

SELF STUDY REPORT

MAHATMA GANDHI VIDYAPEETA TRUST
DAYANANDA SAGAR COLLEGE OF ENGINEERING
(Autonomous)

Shavige Malleshwara Hills, Kumaraswamy Layout

Bengaluru – 560078



SELF STUDY REPORT

May 2016

Submitted to
National Assessment and Accreditation Council
(An Autonomous Institution of the University Grants Commission)



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Dayananda Sagar College of Engineering

(Recognised by All India Council for Technical Education, New Delhi
and Affiliated to Visvesvaraya Technological University, Belgaum)

CERTIFICATE OF COMPLIANCE

(Affiliated to Visvesvaraya Technological University, Belagavi)

This is to certify that **DAYANANDA SAGAR COLLEGE OF ENGINEERING** fulfils all norms:

1. Stipulated by the Visvesvaraya Technological University, Belagavi
2. Regulatory Council - AICTE, New Delhi, and
3. The affiliation and recognition is valid as on date.

In case the affiliation/recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 9th May 2016
Place: Bangalore


Dr. C.P.S. Prakash
Principal

PRINCIPAL
Dayananda Sagar College of Engineering
Kumaraswamy Layout, Bangalore - 560 078.

Shavige Malleshwara Hills, Kumaraswamy Layout, Bangalore - 560 078.
Phone : +91 80 26662226 / 26660789 / 26661104 / Fax : 080-26660789
Website : www.dayanandasagar.edu

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राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद
विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission

CENTRAL APPLICATION PROCESSING UNIT (CAPU)

NAAC/CAPU/SR/KACOGN23742/1st cycle/2015

9th March, 2015

The Principal
Dayananda Sagar College of Engineering
Kumaraswamy Layout, Bangalore - 560078
Karnataka

Nice principal

Dear Sir / Madam

Greetings from NAAC!

10/3/15

This has reference to your LOI bearing Track ID KACOGN23742 dated 9th February, 2015. As your LOI is accepted on 4th March, 2015, you are advised to proceed further for submission of SSR. Acceptance of your SSR is subject to strict adherence to the timelines and procedural formalities of NAAC as given below:

- Use the format "Manual for Self-Study Report- Affiliated/Constituent Colleges" available for download at http://www.naac.gov.in/manuals_ass_accrd.asp.
- A soft copy of SSR complete in all respects must be uploaded on institutional website within Five months from the date of acceptance of LOI. After uploading SSR the concerned Regional Coordinator must be informed by e-mail and also through a letter, or else hard copies of SSR will not be accepted.
- The uploaded SSR must not be password protected and accessible online to all stakeholders till the completion of assessment and accreditation process by NAAC.
- Must submit five hard copies and one soft copy (CD) of SSR along with the applicable A&A fee to NAAC within Six months from the date of acceptance of the LOI. Kindly note that hard copies of SSR/SAR should be submitted by post/ courier only. SSR/SAR will not be accepted by hand in NAAC office.
- There will be no relaxation in the time schedules for uploading SSR on the college website and submission of hard copies of SSR.
- Submit "Certificate of Compliance" (format enclosed) and the Declaration to be made by the Head of the Institution complete in all respects along with the SSR.
- Quote your assigned track ID KACOGN23742 in all your future correspondence with NAAC.
- "Only Government and Govt-Aided colleges covered under 2f and 12 B of UGC Act, 1956, and getting General development grants during XII Plan" are eligible for exemption of Accreditation fees subject to the production of valid documentary evidence. All other colleges have to pay the Accreditation fees as per the revised NAAC fees structure.

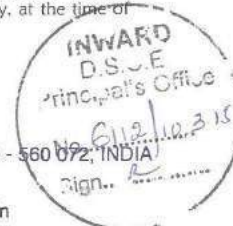
Please note that, if at any point of time while processing your application, NAAC finds that the information provided by the institution in the LOI, SSR or in the supporting documents is incorrect or misleading your application for assessment and accreditation will be rejected. NAAC will not be liable for the consequences arising out of such a rejection including refund of the fees or any other expenditure incurred by the institution in the process.

For any further clarification kindly log on to NAAC website www.naac.gov.in or contact the Help Desk Phone Numbers 080-23005192, 193 and may also contact through e-mail capusouth@gmail.com.

Yours sincerely

9/3/15
Academic Consultant
For CAPU

Note: The Institutions are hereby advised to upload "All India Survey of Higher Education" in MHRD website (<http://aishe.gov.in>) under intimation to NAAC with documentary proof of the Uploaded survey, at the time of submission SSR/RAR to NAAC.



पि ओ बाक्स नं. 1075, नागरभावी, बेंगलूर - 560 072, भारत P.O.Box No. 1075, Nagarbhavi, Bangalore - 560 072, INDIA

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Dayananda Sagar College of Engineering

(Recognised by All India Council for Technical Education, New Delhi
and Affiliated to Visvesvaraya Technological University, Belgaum)

DSCE/NAAC/SSR/8129/2016

DECLARATION BY THE HEAD OF THE INSTITUTION

I certify that the data included in the Self Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after Internal discussions, and no part thereof has been outsourced.

I am aware that the peer team will validate the information provided in this SSR during the peer team visit.


Dr. C.P.S. Prakash
Principal

PRINCIPAL
Dayananda Sagar College of Engineering
Kumaraswamy Layout, Bangalore - 560 078

Place: Bangalore,
Date: 9th May 2016

Shavige Malleshwara Hills, Kumaraswamy Layout, Bangalore - 560 078,
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PREFACE

Mahatma Gandhi Vidya Peeta Trust (MGVP)

Mahatma Gandhi Vidya Peeta Trust (MGVP) was promoted by Late Sri. R. Dayananda Sagar in 1960. The trust manages 17 educational Institutions in the name of Dayananda Sagar Institutions (DSI). There are over 800 faculty members and 13,000 students studying in various programs and schools of DSI. There is a super specialty hospital located inside the DSI campus. Trust has also started a new campus “Dayananda Sagar Academy of Technology and Management” in the academic year 2011-2012 with due approval of All India Council of Technical Education (AICTE) and affiliated to Visvesvaraya Technological University (VTU).

DAYANANDA SAGAR COLLEGE OF ENGINEERING (DSCE)

Sri. R. Dayananda Sagar laid the foundation of Dayananda Sagar College of Engineering in the year 1979. The Institution has grown in leaps and bounds over the period under the leadership of his sons Dr. D. Hemachandra Sagar, Chairman & Dr. D. Premachandra Sagar, Vice chairman and CEO. DSI campus is spread over 29 acres of land with abundant greenery, amphi theatre, parking lot and playgrounds. The institution has a central library with 1,20,000 volumes of well rated books and has access to many technical journal papers. The institution has two spacious auditoriums namely Dr. D. Premachandra Sagar Centre for Performing Arts with 800 seating capacity and Dr. Chandramma Sagar Auditorium with 175 seating capacity to facilitate academic and cultural events.



Dr.Hemachandra Sagar



Dr.Premchandra Sagar

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Initially the college was started with four core engineering branches: Civil, Mechanical, Electrical, Electronics and presently the college offers 16 UG programmes and 17 PG programmes. The college has well established 21 Research centers to pursue Ph.D and M.Sc Engineering by Research. Many of these research centers have got research funding from various funding agencies. The college tops in obtaining number of ranks for the past three years and this year the college has obtained 50 ranks in Visvesvaraya Technological University.



Shri Galiswamy (Secretary)



Shri C.P.S Prakash(Principal)

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EXECUTIVE SUMMARY

Dayananda Sagar College of Engineering (DSCE) is successfully imparting quality education to the students since 1979 with well-set Vision, Mission and Quality Policy.

CRITERIA 1: CURRICULUM ASPECTS

The Institution takes utmost care in developing the programme chart for the effective implementation of the curriculum. The stakeholders are involved in every step of implementation. Being affiliated to VTU, the syllabus and the overall guidelines are followed as laid down by the University. The institution designs and develops action plan for effective implementation of the syllabus prescribed by the university. The Principal of the college conducts meetings with the various heads of the department and develops strategies for the effective implementation of the curriculum. The faculty members of the institution are represented at the university by being an invited member of Board of Studies (BOS). The BOS members duly represents the college and communicates the feedback collected from the various stakeholders including student, alumni, parents and experts from industry which are consolidated and submitted to the University through proper channel for consideration during curriculum revision. Further the Senior Faculty members of the institute contribute in the process of development of curriculum and also for revision of curriculum. Through its research centers the institution is encouraging the faculty members to pursue research. Workshops, seminars, FDPs are conducted to enhance the knowledge of faculty fraternity. Students and faculty members are encouraged to present their research work as papers in various national and international conferences and publish them in reputed journals. Student's feedback is considered seriously as a parameter in evaluating the teaching learning process. The students' results and feedback from the various stakeholders are evaluated and forms the basis for enrichment programs to allow for the modification of the programs. These revisions are made in line with the vision and mission of the institution as well as the current societal and national needs to enable nation building as well inculcating a strong work and academic ethic amongst the students.

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CRITERIA 2: TEACHING LEARNING EVALUATION

The teaching learning Evaluation at Dayananda Sagar College of Engineering is a transparent process with all the activities well planned, structured and organized as per the norms of the VTU. Our crystal clear admission process and state-of-art teaching methodology makes students to choose DSCE over other colleges. Our creative planning and execution of all the activities has made learning enjoyable to both faculty and students. Every step from planning calendar of events, lesson plan, to conduction of classes, laboratory sessions and assessment of internal and external examination, is periodically monitored and evaluated with feedback for the continual improvement of teaching learning and evaluation process. The Institution follows Government schemes and adopts various learning and teaching strategies, considering the divergence in background, abilities and interests there by catering the different needs of the students. Remedial classes are conducted to make the students understand the academic concepts in a much more focused way. Proctor system helps students to share their problems with the faculty and helps the departments to cater to the individual needs of students. Further this system helps in finding necessary solutions to the problems faced by students in their academic and personal life. Various student centric events are organized to nurture critical thinking in lifelong learning. The institute conducts numerous faculty development programs to advance the faculty in accordance with the technology. The institute also makes a sincere effort in recognizing the contributions of both faculty and students, with appropriate financial support. Internal Assessment exams are conducted as per the norms of the university and according to dates scheduled in calendar of events. University Examinations are conducted as per the norms of the university and according to university calendar of events.

CRITERIA 3: RESEARCH, CONSULTANCY AND EXTENSION ACTIVITIES

The institution has given greater magnitude of importance towards Research in addition to teaching. The Institution has Research Committee comprising of Senior Professors, Senior Scientist from reputed scientific Institutes and Industries to guide and monitor Research progress. The Innovation and Entrepreneurship Development Centre (IEDC) in the institution encourages students to write project proposals and extends grants for innovative projects which are entrepreneurial in nature. Research grants are received from several agencies such as the AICTE, DRDO, DBT, DST, ISRO, KSCST, K-FIST, MSME, VGST etc. Library is information resource center for Research. A computerized central digital library with modern catalogue and e-journals is available in our Institute. Journal database of IEEE, ASME, ACSE, I-GATE, EBSCO, Springer, MBASE are available in the central library.

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Collaborative research is facilitated through MOU's with organizations like IBM, UNISYS, ATHINIO, NOVEL, Leeds India Ltd, Skanda Life Sciences, NIMHANS, IISc, KC Das Private Ltd, GKVK, NIT Warangal, National Aerospace laboratories, Wipro and GE Healthcare.

Faculty members are encouraged to file patents and take up consultancy work. Faculty utilizes their expertise and Institute facilities to provide consultancy services, which will generate revenue to the Institute. A total of Rs. 47,06,570 has been generated from past four years through consultancy services.

The institution encourages the students and faculty in extension activities and Institutional social responsibility to promote Institution – Neighborhood – Community network. Blood donation camps awareness programmes, swachh bharat, community service programmes and education related programmes are regularly conducted.

CRITERIA 4: INFRASTRUCTURE AND LEARNING RESOURCES

All the branches of engineering are well equipped with state of the art laboratories. The Institution has provided ICT facilities in all the departments in which the classrooms and Computer labs are provided with LCD projectors for Multimedia presentations for delivering lecture. The campus is Wi-Fi enabled with adequate computing facilities. The faculty and students make use of these facilities for enriching their domain knowledge. The central library of the institution is 4500 sq.m. with a total seating capacity of 800. The library includes Digital Library with modern facilities such as RFID and ICT. Further, elevators and rest rooms are provided at appropriate places. The institution has provided with the hostel facilities for both girls and boys within the campus. In addition, the institution provides top-notch sports facilities like well equipped Gymnasium, Squash Courts, Football / Cricket Ground, Table Tennis, Basketball Court, Lawn Tennis etc. for multi-dimensional growth of the students.

CRITERIA 5: STUDENT SUPPORT AND PROGRESSION

The institution publishes its updated prospectus handbook regularly which contains general information, institution strengths, facilities, Details of courses, Affiliation and also information about each department. Students belonging to SC/ST/OBC category receive scholarships from state government, central government and other national agencies. Student mentoring system wherein a batch of 15-20 students are assigned for a proctor for mentoring the students academically and

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personally. The Institution provides TTK health cards to students which are accessible in most of the hospitals all over India. “Centre for Innovation and Leadership” (CIL)- a prime innovation of our organization imparts skills to the students for their overall growth. Slow learners are identified through the internal assessment test and they are supported through remedial classes and extra coaching classes. Many students have passed the competitive exams UGC-CSIR- NET, GATE, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services and some of them have gone for higher studies abroad. Department wise news-letters and magazines are released periodically which highlights the main events, programs and achievements of the respective departments. There is an exclusive cell which co-ordinates all the Placement activities of the college. Students are encouraged to take part in extracurricular activities and they have own many recognitions in various competitions.

CRITERIA 6: GOVERNANCE, LEADERSHIP AND MANAGEMENT

The vision, mission and the values of DSCE strive continuously to improve the existing system with the aim of becoming the best in the field of education. A commitment to be ethical, sincere and transparent in all activities to treat the stake holders with dignity and respect. The Governing Body of the College comprises of representatives from management, Industry, academia and regulating agencies like AICTE and VTU. Important decisions regarding administration affairs and policy matters are taken in the regular meetings and the implementation is reviewed by the Governing body and the members of other executive committees. The day-to-day management of the college is vested with the Principal, various committees and IQAC of the College. All the HOD's & Staff interact with the institutional stakeholders: students, parents and Alumni to take care of students progress.

CRITERIA 7: INNOVATION AND BEST PRACTICES

DSCE is one of the most reputed institutions which has a wide spread campus and has a well-formed group which monitors and supervises the actions concerning the measures to make the campus eco-friendly. Energy conservation is taken care by making use of solar energy and LED lights. The college campus is on a hilly terrain and is suitable for rain water harvesting. Hence Small check bunds/trenches are made to arrest rainwater during rainy season and are collected in harvesting pond for further use. Carbon neutrality is controlled by using greenhouse effect and greenery around the campus is maintained to reduce the effect of pollution. The waste water from hostel and canteen is taken to Sewage Treatment Plant (STP) for tertiary treatment (Extended Aeration-ASP) and is used for gardening /horticulture. E-waste, segregated from all the departments are taken care by the Facilities. As a part of innovation project, Production of Ethanol from Lignocelluloses Materials and Design, fabrication of Power Handle Wheel Chair for the Disabled were executed by students. Many workshops

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for students like “The Intellectual Property Workshop (IPR)” organized by IEDC of DSCE and Karnataka State Council for Science and Technology (KSCST) with the support of Indian Institute of Science (IISc), Workshop for Aspiring Entrepreneurs: “Building Technology Ventures” were organized for the benefit of students.

SWOC ANALYSIS

SWOC analysis is carried out to identify intrinsic strengths and weakness, the opportunities and challenges faced by the Institution. This kind of analysis will enable for the long term planning and growth of the Institution.

STRENGTHS

Dayananda Sagar College of Engineering, is a premier institute of technology in India which offers large number of courses across all streams. DSCE records in repeat performance by securing, maximum number of University ranks and tops the Visvesvaraya Technological University (VTU) examinations.

The major strengths of DSCE are:

Infrastructure:

DSCE is a well connected, eco- friendly campus spread across 29 acres located in a hillock with scenic beauty, amphitheater, sprawling play grounds and indoor sports facilities. On campus International residential facilities for national and International students with well equipped, digital central library and Wi-Fi enabled campus makes DSCE a number one choice for students and parents. All the departments have state-of- the-art smart spacious, well furnished classrooms, fully equipped, modern laboratory facilities, uninterrupted power supply, exclusive department library and computer facilities. The institute boasts of an ultra-modern, 800 seat capacity auditorium, Premachandra Sagar Centre for Performing Arts. In addition every building has its own mini auditorium and seminar halls to conduct departmental co-curricular and extra-curricular activities.

Faculty:

Out of 527 faculty, 115 doctorates from reputed institutes/universities from diversified specializations is the core teaching strength of DSCE. The rest of the faculty are also experienced, well qualified and dedicated who accommodate the academic needs.

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Students:

Since DSCE offers large number of courses across different domains, it attracts not only national students but also International students. Students from more than 15 countries are trained on campus making it one of the largest foreign student populations. The institute imparts education to all sections of society which is reflecting in having students from diversified backgrounds who enjoy equal opportunities.

Programs Offered:

The programs offered by DSCE are from diversified and upcoming disciplines of engineering. There are 16 undergraduate and 17 postgraduate courses offered. In addition, 21 departments are recognized by Visvesvaraya Technological University for doctoral programs and M.Sc (Engineering) by research.

Governance, Leadership and Management:

The pride of DSCE is its leadership team. The governance is under the strong leadership of Dr. D. Hemachandra Sagar, Chairman and Dr. D. Premachandra Sagar, Vice Chairman. Both are eminent doctors who are thinkers and planners, with enriched insight gained from their vast experience. Under able leadership functions a strong faculty and student friendly administration section which helps in functioning of the Institution.

WEAKNESS

- Counseling of students for competitive examinations needs to be enhanced.
- Academy – industry relationship to be strengthened for projects, consultancy, and placements.
- Specialized courses as per the current emerging trends and International standards should be added to the regular curriculum.
- Need to recruit additional faculty with specific specializations to meet the needs for a wide choice of electives in the curriculum.
- Encouragement for filing patents and interdisciplinary, collaborative research.

OPPORTUNITIES

- Interdisciplinary research opportunities are available as experts in diversified streams are the faculty at DSCE.
- World class infrastructure and training at DSCE will enable students to reach excellence.

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- Excellent indoor and outdoor sports facilities encourage the students to pursue extracurricular activities in addition to their regular curriculum.

CHALLENGES

- Healthy competition with the premier institutes in respective fields to bring out the best in students and faculty.
- Equipping students to improve their quality for employability and life skills is a real challenge.
- Focus more on skill development and expertise in specialized field of interest of the students.
- Socially relevant projects and real time projects should be focused by faculty and students.
- To provide premier institute & international exposure to faculty.

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PROFILE OF THE INSTITUTION

1. Name and Address of the College:

Name : DAYANANDA SAGAR COLLEGE OF ENGINEERING		
Address : Shavige Malleshwara Hills, Kumaraswamy Layout		
City : Bangalore	Pin: 560078	State : Karnataka
Website : www.dayanandasagar.edu/dsce		

2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. C.P.S. Prakash	O:80-42161753 R:-	9448667198	08026660789	ppl-dsce@dayanandasagar.edu
Vice Principals	Dr. D. R. Ramesh Babu Dr. H. Ramakrishna	O:80-42161726 O:80-42161741	9972935935 9448978350	08026660789	vppl@dayanandasagar.edu
Steering Committee Coordinator	Dr. S. Kiran	O:80-42161748 R:-	9845140446	08026660789	kiransvasist@dayanandasagar.edu

3. Status of the Autonomous College by management:

- i. Government
- ii. Private
- iii. Constituent College of the University

-
✓
-

4. Name of University to which the College is

Visvesvaraya

SELF STUDY REPORT

Affiliated

: **Technological University
(VTU)**

**5. a. Date of establishment, prior to the grant
of 'Autonomy'**

: **03.10.1979**

**b. Date of grant of 'Autonomy' to the
College by UGC**

: **01.07.2015**

6. Type of Institution:

a. By Gender

i. For Men

-

ii. For Women

-

iii. Co-education

✓

b. By Shift

i. Regular

✓

ii. Day

-

iii. Evening

-

c. Source of funding

i. Government

-

ii. Grant-in-aid

-

iii. Self-financing

✓

iv. Any other (Please specify)

-

7. Is it a recognized minority institution?

Yes

-

No

✓

If yes specify the minority status (Religious/Linguistic/any other) and provide documentary evidence.

8. a. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)

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2(f)	30.09.2015	UGC Letter No.VTU/Aca/2015-16/A1/2084 dated 25 June 2015
12(B)		Applied

(Enclose the Certificate of recognition u/s 2(f) and 12(B) of the UGC Act)

Certificate is enclosed in Enclosure A

b. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section /clause	Day, Month and Year (dd-mm-yyyy)	Validity	Programme/ institution	Remarks
i. AICTE	25.04.2016	I Year	Under Graduate	Every year Approval has to be renewed vide AICTE, New Delhi Letter No. F.No. 37-3/Legal/2012 dated 27/09/ 2012
			Aeronautical Engineering	
			Architecture	
			Automobile Engineering	
			Biotechnology	
			Chemical Engineering	
			Civil Engineering	
			Computer Science & Engineering	
			Construction Technology & Management	
			Electronics & Communication Engineering	
			Electrical & Electronics Engineering	
			Industrial Engineering & Management	
			Information Science Engineering	
			Electronics and Instrumentation Engineering	
			Mechanical Engineering	
			Medical Electronics	
			Telecommunication	
			Post Graduate	
			Architecture	
			Automobile Engineering	
			Biotechnology	
			Chemical Engineering	

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			Civil Engineering	
			Computer Science	
			Construction Technology & Management	
			Electronics & Communication Engineering	
			Electrical & Electronics Engineering	
			Industrial Engineering & Management	
			Information Science Engineering	
			Electronics and Instrumentation Engineering	
			Mechanical Engineering	
			Medical Electronics	
			Telecommunication Engineering	
			Master of Business Administration	
			Master of Computer Applications	

Enclose the Certificate of recognition/approval) **Certificates are enclosed in Enclosure B**

9. Has the College been recognized?

a. By UGC as a 'College with Potential for Excellence'(CPE)?

Yes

☐ -

No

☒

If yes, date of recognition: (dd/mm/yyyy)

b. For its contributions/performance by any other governmental agency?

Yes

☒

No

☐ --

If yes, Name of the agency ...DSIR... and

Date of recognition: 01/04/2010....

10. Location of the campus and area:

Location *	Urban
Campus area in sq. mts or acres	1,13,312.08 Sq.mts
Built up area in sq. mts	32,624.74 Sq. mts.

(* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

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11. Does the College have the following facilities on the campus (Tick the available facility)? In case the College has an agreement with other agencies in using such facilities provide information on the facilities covered under the agreement.

● Auditorium / Seminar complex	☒
● Sports facilities	☒
❖ Play ground	☒
❖ Swimming Pool	☐
❖ Gymnasium	☒
● Hostel	
❖ Boy's hostels	☒
❖ Girl's hostels	☒
● Residential facilities	
❖ For teaching staff	☐
❖ For non-teaching staff	☐
● Cafeteria	☒
● Health centre	
❖ First aid facility	☒
❖ Inpatient facility	☒
❖ Outpatient facility	☒
❖ Ambulance facility	☒
❖ Emergency care facility	☒
● Health centre staff	
❖ Qualified doctor	Full Time
❖ Qualified Nurse	Full Time
● Other facilities	
❖ Bank	☒
❖ ATM	☒
❖ Post Office	☐
❖ Book shops	☒
● Transport Facilities	

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❖ For students

❖ For staff

● Power house

● Waste management facility

--
--
✓
✓

12. Details of programmes offered by the institution: (give data for current academic year)

Under Graduate

Sl. No	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ Approved Student intake	No. of Students admitted (2015-16)
1.	BE	Aeronautical Engineering	04	PUC,12 th	English	60	52
2.	B.Arch	Architecture	05	PUC,12 th	English	80	78
3.	BE	Automobile Engineering	04	PUC,12 th	English	60	60
4.	BE	Biotechnology	04	PUC,12 th	English	60	46
5.	BE	Chemical Engineering	04	PUC,12 th	English	60	50
6.	BE	Civil Engineering	04	PUC,12 th	English	180	171
7.	BE	Computer Science & Engineering	04	PUC,12 th	English	120	127
8.	BE	Construction Technology & Management	04	PUC,12 th	English	60	42
9.	BE	Electronics & Communication Engineering	04	PUC,12 th	English	180	164
10.	BE	Electrical & Electronics Engineering	04	PUC,12 th	English	120	101
11.	BE	Electronics & Instrumentation Engineering	04	PUC,12 th	English	60	56
12.	BE	Industrial Engineering & Management	04	PUC,12 th	English	60	49
13.	BE	Information Science Engineering	04	PUC,12 th	English	120	124
14.	BE	Mechanical Engineering	04	PUC,12 th	English	180	172
15.	BE	Medical Electronics	04	PUC,12 th	English	60	35
16.	BE	Telecommunication Engineering	04	PUC,12 th	English	120	114
17.	BE (II SHIFT)	Electronics & Communication Engineering	04	PUC,12 th	English	60	44
18.	BE (II SHIFT)	Computer Science & Engineering	04	PUC,12 th	English	60	60

Sl. No	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ Approved Student intake	No. of Students admitted (2015-16)
1	M.Tech	Bioinformatics	2 Years	B.E	English	18	03
2	M.Tech	Biomedical Signal Processing	2 Years	B.E	English	18	08

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		& Instrumentation					
3	M.Tech	Chemical Engineering	2 Years	B.E	English	18	01
4	M.Tech	Computer Integrated Manufacturing	2 Years	B.E	English	18	10
5	M.Tech	Computer Network Engineering	2 Years	B.E	English	18	14
6	M.Tech	Computer Science & Engineering	2 Years	B.E	English	18	14
7	M.Tech	Digital Communication & Networking	2 Years	B.E	English	18	14
8	M.Tech	Digital Electronics & Communication	2 Years	B.E	English	18	13
9	M.Tech	Design Engineering	2 Years	B.E	English	18	13
10	M.Tech	Highway Technology	2 Years	B.E	English	18	18
11	M.Tech	Master of Engineering & Management	2 Years	B.E	English	18	05
12	M.Tech	Micro Electronics & Control Systems	2 Years	B.E	English	18	15
13	M.Tech	Power Electronics	2 Years	B.E	English	18	13
14	M.Tech	Structural Engineering	2 Years	B.E	English	18	17
15	M.Tech	VLSI Design & Embedded System	2 Years	B.E	English	18	14
16	MBA	Master of Business Administration	2 Years	Any graduate Degree	English	120	105
17	MCA	Master of Computer Applications	2 Years	Any graduate Degree	English	60	53

Post Graduate

Ph.D. / M.Sc., (Engg.,) by Research

Sl. No	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	No. of Students admitted
1	Ph.D	Aeronautical Engineering	5 years	M.E / M.Tech	English	05
2	Ph.D	Architecture	5 years	M.E / M.Tech	English	06
3	Ph.D	Automobile Engineering	5 years	M.E / M.Tech	English	06
4	Ph.D	Biotechnology	5 years	M.E / M.Tech	English	06
5	Ph.D	Chemical Engineering	5 years	M.E / M.Tech	English	01
6	Ph.D	Civil Engineering	5 years	M.E / M.Tech	English	07
7	Ph.D	Computer Science	5 years	M.E / M.Tech	English	17
8	Ph.D	Construction Technology & Management	5 years	M.E / M.Tech	English	03
9	Ph.D	Chemistry	5 years	M.Sc.	English	06
10	Ph.D	Electronics & Communication Engineering	5 years	M.E / M.Tech	English	22
11	Ph.D	Electrical & Electronics Engineering	5 years	M.E / M.Tech	English	03
12	Ph.D	Electronics and Instrumentation Engineering	5 years	M.E / M.Tech	English	04
13	Ph.D	Industrial Engineering & Management	5 years	M.E / M.Tech	English	06
14	Ph.D	Information Science Engineering	5 years	M.E / M.Tech	English	20
15	Ph.D	Mechanical Engineering	5 years	M.E / M.Tech	English	19

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16	Ph.D	Medical Electronics	5 years	M.E / M.Tech	English	04
17	Ph.D	Telecommunication Engineering	5 years	M.E / M.Tech	English	12
18	Ph.D	Physics	5 years	M.Sc.	English	03
19	Ph.D	Mathematics	5 years	M.Sc.	English	09
20	Ph.D	Master of Business Administration	5 years	MBA	English	08
21	Ph.D	Master of Computer Applications	5 years	MCA	English	08

13. Does the institution offer self-financed Programmes?

Yes ☒ No ☐

If yes, how many?

14. Whether new programmes have been introduced during the last five years?

Yes ☒ No

If yes, Number

15. List the departments: (Do not list facilities like library, Physical Education as departments unless these are teaching departments and offer programmes to students.

The following are the List of departments

Faculty	Departments	UG	PG	Research
Engineering	Aeronautical Engineering	B.E	--	Ph.D
	Architecture	B.E	--	Ph.D
	Automobile Engineering	B.E	--	Ph.D
	Biotechnology	B.E	M.Tech	Ph.D
	Chemical Engineering	B.E	M.Tech	Ph.D
	Civil Engineering	B.E	M.Tech	Ph.D
	Computer Science	B.E	M.Tech	Ph.D
	Construction Technology & Management	B.E	M.Tech	Ph.D
	Electronics & Communication Engineering	B.E	M.Tech	Ph.D
	Electrical & Electronics Engineering	B.E	M.Tech	Ph.D
	Electronics and Instrumentation Engineering	B.E	M.Tech	Ph.D
	Industrial Engineering & Management	B.E	M.Tech	Ph.D
	Information Science Engineering	B.E	M.Tech	Ph.D
	Mechanical Engineering	B.E	M.Tech	Ph.D
	Medical Electronics	B.E	M.Tech	Ph.D
	Telecommunication Engineering	B.E	M.Tech	Ph.D
	Master of Business Administration	Any graduate	MBA	Ph.D

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	Degree		
Master of Computer Applications	Any graduate Degree	MCA	Ph.D

16. Are there any UG and/or PG programmes offered by the College, which are not covered under Autonomous status of UGC? Give details.

All programmes offered by the college are covered under Autonomous status of UGC.

17. Number of programmes offered under (Programme means a degree course like BA, MA, BSc, MSc, BCom, etc.)

a. Annual system	-
b. Semester system	33
c. Trimester system	-

18. Number of Programmes with

a. Choice Based Credit System	33
b. Inter/multidisciplinary Approach	-
c. Any other (specify)	-

19. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a) Including the salary component	Rs.1,05695/-
(b) Excluding the salary component	Rs.64288/-

20. Does the College have a department of Teacher Education offering NCTE recognized degree programmes in Education?

Yes ☐ No ☒

If yes,

a. How many years of standing does the department have?

.....years

b. NCTE recognition details (if applicable)

Notification No.:

Date: (dd/mm/yyyy)

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c. Is the department opting for assessment and accreditation separately?

Yes ☐ No ☐

21. Does the College have a teaching department of Physical Education offering NCTE recognized degree programmes in Physical Education?

Yes ☐ No ☒

If yes,

a. How many years of standing does the department have?

..... years

b. NCTE recognition details (if applicable)

Notification No.:

Date: (dd/mm/yyyy)

c. Is the department opting for assessment and accreditation separately?

Yes ☐ No ☒

22. Whether the College is offering professional programme?

Yes ☒ No ☐

If yes, please enclose approval/recognition details issued by the statutory body governing the programme.

The approval details issued by AICTE are enclosed in Enclosure B.

23. Has the College been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon.

No

24. Number of teaching and non-teaching positions in the College

*M - Male *F – Female
(1:3:8 – UG/MCA/MBA) for PG -1:1:1

Positions	Teaching faculty						Non-teaching staff		Technical Staff	
	Professor		Associate Professor		Assistant Professor					
	M	F	M	F	M	F	M	F	M	F

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Sanctioned by the UGC / University /State Government Recruited #									
Recruited									
Yet to recruit									
Sanctioned by management / society or other authorizes bodies	50		209		368		3:1		
Recruited	56	15	59	30	181	186	130 120	83	18
Yet to recruit									

25. Qualification of the teaching staff

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	M	F	M	F	M	F	
Permanent Teachers							
D.Sc./D.Litt							
Ph.D	51	15	28	09	07	05	115
M.Phil					01	09	10
PG	06	0	30	21	173	172	402
Temporary Teachers							
Ph.D							
M.Phil							
PG							
Part-time Teachers							
Ph.D.							
M.Phil.							
PG	3	0	3	1	4	7	18

26. Number of Visiting Faculty / Guest Faculty engaged by the College:

18

27. Students enrolled in the College during the current academic year, with the following details:

Type of students	UG	PG	M.Phil	Ph.D	Total
Students from the same state where the college is located	1101	337	Nil	138	1576
Students from the other states of India	442	04	Nil	Nil	446
NRI students	02	0	Nil	Nil	02
Foreign students	02	0	Nil	Nil	02
Total	1547	341	Nil	138	2026

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28. Dropout rate in UG and PG (average for the last two batches)

UG **Less than 1%**

PG **Less than 1%**

29. Number of working days during the last academic year

305

30. Number of teaching days during the last academic year

180

31. Is the College registered as a study centre for offering distance education programmes for any university?

Yes ☐ No ☒

If yes, provide the

a. Name of the University

b. Is it recognized by the Distance Education Council?

Yes ☐ No ☐

c. Indicate the number of programmes offered.

32. Provide Teacher-student ratio for each of the programme/course offered

UG

Programme Teacher Branch	Student Ratio
Aeronautical Engineering	1:15
Architecture	1:15
Automobile Engineering	1:15
Biotechnology	1:15
Chemical Engineering	1:15
Civil Engineering	1:15
Computer Science & Engineering	1:15
Construction Technology & Management	1:15
Electronics & Communication Engineering	1:15
Electrical & Electronics Engineering	1:15

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Industrial Engineering & Management	1:15
Information Science Engineering	1:15
Electronics and Instrumentation Engineering	1:15
Mechanical Engineering	1:15
Medical Electronics	1:15
Telecommunication	1:15
Physics	1:15
Mathematics	1:15
Chemistry	1:15

PG

Programme Teacher Branch	Student Ratio
Architecture	1:6
Automobile Engineering	1:6
Biotechnology	1:6
Chemical Engineering	1:6
Civil Engineering	1:6
Computer Science	1:6
Construction Technology & Management	1:6
Electronics & Communication Engineering	1:6
Electrical & Electronics Engineering	1:6
Industrial Engineering & Management	1:6
Information Science Engineering	1:6
Electronics and Instrumentation Engineering	1:6
Mechanical Engineering	1:6
Medical Electronics	1:6
Telecommunication Engineering	1:6
Master of Business Administration	1:15
Master of Computer Applications	1:15

33. Is the College applying for?

Accreditation Cycle1 ☒ Cycle2 ☐ Cycle3 ☐ Cycle4 ☐

Re-assessment ☐

34. Date of accreditation* (applicable for Cycle2, Cycle 3, Cycle 4 and re-assessment only):

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Not Applicable

Cycle 1:(dd/mm/yyyy) Accreditation outcome/results

Cycle 2:(dd/mm/yyyy) Accreditation outcome/results

Cycle 3:(dd/mm/yyyy) Accreditation outcome/ results

* kindly enclose copy of accreditation certificate(s) and peer team report(s)

Cycle 1 refers to first accreditation; Cycle 2 and beyond refers to reaccreditation

35. a. Date of establishment of Internal Quality Assurance Cell (IQAC)

IQAC: 03.11.2014

b. Dates of submission of Annual Quality Assurance Reports (AQARs). -NA

(i) AQAR for year on(dd/mm/yyyy)

(ii) AQAR for year on (dd/mm/yyyy)

(iii) AQAR for year on (dd/mm/yyyy)

(iv) AQAR for year on..... (dd/mm/yyyy)

36. Any other relevant data, the College would like to include.(Not exceeding one page)

- 1. All departments are approved as Research Centers by Visweswarayya Technological University, Belagavi, Five departments by University of Mysore and Mangalore University respectively.**
- 2. The Quality Management System of the College is certified based on ISO 9001:2015.**
- 3. The Environment Management system of the college is certified based on ISO 14001.**
- 4. The food court is certified based on ISO 22000 Food Safety Management System.**

CRITERION I

CURRICULAR ASPECTS

1.1 Curriculum Design and Development

1.1.1 How are the institutional vision / mission reflected in the academic programmes of the College?

VISION

To impart quality technical education with a focus on Research and Innovation emphasizing on Development of Sustainable and Inclusive Technology for the benefit of society.

MISSION

- To provide an environment that Enhances Creativity and Innovation in Pursuit of Excellence.
- To nurture teamwork in order to transform individuals as responsible Leaders and Entrepreneurs.
- To train the students to the changing technical scenario and make them to understand the importance of Sustainable and Inclusive technologies.

The vision act in accordance with the following ascendancy

1. Offering courses in the core and allied engineering disciplines.
2. Framing of syllabus with inputs from experts of R&D organizations, Industry, academia.
3. Offering laboratory training and project familiarity as part of the curriculum.
4. Inviting experts from leading R & D organizations and Industries for involving them in academic programmes.
5. Inviting visiting faculty from reputed institution to furnish recent advancements in technologies amongst students.
6. Transforming young women and equip them to face challenges in their personal and professional life.
7. Organizing various co-curricular and extra-curricular activities that help the students to develop leadership qualities, team work spirit, professional and soft skills.
8. Endeavour to maintain a learning atmosphere that reinforces the ideals of professional competence and social commitments
9. Involvement of student manpower in research and consultancy projects.

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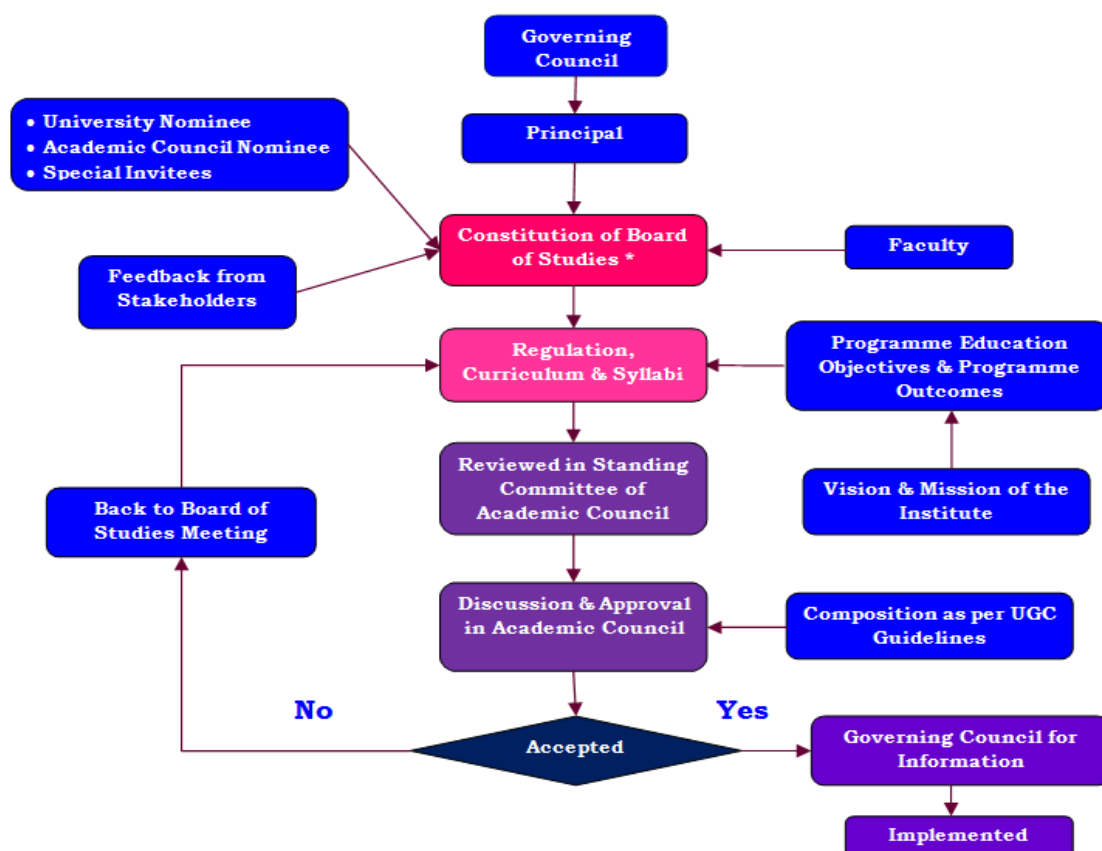
10. Encouraging and rewarding the faculty members for their refereed publications and patents.

1.1.2 Describe the mechanism used in the design and development of the curriculum? Give details on the process. (Need Assessment, feedback, etc.)

Curriculum design of the college

The current needs of the industry and society are assessed and the draft Curriculum is designed by the Head of the Department and faculty members of the respective departments by taking into account the feedback reports given by the various stakeholders (particularly from industrialist, academican and alumni). The IIT's, VTU University, leading Indian Universities and reputed Autonomous college models syllabi are referred for curriculum and syllabi development. Each department has formed a Board of Studies and the constitution of which is as follows:

Table 1.1 Department of Board of Studies



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Designation	Designation with Affiliation
Chairman	Head of the Department
Member	VTU Nominee
Members	Academic Experts (2 Nos.)
Member	Industrial Expert
Member	Alumni
Members	Four Senior Faculty of the Department

Review and approval

The draft curriculum and syllabi are presented in the Board of Studies (BOS) for discussion, suggestions and recommendations for approval. Any suggestions / recommendations by BoS members are taken into consideration. If there are any modifications in the curriculum or syllabi, the modified curriculum or syllabi is reviewed in the Standing Committee of the Academic Council and the revised curriculum is placed before the Academic Council for approval.

Implementation

A resolution is passed by the Academic Council and the new / revised Curriculum is implemented in the forthcoming academic year. If there are any changes in the curriculum by the academic council then the changes are incorporated with the approval of BOS members.

1.1.3 How does the College involve industry, research bodies, and civil society in the curriculum design and development process? How did the College benefit through the involvement of the stakeholders?

BOS of each department consists of the industrialists, academicians who will give their suggestions and feedback for introducing new courses, modifying existing courses, revising existing curriculum or syllabi, adopting innovations in teaching and learning methodologies and assessment methods. The given suggestions and feedback helps in designing the curriculum relevant to present scenario.

Role of industry

The College has maintained a robust industry-Institution link to bridge the gap between the industry needs and the Institution which makes the curriculum industry relevant. Further the industry experts are involved in all the stages of curriculum design.

- ❖ Industry experts are nominated as members of BoS of all departments.
- ❖ Two industry experts are included as members of Academic Council.
- ❖ Industry experts are invited as resource persons for guest lecturers, seminars and conferences
- ❖ The students and the faculty have discussions regarding the emerging trends with the industrial experts when they go for industrial visits, internships and projects. This helps in identifying new areas of knowledge that could be incorporated in the curriculum.

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MOUs signed

The college has signed MOUs with leading industries IBM, AUTODESK, WIPRO, INFOSYS, National Aerospace Laboratory and many more which helps in exploring different avenues for strengthening the curriculum.

Feedback from Employers

The feedback obtained from the recruiters at the time of campus placement and other occasions and their expected inputs are shared with the concerned department to revise the curriculum as per the requirements of the industry.

Role of Research Bodies

The eminent researchers from the R&D division of industry are part of various BOS and Academic Council are helping in tuning the curriculum and syllabi. Senior Professors involved in research activity are appointed as University Nominees for BOS / Academic Council by the university. They provide valuable information regarding the latest research issues which are useful in framing the curriculum and syllabi. Faculty members and students interact with researchers while visiting Research Institutions and attending seminars / conferences / workshops / orientation programmes which makes the faculty member to redesign the curriculum.

Role of Civil Society

The curriculum is designed with society relevant subjects like Environmental Science, Professional Ethics in Engineering and other open elective courses based on the social needs which will enrich the knowledge of the students and equip them with the required skills.

Benefits from the involvement of Stakeholders

The feedback given by alumni, parents, employers, management and relevant suggestions are considered while designing the curriculum. The views and suggestions of Industry experts, Research scholars and Professionals are incorporated in the curriculum of all disciplines to make it locally and globally relevant and to promote employability.

Based on the stakeholders' suggestions, many certificate courses have been introduced. In addition, a Career Oriented Course, added courses are introduced in the curriculum. These courses will enable the students to plan interdisciplinary academic pursuit, research and also get placed easily.

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Formation of Board of Studies

DEPARTMENT OF CIVIL ENGINEERING

I.	Head of the Department	Dr.Nagaraj Sitaram	Convener
II.	At least 5 faculty members at different levels, covering different specializations to be nominated by the academic council	1. Dr. Munirudrappa 2. Dr.A.R.Rajendra 3. Dr. P Prakash 4. Dr.Raja Shekhara 5. Dr.Ramesh.N.R 6. Dr.K.S Krishnamurthy 7. Prof.B.T.Shivendra	Members
III.	Two subject experts in the concerned discipline from outside , to be nominated by the Academic Council	1. Dr.W P Premakumar, Professor , Dept of Civil Engg, Reva University, Rukmini Knowledge Park, Kattigena halli, Yalahanka, Bangalore 560 064 2. Dr. L. Udaysimha, Professor,Dept of Civil Engg, BMSCE, Bull temple Road Bangalore	Member
IV.	One expert from outside the college to be nominated by the Vice chancellor from a panel of 6 recommended by principal of the college	1. Dr. SampathKamar, Professor, Department of Civil Engg, BMS College of Engineering, Bull Temple Road, Basavanagudi, Bangalore – 560019 2. Dr. R Prabhakar Professor and Head, Department of Civil Engineering, MS Ramiah University, MSR Nagar, MSRIT Post, Bangalore – 560056 3. Dr. Nanjundaswamy, Principal, Dr. Ambedkar Institute of Technology, Near Jnana Bharathi Campus, Bangalore – 560056 4. Dr. Radha Krishna, Professor, Department of Civil Engineering, RV College of Engineering, Mysore Road, R V Vidyanikethan, Bangalore – 560059 5. Dr. L Govindaraju, Professor, Department of Civil Engineering, UVCE, Jnana Bharathi Campus, Bangalore	Member
V.	One representative from Industry /corporate sector/allied area relating to placement to be nominated by the academic council.	Er. Anand S Kulkarni, Deputy Director KPMG Koramangala Bangalore - 560071	Member

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VI.	One post graduate meritorious Alumnus ,to be nominated by the principal	Mrs.D.K.Supritha Assistant Professor, Department of Civil Engineering Dayananda Sagar College of Engineering Shavige Malleshwara Hills,Bangalore	Member
VII.	Co-opt external experts, whenever special course studies are to be formulated. One member of the other department may be included	1. Dr.P.Prakash, HOD. Department of CTM , Dayananda Sagar College of Engineering Shavige Malleshwara Hills Bangalore 2. Dr. Ananda Shivapur Professor, Department of PG Studies.VTU, Belgaum. 3. Dr. P S Nagaraj	Member

DEPARTMENT OF AUTOMOBILE ENGINEERING

I.	Head of the Department	Dr. H.N.Suresh	Convener
II.	At least 5 faculty members at different levels, covering different specializations to be nominated by the academic council	Dr. Sekhar N. Nandakumar M.B. Kirana Kumara P. Mahesh B. R Naveena B.E Pradeep Kumar G.S. Sathyanarayana A Divya G.S. Vijay T Murgayya S.B.	Members
III.	Two subject experts in the concerned discipline from outside , to be nominated by the Academic Council	Dr. R. Raja Mr. Sahadev Panch	Member
IV.	One expert from outside the college to be nominated by the Vice chancellor from a panel of 6 recommended by Principal of the college	Mr. Sahadev Panch	Member
V.	One representative from Industry /corporate sector/allied area relating to placement to be nominated by the academic council.	Mr. Sahadev Panch	Member
VI.	One post graduate meritorious Alumnus ,to be nominated by the Principal	NIL	Member
VII.	Co-opt external experts, whenever	NIL	Member

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	special course studies are to be formulated. One member of the other department may be included		

DEPARTMENT OF ARCHITECTURE

I.	Head of the Department	Dr.Rama R Subrahmanian	Convener
II.	At least 5 faculty members at different levels, covering different specializations to be nominated by the academic council	Prof. KR Ganesh Ar. Triveni Amarnath Ar. Dominic L Harper Ar.Manisha Nupur Ar.Shruthi Murthy	Members
III.	Two subject experts in the concerned discipline from outside , to be nominated by the Academic Council	Ar. Dennis Sam Shaju Ar. Pankaj Modi	Member
IV.	VTU nominee	Prof. SV Ravindra	Member
V.	One representative from Industry /corporate sector/allied area relating to placement to be nominated by the academic council.	Ar. S Sudhakar	Member
VI.	One post graduate meritorious Alumnus ,to be nominated by the principal	Ar. Kochuthammen	Member
VII.	Co-opt external experts, whenever special course studies are to be formulated. One member of the other department may be included	Dr. AR Rajendra / Dean	Member

CONSTRUCTION TECHNOLOGY & MANAGEMENT

I	Head of the Department	Dr.Prakash P	Convener
II	At least 5 faculty members at different levels, covering different specializations to be nominated by the academic council	1) Dr Vivek R Das 2) Dr Anjana S 3) K Pramod 4) Karthik M 5) Geetha L	Members
III	Two subject experts in the concerned discipline from outside , to be nominated by the Academic Council	1. Dr B Vishwanath , Professor UVCE Bangalore 2. Dr. BV Ravishankar Professor BMSCE Bangalore	Member
IV	One expert from outside the college to be nominated by the Vice chancellor from a panel of 6 recommended by Principal of the college	1. Dr Karisidappa Principal Govt Engg college Hassan 2. Dr. Anantharama V	Member

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		Professor in civil Engg, RVCE, Bangalore 3. Dr. Chandrasekhar Principal, govt engg college GSKSJIT Bangalore 4. Dr. Renuka Devi HOD RVCE 5. Dr. Nagabhushan Prof JCE Bangalore	
V	One representative from Industry /corporate sector/allied area relating to placement to be nominated by the academic council.	Dr V Ramachandra Vice President- south zone Ultra-tech cement Bangalore	Member
VI	One post graduate meritorious Alumnus ,to be nominated by the Principal	Dr B V Kirankumar Professor GSKSJIT-bangalore	Member
VII	Co-opt external experts, whenever special course studies are to be formulated. One member of the other department may be included	DrRamasubramanyam Professor DSCE	Member

DEPARTMENT OF BIOTECHNOLOGY

I.	Head of the Department	Dr. S. Kiran Profesor & Head, Dept of BT	Convener
II.	At least 5 faculty members at different levels, covering different specializations to be nominated by the academic council	Dr. N .Rajeswari, Associate Professor, Dept of BT, DSCE Dr. Nagamani S Khandre, Associate Professor, Dept of BT, DSCE Dr. Sinosh Skariyachan, Associate Professor, Dept of BT, DSCE Dr. Shinomol George K, Assistant Professor, Dept of BT, DSCE Mr. Madhu HN, Assistant Professor, Dept of BT, DSCE	Members
III.	Two subject experts in the concerned discipline from outside , to be nominated by the Academic Council	Dr. HG Nagendra (Prefoessor & head, Dept of Biotechnology, Sir MVIT, Bangalore) Dr. Ashok Professor, Dept of Biotechnology, RVCE,	Member
IV.	One expert from outside the college to be nominated by the Vice	Dr. R. Sowdhamini (Professor, NCBS, Bangalore)	Member

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	chancellor from a panel of 6 recommended by Principal of the college		
V.	One representative from Industry /corporate sector/allied area relating to placement to be nominated by the academic council.	Dr. Sudhakar Johnson (Natural Remedies)	Member
VI.	One post graduate meritorious Alumnus ,to be nominated by the Principal	Ms. Akshatha Prasanna	Member
VII.	Co-opt external experts, whenever special course studies are to be formulated. One member of the other department may be included		Member

Department of Computer Science Engineering

I.	Head of the Department	Dr. Ramesh Babu	Convener
II.	At least 5 faculty members at different levels, covering different specializations to be nominated by the academic council	Dr. Amutha Dr Venkateshan Prof. Kusuma Prof AM Prasad Prof Tajjuddin	Members
III.	Two subject experts in the concerned discipline from outside , to be nominated by the Academic Council	Dr Guru Prasad Dr Latha	Members
IV.	One expert from outside the college to be nominated by the Vice chancellor from a panel of 6 recommended by Principal of the college	DrSrinath	Member
V.	One representative from Industry /corporate sector/allied area relating to placement to be nominated by the academic council.	Prof Vinay	Member
VI.	One post graduate meritorious Alumnus ,to be nominated by the Principal	Ms. Surya	Member
VII.	Co-opt external experts, whenever special course studies are to be formulated. One member of the other department may be included	Dr SP Srinivasan Dr RajshekharPatil Dr Sai Ram	Members

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Department of EEE

I	Head of the Department	Dr.K.ShanmukhaSundar	Convener
II	At least 5 faculty members at different levels, covering different specializations to be nominated by the academic council	(i) Dr.P.Usha Professor, EEE Dept. (ii) Dr.Dhanalakshmi. R, Professor, EEE Dept. (iii) mr.Sharathkumar Y.N Assistant Professor, EEE . (iv) Mr.Balaji Ramakrishna Asst. Professor,EEE Dept. (v) Mr.Sreevidya . T.R Asst. Professor,EEE Dept. (vi) Mr. Satish .B.A Asst. Professor,EEE Dept. (vii) Smt. Madhura.S Asst. Professor,EEE Dept. (Viii) Smt. Vidya. M Asst. Professor, EEE Dept.,	Members
III	Two subject experts in the concerned discipline from outside , to be nominated by the Academic Council	(i) Dr. .S.Sumathi Professor & HoD, EEE Dept., RNSIT,Bengaluru (ii) Dr. Shankar C.B, Professor, EEE Dept, Dr.AIT,Bengaluru	Member
IV	One expert from outside the college to be nominated by the Vice chancellor from a panel of 6 recommended by Principal of the college	Dr.SundaraRajan. J Joint Director & Head R & D Management Division, CCAR, CPRI, Bangalore.	Member
V	One representative from Industry /corporate sector/allied area relating to placement to be nominated by the academic council.	Shri Ganga Prasad, Scientist & Senior Director, C DAC,Old Madras Road,Bengaluru	Member
VI	One post graduate meritorious Alumnus ,to be nominated by the Principal	Smt.Usha, Asst. Professor DSATM,Bangalore	Member

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VII	Co-opt external experts, whenever special course studies are to be formulated. One member of the other department may be included	Dr . Dinesh Prof. ECE Dept, DSCE, Bengaluru	Member

Department Of MBA

I	Head of the Department	Dr. K G Hemalatha	Convener
II	At least 5 faculty members at different levels, covering different specializations to be nominated by the academic council	1. Dr Lakshmi Jagannathan, Professor,MBA 2. Dr MR Sripathi Rao Professor, MBA DSCE 3. Dr Suma Rao ,Assistant Professor 4. Mrs Roopa U, Asst Professor, MBA DSCE 5. Dr Kishna Kishore Asst Professor, MBA DSCE	Members
III	Two subject experts in the concerned discipline from outside , to be nominated by the Academic Council	1.Prof.Dr. M.H .BalaSubramanya, Professor & Chairman, IISc 2.Prof. Raghunath, Professor, IIMB	Member
IV	One expert from outside the college to be nominated by the Vice chancellor from a panel of 6 recommended by Principal of the college	Dr H.K Shivprasad	Member
V	One representative from Industry /corporate sector/allied area relating to placement to be nominated by the academic council.	Mr. B G Dwaraganath, Senior consultant Titan Company	Member
VI	One post graduate meritorious Alumnus ,to be nominated by the Principal	MR Rajdeep Ghosh Sr. operations analyst, Akamai Technologies student alumni.	Member
VII	Co-opt external experts, whenever special course studies are to be formulated. One member of the other department may be included	Dr .R.K.Vijayasarathy, Director, DSBS.	Member

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DEPARTMENT OF MECHANICAL ENGINEERING

I.	Head of the Department	Dr. R. Keshavamurthy	Convener
II.	At least 5 faculty members at different levels, covering different specializations to be nominated by the academic council	Dr. C.P.S. Prakash Dr. Narasimhe Gowda Prof. G.S. Mahesh Prof. Haseebuddin.M.R Prof. Ramesha H	Members
III.	Two subject experts in the concerned discipline from outside , to be nominated by the Academic Council	Dr. K.V. Mahendra Dr. Shanmukha	Member
IV.	One expert from outside the college to be nominated by the Vice chancellor from a panel of 6 recommended by Principal of the college	Dr. A.N. Suresh	Member
V.	One representative from Industry /corporate sector/allied area relating to placement to be nominated by the academic council.	Dr. Sundarmurthy	Member
VI.	One post graduate meritorious Alumnus ,to be nominated by the Principal	Padmavathi.G	Member
VII.	Co-opt external experts, whenever special course studies are to be formulated. One member of the other department may be included	----	Member

1.1.4 How are the following aspects ensured through curriculum design and development?

- ❖ Employability
- ❖ Innovation
- ❖ Research

These are the important criteria considered in the design and development of curriculum to ensure promotion of competency, technocracy and motivate research activities.

Employability

- ❖ Curriculum and syllabi are prepared with the contribution from industry to meet their general and specific requirements.

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- ❖ Practical course corresponding to the theory courses are done which helps the students to develop skills related with design, development, debugging, evaluation, instrumentation etc.
- ❖ Mini project is included in the curriculum of UG programme. Main project is carried out in the eighth semester of the program either in department or industry. For PG programme the dissertation and publication in peer reviewed journal is included as part of curriculum.
- ❖ Need based training programs are provided to the students in the form of workshops and guest lectures from industry experts, professors from reputed foreign / national institutions or in-house faculty.
- ❖ Special Soft-Skill, attitude development programs from industry professionals are arranged from training and placement cell on regular basis.
- ❖ Industrial visits are arranged by all the departments to give practical exposure and understanding of current trends, latest developments in industry and requirements of industries.
- ❖ Open electives are introduced in the curriculum so that students can get knowledge from cross domain platforms and apply skills to develop integrated systems

Innovation

- ❖ With the advent of Autonomy, the first innovative measure taken up by the college was to go beyond the existing conventional courses and introduce new courses which are currently important.
- ❖ Courses in emerging areas like Intelligent Control, Micro grids, Renewable energy sources, Big Data Analytics, Nano Science, Cloud Computing, Mobile Computing etc., are introduced in order to enable the students to update their knowledge and expand the avenues for placements.
- ❖ Inclusion of Theory Courses with tutorial components in the curriculum provides scope for flexibility and ensures innovation.
- ❖ The pre-lab and post-lab test for laboratory courses helps to enhance the creative learning among the students.
- ❖ Conduct of workshops, best project contest, field visits etc. help to provide participatory approach and to enhance the creative learning among the students; their participation gets the weightage in the internal mark calculation.
- ❖ Conduct of value added courses to strength the technical skills of the students

Research

- ❖ The courses on projects make the students to review the literature and prepare the synopsis. This helps to impart them self learning attitude.
- ❖ Faculty are encouraged to pursue Ph.D. programme
- ❖ Research funding and projects from premier funding agencies in emerging areas.
- ❖ All departments are approved Research Centers of Visvesvaayya Technical University. Five departments are recognized as research centers by Mysore and Mangalore Universities.

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- ❖ The findings through UG / PG project work are presented in conferences and published in peer reviewed journals.
- ❖ The state of the art equipment and adequate laboratory facilities available in the departments, besides the availability of e-resources especially reputed journals and digital library services provide further support to students in undertaking research activities.

1.1.5 How does College ensure that the curriculum developed address the needs of the society and have relevance to the regional / national developmental needs?

The curriculum is developed keeping in mind the needs that exist at the regional and national levels. Human needs and social problems have a bearing on curriculum design. The curriculum is consciously developed to promote global competencies viz., communication skills in English, soft skills, computer skills, latest technologies, Lifelong learning, Social Ethics etc. It is also developed to impart values and also sensitize the students to environmental, ethical, social, management, regional and national issues. The conventional subjects are restructured to meet the local, regional, national and global needs.

- ❖ The College offers a compulsory course in Environmental Science & Engineering at UG level which creates the awareness among the students regarding the environmental conservation.
- ❖ In order to inspire critical and responsible reflection on moral issues surrounding engineering practice and to make the students aware of the different ethical issues, codes of conduct for engineers in the society and moralities in an organization. Institution has introduced unique subject namely Contributory Personality Development(CPD).
- ❖ The curriculum is consciously developed to promote global competencies through English for communication, Communication skills & Career development practice laboratory, Fundamentals of computing and C Programming courses.
- ❖ The courses like Renewable power generation technologies, Electrical system in wind energy, Indian Constitution and Society are offered as Open elective to create the social awareness among students.
- ❖ To enrich the analytical and research skills of the students the research methodologies and data analytics, Big data analytics, Stochastics power system model and applications, 3D network on chip, Social Network Analysis are included in the curriculum.
- ❖ Apart from the curriculum, the college provides opportunity to participate in Institute Social Responsibilities (ISR) activities which encourage direct involvement of students in Community and National Development activities and develop leadership of high calibre and integrity. The college contributes to the national cause of human resources development by organising blood donation camps. It provides skilled human resources to the nation's workforce. Students are equipped with Life skills to proactively deal with life's challenges. The college promotes scientific temperament and entrepreneurship among students.
- ❖ Apart from the curriculum the institution has been developing value-based holistic vision by imparting moral education to students and motivating them through regular lectures by faculty and guests.
- ❖ Additional Technical talks / Workshops on General Issues ensure that students will get to know the problems faced by the Community / Society / Industry.
- ❖ Final year projects / Co-curricular activities are also aligned towards the community services.

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1.1.6 To what extent does the College use the guidelines of the regulatory bodies for developing or restructuring the curricula? Has the College been instrumental in leading any curricular reform which has created a national impact?

The AICTE recommendation for curriculum structure and the percentage credit distribution for various programmes in our institution are given below:

S.No.	Course Work - Subject Area	Range of Total Credits (%)	
		Minimum	Maximum
1	Humanities and Social Sciences (HS), including Management;	5	10
2	Basic Sciences(BS) including Mathematics, Physics, Chemistry, Biology;	15	20
3	Engineering Sciences (ES), including Materials, Workshop, Drawing, Basics of Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation;	15	20
4	Professional Subjects-Core (PC), relevant to the chosen specialization/branch; (May be split into Hard (no choice) and Soft(with choice), if required;)	30	40
5	Professional Subjects – Electives (PE), relevant to the chosen specialization/ branch;	10	15
6	Open Subjects- Electives (OE), from other technical and/or emerging subject areas;	5	10
7	Project Work, Seminar and/or Internship in Industry or elsewhere.	10	15

- ❖ The Institution adheres strictly to the UGC, AICTE and VTU, Belagavi guidelines regarding the percentage of credit distribution in curriculum grouping for its various components while deciding the curriculum structure. While restructuring the curriculum, all departments refer to national and international models of their respective subjects.
- ❖ Further the expertise from the nominees of UGC, VTU University and State Government is explored during curriculum design.
- ❖ The developed curriculum and syllabi is approved by the statutory regulatory bodies such as Board of Studies, Academic Council and Governing Council of the college during curriculum revision. Because of this, some of the courses offered in the college are among the very few available in the country.
- ❖ The curriculum also adheres to the requirements of research and development agencies like DST, CSIR, etc. and prepares students to take up GATE and IES examinations. Thus the college has structured the curriculum of each programme to reach Dayananda Perspective Plan(Vision Document 2020)

1.2 Academic Flexibility

1.2.1. Give details on the following provisions with reference to academic flexibility.

a. Core / Elective options

All the Programmes in our institution have balanced core and elective courses. All Programmes were started keeping in view of fast changing technologies, industry requirement, and smooth progression to higher studies, the requirement of statutory bodies and the stakeholders. Each program has required mandatory core courses and selected elective courses. The courses for the list of electives are chosen based on industry requirements and employability. Students are given choices for selecting their elective courses as per their interest. The elective courses generally start from pre-final year for both UG and PG programmes.

The syllabus for all the courses is carefully designed to meet out the Programme Educational Objectives (PEOs), Programme Outcomes (POs) of the programmes concerned as well as to reach the Mission and Vision of the Department concerned and the Institution. It ensures that it fulfills the new as well as market demand based requirement.

Open Electives

The students can select open elective courses prescribed in the curriculum as one of their elective courses based on their areas of interest.

b. Enrichment courses

Enrichment courses are offered in certificate form on various emerging areas in each department. These courses are normally offered to the interested students. In addition to these, departments also arrange workshops, seminars, symposia and guest lectures on various areas for benefit of students to enrich their knowledge over and above the curriculum.

Certificate courses on the present trend and emerging areas are being organized to meet the present industry requirements.

Courses on and comprehensive skill development are made available in the curriculum of UG Programmes. These courses are useful for the students to implement their technical ideas by doing. The knowledge acquired through various activities like Technical, General Aptitude tests, Group Discussion, Mock Interview etc., which are included in the course on Comprehensive Skill Development, are useful for the students to improve their personality and to get placement in the campus/outside.

Course on Technical Seminar is made available in the curriculum of PG Programmes. This helps students to acquire communication and presentational skills and their application in social communication. Students enrich their knowledge on recent technical topics. It creates conditions for acquirement of other special skills important for effective functioning of graduates in practice. This course enables students to learn skills essential for becoming successful researchers and to face the placement interviews with confidence.

Apart from the above, industrial visits, internship programme and Value Added Courses are being arranged for our students regularly. These enable our students to enrich their practical knowledge by

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updating the day-to-day technological development and they help them to get employment and to become an entrepreneur.

Students are given opportunities to improve their general knowledge, managerial skill, organization ability, communication skill, soft skill by participating in different activities organized by the various clubs functioning in our Institution.

c. Courses offered in modular form

Courses are provided unit wise and are arranged in the modular form at department level by academic committees comprising of HODs, Faculty and Principal. Moreover the arranged modules are used for evaluating the students in the examination.

d. Credit transfer and accumulation facility

The institution does not provide facility for transfer / accumulation of credits in any programme for the students.

e. Lateral and vertical mobility within and across programmes, courses and disciplines

Open Elective Courses provided in the curriculum facilitate Lateral mobility across the programme and courses.

Self Study courses facilitate Vertical mobility within the programme and courses.

Apart from the regular curriculum, the various Value Added Certificate courses offered to our students facilitate Lateral mobility across the programme and courses.

Institutional Electives of All Departments

SLNo	Name of the Department	Institutional Electives
1	Aeronautical Engg	7th Semester 1.Project Management
		2.Robotics
		3.Total Quality Management
		4. Automotive Electronics
		8th Semester
		Supply Chain Management
		Industrial Automation
		Alternative Energy Sources
		DBMS
2	Automobile Engg	7th Sem. - Automotive Electronics and Hybrid Vehicles 8th Sem -Alternative Energy Sources for Automobiles.
3	Bachelor of Architecture	-----
4	Biotechnology	
5	Chemical Engg	Industrial Waste Water Treatment
5	Civil Engg	Environment Impact Assessment
6	Computer Science Engg	Database System Management (DBMS) - CSE
7	Construction Technology & Management	7th Semester Project Management
		Engineering Risk – Benefit Analysis

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		Infrastructure Systems Planning
		Planning for Sustainable Development
		8th Semester Management innovation & Entrepreneurship
		Global Strategy & Technology
		Knowledge Management
		Rural Technology & Community Development
8	Electrical & Electronics Engg	1) Electrical power and Energy Management Systems (VII SEMESTER) (2) Renewable energy sources (VIII Semester)
9	Electronics & Communication Engg	1.Digital Communication 2. Digital Signal Processing
10	Industrial Engg & Management	7th Semester 1.Project Management
		2.Robotics
		3.Total Quality Management
		4. Automotive Electronics
		8th Semester
		Supply Chain Management
		Industrial Automation
		Alternative Energy Sources
		DBMS
11	Information Science & Engg	Software Engineering (SE) - ISE.
12	Electronics & Instrumentation Engg	Analytical Instrumentation Process Control & Automation
13	Mechanical Engg	7th Semester 1.Project Management
		2.Robotics
		3.Total Quality Management
		4. Automotive Electronics
		8th Semester
		Supply Chain Management
		Industrial Automation
		Alternative Energy Sources
		DBMS
14	Medical Electronics Engg	Bio Materials
15	Telecommunication Engg	1. Digital Communication 2. Artificial Intelligence and Robotics.

1.2.2. Have any courses been developed specially targeting international students? If so, how successful have they been? If 'no', explain the impediments.

No. However we are in the process of implanting Dayananda Sagar Vision Document (Perspective Plan) to attract foreign students. Although our Dayananda Sagar University has already implemented measures to attract Foreign Students.

1.2.3. Does the College offer dual degree and twinning programmes? If yes, give details.

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The institution does not offer any dual degree and twinning programmes.

1.2.4. Does the College offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes?

Yes,

Since our institution is an un-aided institution, all the programmes offered by the institution are self-financing programmes. The various self financing programmes offered by our institution are as below:

The policies regarding admission, fee structure, teacher qualification and salary are as per the norms of AICTE / Director of Technical Education, Bangalore.

1.2.5 Has the College adopted the Choice Based Credit System (CBCS)? If yes, how many programmes are covered under the system?

Yes. Since 2015 – 2016, all PG Programmes are covered under CBCS

1.2.6. What percentage of programmes offered by the College follows:

- ❖ Annual system
- ❖ Semester system
- ❖ Trimester system

100% of all programmes offered follow the semester system only.

1.2.7. What is the policy of the College to promote inter- disciplinary programmes? Name the programmes and what is the outcome?

Our management encourages for starting interdisciplinary programmes which will be useful for the society.

We offered M.Tech VLSI Design and Embedded Systems M.Tech in Bioinformatics etc are some of the interdisciplinary programmes. Research is undertaken by researchers and PG students from various disciplines. Testing is also done by the graduating students and researchers of various disciplines. Our other UG and PG programme students are utilizing the facilities available in the VLSI Design and Applied Electronics laboratories for doing their projects successfully.

Our college is planning to offer few programmes of inter disciplinary nature in future with the prior approval from AICTE. The institution is bound to offer programmes that are specified by AICTE and Affiliated University. To offer inter disciplinary programmes lot of ground work is required with reference to

- ❖ Market potential
- ❖ Scope for higher education
- ❖ Students and Parents attitude towards the programmes
- ❖ Availability of the nomenclature in AICTE.

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1.3 Curriculum Enrichment

1.3.1 How often is the curriculum of the College reviewed for making it socially relevant and/or job oriented/knowledge intensive and meeting the emerging needs of students and other stakeholders?

It is planned to revise the curriculum once in four years. A comprehensive procedure is adopted for reviewing the curriculum of our institution.

- ❖ To reach out the goals and objectives, a series of Group Discussions among faculty members at departmental level is made. While reviewing the syllabus recent technological developments, socially relevant and career oriented contents are given due importance.
- ❖ In addition to the engineering discipline curriculum the following social relevant courses like Professional Ethics and Human values, Environmental Science, Principles of Management, and Total Quality Management have been included to enhance the societal fitness of students and other stakeholders.
- ❖ The interaction and feedback with our stakeholders from industry paves way to understand current demands of the industry and technological advancements, which help in redesigning the curriculum for the students to become job oriented and knowledge intensive.
- ❖ Board of Studies and Academic Council meeting is held once in a year to review the curricula and syllabi.
- ❖ More over there is a provision to include elective subjects every year, in the emerging area of science, engineering and technology.

1.3.2 How many new programmes at have been introduced UG and PG level during the last four years? Mention details.

The following four new programmes have been introduced during the last 4 years at PG level:

* Inter-disciplinary

Programmes Introduced in Last Four Years	Department	Specialization	Year
M.Tech	Biotechnology	Bioinformaticis	2013

1.3.3 What are the strategies adopted for revision of the existing programmes? What percentage of courses underwent a major syllabus revision?

For keeping the curriculum up-to-date and to introduce appropriate changes within the curriculum, Board of Studies (BOS) meeting and Academic Council meeting are conducted regularly in our Institution. The interaction sessions with the alumni and industrial experts are also arranged periodically.

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This kind of interaction with the expert members helps us to identify the emerging areas. Based on the needs in the current scenario, curriculum has been redesigned. The major revision is taken up once in every four years and minor changes are made once a year. The strategies adopted for the revision of the existing programmes are as follows:

- ❖ Analysis of the feedback from the students and Subject Experts from various fields.
- ❖ Referring the syllabus of reputed institutions like IIT and National Universities.
- ❖ Considering the suggestions given by the Experts from industries and Multinational Companies while coming here for recruitment and guest lectures.
- ❖ Incorporating the suggestions of Academic Council Members.

1.3.4 What are the value-added courses offered by the College and how does the college ensure that all students have access to them?

All students have to undergo any one value added course during their programme. These courses are offered after the college hours so that the students are free to undergo any value added course. The knowledge acquired from the value added course will be assessed and evaluated by conducting periodical test, Quiz and by student feedback. The lists of Value-added courses that have been conducted by various departments are as follows:

Sl No	Department	Details of the Value Added Course	Agency	Duration	Year	No of Students Benefitted
1	ISE	DB2 Training	IBM	21 st -24 th Aug, 4 days	2012	138
2		Lotus Training	IBM	6 th -8 th Aug, 3 days	2012	138
3		DB2 Training	IBM	26 th -29 th Sep, 4 days	2012	138
4		Lotus Training	IBM	3 rd -5 th Aug, 3 days	2012	138
5	ISE	RAD	IBM	13 th -14 th April, 2 days	2012	138
6		RAD	IBM	29 th - 31 st , Aug, 3 days	2013	133
7		TIVOLI	IBM	5 th Oct 1 day	2013	120
8		WEBSPPHERE	IBM	26 th - 27 th Oct, 2 days	2013	133
9		TGMC Training	IBM	13 th March, 1 day	2014	133
10		BLUEMIX	IBM	24 th March, 1 day	2015	139
11		DB2	IBM	21 st Feb 1 day	2013	124
12		Advanced Excel	Freelancer	20 hrs	2012	100
13		Advanced Excel	Freelancer	20 hrs	2013	100

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14	MBA	Advanced Excel	Xylectics	20 hrs	2014	100
15		Advanced Excel	Xylectics	20 hrs	2015	100
16		Advanced Excel	Xylectics	20 hrs	2016	100
17		Advanced Excel	Freelancer	20 hrs	2012	100
18		Skill development	SkillWiz	20 hours	2011	58
19		Skill development	SkillWiz	20 hours	2012	100
20		Skill development	SkillWiz	20 hours	2013	100
21		Skill development	SkillWiz	20 hours	2014	100
22	IEM	MSME	MSME-DI	2weeks	2008-16	240
23	Telecom		HEDEX		2015	
24	ECE	-Embedded course on PIC18F4550 MICRCONTROLLER. -Communication Systems course on GSM and other communication standards. -Information Security based on computing, data analysis and programming.	HEDX Training Institute	6 Months	2015	180
25		-Setting up of embedded labs and VLSI laboratory -MSP kits were received from & related course on MSP has been taught.	TEXAS Instruments/ Head gate	6 Months	2014	172
26		-Lab view virtual simulation tool training equip with communication VTU syllabus for faculty -Simulations of lab experiments with basic concepts of Simulink.	National Instrumentation	6 Months	2013	170
		Campus Connect Program Partnership	Infosys Campus	6 months	2011-2016	540

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27	CSE		Connect			
		Collaborative study of diagnostics images	HCL Technologies	4 months	2014-2016	56
		Collaborative study of new technologies	AntheaConsultancy Ltd.	1 months	2014-2016	120
		Course on Python, Java	HedX	3 months	2014-2016	270
		C,C++, Big data , Cloud Computing	Saarthi Career Centre	1 month	2016	519
		Campus Connect Program Partnership	Infosys Campus Connect	6 months	2011-2016	540

Following Table shows a sample list of Value Added Courses and Skill development programmes conducted by different departments.

Electronics and Communication Engineering

Sl.No	Date	Semester	Programme	Students Attended
PHASE I				
1	02.09.14	3 – A, B, C & D	Working in Teams and Interpersonal Skills	64
2	03.09.14			61
3	04.09.14			63
4	05.09.14			61
5	02.09.14	5 – A, B, C, & D	Pre Placement Training - I	64
6	03.09.14			67
7	04.09.14			65
8	05.09.14			45
PHASE II				
9	12.03.15	4 - A, B, C & D	Leadership and Emotional Quotient	57
10	13.03.15			50
11	16.03.15			61
12	17.03.15			44

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13	12.03.15	6 – A, B, C & D	Final Placement Training	61
14	13.03.15			66
15	16.03.15			59
16	17.03.15			42

Electrical and Electronics Engineering

Sl.No	Date	Semester	Programme	Students Attended
PHASE I				
1	18.08.14	3 – A & B	Working in Teams and Interpersonal Skills	46
2	25.08.14			48
3	18.08.14	5 – A & B	Pre Placement Training - I	61
4	25.08.14			19
PHASE II				
5	23.02.15	4 – A & B	Leadership and Emotional Quotient	36
6	25.02.15			49
7	23.02.15	6 – A & B	Final Placement Training	53
8	25.03.15			48

Electronics and Instrumentation Engineering

Sl. No	Date	Semester	Programme	Students Attended
PHASE I				
1	25.9.14	3	Working in Teams and Interpersonal Skills	36

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2	26.8.14	5	Pre Placement Training	46
PHASE II				
3	18.02.15	4	Leadership and Emotional Quotient	30
4	18.02.15	6	Final Placement Training	41

Industrial Engineering and Management

Sl.No	Date	Semester	Programme	Students Attended
PHASE I				
1	01.09.14	3	Working in Teams and Interpersonal Skills	45
2	01.09.14	5	Pre Placement Training- I	32
PHASE II				
3	26.02.15	4	Leadership and Emotional Quotient	35
4	26.02.15	6	Final Placement Training	30

Information Science and Engineering

Sl.No	Date	Semester	Programme	Students
PHASE - I				Attended
1	19.08.14	3 – A & B	Working in Teams and Interpersonal Skills	56
2	19.08.14			50
3	30.10.14	5 – A & B	Pre Placement Training - I	33
4	31.10.14			53
PHASE – II				
5	03.03.15	4 – A & B	Leadership and Emotional Quotient	43
6	05.03.15			45

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7	03.03.15	6 – A & B	Final Placement training	63
8	05.03.15			57

Mechanical Engineering

Sl.No	Date	Semester	Programme	Students
PHASE - I				Attended
1	20.08.14	3 – A, B & C	Working in Teams and Interpersonal Skills	55
2	21.08.14			65
3	22.08.14			66
4	20.08.14	5 – A, B & C	Pre Placement Training – I	59
5	21.08.14			59
6	22.08.14			49
PHASE – II				
7	24.03.15	4 – A, B & C	Leadership and Emotional Quotient	55
8	25.03.15			49
9	22.04.15			56
10	24.03.15	6 – A, B & C	Final Placement Training	40
11	25.03.15			54
12	17.04.15			53

Medical Electronics

Sl.No	Date	Semester	Programme	Students
PHASE - I				Attended
1	29.10.14	5	Pre Placement Training - I	30
PHASE – II				
2	19.03.15	4	Leadership and Emotional Quotient	33

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3	19.03.15	6	Final Placement Training	33

Telecommunication Engineering

Sl.No	Date	Semester	Programme	Students Attended
PHASE - I				
1	16.09.14	3 – A & B	Working in Teams and Interpersonal Skills	48
2	17.09.14			55
3	16.09.14	5 – A & B	Pre Placement Trainning – I	48
4	17.09.14			21
PHASE – II				
5	02.03.15	4 – A & B	Leadership and Emotional Quotient	43
6	04.03.15			35
7	02.03.15	6 – A & B	Final Placement Training	46
8	04.03.15			41

1.3.5 Has the College introduced any higher order skill development programmes in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies?

NSDC acts as a catalyst in skill development by providing funding to enterprises, companies and organizations that provide skill training. It will also develop appropriate models to enhance, support and coordinate private sector initiatives. As per the above direction, our college is committed to excellence in higher education through the following of academic processes that are fair, transparent, enriching and give a balance of the professional and social spheres.

1.4 Feedback System

1.4.1 Does the College have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?

Yes.

- ❖ The Institution encourages the participation of all the stakeholders in planning, implementation and evaluating the academic programmes. It collects the feedback from them about POs which indirectly reflect on the curriculum. Institution has several mechanisms to obtain feedback from current as well as outgoing students and stakeholders.

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- ❖ The Institution gets regular feedback from student, alumni, parent, and industry related to the areas of curriculum indirectly and on delivery mechanism. Feedback from students is collected through the feedback forms for the ongoing academic activities.
- ❖ Feedback is also obtained through personal interaction with students during the meetings like Class Committee meetings, Academic Improvement committee meetings with student members along with Principal.
- ❖ The consolidated outcome is communicated to concerned authorities / HoDs / Faculty. The feedbacks are also used to organize the programs and courses to take care of the contents beyond syllabi and the suggestions made are taken into consideration during the subsequent Board of Studies and Academic Council meeting. All the departments are collecting the feedback from the autonomous students at the end of semester.

1.4.2. Does the College elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods adopted to do the same - (conducting webinar, workshop, online forum discussion etc.). Give details of the impact on such feedback.

Yes.

- ❖ No direct measure is available at present but it is done indirectly.
- ❖ Broadly, the Institution is following model curricula recommended by the national level regulatory agency and Affiliating University for all its programmes after eliciting opinions from the experts in their respective fields. There is no formal mechanism developed to obtain feedback on curriculum from international faculty. Now it is planned to get the feedback from international faculty concerned by sending the current curriculum and syllabi of all programmes. On receipt of feedback from them, necessary revision will be made in the curriculum after getting the approval from BOS concerned and Academic Council. But, our faculty members get oral feedback from foreign faculty during their participation in different National and International Seminars/Workshops /Conferences. Moreover the Board of Studies/Academic Council include Academic Experts from IIT, IISc., VTU University, etc., and Industrial Expert members whose comments and suggestions are taken into consideration in the curriculum formation/revision.

1.4.3 Specify the mechanism through which alumni, employers, industry experts and community give feedback on curriculum enrichment and the extent to which it is made use of.

The college has adapted a unique mechanism for conducting stakeholder's feedback by IQAC Cell. .

The IQAC conducts the feedback survey of existing students, alumni, external peers, employers and other stakeholders by various methods including survey questionnaire and interviews. The comprehensive survey report with recommendations provide a clear perspective for future curriculum redesign and modifications.

We are getting feedback from Alumni, Employers, Expert committee like BOS, Academic Council etc.

a. Alumni:

Several Alumni members are entrepreneurs and many hold management positions at leading industries/organization. Few organizations have appointed a good number of our alumni as consultants. Their input is used by the department as the link between the department and its industry partners. As the young engineers move to corporate fields, in the defined interval, faculty conducts Informal

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conversation/ collects questionnaire, to elicit feedback about the relevance of the course content, coverage etc. The Institution invites Alumni and their employers for various academic activities such as Association events, Symposium, Seminar, Guest Lecture etc. and get their feedback about curriculum enrichment. Also, during annual alumni meetings these points are further discussed and brought to the notice of Board of Studies concerned and Academic Council for further consideration.

b. Employers / Industry :

Employers are invited to offer their comments / opinion on the curriculum, which is obtained through the feedback proforma that deals with content relevance to cater industrial requirement, teaching-learning process, student motivation and other related parameters. Moreover, all the Boards of Studies include expert member from industries whose comments and suggestions are taken into consideration in the curriculum formation/revision.

c. Parents :

Parents are the direct beneficiary or sufferer incase their ward succeeds or fails in his/her career. Parent's responsibilities lie in ensuring their wards' best performance at the college, and also supporting the college in shaping the ethical values of them. The Institution encourages frequent visit by the parents during their wards' course of study. Input from parents provides general feedback about the related curricular/co-curricular activities.

d. BOS :

Faculty members, a prominent member from Alumni and a member from prominent employers are part of BoS. They collectively provide valuable feedback towards the improvement of curriculum design and development. Moreover Faculty members of the institution constantly interact informally with faculty members of other institutions and industry personnel, to get inputs for curriculum development.

e. Agencies like AICTE, NBA, UGC, VTU University are also involved in providing indirect feedback.

Above all, evaluation is required for corrective actions. Evaluation is done at a macro level by the Institution and at a micro level by the Department.

1.4.4 What are the quality sustenance and quality enhancement measures undertaken by the institution in ensuring effective development of the curricula?

Board of Studies meeting, comprising experts from various academic and industries, will be conducted twice a year for analyzing and improving the curriculum and syllabus to meet the industrial requirements. Guidelines issued from the national and International Quality assurance and accreditation agencies like AICTE, NAAC, NBA, ISO etc. are adopted in periodic revisions of curriculum. The institution has made it a point to define Program Educational Objectives and Program Outcomes for every program. Apart from this, Course Level Objectives also play a vital role in enhancing the quality of the curricula. Institution adopts the model curriculum developed by AICTE / Affiliated University. Also, it is planned to revise the contents of each programme on regular basis to meet the ever changing requirements of the industry/and job market/needs of society. These measures ensure effective development of the curricula.

Any other information regarding Curricular Aspects which the university would like to include.

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- ❖ Flexible and Choice Based Credit System to learn elective subjects offered across the departments.
- ❖ Periodic revision of curriculum & syllabi.
- ❖ Value added courses. Courses on communication skills / Professional ethics / Environmental Engineering.
- ❖ Tutorials for analytical subjects.

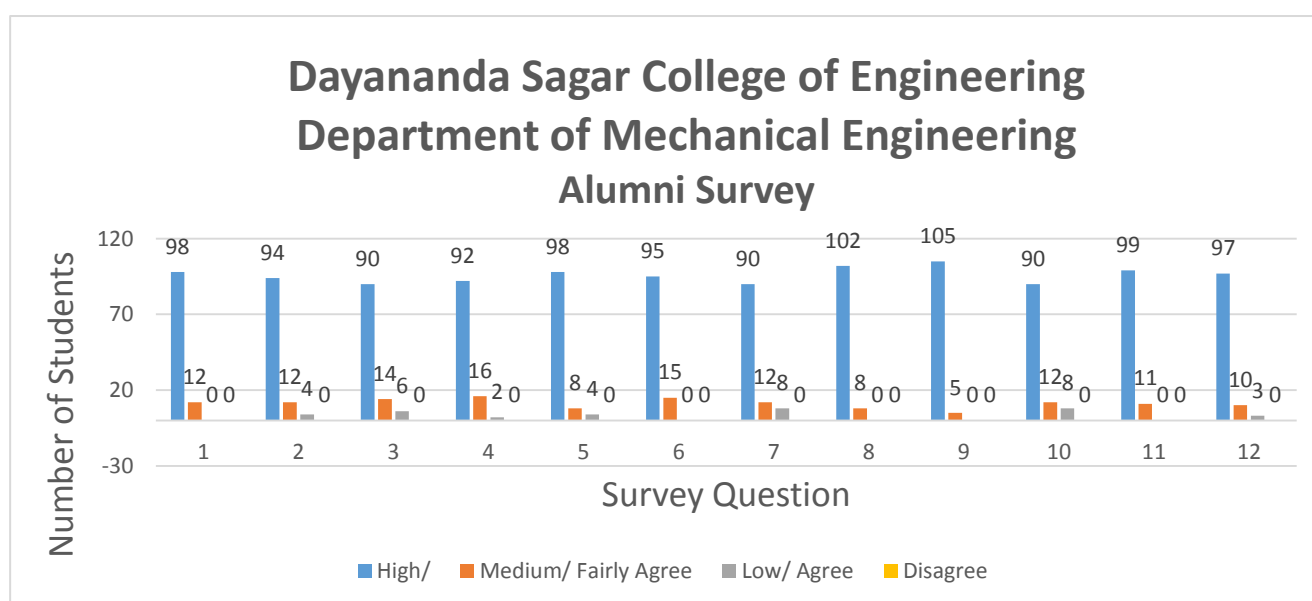
Sample Surveys carried out recently

Survey: Alumni Survey	Survey Type: Feedback Survey	Survey For: PEO,PO
Department: Mechanical Engineering	Program: Mechanical	Target Value: Medium/ Fairly Agree
	Total Number of Alumni's Participated in the Survey: 110	

Survey Question	High/ Strongly Agree	Medium/ Fairly Agree	Low/ Agree	Disagree
1. The courses in mechanical engineering helped to apply knowledge of Engineering, science and mathematics to solve Engineering problems.	98	12	0	0
2. Are you able to identify, formulate and analyse engineering problems using principle of Maths, natural science and Engineering science.	94	12	4	0
3. Are you able to design solution for engineering problems/system for the society?	90	14	6	0
4. Are you able to use research based knowledge and research methods to conduct investigations of complex problems.	92	16	2	0
5. Has the course in Mechanical Engineering helped to apply modern tools for prediction and modelling of complex engineering activities?	98	8	4	0
6. Are you able access societal health, safety, legal, cultural issues and consequent responsibilities relevant to professional engineering activities?	95	15	0	0
7. Are you able to demonstrate the knowledge required for solving environmental problems sustainable development?	90	12	8	0

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8. Are you aware of professional ethics and responsibilities required for engineering practices?	102	8	0	0
9. Can you function effectively as individual/a leader in a team?	105	5	0	0
10. Can you effectively communicate complex Engineering activities?	90	12	8	0
11. Can you able to demonstrate knowledge, understanding of engineering and management principles to lead projects.	99	11	0	0
12. Did the courses studied you useful in lifelong learning?	97	10	3	0

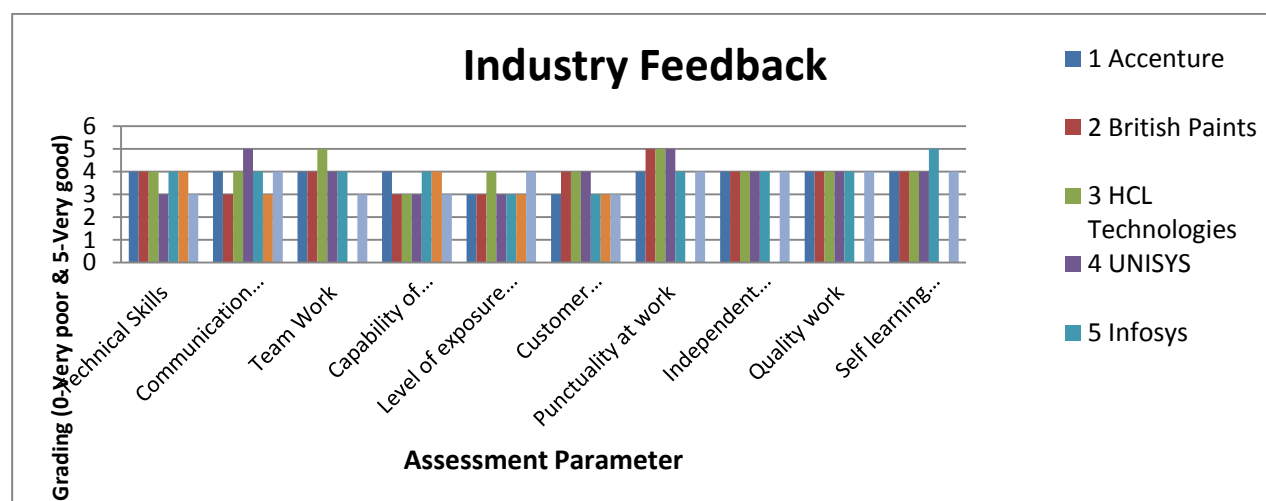


Employer's Survey Sample

Survey Question	Disagree	Agree	Fairly Agree	Strongly Agree
Have clarity with basic concepts of engineering? Can identify the design aspects, analyse and interpret the requirements.			✓	
Capable of designing the required system components and processes to support the functioning of the system as a whole? Can identify the technical problems and try to find solutions to these problems?				✓
Can identify the design aspects, analyse and interpret the requirements? Capable of designing the required system components and processes to support the functioning of the			✓	

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system as a whole				
Can identify the technical problems and try to find solutions to these problems				✓
Have good attitude and behaviour contemporary issues, professional responsibility, impact of technology on society and the need for lifelong learning? Follow the ethical issues			✓	
Can communicate effectively? Capability to upgrade skills and use modern engineering tools necessary for engineering practice			✓	
Capable of adapting to new changes in technology? Keep upgraded with latest technical developments that impact the industry			✓	



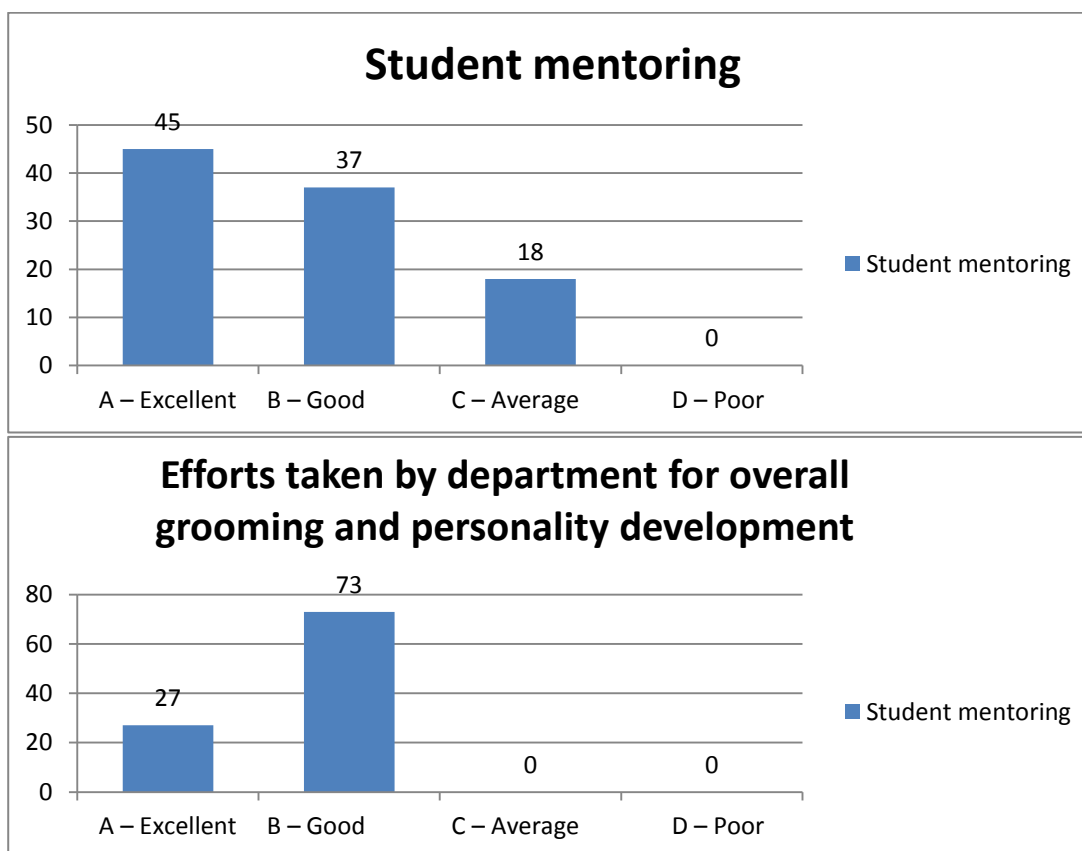
Parent's Feedback Sample

DEPARTMENT OF CIVIL ENGINEERING

	Infrastructure Facilities namely library, laboratory, canteen and other campus facilities	Programmes arranged by the department for achieving industry exposure	Encouragement to students for participation in various co-curricular activities	Quality of academic resources namely teachers, course material etc.	Are you reciving Message/Letter /Phone from the Department regarding progress of your Ward	Placement activities	Efforts taken by department for overall grooming and personality development	Student mentoring
A – Excellent	73	45	27	46	55	45	27	45
B – Good	27	45	63	54	18	55	73	37
C – Average	0	10	0	0	27	0	0	18

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D – Poor	0	0	10	0	0	0	0	0



CRITERION II

TEACHING-LEARNING AND EVALUATION

2.1. Student Enrolment and Profile

2.1.1. How does the College ensure publicity and transparency in the admission process?

The institution has a long standing history of over 36 years. It has an exemplary reputation for higher education in Karnataka with a large number of programs to choose from. Media and various fairs are some of the ways the institution publicizes itself. Below is the description of how publicity is achieved and the transparency involved in the admission process.

Publicity:

- Advertisements are released in newspapers.
- Website: The institutes' website <http://www.dayanandasagar.edu/dsce> gives the entire information on institute, its infrastructure, faculty, activities and admission details.
- Information Brochure: The institutes' Brochure contain information about departments, faculty, infrastructure, placements and achievements. It provides guidelines for admission seeking candidates and their parents.
- The institution participates in educational fairs, technical exhibitions, programs in electronic media and uses such other opportunities for propagation of institutional achievements as well as programs.
- Alumni: The institute has a strong Alumni network working in all facets of engineering, business and government organizations. The alumni are one of the major publicizing sources.

Transparency:

The Institute strictly adheres to the norms of AICTE/ State Government and its affiliating University, VTU for admitting students. Undergraduate Candidate's admission to the Institute is through Common Entrance Test (CET) of Karnataka Examination Authority (KEA), Consortium of Medical, Engineering, and Dental colleges of Karnataka (COMED-K) and Management Quota.

Postgraduate students are admitted through PGCET and management quota. Seats allotted through counseling of KEA, COMED-K are admitted to the institute as per the norms of VTU.

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- The admissions are done as per the Government of Karnataka norms based on the admission matrix announced by them.
- Out of the total seats 45% of the seats are filled by the Common Entrance Test conducted by Karnataka Examination Authority (KEA), 30% of seats are filled through COMED-K and 25% by Management, all by merit.
- All admissions are approved by the VTU.

2.1.2. Explain in detail the process of admission put in place for UG, PG and Ph.D. programmes by the College. Explain the criteria for admission (Ex. (i) Merit, (ii) Merit with entrance test, (iii) Merit, entrance test and interview, (iv) Common test conducted by state agencies and national agencies (v) Others followed by the College?

The admission to bachelor's degree is through the Common Entrance Test (CET) conducted by Karnataka Government & Consortium of Medical, Engineering and Dental colleges of Karnataka COMED-K. The admission to master's degree is through Post Graduate Common Entrance Test (PGCET) and to Ph.D is through VTU Research Aptitude Test (VRAT) conducted by VTU. The students with meritorious ranking are considered for admissions.

1. Admission to Bachelor Degree in Engineering/Technology (UG) shall be open to the candidates who have cleared the second year Pre-University or XII standard or any equivalent examination recognized by the University.
2. The candidate shall have secured not less than forty five percent (45%) with physics, Mathematics & English as compulsory subjects, along with any one of the following subjects, namely, Chemistry, Biotechnology, Computer Science, Biology and Electronics.
3. Provided that, the minimum marks for the purpose of eligibility shall be forty percent (40%) in optional subjects in case of candidates belonging to SC/ST and OBC candidates from Karnataka.
4. Admission to Master Degree in Engineering / Technology (PG) shall be open to the candidates who have passed bachelor of engineering or equivalent examination recognized by the University.
5. The candidate shall have secured not less than fifty percent (50%) marks in the aggregate in bachelor of engineering.
6. Provided that, the minimum marks for the purpose of eligibility shall be forty percent (40%) in bachelor of engineering in case of candidates belonging to SC/ST and OBC candidates from Karnataka.
7. Admission to Doctor of Philosophy (Ph.D) shall be open to the candidates who have passed Master degree in Engineering or Technology from a recognized university with a CGPA of 6.75 out of 10. (Minimum 60 percent aggregate at the bachelors' level or master's level).
8. Bachelor's degree in Engineering or Technology from a recognized university with a CGPA of 7.75 out of 10 (minimum 70 percent aggregate at bachelors level) and should have published research papers in refereed journals or obtained patents.

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9. Candidates with an M.Tech degree from recognized university who have successfully completed prescribed course work at first three semester of study with a CGPA of 7.75 out of 10 (70 percent aggregate) with good research aptitude are eligible to apply.

2.1.3. Does the College have a mechanism to review its admission process and student profiles annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?

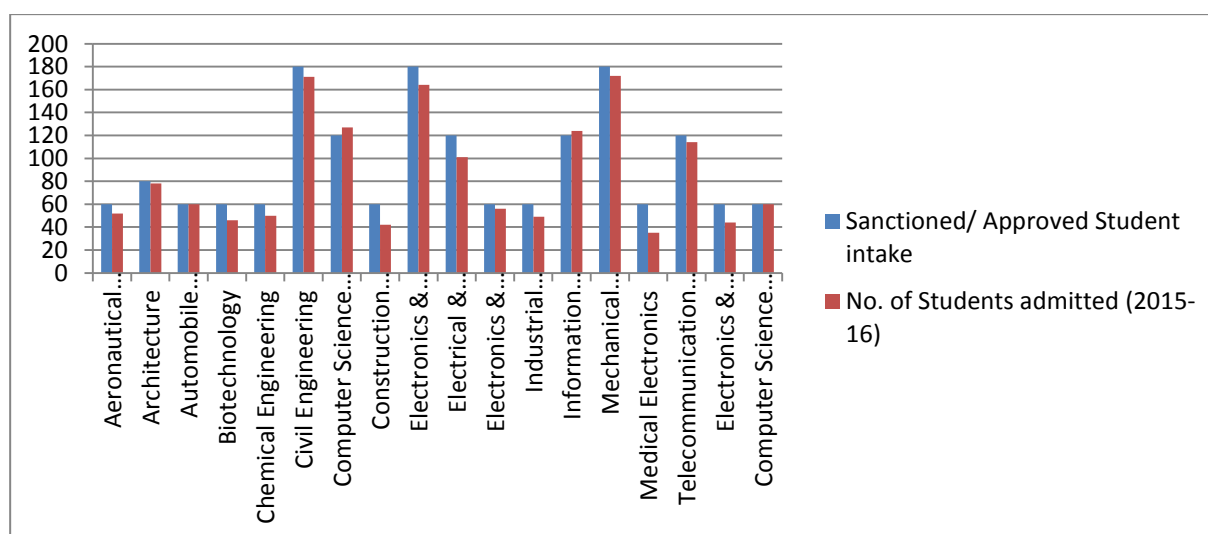
Yes. The college conducts review and analyzes data pertaining to admission profiles. The review generally includes but not limited to the following areas.

The strata of the students involving

- a) SC/ST/OBC Vs General – Contribution of SC/ST/OBC in Results and placement (This analysis enables the institute to know the progress of backward communities).
- b) CET Input Quality Analysis (Cut off Rank Analysis)
- c) Own State v/s other states Contribution of Other State students in overall Results and placement

Some Sample Data Analysis is furnished below for the academic year 2015-16

All UG Programmes Intake Vs Actuals



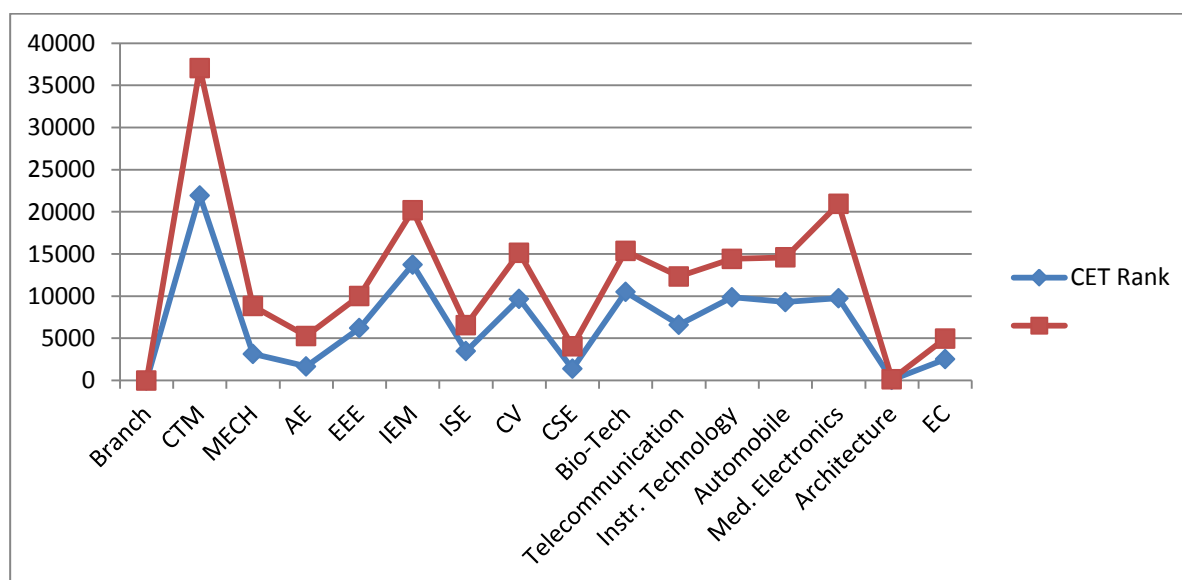
Impression No.01 : This gap is noticed in recent years and the reason is mushrooming of technical institutions in the State.

Impression No.02 : Conventional Programs Viz Mechanical, Civil, Information Science are comparatively doing well.

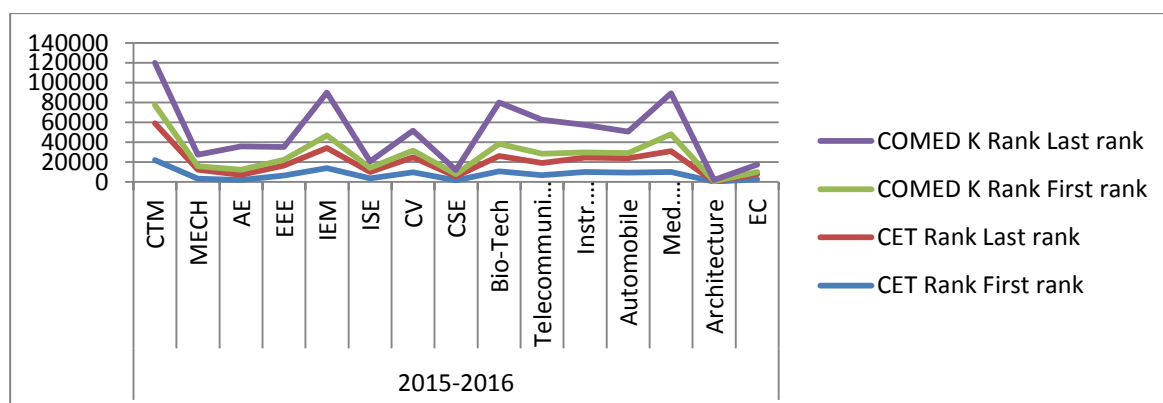
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Academic year	Branch	CET Rank		COMED K Rank	
		First rank	Last rank	First rank	Last rank
2015-2016	CTM	21934	37050	18375	42610
	MECH	3141	8825	3717	11582
	AE	1672	5272	5090	23539
	EEE	6191	10021	5921	12866
	IEM	13733	20177	12581	43387
	ISE	3460	6568	3917	6589
	CV	9671	15149	6802	19974
	CSE	1379	4027	2263	4121
	Bio-Tech	10495	15347	12505	41414
	Telecommunication	6600	12327	9360	34289
	Instr. Technology	9871	14414	5368	27766
	Automobile	9289	14593	4953	21547
	Med. Electronics	9747	20931	17197	41450
	Architecture	78	145	162	1272
	EC	2509	4963	2257	7539

CET RANK ANALYSIS



Comparison between CET and COMED K



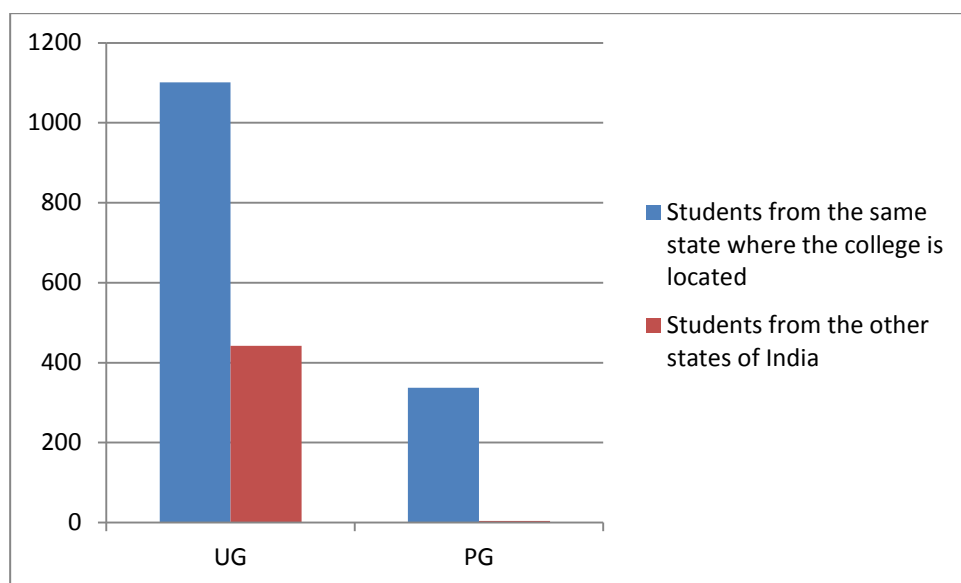
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Impression I : Computer and Electronics based Programs have great Demand with CET Rank Range of 1 to 20000

Outcome of the Analysis

- 1. Recommendations from Admission Committee: To adopt Online Admission Process from academic year 2016-17**

Analysis of Students From Same State Vs Others



Impression I – There is huge Gap in PG Admissions from Other States.

2.1.4 What are the strategies adopted to increase / improve access to students belonging to the following categories?

The College follows reservation policy for admissions of the socially, economically disadvantaged sections, physically challenged persons, sports persons, children of Ex-servicemen and wards of the employees

- **SC/ST:** Statutory reservation policies of the State Government are followed.
- **OBC:** Statutory reservation policies of the State Government are followed.
- **Different categories of persons with disabilities:** The State Government reserves 3% of the seats for students with different categories of disabilities. The College is accommodative towards candidates applying in this category. These students are also counseled on the viable course options available for them. Once admitted, the campus being disabled friendly offers special amenities like ramp, lift, wheel chair etc.
- **Economically weaker sections:** Scholarships are provided for economically backward students based on their merit and annual income irrespective of the community or caste. Poor and meritorious students get benefited out of it. Financial assistance and support in the form of fee concessions by the society and Scholarships from various agencies are offered along with an opportunity to pay fees in

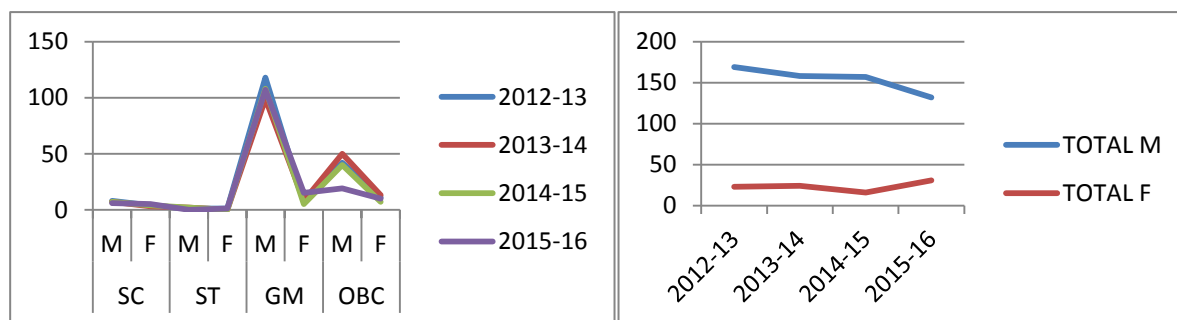
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installments.

- **Outstanding achievers in sports and extracurricular activities:** The State Government reserves seats for students who have distinguished themselves in sports and other extracurricular activities.
- To promote access and ensure the equity, the institution follows specific percentages of seats for each of the social categories specified by the VTU University and they are strictly adhered during the admission process.
- The students from the disadvantaged community are admitted based on the overall merit in open competition and also in the specific quota of seats allotted for their community.

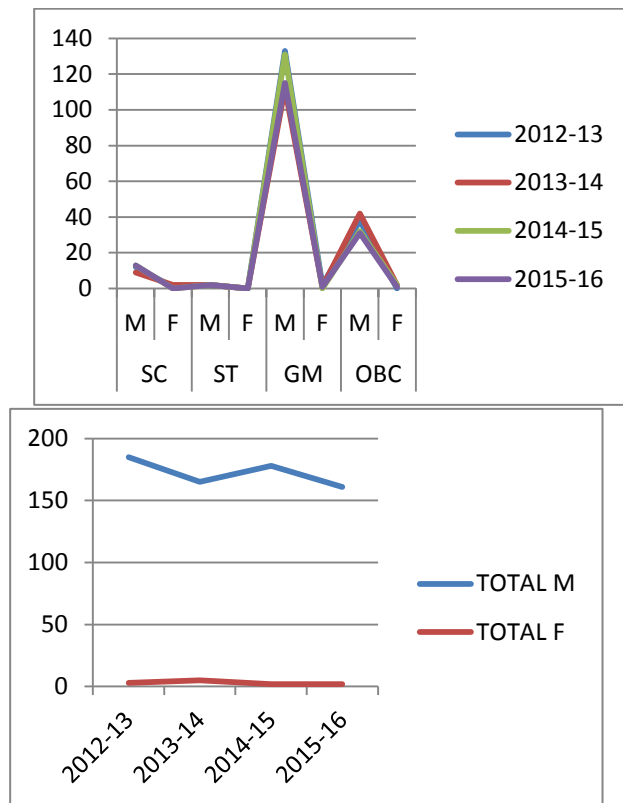
2.1.5 Furnish the number of students admitted in the College in the last four academic years.

CIVIL ENGINEERING																			
Year	SC		ST		GM		OBC		TOTAL		TO TAL	Karnatak a		Non- Karnatak a		NRI		Foreig n	
	M	F	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F
12-13	8	4	1	1	118	7	42	11	169	23	192	83	18	84	5	0	0	2	0
13-14	7	3	2	0	99	8	50	13	158	24	182	85	20	69	4	0	0	4	0
14-15	7	4	2	0	108	5	40	7	157	16	173	117	14	39	2	0	0	1	0
15-16	6	5	0	1	107	15	19	10	132	31	171	99	30	38	4	0	0	0	0

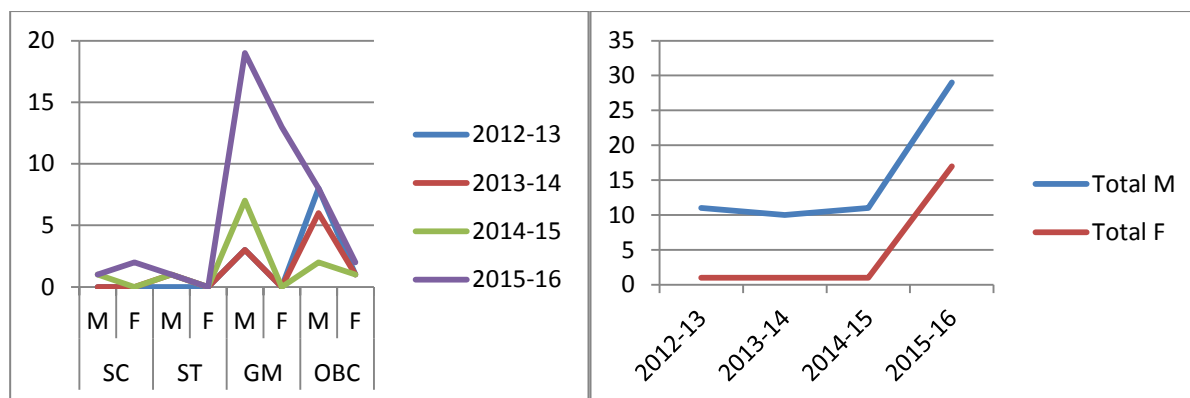


MECHANICAL ENGINEERING																			
Year	SC		ST		GM		OBC		TOTAL		TOTAL	Karnataka		Non- Karnataka		NRI		Foreign	
	M	F	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F
12-13	12	1	2	0	133	2	38	0	185	3	188	103	3	79	0	2	0	1	0
13-14	9	2	2	0	112	1	42	2	165	5	170	104	5	56	0	3	0	2	0
14-15	13	0	2	0	131	0	32	2	178	2	180	121	2	55	0	1	0	1	0
15-16	13	0	2	0	115	1	31	1	161	2	163	126	2	44	0	0	0	0	0

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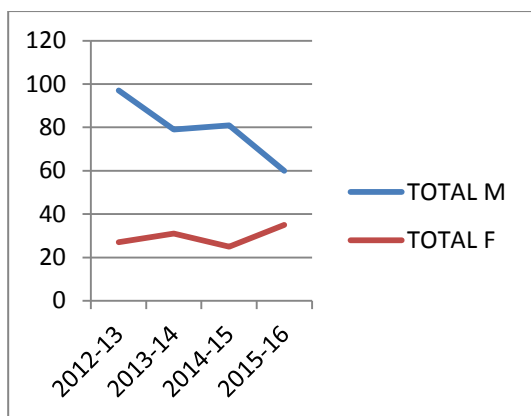
IEM

Year	SC		ST		GM		OBC		Total		Total	Karnataka		Non-Karnataka		NRI		Foreign	
	M	F	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F
12-13	0	0	0	0	3	0	8	1	11	1	12	11	1	0	0	0	0	0	0
13-14	0	0	1	0	3	0	6	1	10	1	11	10	1	0	0	0	0	0	0
14-15	1	0	1	0	7	0	2	1	11	1	12	11	1	0	0	0	0	0	0
15-16	1	2	1	0	19	13	8	2	29	17	49	24	15	8	2	0	0	0	0

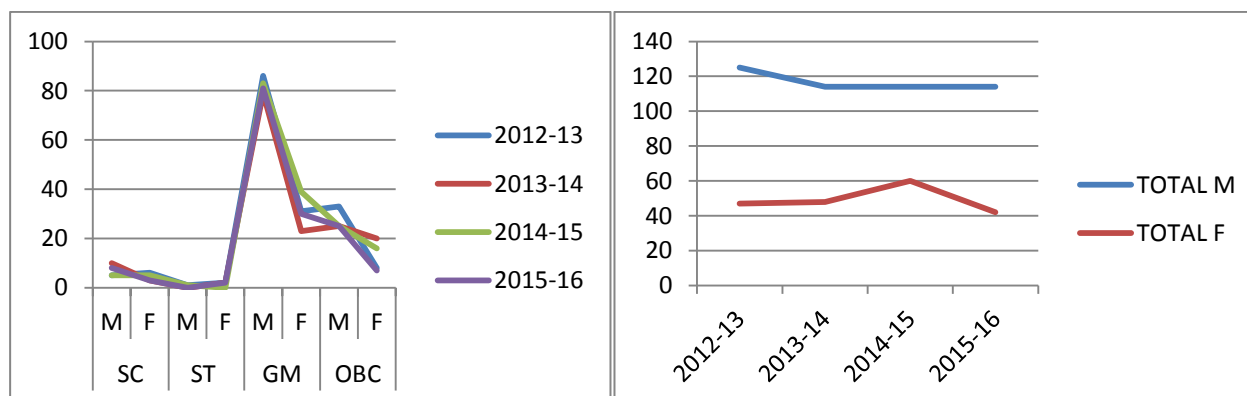
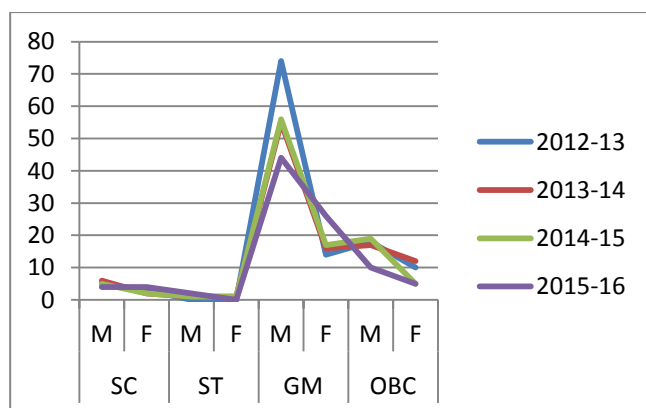
ELECTRICAL ENGINEERING

Year	SC		ST		GM		OBC		TOTAL		TOTAL	Karnataka		Non-Karnataka		NRI		Foreign	
	M	F	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F
12-13	5	3	0	0	74	14	18	10	97	27	124	38	22	58	5	0	0	1	0
13-14	6	2	1	1	55	16	17	12	79	31	110	46	23	33	8	0	0	0	0
14-15	5	2	1	1	56	17	19	5	81	25	106	45	20	36	5	0	0	0	0
15-16	4	4	2	0	44	26	10	5	60	35	101	34	22	30	15	0	0	0	0

SELF STUDY REPORT



ELECTRONICS AND COMMUNICATION



SELF STUDY REPORT

Year	SC		ST		GM		OBC		TOTAL		TOTAL		Karnataka		Non-Karnataka		NRI		Foreign		
	CHEMICAL ENGINEERING																				
12-13	5	6	1	2	86	31	33	8	125	47	172		70	33	55	14	0	0	0	0	
13-14																					
14-15																					
	Year		SC		ST		GM		OBC		TOTAL		TOT AL	Karnatak a		Non-Karnatak a		NRI		Foreign	
	M	F	M	F	M	F	M	F	M	F	M	F		M	F	M	F				
	12-13	1	0	0	0	26	18	5	4	32	22	54	19	15	12	7	1	0	0	0	
	13-14	3	0	0	0	28	14	8	2	39	16	55	19	11	19	4	0	1	1	0	
	14-15	2	1	1	0	22	12	12	4	37	17	54	26	15	9	2	2	0	0	0	
15-16	2	1	0	0	20	16	4	3	27	20	51	20	16	9	5	0	0	1	0		

COMPUTER SCIENCE & ENGINEERING																			
Year	SC		ST		GM		OBC		TOTAL		TOTAL	Karnataka		Non-Karnataka		NRI		Foreign	
	M	F	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F
12-13	4	4	0	2	62	26	13	8	79	40	119	41	31	38	9	0	0	0	0
13-14	5	3	1	0	47	34	15	14	68	51	119	39	35	28	16	1	0	0	0
14-15	3	5	1	0	64	28	16	9	84	42	126	50	32	33	10	0	0	1	0
15-16	4	2	1	1	59	31	14	6	80	41	127	45	31	40	11	0	0	0	0

Note : Annexure is maintained with all student data for last Four Years.

2.1.6 Has the College conducted any analysis of demand ratio for the various programmes offered by the College? If so, indicate significant trends explaining the reasons for increase / decrease.

. Yes. The institution regularly conducts Demand Ratio Analysis.

The trend shows significant decline in the demand for some programmes. The reason for the decline is global recession and the employability.

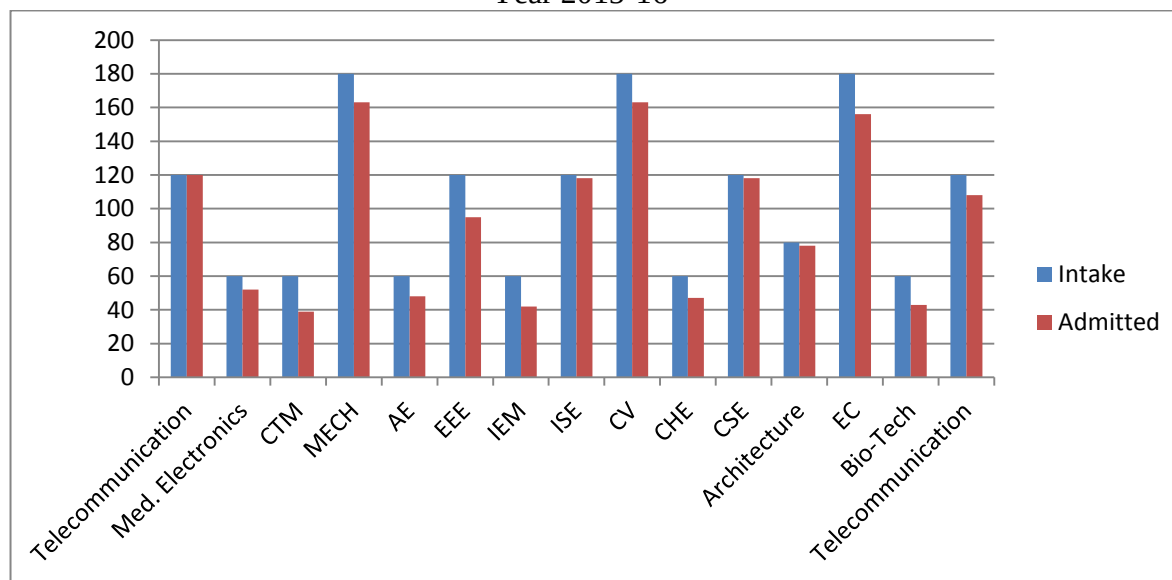
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Academic year	Branch	Number of applications	Number of students admitted	Demand Ratio
2012-2013	CTM	60	56	0.933
	MECH	120	120	1
	AE	60	62	1.01
	EEE	120	120	1
	IEM	60	54	0.9
	ISE	126	124	0.98
	CV	60	60	1
	CHE	60	54	0.9
	CSE	120	120	1
	Architecture	40	40	1
	EC	130	130	1
	Bio-Tech	60	47	0.72
	Telecommunication	120	120	1
	Med. Electronics	60	54	0.9
2013-2014	CTM	60	57	0.95
	MECH	120	120	1
	AE	60	61	1.03
	EEE	120	120	1
	IEM	60	56	0.93
	ISE	126	121	0.96
	CV	60	60	1
	CHE	60	55	0.92
	CSE	120	120	1
	Architecture	40	40	1
	EC	130	130	1
	Bio-Tech	60	50	0.78
	Telecommunication	120	120	1
	Med. Electronics	60	52	0.9
2014-2015	CTM	60	45	0.75
	MECH	120	120	1
	AE	60	62	1.05
	EEE	120	120	1
	IEM	60	51	0.85
	ISE	126	122	0.97
	CV	60	60	1
	CHE	60	54	0.9
	CSE	120	120	1
	Architecture	80	74	0.92
	EC	130	130	1
	Bio-Tech	60	48	0.75
	Telecommunication	120	120	1
	Med. Electronics	60	52	0.9
2015-2016	CTM	60	39	0.65

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MECH	180	163	0.90
AE	60	48	0.8
EEE	120	95	0.79
IEM	60	42	0.7
ISE	120	118	0.98
CV	180	163	0.91
CHE	60	47	0.78
CSE	120	118	0.98
Architecture	80	78	0.97
EC	180	156	0.86
Bio-Tech	60	43	0.71
Telecommunication	120	108	0.9
Med. Electronics	60	32	0.5

Year 2015-16



2.1.7 Was there an instance of the College discontinuing a programme during last four years? If yes, indicate the reasons.

None.

2.2 Catering to Student Diversity

2.2.1 Does the College organize orientation / induction programme for freshers? If yes, give details of the duration of programme, issues covered, experts involved and mechanism for using the feedback in subsequent years.

Yes.

- The College organizes orientation / induction programme for fresher's at the beginning of every academic year. This orientation programme provides awareness to the students about the facilities and features of the institution.

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- College achievements, awareness on academic rules and regulations are given to the students through the Principal address.
- Heads of various Departments and other members of faculty introduced to the parents and interact with students during session.
- Parents interact with the Heads of various Departments to know better about the department and the institution.
- Academic details related to the programme (credits, evaluation procedures, eligibility for the Award of Degree), Milestones of the Departments and scope of the programmes are by respective Heads of Departments.
- Facilities in Library, Sports, and Computer were discussed by the Librarian, Physical Director and Experts.
- Freshers are taken around the college as batches to the department Labs/Workshops, library and main library to show the available facilities.

Experts Involved

The experts involved in the Orientation process include the Heads of the Departments, Academic Coordinators, Tutors, Placement coordinator and an Industrial Expert. Information about the following is disseminated to the students:

1. Attendance Requirements
2. Teaching Learning Process
3. Internal Assessment Procedure
4. Facilities of the College
5. Placement Record
6. Industry Interactions

Feedback is obtained from the students to know their impersonation. The effectiveness of the programme is sensed from the students' oral feedback and as accordingly, the nature of the programme is reoriented in the subsequent years.

2.2.2 Does the College have a mechanism through which the “differential requirements of student population” are analyzed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

Yes.

The College has a mechanism through which the differential requirements of student population are analyzed after admission and before the commencement of classes.

- The key issues are
 - ✓ Lack of communication skills due to rural background
 - ✓ Medium of instruction in the higher secondary class.
 - ✓ Lateral Entry Students require Bridge Course on Mathematics and Science.

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- ✓ Students from other states require foundation courses on communicative English and Programming.

Actions for addressing the issues are as follows:

Higher Secondary Students

- There will be an orientation programme for first year students, before the start of the first semester classes.
- For addressing rural background students, HOD addresses and motivates the students to make them mingle with others.
- To improve the communication skills of the students they are given special training at English language lab.
- Students with interest in the sports, cultural and other club activities are identified and encouraged to join the respective groups and participate in various activities.
- Financial support is extended to students with poor economic background through scholarships from Government, Management, and other Philanthropic organizations.

Lateral Entry Students:

- From the observations made on students admitted to lateral entry scheme during the past, the following key issues have been identified and are addressed:
- **Programming Skills** –Bridge courses are conducted to enhance the Programming skills of the students.
- **Rural Background** - Students hailing from rural background are mentored to break their language barriers and improve their interpersonal skills. To improve the communication skills of students, the Language Laboratory is made open to all students from the beginners to the advanced level of usage. The Software focuses on all four skills of language (LSRW, L- learning, S-speaking, R-reading, W-writing). Students who use this software will emerge well trained in all these four skills of language.
- **Mathematics/ English** - Lateral entry students admitted in the third semester are given special attention by arranging bridge course for subjects like Mathematics and English.

2.2.3 Does the College provide bridge /Remedial /add-on courses? If yes, how are they structured into the time table? Give details of the courses offered, department wise/faculty-wise?

Yes. The college provides bridge, remedial and add-on courses to the students.

The following measures are taken

Bridge Courses

Bridge courses are conducted for students immediately after they join the first year, to enable smooth transition into college study from intermediate and lateral entry level.. At the commencement of the first year classes, the following statistics are consolidated:

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1. Number of students in school with medium of instruction in Vernacular
2. Number of students from Vocational Stream of Study in qualifying
3. Higher Secondary Examinations
4. Number of students who had no exposure to computing
5. Number of students from Rural Background

Based on these statistics, the Bridge Courses are conducted as below:

- Communicative English
- Physical Sciences
- Fundamentals of Computing
- Mathematics course

Remedial classes

- Remedial classes are conducted for the lateral entry students and academically weak students during the evening hours.
- Special coaching classes are scheduled and conducted for the failed students to prepare for the supplementary examinations.

Value added courses

- Value added courses are conducted periodically by all the departments on advanced topics which are not covered in the curriculum and syllabus but required for industries or to take up higher education. Certificates are issued to the participants.
- Value added courses are optional courses conducted in the evening hours after regular class hours. Certificates are provided for the participants.

Add on courses

- a) **Higher Education in India-** In-house training is conducted for students aiming to pursue higher studies in reputed institutions within the country
- b) **Centre of Innovation and Leadership Cell** and the Industry Institute Partnership Cell incubates and encourages students with innovative ideas.
- c) **Foreign Languages** - Students are provided with an option of learning English, French and German languages at the campus itself, as knowledge of a foreign language may improve their chances of placement.

2.2.4 Has the College conducted a study on the incremental academic growth of different categories of students; - student from disadvantaged sections of society, economically disadvantaged, physically handicapped and slow learners etc.? If yes, give details on how the study has helped

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the College to improve the performance of these students.

Yes.

Student from disadvantaged sections of society and physically handicapped are admitted as per the reservation policy of the government.

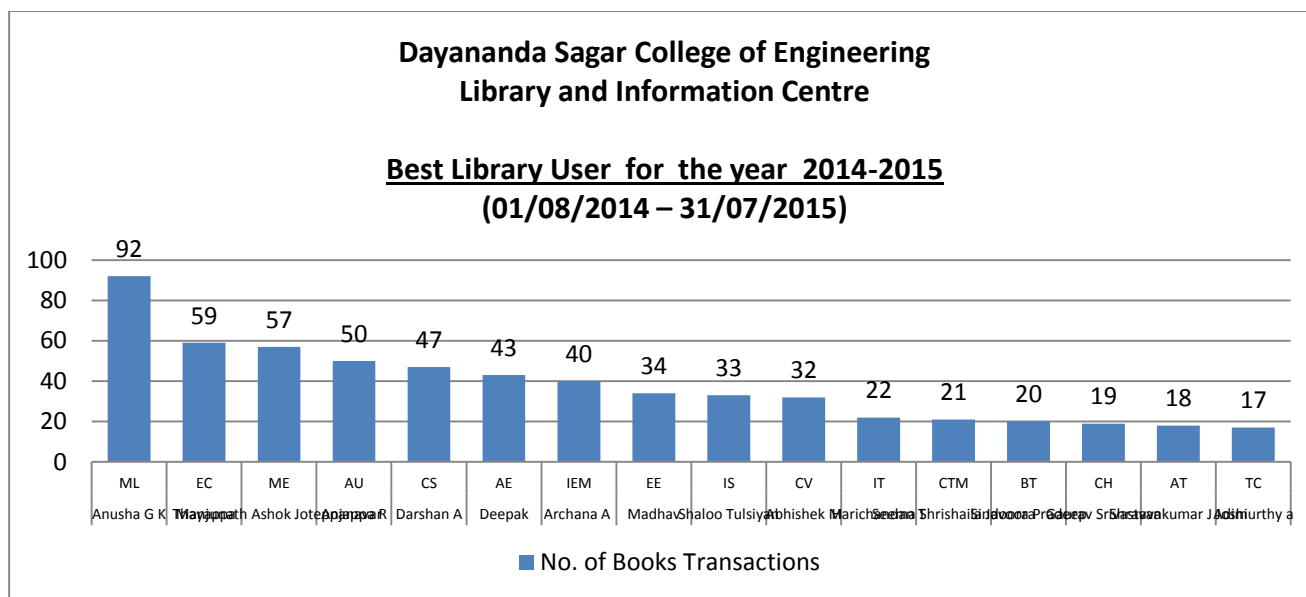
- The incremental academic growth of these students' (internal test marks and University exam marks) is maintained in respective Departments. After the completion of each test, the marks are uploaded in the Portal. The faculty advisor does the analysis of marks obtained by their wards.
- At the end of every semester, the result analysis is carried out subject wise by all the departments.
- Various Analytical tools are employed to study the incremental growth of the following category of students.
 1. Slow Learners
 2. Advanced Learners
 3. SC/ST/OBC Category
 4. Other State students
 5. Students on the risk of 'DROP OUT'

Example :

Best Library User for the year 2014-2015
(01/08/2014 – 31/07/2015)

Sl.No	Name	Dept.	No. of Books Transactions
1	Anusha G K	ML	92
2	Thayappa	EC	59
3	Manjunath Ashok Joteppanavar	ME	57
4	Anjappa R	AU	50
5	Darshan A	CS	47
6	Deepak	AE	43
7	Archana A	IEM	40
8	Madhav	EE	34
9	Shaloo Tulsiyan	IS	33
10	Abhishek M	CV	32
11	Harichandan T	IT	22
12	Seema Shrishaila Javoora	CTM	21
13	Sindoora Pradeep	BT	20
14	Gaurav Srivastava	CH	19
15	Shravankumar J Joshi	AT	18
16	Adimurthy a	TC	17

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The library Usage Data is Correlated with the CIE and Semester Examination Marks

- Parents are informed about their ward's performance and activities in the college through SMS.
- For slow learners Question Bank, Tutorial questions, Course material and previous University question papers, e-book and power point slides are given by the instructor to improve their performance.
- Special class tests are conducted for slow learners providing opportunity for them to boost their marks.
- Special coaching classes are arranged for the students who have failed in the end semester examinations.

2.2.5 How does the institution identify and respond to the learning needs of advanced learners?

Advanced learners are identified through their academic performance, project execution, involvement in co-curricular activities etc. They are motivated and mentored to enhance their skills. They are encouraged to

- Participate in National/International conferences, Seminars/ Workshop/ hands-on training/ Symposia for presenting papers.
- Do innovative projects with funding provided by the institution and demonstrate in the Mega science expo conducted in the college every year.
- Enroll in various student chapters.
- Self-study, open elective courses are provided in the 2015(CBCS) Regulations and Curriculum for the advanced learners.
- Take part in discussion forum and self learning through video materials like NPTEL.
- Referred Journals from library to learn about the novel ideas in research.

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- Learn in higher level and made to share their knowledge by means of presentation in various forums.
- One of the Major support for Advanced Learners is Paper Publication and Minor and Major Projects.

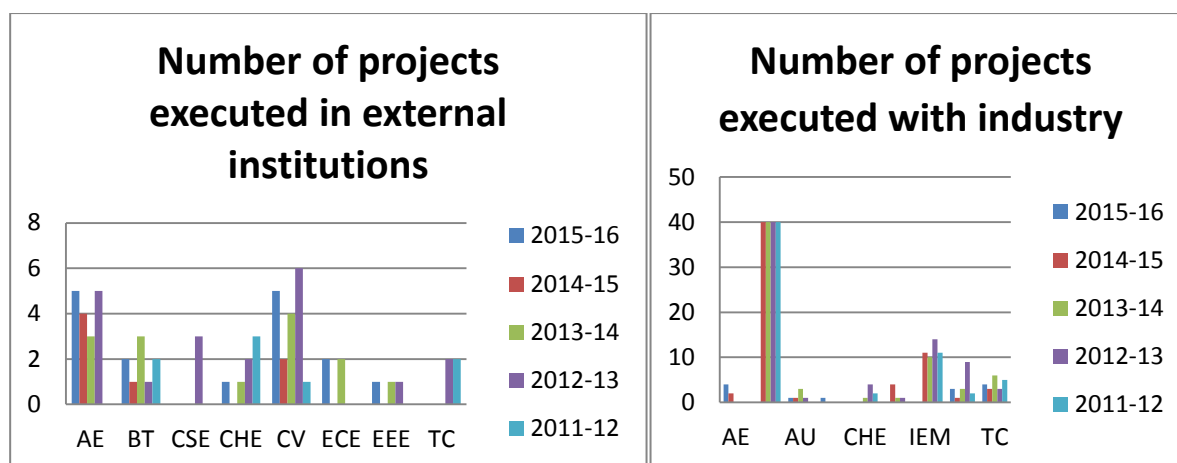
A sample data of the number of projects undertaken by the students is given below.

Sl. No.	Academic Year	Number of In house projects (within the institution)																Total No. of Projects
		AE	ARC	AU	BT	CSE	CHE	CTM	CV	ECE	EIE	ISE	IEM	ME	ML	EEE	TC	
1.	15-16	11	40	15	08	37	11	15	56	56	14	32	17	51	08	32	23	426
2.	14-15	16	40	15	09	37	16	12	41	46	11	33	4	38	13	28	29	388
3.	13-14	12	40	13	09	36	11	11	39	36	15	32	6	36	14	30	32	372
4.	2012-13	08	40	12	10	37	08	12	37	38	16	30	3	32	11	22	32	348
5.	2011-12	-	40	-	11	36	06	-	38	41	17	29	4	38	15	31	21	327

Sl. No.	Academic Year	Number of Projects associated with external institution																Total No. of Projects
		AE	ARC	AU	BT	CSE	CHE	CTM	CV	ECE	EIE	ISE	IEM	ME	ML	EEE	TC	
1.	2015-16	05	-	-	02	-	01	-	05	02	-	-	-	-	-	1	-	16
2.	2014-15	04	-	-	01	-	-	-	02	-	-	-	-	-	-	-	-	7
3.	2013-14	03	-	-	03	-	01	-	04	02	-	-	-	-	-	1	-	14
4.	2012-13	05	-	-	01	03	02	-	06	-	-	-	-	-	-	1	02	20
5.	2011-12	-	-	-	02	-	03	-	01	-	-	-	1	-	-	-	02	9

Sl. No.	Academic Year	Number of Industry Projects																Total No. of Projects
		AE	ARC	AU	BT	CSE	CHE	CTM	CV	ECE	EIE	ISE	IEM	ME	ML	EEE	TC	
1.	2015-16	04	-	01	-	01	-	-	-	-	-	-	-	-	-	3	04	13
2.	2014-15	02	40	01	-	-	-	-	-	-	04	-	11	-	-	1	03	62
3.	2013-14	-	40	03	-	-	01	-	-	-	01	-	10	-	-	3	06	64
4.	2012-13	-	40	01	-	-	04	-	-	-	01	-	14	-	-	9	03	72
5.	2011-12	-	40	-	-	-	02	-	-	-	-	-	11	-	-	2	05	60

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Example II :

Table 3.4: List of Workshops/Seminar/Guest Lectures conducted in college

Number of the Workshops/Seminars/Guest Lectures				
2014-2015	2013-2014	2012-2013	2011-2012	2010-2011
96	111	102	117	115

2.2.6. How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

In all means the institution takes care of the needs of differently abled students. The following strategies are adapted to cater to the needs of them:

- ✓ The college has health care center for immediate medical assistance within the campus
- ✓ Elevator facility is provided
- ✓ A state-of-the- art 400 bedded multispecialty hospital run by our trust adjacent to the campus
- ✓ Ambulance facility available if required
- ✓ The following facilities are provided for differently-abled:
 - Separate toilet facility
 - Wheel chairs are readily available in the campus
 - Separate Hostel rooms are provided in the ground floor

2.3 Teaching-Learning Process

2.3.1 How does the College plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan and evaluation blue print, etc.)

Academic calendar

The Teaching Learning process is the back bone of the academic system of any Institution. The academic calendar is prepared and distributed to the students along with vision and mission of the institution at the beginning of each academic year.

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The calendar gives the information of the Institution, rules & regulations, working days, holidays and various events. The academic calendar is prepared in consultation with the Principal, Controller of Examinations, and Heads of the Departments and other administrative officers of the institution prior to the commencement of the academic year. It contains the various details such as commencement of classes/continuous internal assessment tests/closing date of theory classes/commencement of practical examination/commencement of theory examination/reopening of college after semester holidays/communication details of all teaching and non-teaching faculty member.

Apart from the Institution academic calendar, the individual departments organize their teaching plans, various co curricular and extracurricular activities in the department calendar.

Class time table is prepared, displayed at the department notice board, and circulated to the students. The time table for each class is prepared and displayed in the notice board at the beginning of each semester. Various time tables are prepared such as

- Class timetable for regular classes
- Lab time table for the concerned lab is displayed in the laboratory venue.
- Internal test time table is displayed in the notice boards
- Practical exam and End-Semester Examination time table is displayed in the notice boards and college website
- Copies of the time table are made available in the department for information to faculty and staff members and document purpose
- Guest lecture schedule for analytical subjects

Teaching Plan

At the beginning of each semester, once the subjects are allocated the faculty members prepare thorough plan of the course delivery plan for the course which is going to handle during the semester. It is reviewed by the course coordinator having expertise in the course and is acknowledged by the Head of the Department. All faculty members maintain class log book for theory and laboratory courses which is periodically monitored by HoD and Principal.

Evaluation blue print

Continuous Assessment test

The Continuous Assessment Examination (CIE) consists of internal tests, quiz and assignment conducted each semester and the marks scored in the tests along with the marks obtained in the quiz and assignment is considered as the final internal mark.

Semester End Examination

The Semester End Examinations are conducted at the end of each semester which carries 100 marks for each course.

2.3.2 Does the College provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?

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Yes.

- Curriculum and syllabi are posted in the college website for students' reference.
- **The course outlines** contain the syllabus, course objectives, course outcomes, number of lecture hours, tutorial hours, practical hours, and number of credits. It also lists out the text books and reference books.
- **The course schedule** is prepared in advance and displayed to the students on the starting day of the semester. The course schedule is prepared based on the number of credits for the subject.
- The lesson plan for each subject prepared by the Faculty includes topics to be covered, duration, teaching aid and reference books for each topic.
- The internal test, assignment, quiz schedule for the courses are also given as part of the lesson plan.
- Course delivery plan for individual subjects prepared by particular faculty is approved by HoD prior to the commencement of the academic session.
- The portion handled by the individual faculty will be entered in the class log book of every class. The feedback obtained from the students through class committee meetings will be intimated to the faculty concerned for necessary action.
- Regular faculty meetings are arranged by Head of the Department to review the academic progress to monitor the record of class work maintained by the Faculty.

2.3.3. What are the courses, which predominantly follow the lecture method? Apart from classroom interactions, what are the other methods of learning experiences provided to students?

Almost all the course except some laboratory courses and projects need predictable lecture methods. In addition to classroom interactions, following are the other methods of learning experiences provided to the students:

- ICT enabled teaching method
- Group discussion and quiz programmes for some of the courses
- Arrange Industrial visit to get the latest developments and application of theoretical aspects in the industrial upbringing
- Demonstrate using cut or dismantled models and simulation tools
- Motivate students to participate in national/international level symposiums
- Arrange special lectures by alumni members to present a glimpse of latest technology and to share their knowledge and experience with the students
- Encourage self-learning by students
- Guide the students to publish the technical paper in journals
- Motivate students to develop working models for Open House Exhibition in Science & Engineering conducted annually

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- Arrange to show video Lectures delivered by Professors from premier institutions like IITs and IISC, obtained from National Program on Technology Enhanced Learning (NPTEL)
- Arrange for In plant Training for the duration of 15 days for UG students

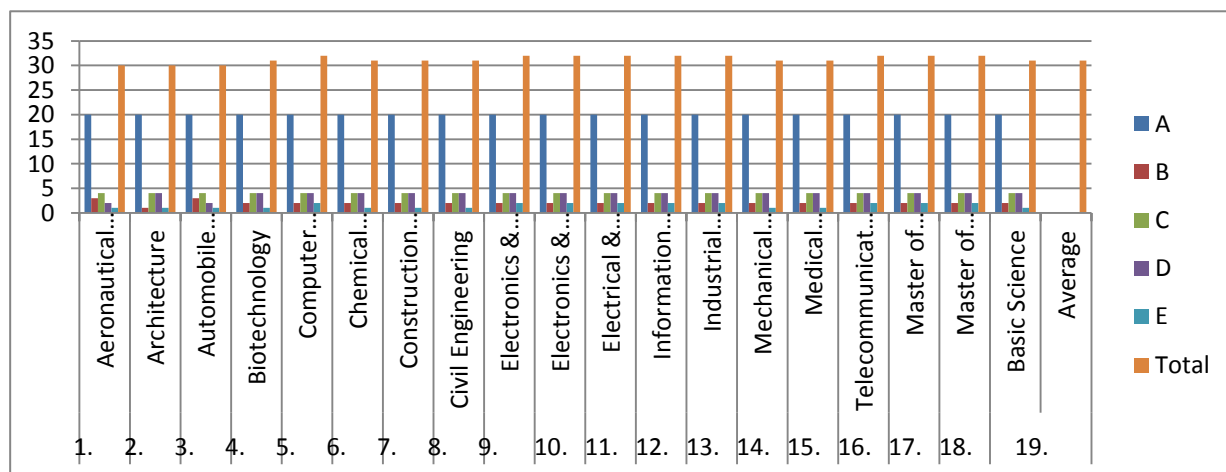
The students are also motivated to participate in other extracurricular activities.

A Sample Survey of the Different Pedagogies used by the Departments is shown below.

SL	Department	A	B	C	D	E	Total
1.	Aeronautical Engineering	20	3	4	2	1	30
2.	Architecture	20	1	4	4	1	30
3.	Automobile Engineering	20	3	4	2	1	30
4.	Biotechnology	20	2	4	4	1	31
5.	Computer Science Engineering	20	2	4	4	2	32
6.	Chemical Engineering	20	2	4	4	1	31
7.	Construction Technology & Management	20	2	4	4	1	31
8.	Civil Engineering	20	2	4	4	1	31
9.	Electronics & Communication Engineering	20	2	4	4	2	32
10.	Electronics & Instrumentation Engineering	20	2	4	4	2	32
11.	Electrical & Electronics Engineering	20	2	4	4	2	32
12.	Information Science Engineering	20	2	4	4	2	32
13.	Industrial Engineering & Management	20	2	4	4	2	32
14.	Mechanical Engineering	20	2	4	4	1	31
15.	Medical Electronics Engineering	20	2	4	4	1	31
16.	Telecommunication Engineering	20	2	4	4	2	32
17.	Master of Business Administration (MBA)	20	2	4	4	2	32
18.	Master of Computer Application (MCA)	20	2	4	4	2	32
19.	Basic Science	20	2	4	4	1	31
Average							31

Note: All in mentioned in %

- A- PPT**
- B- DLMS**
- C- NPTEL, Coursera, Video Lectures etc..**
- D- E-Journals**
- E- Others like Online test, Quiz etc.**



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2.3.4. How is 'learning' made more student-centric? Give a list of participatory learning activities adopted by the faculty that contribute to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.

After a student is admitted to the College she is guided, stimulated, motivated and corrected, from the beginning of student life at college thereby channelizing energy in the best possible manner.

Remedial classes, Career Counseling Cell, concessions, aids, awards, incentives, special classes, tutorials and state of the art infrastructure at international standards are meant to groom and prepare them for the industry need, as well as morally upright, socially responsible and professionally sound human resource.

Apart from regular lectures, the institute is more interested in active learning which contributes to the holistic development and improved self learning which provides opportunity to improve, learn, develop thinking skills, communication and presentation skills of students. Further the student gain hands-on experience through the following:

- ✓ project work
- ✓ Student's association activities by individual department.
- ✓ Student seminars
- ✓ Lab experiments

Guest lectures, symposium and workshops are regularly arranged for students by inviting eminent people from Industry, Academic and Research Institutions.

Technical Societies and Student chapters of National/International Associations are active and students are encouraged to present technical papers at National/ International Conferences.

Peer interaction is done through inter collegiate student technical symposia which are arranged and conducted by students and funded by the Management. The students are motivated to undergo Industrial visits and in-plant training and also an Industrial Tour is arranged by individual Department

2.3.5. What is the College policy on inviting experts / people of eminence to provide lectures / seminars for students?

The College has a policy of organizing 'Expert Lectures' by inviting faculty from IITs, NITs, University departments from VTU university, State & Central Universities and experts from the Industry.

The College also encourages the Departments to organize Guest Lectures/Seminars/Conferences and Workshops by inviting eminent persons from academic institutions/industries every semester. Every department has association activities for students. In addition to guest-lectures, plenary lectures are included in the Workshops/Seminars organized by various Departments. Guest lectures are arranged to enrich the learning process of the student community.

Professional Society Chapters

Every department is associated with one Professional Society to organize Programmes. The Professional Society chapters functioning in the institution include - IETE, IEEE, CSI and IET.

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Career Development and Placement Division

The Career Development and Placement Division of the college make use of every opportunity to invite industry people and create awareness of industry expectations and working culture among the students. They conduct industry connect programmes every Saturday, with a projected annual budget.

Alumni Association

The alumni association has good interaction with the Alumni through its various chapters. Every department invites at least 2 alumni per semester for technical talk. A vast alumni database, along with details distinguished alumni is maintained, to make use of their services as resource people or placement training, when required.

The list of seminar, lectures and other technical events maintained in **Annexure**

2.3.6 What are the latest technologies and facilities used by the faculty for effective teaching? Ex: Virtual laboratories, e-learning, open educational resources, mobile education, etc.

The latest technologies and facilities used by the faculty for effective teaching are:

E-learning

- **Digital Library** is utilized by the students to get proverbial with the recent trends in the industry.
- **Video Contents** - Students are enthusiastically access to IEEE, Science direct, etc. and access to Video Contents of NPTEL
- **Audio Visual Aids** – Teachers effectively make use of audio visual aids to make learning a satisfying experience for the students.
- **Language Laboratory** is made open to all students from the beginners to the advanced level of usage. The Software focuses on all four skills of language (LSRW, L- learning, S-speaking, R-reading, and W-writing). Student who uses this software will emerge well trained in all these four skills of language.
- Computers with internet facilities in all laboratories
- Facilities available in the Learning Centre include, Seminar Halls, Digital Library, Wi-Fi connectivity, Department Library, Project reports and Reference books.

Open Educational Resources

- **NPTEL** - Accessing NPTEL improves the quality of self-learning. NPTEL provides E- learning through online Web and Video courses in Engineering, Science and humanities streams. The use of NPTEL resources enhances the quality of engineering education.
- Study materials for the courses are available online in the intranet for academic under beetech guru and for placement related materials under Local guru.
- E-journals and e-books are available in college digital library.

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Mobile Education

The institution has provided Wi-Fi with 100 mbps connectivity for 24×7 learning for smart phone.

2.3.7. Is there a provision for the services of counselors / mentors / advisors for each class or group of students for academic, personal and psycho-socio guidance? If yes, give details of the process and the number of students who have benefitted.

Yes.

- Each class will be allotted a Class Teacher. The Class Teachers will keep track of the academic performance of the students and send the progress report of the students to the parents for all internal assessments and also end semester examination marks.
- Class Teacher will act as a philosopher, guide and friend to the students of their ward.
- If any student lags or show deviation in her academic and attendance, the students will be counseled and appropriate actions are initiated. Students who require any personal guidance may approach the Class Teacher for their assistance to overcome their difficulties.
- In addition, Counselors are allotted for every class of students for academic and personal guidance.

Type of mentoring: Professional guidance / Career Advancement / course work specific / laboratory specific/ total development

- ✓ Number of faculty Counselors : 3 per Class of strength 60
- ✓ Number of Students per Proctor : 10 - 20 Students
- ✓ Frequency of the Meeting : Once in a month.
- The students who are having problems will be brought to the notice of the concerned Head of the Department by the counselor, so that the HoD can analyze the problem and provide necessary counseling in the presence of their parents and the Principal if necessary.

2.3.8 Are there any innovative teaching approaches/methods/ practices adopted/put to use by the faculty during the last four years? If yes, did they improve the learning? What methods were used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?

Yes,

There are some innovative teaching approaches and methodologies are being followed. They are as follows:

Innovative practices:

Brainstorming sessions will be conducted to students on any random occasion in which students will be posted with problems and they have to work in team to arrive the solution. This improves work-as-team ability of the students and also gives them confidence in breaking a new problem put forth at any time.

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Hands on experience in some courses which will help the students to experience some concepts get implemented. This helps the student to gain confidence in that concept and improves knowledge.

Project in Laboratory courses which will have practical problems relevant to the syllabus. Students will be given set of problems to choose based on their interest. This improves the applicability skill set of the students.

Model based demonstration is the way of some of the engineering courses using models. The faculty members encourage the students to develop models and use them to explain the concept for better understanding.

Methods used to evaluate the impact of such practices

- Feedback from students on curriculum, teacher and teaching methodology
- Feedback from the faculty on performance of the students.

Faculty Recognition

The research in the particular domain makes the faculty member to become competent in teaching and hence the faculty members are recognized by cash award in the college day for their publications. Also the performance in the research is one of the assessment factors for computing FPI.

2.3.9. How does the College create a culture of instilling and nurturing creativity and scientific temper among the learners?

The following steps are taken by the college to create a culture of instilling and nurturing creativity and scientific temper among learners.

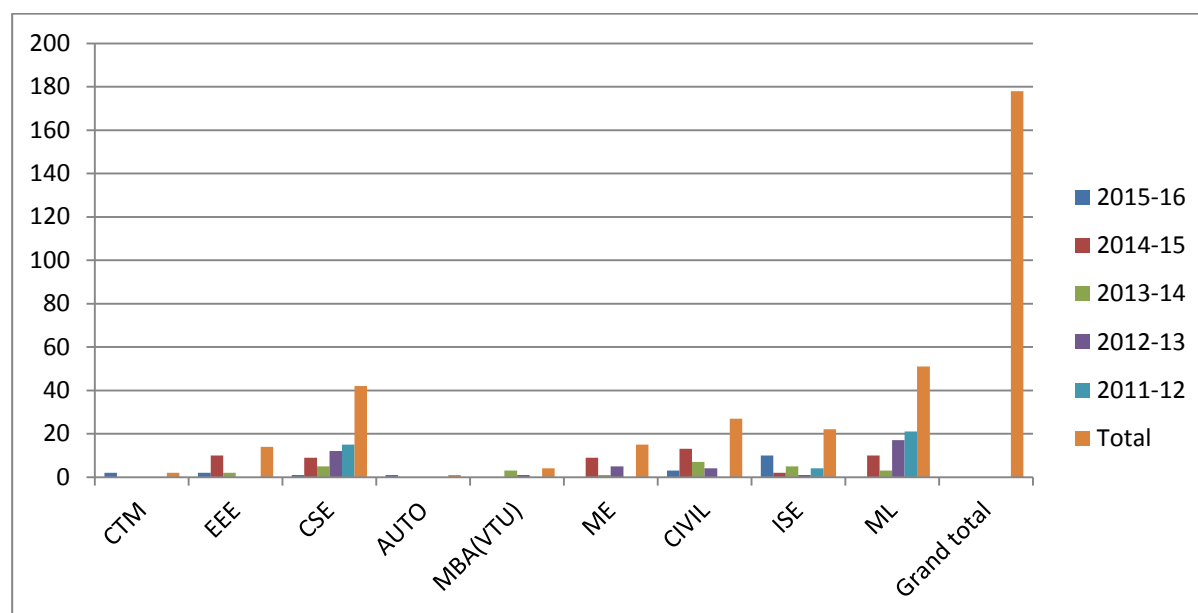
- 5 to 20% courses of curriculum deal with Basic sciences, Mathematics and fundamental courses in core engineering disciplines.
- Students are encouraged to opt for inter-disciplinary electives which help them to cultivate inter-disciplinary approach in problem solving.
- In House Project Exhibitions are conducted to showcase the projects developed by the students.
- Guest lectures by eminent persons from institution/industry and interactive Sessions with them help the students in creating interest in new areas.
- Encouraging students to participate in national level cultural events.
- Cash prizes are awarded to students for academic excellence and merit, prizes & medals are given for achievement in co-curricular & extra-curricular activities.
- Students who participate in national level events are encouraged by recognizing them in the annual day functions.
- Regular value added courses are organized by the college to supplement the academic activities of the students to face the challenges in the industry as shown in the following Table.

Following Table gives an Indication of creativity and Scientific Temper inculcated by our faculty among our Students.

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THE LIST OF JOURNAL PUBLICATIONS BY OUR STUDENTS

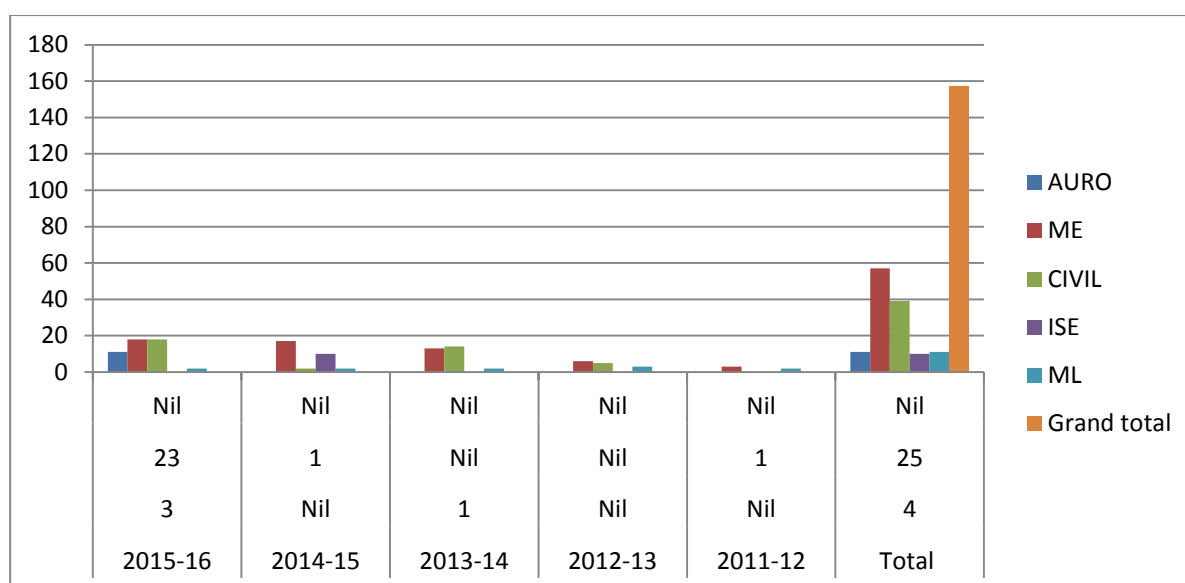
Department	2015-16	2014-15	2013-14	2012-13	2011-12	Total
CTM	2	Nil	Nil	Nil	Nil	2
EEE	2	10	2	Nil	Nil	14
CSE	1	9	5	12	15	42
AUTO	1	Nil	Nil	Nil	Nil	1
MBA(VTU)	Nil	Nil	3	1	Nil	4
ME	Nil	9	1	5	Nil	15
CIVIL	3	13	7	4	Nil	27
ISE	10	2	5	1	4	22
ML	Nil	10	3	17	21	51
Grand total						178



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The list of National / International Conference paper presentation by Students (UG / PG / Research Scholars)

Department	2015-16	2014-15	2013-14	2012-13	2011-12	Total
CTM	3	Nil	1	Nil	Nil	4
EEE	23	1	Nil	Nil	1	25
CSE	Nil	Nil	Nil	Nil	Nil	Nil
AURO	11	Nil	Nil	Nil	Nil	11
ME	18	17	13	6	3	57
CIVIL	18	2	14	5	Nil	39
ISE	Nil	10	Nil	Nil	Nil	10
ML	2	2	2	3	2	11
Grand total						157



2.3.10 Does the College consider student projects a mandatory part of the learning programme? If so, for how many programmes is it made mandatory?

- Number of projects executed within the College
- Names of external institutions associated with the College for student project work
- Role of the faculty in facilitating such projects

- Yes. Student projects are mandatory as a part of the Programme in the final year. All UG students are motivated to carry out projects in the second and third year of study.
- Also, the students are allowed to carry out projects in collaboration with reputed industries. The details of projects executed by the students are tabulated in the following Table.

The role of Faculty members in facilitating such projects:

The faculty members as the project guides facilitate the research endeavors of students through the following ways:

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- Ascertaining the feasibility of the student's project proposal.
- Monitoring the students to streamline the project and adhere with the schedule. Guiding the students during the implementation of the project.
- Enabling the students in writing the project report and facing the viva-voce. Also the senior faculty members serve as review members in their domain of expertise to fine tune the quality of the project outcome.
- The main projects of the final year engineering students are assessed at various levels such as: (i) Guide (ii) Monitoring committee (iii) external expert committee (for short listing the projects for best project award).

The Data of Projects executed by students at UG and PG level is as given below.

Number of projects executed within the College

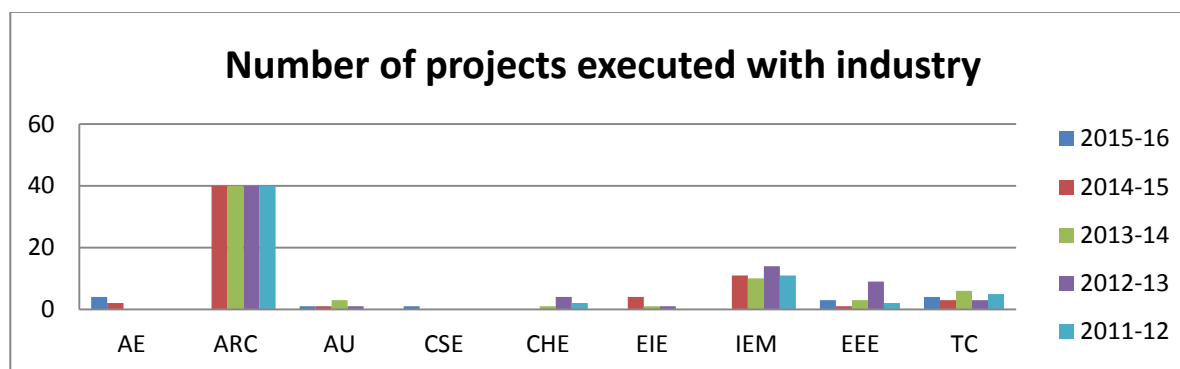
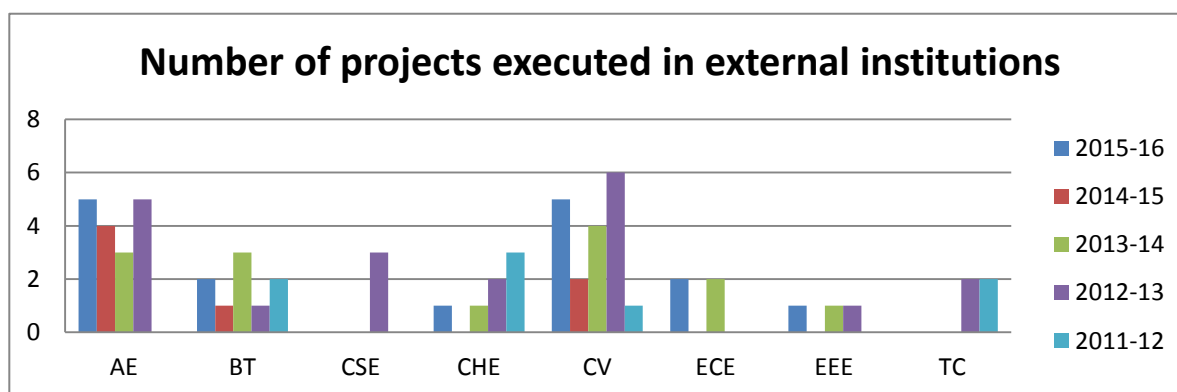
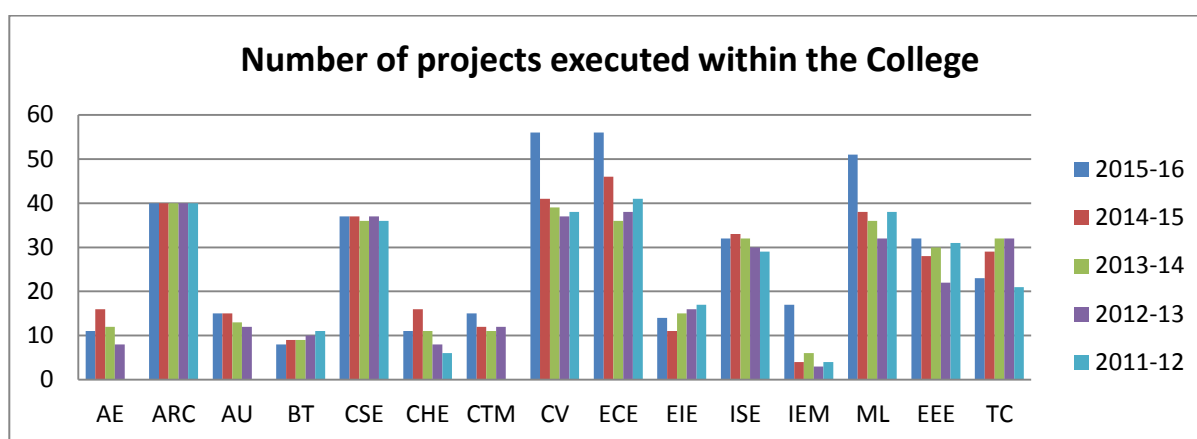
Sl. No.	Academic Year	Number of In house projects (within the institution)																Total No. of Projects
		AE	ARC	AU	BT	CSE	CHE	CTM	CV	ECE	EIE	ISE	IEM	ME	ML	EEE	TC	
1.	15-16	11	40	15	08	37	11	15	56	56	14	32	17	51	08	32	23	426
2.	14-15	16	40	15	09	37	16	12	41	46	11	33	4	38	13	28	29	388
3.	13-14	12	40	13	09	36	11	11	39	36	15	32	6	36	14	30	32	372
4.	12-13	08	40	12	10	37	08	12	37	38	16	30	3	32	11	22	32	348
5.	11-12	-	40	-	11	36	06	-	38	41	17	29	4	38	15	31	21	327

Number of projects executed in external institutions (eg; R &D Institution like IISc, IIT etc)

Sl. No.	Academic Year	Number of Projects associated with external institution																Total No. of Projects
		AE	ARC	AU	BT	CSE	CHE	CTM	CV	ECE	EIE	ISE	IEM	ME	ML	EEE	TC	
1.	15-16	05	-	-	02	-	01	-	05	02	-	-	-	-	-	1	-	16
2.	14-15	04	-	-	01	-	-	-	02	-	-	-	-	-	-	-	-	7
3.	13-14	03	-	-	03	-	01	-	04	02	-	-	-	-	-	1	-	14
4.	12-13	05	-	-	01	03	02	-	06	-	-	-	-	-	-	1	02	20
5.	11-12	-	-	-	02	-	03	-	01	-	-	-	1	-	-	-	02	9

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Sl. No.	Academic Year	Number of Industry Projects																Total No. of Projects
		AE	ARC	AU	BT	CSE	CHE	CTM	CV	ECE	EIE	ISE	IEM	ME	ML	EEE	TC	
1.	15-16	04	-	01	-	01	-	-	-	-	-	-	-	-	-	3	04	13
2.	14-15	02	40	01	-	-	-	-	-	-	04	-	11	-	-	1	03	62
3.	13-14	-	40	03	-	-	01	-	-	-	01	-	10	-	-	3	06	64
4.	12-13	-	40	01	-	-	04	-	-	-	01	-	14	-	-	9	03	72
5.	11-12	-	40	-	-	-	02	-	-	-	-	-	11	-	-	2	05	60



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PG Project details-Last four years Number of projects executed within the College

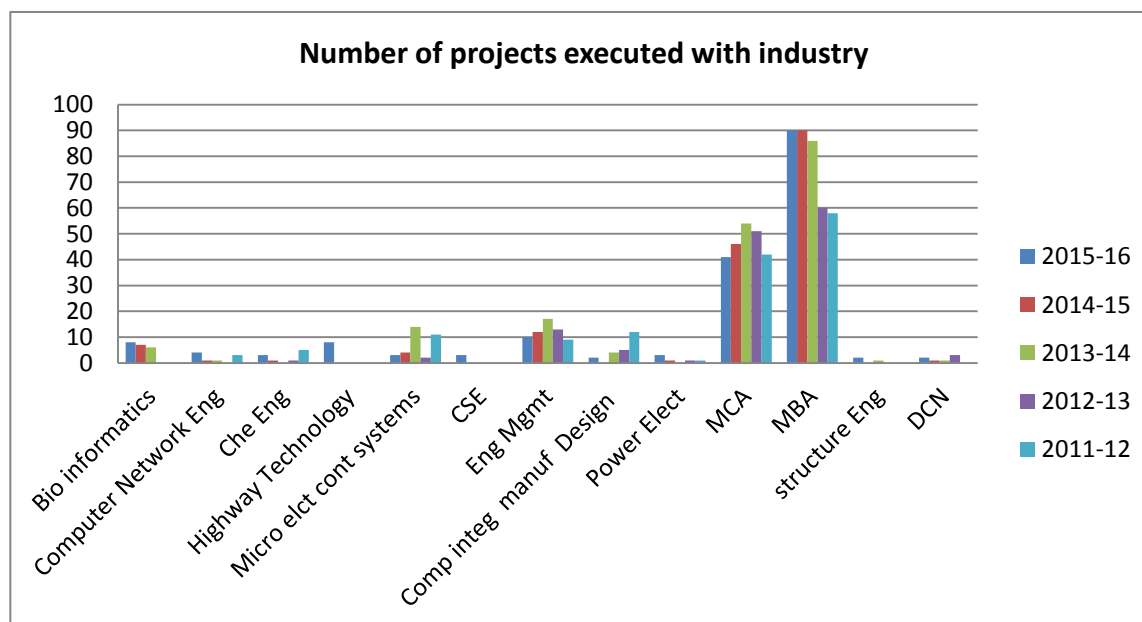
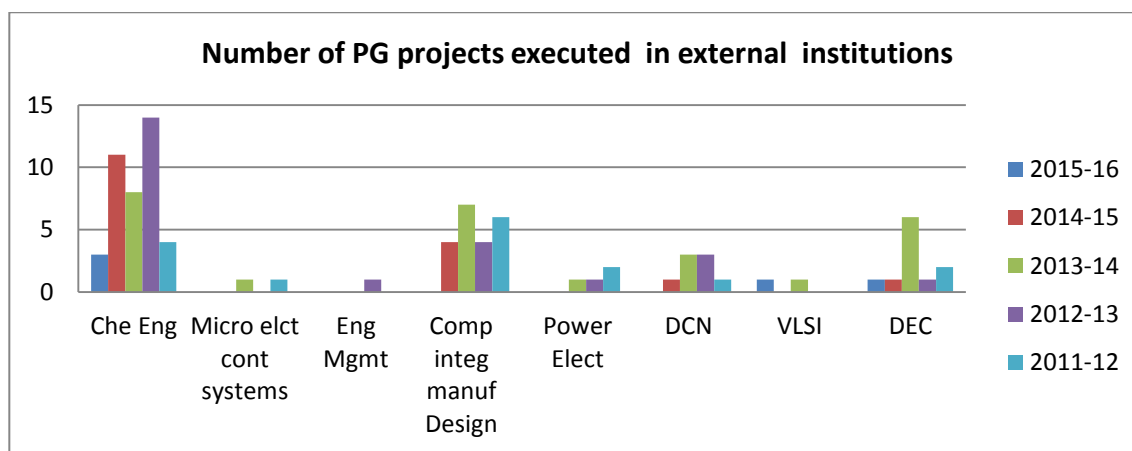
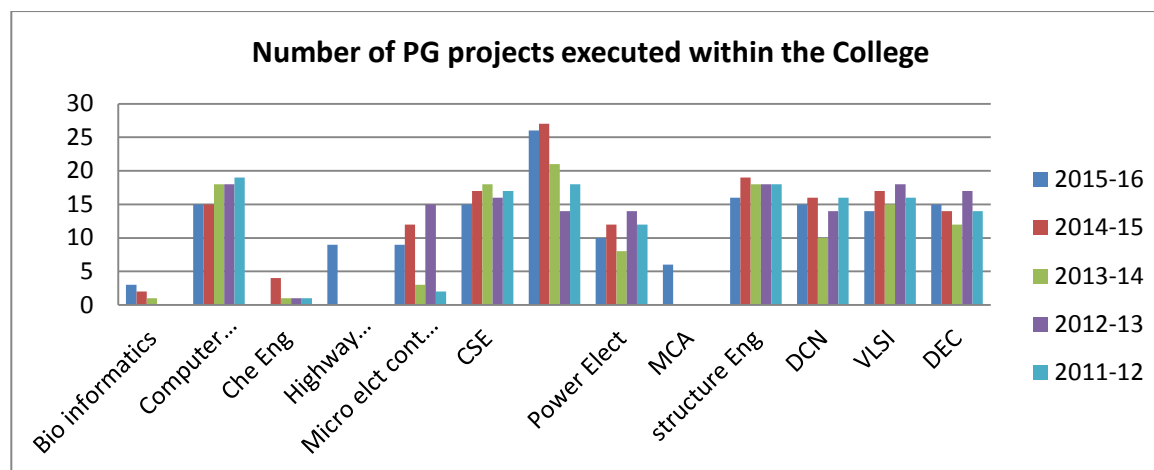
Sl. No.	Academic Year	Number of In house projects(within the institution)																Total No. of Projects
		(BT) Bioinformatics	(CSE) Computer Network Eng	(ME) Chemical Eng	(CTM) Highway Technology	EIE(Micro elct cont systems)	ISE(CSE)	IEM(Eng Mgmt)	ME(Comp integ manuf Design	(EEE) Power Elect	MCA	MBA	(ML) Bio medical	(Cv)structure Eng	EC(VLSI)	EC(DEC)	(TC) DCN	
1.	15-16	03	15	-	9	09	15	-	26	12	06	-	12	16	14	15	15	153
2.	14-15	02	15	04	-	12	17	-	27	10	-	-	14	19	17	14	16	150
3.	13-14	01	18	01	-	03	18	-	21	08	-	-	13	18	15	12	10	123
4.	12-13	-	18	01	-	15	16	-	14	14	-	-	18	18	18	17	14	145
5.	11-12	-	19	01	-	02	17	-	18	12	-	-	17	18	16	14	16	134

Number of projects executed in external institutions (eg; R &D Institution like IISc, IIT etc)

Sl. No.	Academic Year	Number of Projects associated with external institution																Total No. of Projects
		(BT) Bioinformatics	(CSE) Computer Network Eng	(ME) Chemical Eng	(CTM) Highway Technology	EIE(Micro elct cont systems)	ISE(CSE)	IEM(Eng Mgmt)	ME(Comp integ manuf Design	(EEE) Power Elect	MCA	MBA	(ML) Bio medical	(TC) DCN	EC(VLSI)	EC(DEC)	(Cv)structure Eng	
1.	15-16	-	-	03	-	-	-	-	-	-	-	-	-	-	1	01	-	4
2.	14-15	-	-	11	-	-	-	-	4	-	-	-	-	01	-	01	-	17
3.	13-14	-	-	08	-	01	-	-	7	01	-	-	-	03	1	6	-	26
4.	12-13	-	-	14	-	-	-	1	4	01	-	-	-	03	-	01	-	24
5.	11-12	-	-	04	-	01	-	-	6	02	-	-	-	01	-	02	-	16

Sl. No	Academic Year	Number of projects executed with industry														Total No. of Projects
		(BT) Bioinformatics	(CSE)Computer Network Eng	(ME)Chemical Eng	(CTM)Highway Technology	EIE(Micro elct cont systems)	ISE(CSE)	IEM(Eng Mgmt)	ME(Comp integ manuf Design	(EEE) Power Elect	MCA	MBA	(ML) Bio medical	(TC) DCN	(Cv)structure Eng	
1.	15-16	08	04	03	08	03	03	10	2	03	41	98	-	02	2	187
2.	14-15	07	01	01	-	04	-	12	-	01	46	96	-	01	0	169
3.	13-14	06	01	-	-	14	-	17	4	-	54	86	-	01	1	184
4.	12-13	-	-	01	-	2	-	13	5	01	51	60	-	03	0	136
5.	2011-12	-	03	05	-	11	-	9	12	01	42	58	-	-	0	141

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2.3.11 What efforts are made to facilitate the faculty in learning / handling computer-aided teaching/ learning materials? What are the facilities available in the College for such efforts?

All efforts are made to facilitate the faculty in learning /handling computer-aided teaching/ learning materials

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Following facilities are made available by the college to facilitate computer aided teaching/Learning.

- Each department is provided with sufficient number of computers for faculties with internet facility.
- Each department is provided with seminar hall with LCD and multimedia facility to conduct Guest lecturers or seminars.
- The class rooms of each department are fitted with LCDs.
- Laboratories are equipped with modern learning software.
- Connected computing infrastructures for everywhere access in the campus with uninterrupted power supply
- Digital class rooms (Video Projector, Digitizer, mike, webcam, smart board etc)
- Language lab

Learning Materials available for computer aided learning

- NPTEL video library in the intranet
- All relevant Journals online (IEEE, Science Direct)
- Archive of free e-books
- Library is well equipped with CD's, DVD's, Software and Internet facilities

Facilities available in the College for such efforts include:

- Classrooms with audio-visual aids
- Communication Laboratory
- Digital Library with e- Journals and e- books.
- Wi-Fi connectivity throughout the campus
- Print, Scan and Copy facilities in all the departments
- Laboratories equipped with modern software packages

2.3.12 Does the College have a mechanism for evaluation of teachers by the students / alumni? If yes, how is the evaluation used in achieving qualitative improvement in the teaching-learning process?

Yes.

- Evaluation of a faculty is done by obtaining a feedback from the students at the end of the semester and also the feedback on faculty is obtained from students members of the class committee and the outcomes of the feedback are discussed with concerned faculty members by HoD for further improvement / information.
- Faculty members with lower feedback rating are counseled by the concerned Heads of the Department

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and the Principal, if required.

Usage of evaluation in achieving qualitative improvement in the teaching-learning process:

- Evaluation of feedback forms, Minutes of the meeting and Suggestions / Comments are properly scrutinized by the Head of the Department and Principal to guide/ instruct / motivate the teachers to improve the quality of teaching learning process.
- The summary of the feedback given by the students are analyzed by the HOD and if the performance of the faculty member is below an expected level, it is brought to the attention of the faculty member and the causes are analyzed and counseling is given to improve the performance level.
- Induction Programmes are conducted to the new faculty members and fresher's to become a good and effective teachers. Senior faculty members are sharing their experiences with the junior

2.3.13 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If yes elaborate on the challenges encountered and the institutional approaches to overcome these.

No, the institution does not face any challenge in completing the curriculum within the planned time frame.

2.3.14 How are library resources used to augment the teaching- learning process?

The Central library is fully established with a comprehensive collection of books and documents useful for the Faculty, Research scholars and Students. The details of the books, e-books and journals are given below:

- The Main library functions on all days including Sundays and Government Holidays
- The Librarian helps the departments to purchase the latest edition of the books as per the requirement of the teachers.
- A number of guides and books are available in the Competitive Exams for preparation of competitive examinations like GATE, TOEFL, GRE, GMAT, Civil Service exams, Bank exam and other similar examinations.

2.3.15 How does the institution continuously monitor, evaluate and report on the quality of teaching, teaching methods used, classroom environments and the effect on student performance.

Quality of teaching:

- Evaluation of the quality of teaching is done through a feedback system by students, submitted at the end of semester for each course.
- The Heads of departments monitor the Teaching-Learning process in the class room through direct observation.

Teaching methods used:

- Regular monitoring and evaluation of the teaching methods is done based on the feedback received

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from the students.

- The performance appraisal of each faculty is done at the end of each semester for each subject and the same will be analyzed and a copy of it will be given to the faculty with necessary remarks for improvement if necessary.

Class room environments:

- Each class is monitored by a Class Teacher. Effective use of class rooms and comforts in class rooms are regularly monitored and the feedbacks are analyzed for corrective action.
- The HoD allots one counselor for a group of 15-20 students. He/She will conduct the counseling and interaction at periodic intervals, on all matters - academic, career, personal, social, psychological and other problems with help of the Head of the Department and other faculty members.

Effect on student performance:

- The results of each continuous assessment tests are analyzed and faculty members are mentored to take corrective actions to improve the student performance.
- Parents are informed regarding the attendance and internal marks of students regularly by the Class Teacher.
- The students meet their counselors whenever they have any difficulty to discuss their problems and seek guidance in solving them.

2.4 Teacher Quality

2.4.1 What is the faculty strength of the College? How many positions are filled against the sanctioned strength? How many of them are from outside the state?

The total teaching faculty strength of the college is 527 of all the departments. All the positions have been filled.

Sl NO	Department	Total No of Faculty in the Department	% Male faculty	% Female faculty	% of Faculty who are product of the same College	% of faculty from other Colleges with in the State	% of faculty from Other State	% of faculty from abroad*
1.	Medical Electronics	17	58.8%	41.17%	17.64%	94.2%	5.88%	Nil
2.	Electronics & Communication				8.2	72.1	19.7	Nil
3.	Automobile Engg.	12	91.7	8.3	0	100	0	Nil
4.	Physics	11	55	45	Nil	80%	20%	Nil
5.	MBA	17	47%	53%	Nil	81.25%	19.75%	Nil
6.	MCA	10	30	70	10%	90%	0%	Nil

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7.	Electronics & Instrumentation Engineering	15	53	47	Nil	66.66%	33.33%	Nil
8.	Mechanical	51	92%	8%	11.76%	70.59%	17.64%	NIL
9.	Architecture	20	30%	70%	8%	67%	25%	Nil
10	Information Science And Engineering	25	20%	80%	33	55%	7%	Nil
11	Telecom	24	58.33 4	41.66	12.5%	83.4%	4.1%	Nil
12	Civil Engineering	38	55.2%	44.7%	4.76%	85.71%	11.90%	2.38%
13	CTM	12	83	17	15%	70%	15%	NIL
14	Mathematics	17	36	64	0	82%	18%	NIL
15	IEM	15	73	27	13.33	80	6.66	Nil
16	Computer Science & Engineering	46	39	61	17%	64%	19%	Nil
17	Chemistry	15	60 %	40%	NIL	80	20	NIL
18	Aeronautical Engineering	12	83.3	17.7	--	--	--	--
19	Chemical Engineering	14	64.29%	35.71	--	--	--	--
20	Biotechnology	15	53.3 %	46.6 %	--	--	--	--
21	E E E	30	50%	50%	--	--	--	--

2.4.2 How are the members of the faculty selected?

Faculty members are selected based on the vacancy position, increased in-take of students and introduction of new academic programmes are given below:

- Access the faculty requirement by considering available strength with sanctioned strength.
- Submit the requirements to the human resource committee
- Give advertisement in news papers
- Form selection Committee & get approval from Vice Chairman
- Selection Committee consists of leading subject experts in the respective discipline & Principal.
- Decide Venue & Date and inform to the Candidates who have applied

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- Conduct Interview & Issue Letter of Intimation (LOI) to Selected Candidates
- Send the Selected List to Vice Chairman for Approval and Issue appointment order

The following parameters are noted for evaluating the faculty,

- Subject Knowledge
- Area of Specialization
- Voice Modulation
- Presentation
- Liveliness
- Communication Skill

2.4.3 Furnish details of the faculty

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	M	F	M	F	M	F	
Permanent Teachers							
D.Sc./D.Litt							
Ph.D	51	15	28	09	07	05	115
M.Phil					01	09	10
PG	06	0	30	21	173	172	402
Temporary Teachers							
Ph.D							
M.Phil							
PG							
Part-time Teachers							
Ph.D.							
M.Phil.							
PG	3	0	3	1	4	7	18

2.4.4 What percentages of the teachers have completed UGC-CSIR-NET, UGC-NET and SLET exams? In that what percentage of teachers are with PG as highest qualification?

Department	UGC-NET and SLET	PG as highest qualification
Science & Humanity	01	100%

1. Average Experience

Sl.No	Total Experience of the Faculty(Yrs)	Total No of Faculty	Average Experience(Yrs)

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01	2962	527	5.6

2. Percentage of PhD's

Sl.No	Total No of Faculty	No of PhD's	Percentage of PhD's
01	527	115	21.8 %

3. Total Faculty Percentage of PhD + PhD pursuing

Sl.No	Total No of Faculty	No of faculty pursuing PhD	Percentage of PhD's
01	527	214	40.6%

4. Percentage of M. Tech's

Sl.No	Total No of Faculty	No of faculty with M. Tech / ME	Percentage of M. Tech's
01	527	200	37.8 %

2.4.5 Does the College encourage diversity in its faculty recruitment? Provide the following departments-wise details.

Department	% of Faculty who are product of the same College	% of faculty from other Colleges with in the State	% of faculty from Other State	% of faculty from abroad*
ML	17.64%	94.2%	5.88%	nil
E&C	8.2	72.1	19.7	nil
Automobile Engg.	0	100	0	0
Physics	nil	80%	20%	nil
MBA	nil	81.25%	19.75%	nil
MCA	10%	90%	0%	0%
Electronics & Instrumentation Engineering	Nil	66.66%	33.33%	Nil
Biotechnology	13.3%	60.1%	26.6%	Nil

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Computer Science	30%	65%	5%	Nil

2.4.6 Does the College have the required number of qualified and competent teachers to handle all the courses for all departments? If not, how do you cope with the requirements? How many faculty members were appointed during the last four years?

Yes, College has required number of qualified faculty to handle all the courses, as prescribed by the AICTE. The college recruits faculty members as per AICTE norms, based on the vacancy position, increase in- take of students and introduction of new academic programmes.

2.4.7 How many visiting Professors are on the rolls of the College?

Eighteen visiting faculties are on the rolls of the college.

2.4.8 What policies/systems are in place to recharge teachers?(eg: providing research grants, study leave, nomination to national/ international conferences/Seminars, in-service training, organizing national/international conferences etc.)

- Research grant is availed by concerned Faculty.
- On Duty leave is granted to faculty pursuing Ph.D for attending course work/ DC meetings/Submission of Ph.D thesis and Viva-Voce etc.
- All the faculty members can participate in workshops, seminars, training programmes, conferences in their relative areas based on their interest in consultation with their respective department heads. Some of our faculty members have gone for training programme organized by premier institutions like IITs.
- The faculty members are encouraged to be a Resource person to deliver Keynote address in International / National Conferences / seminars / workshops / SDP / FDP etc...
- Faculties are motivated to organize International Conference to promote the research activities and enlighten the latest trends in their respective areas.
- Once in two academic years, each department organizes a National- Level Conference enabling the research scholars and faculty members to present their innovative ideas
- Management provides partly financial assistance for presenting research paper in International conferences and journals.

2.4.9 Give the number of faculty who received awards / recognitions for excellence in teaching at the state, national and international level during the last four years.

Sl No	Faculty	Award	Venue	Year
1	Prof. D. C. Sikdar	Best Project Award	KSCST Bangalore	2012
2	Dr. S.A. Vasantha Kumara	Outstanding Scholar & Educator award	Coimbatore	2013
3	Dr. H. Ramakrishna	Rajiv Gandhi Excellence Award	New Delhi	2013

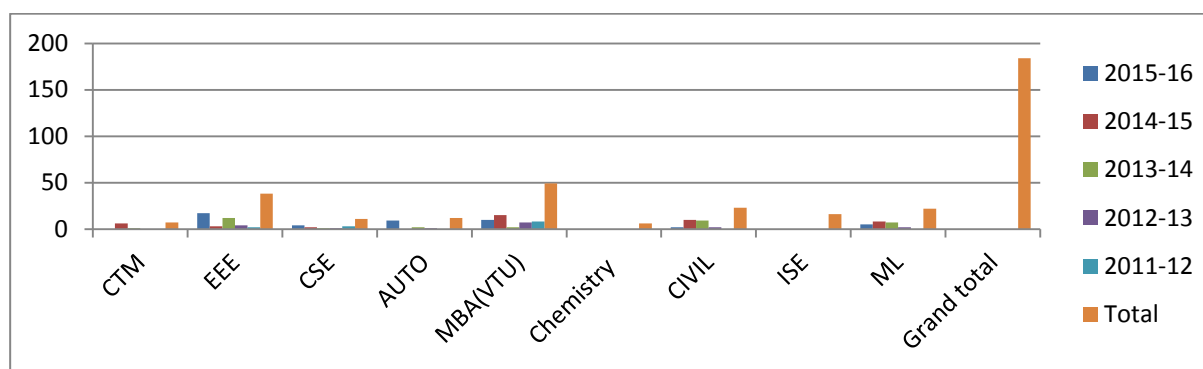
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4	Dr. V. Suma	Academic Research Award of Excellence	Bangalore	2013
5	Madhura S. Mulimani	IBM TGMC Mentor Award	Bangalore	2014
6	Prof. Sunanda Dixit	Best Faculty Award	DSCE, Bangalore	2015
7	Prof. K. S. Amaresha	Young scientist award	VGST	2014

2.4.10 Provide the number of faculty who have undergone staff development programmes during the last four years. (Add any other programme if necessary)

The list of Faculty Development Programme (FDP)attended by Staff Members (Teaching / Non-Teaching)

Department	2015-16	2014-15	2013-14	2012-13	2011-12	Total
CTM	Nil	6	1	Nil		7
EEE	17	3	12	4	2	38
CSE	4	2	1	1	3	11
AUTO	9	Nil	2	1	Nil	12
MBA(VTU)	10	15	2	7	8	49
CIVIL	2	10	9	2	Nil	23
ISE						16
ML	5	8	7	2	Nil	22
Grand total						178



2.4.11 What percentages of the faculty have

- been invited as resource persons in Workshops /Seminar /Conferences organized by external professional agencies?
- participated in external Workshops / Seminars / Conferences recognized by national/international professional bodies?
- presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies?
- teaching experience in other universities / national institutions and others
- industrial engagement?
- international experience in teaching?

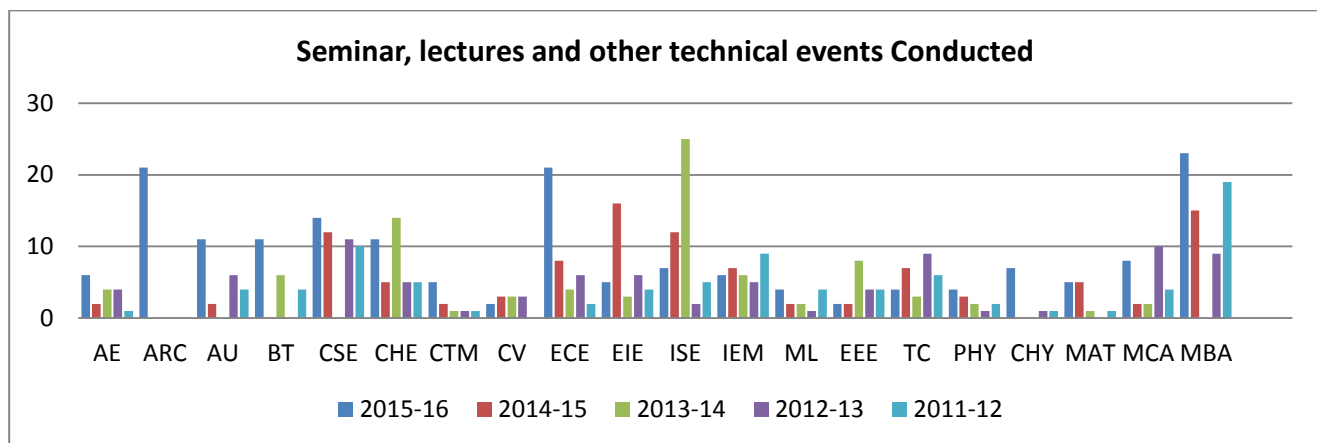
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The list of National / International Conference Publications by Faculty Members

Department	2015-16	2014-15	2013-14	2012-13	2011-12	Total
CTM	2	8	3	Nil	Nil	13
EEE	Nil	Nil	Nil	Nil	Nil	Nil
CSE	Nil	Nil	Nil	Nil	Nil	Nil
AUTO	19	-	3	-	3	25
ME	41	39	22	15	4	121
CIVIL	2	3	3	3	Nil	11
ISE	Nil	10	Nil	Nil	Nil	10
ML	3	1	1	4	2	11
Grand total						191

The list of seminar, lectures and other technical events Conducted

Sl	Academic year	Number of lectures/ Seminar Organized																				Total No. of lectures/ Seminar Organized	
		AE	ARC	AU	BT	CSE	CHE	CTM	CV	ECE	EIE	ISE	IEM	ME	ML	EEE	TC	PHY	CHY	MAT	MCA		MBA
1.	15-16	06	21	11	11	14	11	05	02	21	05	07	06	23	04	02	04	04	07	05	08	23	200
2.	14-15	02	-	02	-	12	05	02	03	08	16	12	07	12	02	02	07	03	-	05	02	15	117
3.	13-14	04	-	-	06	05	14	01	03	04	03	25	06	13	02	08	03	02	-	01	02	-	102
4.	12-13	04	-	05	-	11	05	01	03	06	06	02	05	16	01	04	09	01	01	-	10	09	99
5.	11-12	01	-	02	04	10	05	01	-	02	04	05	09	10	04	04	06	02	01	01	04	19	94



2.4.12 How often does the College organize academic development programmes for its faculty, leading to enrichment of teaching- learning process?

- Every year faculty training programme organized for Enriching teaching learning process.

Curriculum Development

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- Board of Studies meeting is conducted to frame / reform the curriculum based on contemporary technologies and requirements.
- Expert members from premier institutions, leading universities and industries are invited for the Board of Studies meeting and their valuable suggestions are considered in framing state-of- art curriculum and syllabi.

Teaching-Learning methods

- Each department separately organizes specialized workshops, seminars and faculty development programs for their faculty members and outsiders which are being funded by several organizations and also by college management
- Faculties are encouraged to participate in Faculty Development Programs, Training programs, Workshops and Seminars in all parts of the country by providing registration fee, TA and DA.
- Faculties are also encouraged to organize Faculty Development Programs, Staff Development Programs, Short Term Training Programs (STTP), Collaborative Training Programs (Corporate & IITs), Workshops, and Seminars in college campus, for the knowledge enrichment of both internal and external faculty members.
- Faculty members from the college attended a orientation programme on teaching learning programme in reputed institutions and enabled other faculty members in the college to follow a structured teaching learning process

Examination Reforms

Our college initiated major evaluation reforms by changing the question pattern which entirely differs from other engineering colleges and introducing the absolute grading system for theory and practical courses.

2.4.13 What are the teaching innovations made during the last five years? How are innovations rewarded?

Innovative learning Practices:

The following innovative strategies are introduced in the past few years:

- The traditional way of teaching is reformed by presenting the contents over LCD projector
- The smart classrooms are being introduced to enable ICT enabled learning
- Technical Seminar with Credits
- Seminar/Guest lecture
- Videos
- Field visit
- Pre laboratory and post laboratory test
- E-Learning is being introduced and students are given access to download and use presentation slides

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High Speed Internet with access to educational contents (like **YouT ube** for Education) is made available for both faculties and students.

- Theory courses with laboratory component, i.e. Layer -Learning/ Learning by doing/Project learning - every students gets an opportunity to learn theory and practice simultaneously, doing projects thereby referring literature published in the relevant area and developing skills (reading, writing and presentation/communication)

Innovative Practices introduced in 2015 Regulations are as follows

- Choice based credit system
- Self-study /open/special electives

Supplementary Teaching

- Guest Lectures / Invited Lectures by Industry Experts
- Workshops / Value Added Courses
- Placement related Training
- Industrial Visits
- Internships / Summer Training
- Organizing Seminars / Technical Symposia / Open Houses

The innovations are taken into account and considered for self-appraisal report for award of best teacher.

2.4.14 Does the College have a mechanism to encourage

- Mobility of faculty between institutions for teaching?

- Faculty exchange programmes with national and international bodies?

If yes, how have these schemes helped in enriching quality of the faculty?

Yes.

- The college encourages mobility of faculty between institutions and provision for availing on duty leave is made available
- To act as the resource persons for national / international conferences, providing technical supports, delivering lectures and conducting mock audits for accreditation / autonomous systems.
- To serve as a member in Doctoral Committee, Oral Examination Board for Ph.D Viva voce.
- To visit the faculty members participating other Institutions for sharing their Academic experiences.

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- MoUs are signed with various Multi-National Organizations for facilitating training for both faculty and students.
- College permits the faculty members to undergo short courses, pursue Ph.D in specialized areas in other institutions.

These initiatives have helped to understand the best practices of those institutions and make use of them in enriching the faculty quality.

2.5. Evaluation process and Reforms

2.5.1. How does the College ensure that all the stakeholders are aware of the Evaluation processes that are operative?

The process of evaluation is made transparent to the stakeholders as follows:

- The parents and students are informed about autonomous examination system of the college during the first day and fresher's day address by Principal.
- Workshop on autonomous examination system is conducted by Controller of Examinations to the first year students during their first semester of study. Whenever students need this workshop, it will be conducted as per the schedule given by the respective head of the department.
- The regulations, curricula and syllabi are made available in the college website to all the stake holders.
- Every class shall have a class committee consisting of Class Teacher, teachers of the class, student representatives and a senior faculty as chairperson who is not handling any courses for the class.
- Student's performance on Continuous Internal Assessment (CIA) and Semester End Examinations(SEE) are reported to the parents through Grade Card.
- The college issues a handbook which contains regulations, Curricula and Syllabi of the Programme to the students during their first year of study. It is also available in the college website for information of students and parents.

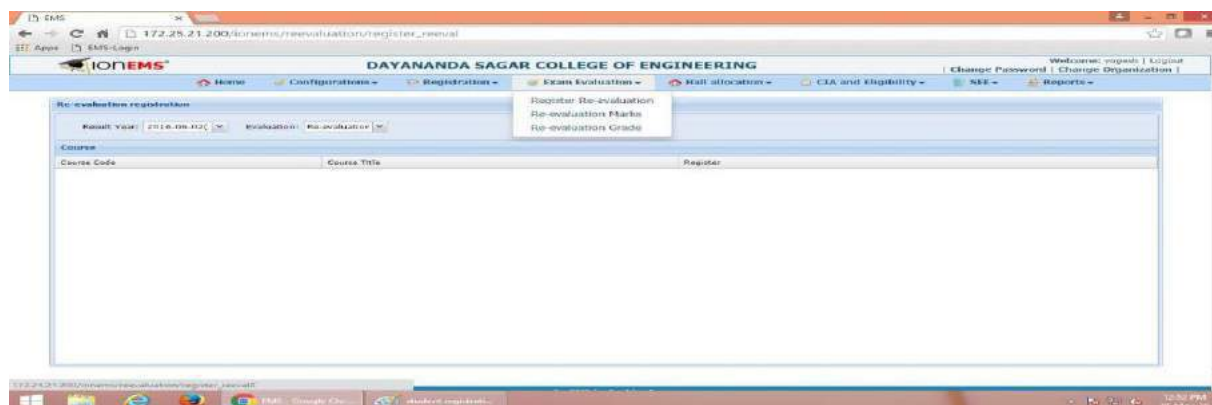
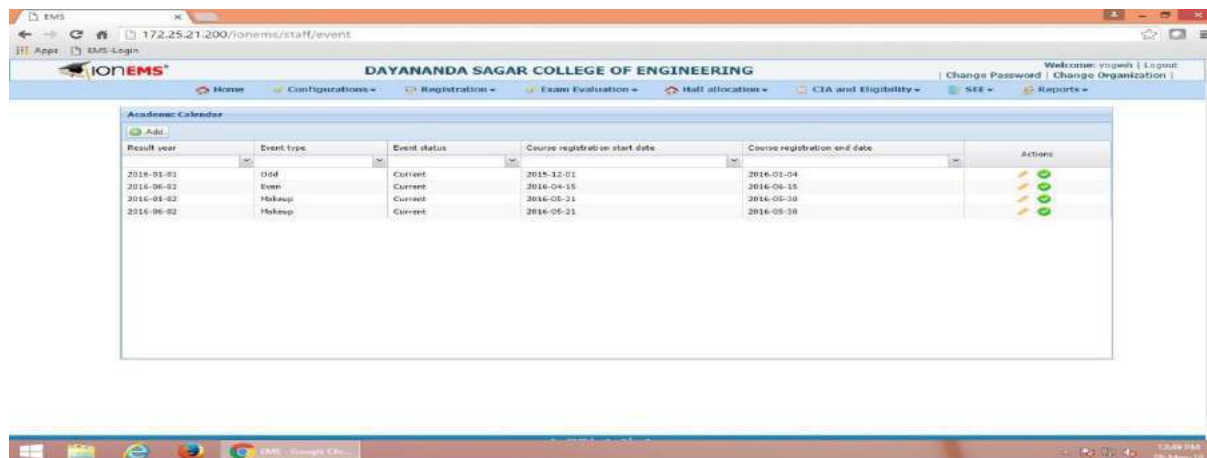
2.5.2. What are the major evaluation reforms initiated by the College and to what extent have they been implemented in the College? Cite a few examples which have positively impacted the evaluation management system?

Major Reforms in the Evaluation System

1. College has introduced state of the art Digital Evaluation System(DVS) since Autonomy granted.
2. College has adopted Examination Management System a reliable and transparent management system software.

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Some of the features of the EMS and DVS are listed below.



2.5.3. What measures have been taken by the institution for continuous evaluation of students and ensuring their progress and improved performance?

Progress and performance of the students are continuously evaluated by the following four modules.

Proctor:

To help the students in planning their courses of study and for general advice on the academic

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programme, the Head of the Department will attach a certain number of students (10 to 20) to a teacher of their respective department, who shall act as a **Proctor** for those students throughout their period of study. Such **Proctor** shall advise the students and monitor their attendance, academic performance and progress, encourage co-curricular, extra-curricular activities of students and counsel them periodically on all matters pertaining to hostel / transport / health, etc. If necessary, the counselor may also meet / discuss with or inform the parents about the progress / grievances of the students.

Class Teacher:

There shall be a Class Teacher for each class from the first semester to the end of the Programme. The Class Teacher will be one among the course instructors of the class, at least in the first semester. He / She will be appointed by the concerned Head of the Department. The Class Teacher is the ex- officio member and the convener of the Class Committee. The responsibilities for the Class Teacher are:

- i. To act as the channel of communication between the Head of the Department and the students of the respective Class.
- ii. To collect and maintain various statistical details of the students.
- iii. To help the chairperson of the Class Committee in planning and conduct of the Class Committee meetings.
- iv. To monitor the academic performance of the students including attendance and to inform the class committee.
- v. To monitor the students' activities / achievements like awards, medals, scholarships, industrial visits, etc.

Class Committee:

Every class shall have a class committee consisting of Class Teacher, teachers of the class, student representatives and a senior faculty as chairperson who is not handling any courses for the class. It is like the 'Quality Circle' (more commonly used in industry), with the overall goal of improving the teaching-learning process. The functions of the Class Committee include:

- i. Solving problems experienced by students in the classroom and laboratories.
- ii. Clarifying the regulations of the Degree Programme and the details of rules.
- iii. Informing the student representatives, the academic schedule including the dates of Continuous Internal Assessment (CIA) and the syllabus coverage for each assessment.
- iv. Informing the student representatives the details of regulations regarding weight- age given for each assessment. In the case of practical courses (Laboratory / drawing / Project Work , etc.) the breakup of marks for each experiment / exercise / module of work, should be clearly discussed in the Class Committee meeting and informed to the students.
- v. Analyzing the performance of the students of the class after each term test and finding ways and means of solving the problems, if any.
- vi. Identifying the weak students, if any, and requesting the teachers concerned to provide additional

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classes or consultation or guidance to such weak students.

- The Class Committee for a class under a particular branch is normally constituted by the Head of the Department.
- The Chairperson of the Class Committee may invite the Head of the Department to the Class Committee meeting, if required.
- The Head of the Institution may participate in any of the Class Committee meeting.
- The Chairperson is required to prepare the minutes of every meeting, submit the same to the Head of the Institution within two days of the meeting and make arrangements to circulate it among the students and teachers concerned. If there are some points in the minutes requiring action by the Management, the same shall be brought to the Management's notice by the Head of the Institution.
- The first Class Committee meeting shall be held one week after the date of commencement of the semester, in order to inform the students about the nature and weight-age of assessments within the framework of the regulations. A minimum of three meetings should be conducted in a semester. The Class Teacher shall display the cumulative attendance particulars of each student on the Notice Board, at the end of every such meeting to enable the students to know their attendance details. During these meetings, the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

Course Committee for Common Courses:

Each common theory course offered to more than one discipline or group shall have a "Course Committee" comprising all the teachers, teaching the common course with one of them nominated as Course Coordinator. The nomination of the Course Coordinator shall be made by the Head of the Department / Head of the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments.

The 'Course Committee' shall meet in order to arrive at a common scheme of evaluation for the test and shall ensure uniform evaluation of the tests. Wherever feasible, the Course Committee may also prepare a common question paper for Term tests.

2.5.4. What percentage of marks is earmarked for continuous internal assessment? Indicate the mechanisms strategized to ensure rigor of the internal assessment process?

50% of marks are earmarked for Continuous Internal Assessment (CIA)

- Performance in each course of study shall be evaluated based on (i) CIA throughout the semester (ii) SEE.
- Each course such as Theory, Practical, Internship training, Project shall be evaluated for a maximum of 100 marks. Further the CIA and SEE will carry 50 marks each. However the Internship training or Summer Project, Technical Seminar, Professional Practices shall carry 100 marks and shall be evaluated through CIA only. Project Work may be allotted to a group of 2 to 4 students.
- The SEE for Theory and Practical courses of 3 hours duration shall ordinarily be conducted between

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October and December during the odd semesters and between April and June during the even semesters.

- The SEE for Project Work shall consist of evaluation of the final report submitted by the student or students of the project group (not exceeding 4 students) by an External Examiner followed by a Viva-Voce Examination conducted separately for each student by a committee consisting of an External Examiner, an Internal Examiner.

Mechanisms strategized to ensure rigor of the internal assessment process:

The evaluation of the student shall be based on continuous assessment. The structure for evaluation is as follows:

Theory Courses:

- i. Assessment and evaluation processes happen in a continuous mode. However, for reporting purposes, a semester is divided into 3 discrete components identified as Continuous Internal Assessment 1 (CIA1), Internal Assessment 2 (CIA2) and CIA3
- ii. The apportioning of CIA1 for 50 marks shall be as follows:
 - a) 40 marks for Term Test1
 - b) 10 marks for Quiz/Test
- iii. The apportioning of CIA2 for 50 marks shall be as follows:
 - a) 30 marks for best of two term tests.
 - b) 10 marks for Quiz
 - c) 10 marks for assignment

Practical Courses

Every practical exercise / experiment shall be evaluated based on the performance of the student as follows:

1 – 35 marks for conduction of experiment.

2 – 8 marks for Viva Voce

3 – 7 Marks for Write Up.

Same procedure is followed for CIA and SEE.

2.5.5 Does the College adhere to the declared examination schedules? If not, what measures have been taken to address the delay?

The practical and theory examinations time table is displayed in the college notice board and hosted in the college website: www.dayanandasagar.edu/dsce

2.5.6. What is the average time taken by the College for declaration of examination results? Indicate the mode / media adopted by the College for the publication of examination results e.g., website, SMS, email, etc.

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Examination results are declared within a 3 Days from the date of last examination..

Grading Advisory Committee Meeting which constitutes Head of the Institution, COE & Board of Studies Chairman are conducted before the declaration of the results..

2.5.7. Does the college have an integrated examination platform for the following processes?

- **Pre-examination process:** Time table generation, student list generation, invigilators, squads, attendance sheet, online payment gateway, etc.
- **Examination process:** Examination material management, logistics.
- **Post examination process:** Attendance capture, exam result, auto processing, generic result processing and certification.

Yes, the college has integrated examination platform known as CoE office. The CoE office work is classified into the following three categories:

- ✓ Pre Examinations Work
- ✓ Actual Conductance of Examinations
- ✓ Post Examinations Work

Pre Examinations Work:

It is basically related to preparation of academic schedule, creation of bio data for first year students, updating the result in the arrear list for senior students, preparation of panel of examiners for practical examinations, intimation of the exam fee circular to the students , budget preparation, preparation of exam applications, collection of the CIA marks and attendance particulars from the respective departments, arrangement of stationeries for conduction of both practical and theory examinations, preparation of nominal roll and hall tickets, preparation of theory examination time table, getting the willingness from question paper setters, collection of question papers, printing of question papers,

Actual Conductance of Examinations:

It is mainly related to make arrangement for vigilance squads to visit examination cell and exam halls, distribution of question paper bundles date and session wise, collection of answer paper bundles daily as per the dispatch slip from the exam cell, coding and decoding of the answer scripts and arranging the answer scripts subject wise etc.,

Post Examinations Work:

It is related to make all the arrangements for paper valuation, conversion of marks into grades, arranging the performance analysis committee meeting, publishing the results in the college website, sending the photocopy and revaluation procedure to the students through Principal and HoDs, conducting the revaluation, publishing the revaluation results, printing the semester grade sheets and consolidated mark sheets, distribution of mark sheets, completion of final account settlement process, submission of documents to the parent university to get provisional certificates and degree certificates etc.

2.5.8. Has the College introduced any reforms in its Ph.D. evaluation process?

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As per the parent university norms, selection of candidates for Ph.D programme is based on written test and personal interview which will only be conducted by the parent university. The selected Ph.D candidates can write their course work examinations along with our PG students' End Semester Examinations at our college. Similarly, the evaluation process is carried out along with the respective PG courses to award letter grade for Ph.D courses.

The Ph.D. student should follow the parent university prescribed procedure for conducting doctoral committee meeting, submitting synopsis, submission of thesis and conducting viva voce examination.\

2.5.9. What efforts are made by the College to streamline the operations at the office of the Controller of Examinations? Mention any significant efforts which have improved process and functioning of the examination division/section?

To improve the CoE office process and functioning of the examination section, the following significant efforts are taken.

Academic Schedule:

Academic schedule is prepared at the beginning of every semester. It includes date of commencement of class, CA test slot, last working day, practical exam slot, commencement of theory exam and reopening day for next semester. It is circulated to the students within one week from the commencement of class. In case of CBCS, course registration form will be collected from the students within one week from the commencement of class

Question paper process:

Question paper setters are identified from IITs, NITs, BITs and other reputed institutions based on the subject area. The request letter is sent to the identified examiners for getting the willingness. The appointment order is sent along with syllabus of the subject, details of the question pattern, template for typing the questions, question paper setter's certificate and vouchers. If question papers are not received from the examiners before the last date, reminder mails will be sent to the examiners.

Dy.CoE – QP process is responsible for all the question paper processes such as getting the question papers from the examiners on time, printing the question papers confidentially, keeping the question paper bundles under safe custody, submitting the question paper bundles to the chief superintendent as per the examination date, etc.

Conduct of CIA (Continuous Internal Assessment) Test:

CIA tests are conducted as per the academic schedule. Coordinators and other members are appointed by the COE/HOD.

Printing Work:

Dy CoE is responsible for printing the theory answer books, practical answer books, all types of covers, all types of vouchers, etc. Stock registers are maintained for all the stationeries. Semester grade sheets and consolidated mark sheets are printed after completion of the meeting of Grading Advisory Committee.

Conduct of Semester End Practical and Theory Examinations:

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Practical exam time table, theory exam time table, exam applications, hall tickets, attendance sheets for practical exams, mark sheets for entering practical marks, attendance sheets for theory exams, subject wise strength list are prepared by Dy.CoE – Conduct of Examinations. To conduct practical exams, the external examiners who are having more than 3 years teaching experience in engineering colleges are appointed from other Engineering colleges.. The used theory and practical answer books are kept under safe custody till the students complete their programmes.

Paper Evaluation:

Dy.CoE is responsible for coding, decoding and assigning answer scripts for subject wise for valuation. 30% of the answer scripts are moderated by an external examiner. If the difference between two valuations is more than 15 marks then the scripts are evaluated for third time by an another examiner.

Practical examinations are conducted jointly with external examiner.

Result Processing:

The practical and theory subject marks are converted into letter grades as per the grading system and the result analysis parameters such as overall pass percentage, Department wise, year wise and subject wise pass percentage, subject wise and year wise grade distribution, etc. are prepared. The results are published in the college website and on the notice boards of the respective departments.

Revaluation:

Students who are not satisfied with the exam results can apply for revaluation. At first, students can apply for photocopy of the answer script. The answer scripts are thoroughly checked and verified by the respective subject staff and HOD. Based on their recommendation, students can apply for revaluation. The revaluation process is carried out as per the revaluation application. The revaluation result is published in the college website.

Grade Card Printing:

Semester Grade Cards with SGPA and CGPA are printed and distributed to the students.

2.5.10. What is the mechanism for redressed of grievances with reference to evaluation?

i) For Continuous Assessment Tests:

- The Continuous internal Assessment answer scripts are evaluated within three days of conduct of examination.
- The evaluated answer scripts of every Continuous internal Assessment are distributed to the students in the classrooms followed with discussion.
- All the students can seek clarification for any doubt regarding the evaluation in the class room.
- Grievances, regarding evaluation can be taken to the notice of the HoD, if necessary.

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ii) For Semester End Examination:

- A candidate can apply for a photocopy of an answer script to the Controller of Examinations after declaration of the results and the date notified by the CoE on payment of a prescribed fee.

2.6 Student performance and Learning Outcomes

2.6.1 Does the College have clearly stated learning outcomes for its programmes? If yes, give details on how the students and staff are made aware of these?

Yes

- The College has clearly stated the Programme Educational Objectives, Programme Outcomes and Course Outcomes are published in the College website. These are commonly referred to as Learning Outcomes as per NAAC terminology.
- At the beginning of every academic year the outcomes are reviewed in the faculty meeting to disseminate the outcomes by the faculty.
- The faculty explains the outcomes expected by the students in the orientation classes to make them aware of the same.
- For an example the PEOs and POs associated with B.E. Electrical and Electronics Engineering is as follows:

The major objectives of the B.E. programme in Electrical and Electronics Engineering are to prepare students:

PEO1: For Graduate study in engineering

PEO2: For employment in electrical power industries

PEO3: To acquire job in electronic circuit design and fabrication industries

PEO4: To work in Information Technology and Information Technology Enabled Service industries

Programme Outcomes (POs)

The students who have undergone the B.E. programme in Electrical and Electronics Engineering (EEE)

PO1: will have an ability to apply knowledge of mathematics and science in EEE systems.

PO2: will have an ability to provide solutions for EEE problems by designing and conducting experiments, interpreting and analysing data, and reporting the results.

PO3: will have comprehensive understanding of the entire range of electronic devices, analog and digital circuits with added state-of art knowledge on advanced electronic systems.

PO4: will have knowledge and exposure on different power electronic circuits and drives for industrial applications.

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PO5: will have in-depth knowledge in transmission and distribution systems, power system analysis, protection systems and renewable energy systems to pursue a career in the power sector.

PO6: will have a good knowledge in microprocessors/microcontrollers, data structures, computer programming and simulation software.

PO7: will be able to develop mathematical modelling, analysis and design of control systems and associated instrumentation for EEE.

PO8: will be able to systematically carry out projects related to EEE.

PO9: will have an ability to participate as members in various professional bodies as well as multidisciplinary design teams.

PO10: will demonstrate the ability to choose and apply appropriate resource management techniques so as to optimally utilize the available resources.

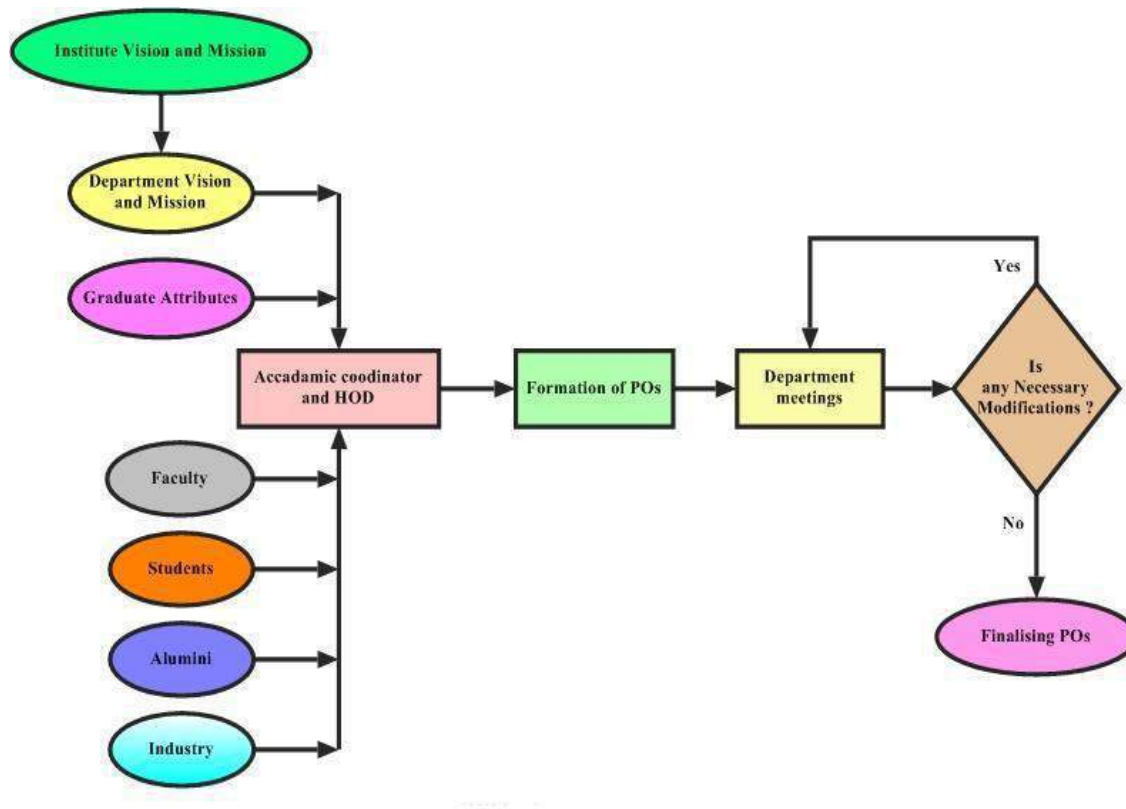
PO11: will be proficient in English language in both verbal and written forms which will enable them to compete globally.

PO12: will have confidence to apply engineering solutions with professional, ethical and social responsibilities.

PEOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
PEO1	H	H	H	H	H	M	H	M	L	L	H	H
PEO2	H	H	M	H	H	H	H	H	H	H	H	H
PEO3	H	H	M	H	H	M	M	H	H	H	M	H
PEO4	H	H	H	H	H	H	M	H	H	H	H	H

H – High; M – Medium; L – Low; NA – Not Applicable]

The following flowchart describes the process of establishing the POs:



2.6.2 How does the institution monitor and ensure the achievement of learning outcomes?

The Institution monitors and ensures the achievements of learning outcomes through the assessment of the following:

Direct Assessment Tools

a. Theory Course Evaluation Process:

Assignment: Assignment is a continuous performance assessment tool that is used to develop and improve the students knowledge related to engineering practices, develop the problem solving skills to apply in real time processing.

Seminar: Seminar is intended to bring out the presentation skills and establish a collaborative learning process in order to present among their class students. It is a motivation factor to the students.

Surprise test: This is an impulsive test understanding the contemporary topic covered in the class room.

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Quiz: This is an assessment tool to understand the subject knowledge in depth.

Open book test: Explore the students knowledge related to the present solving skills to apply in engineering practices.

Continuous Internal Assessment : This is a performance assessment test which takes place as examination sessions that are held twice a semester. Each and every test session is focused in achieving the course outcomes. After Completion of two units, the test will be conducted.

Semester End Examination: The end semester examination is conducted with the question papers set by the experts and exam results are analyzed by the faculty members and reviewed by the HOD.

b. Laboratory Course Evaluation Process:

Continuous Assessment: The pre-lab and post-lab test for laboratory course is conducted for each experiment to enhance the creative learning among the students.

Model Exam: This is conducted after completion of all the experiments in order to understand the student's readiness towards the end semester practical examination to assist them in understanding the experiment if they have any issues or doubts in it.

Semester End practical Exam: End Semester examination is an assessing tool to monitor whether all the POs are attained or not.

Indirect Assessment Tools

At the end of every semester, progress report is developed where the statistics of students who have participated in professional bodies/student chapters / workshops / seminars / conferences / paper presentations / internships / industrial visit etc. is prepared. This statement is considered to indirectly assess the POs.

Graduate Exit Survey: It is conducted every year at the end of the programme.

Alumni feedback: Alumni feedback forms are used for collecting the feedback from the students at the time of completion of the programme and the feedback are analyzed and the suggestions are taken into consideration.

Employer feedback: Feedback is received from the employers to comprehend the performance of our graduates.

Student feedback: It gives the feedback about the course by the students regarding the course content delivery at the end of every semester.

Sample Course Outcome Attainment Report

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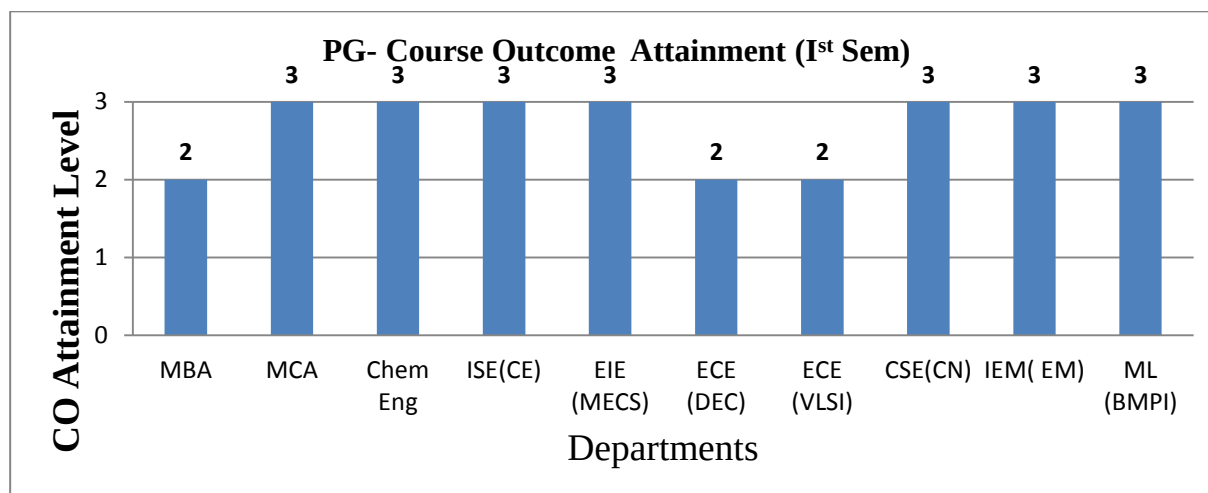
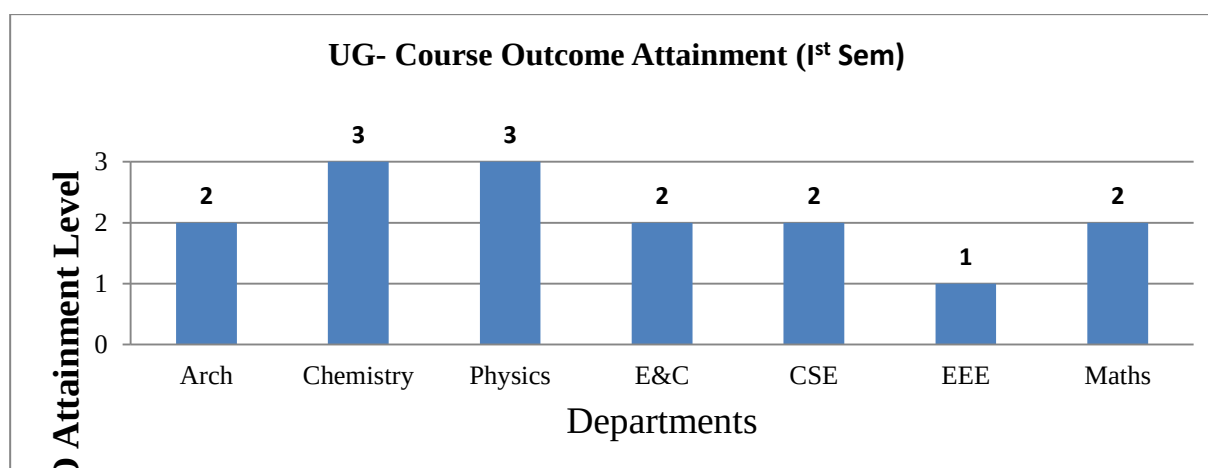
SL No	Department		Average CO Attainment LEVEL
1.	PG	Master of Business Administration	2
2.		Master of Computer Application	3
3.		Chemical Engineering	3
4.		ISE(Computer Engineering)	3
5.		EIE (Microelectronics & Control Systems)	3
6.		ECE (Digital Electronics Communication)	2
7.		ECE(VLSI Design Embedded System)	2
8.		CSE (Computer Networking)	3
9.		IEM (Engineering Management)	3
10.		EEE(Power Electronics)	3
11.		Bio-Technology (Bio informatics)	3
12.		ML (Bio-Medical Signal Processing & Instn.)	3

SL No	Department		Average CO Attainment LEVEL
1.	UG	Architecture	2
2.		Chemistry	3
3.		Physics	3
4.		Electronics & Communication	2
5.		Computer Science Engineering	2
6.		EEE	1
7.		Maths	2

SL No	Attainment Level Names	Attainment Level	Target

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		Values	
1	Low	1	20% Students scoring ≥ 8 Points (SGPA) out of maximum
2	Medium	2	40% student scoring ≥ 8 Points (SGPA) out of maximum
3	High	3	60% student scoring ≥ 8 Points (SGPA) out of maximum



2.6.3 How does the institution collect and analyze data on student learning outcomes and use it for overcoming barriers of learning?

The institution makes use of direct and indirect assessment tools to collect and analyze data on student learning outcomes.

- The performance of students, internal assessment includes assignments, quiz, seminar, surprise test, open book tests and end semester examinations serve as direct tools for analysis of data on student learning outcomes.

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- The alumni surveys and employer surveys are used as performance indicators of advancement in professional career, achievement of higher education, ability to excel in their respective domains, and interpersonal skills.
- The analysis of data on student learning outcomes also helps in identifying the slow learners and to arrange remedial classes for them.
- Every staff member is allotted with 20 students for counseling over the entire semester.
- Every staff member will have knowledge of performance of those students, to identify slow and fast learners.
- Feedback from the students at the end of each semester to know about the teaching / learning of each subject through a questionnaire. Necessary measures are taken to ensure improvement in teaching / learning process.
- All this data is analyzed by the internal academic committee of the department to take effective steps to improve learning outcomes.
- The analysis of alumni survey and employer surveys help in identifying gaps between the needs of the industry and the curriculum.
- The input from the stakeholders is used in making modification to the curriculum and syllabi.
- All the data collected through direct and indirect tools are analyzed and used for overcoming the barriers of learning.

Sample Survey

Survey Question	Disagree	Agree	Fairly Agree	Strongly Agree
Have clarity with basic concepts of engineering? Can identify the design aspects, analyse and interpret the requirements.			☒	
Capable of designing the required system components and processes to support the functioning of the system as a whole? Can identify the technical problems and try to find solutions to these problems?				☒
Can identify the design aspects, analyse and interpret the requirements? Capable of designing the required system components and processes to support the functioning of the system as a whole			☒	
Can identify the technical problems and try to find solutions to these problems				☒

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Have good attitude and behavior contemporary issues, professional responsibility, impact of technology on society and the need for lifelong learning? Follow the ethical issues			✓	
Can communicate effectively? Capability to upgrade skills and use modern engineering tools necessary for engineering practice			✓	
Capable of adapting to new changes in technology? Keep upgraded with latest technical developments that impact the industry			✓	

2.6.4 Give Programme-wise details of the pass percentage and completion rate of students.

Percentage of students Passed out in the last four years.

SN	Programme Name	Institution Name	Pass Percentage of students			
			2014-2015	2013-2014	2012-2013	2011-2012
1	Aeronautical Engineering	DSCE	88%	95%	100%	NA
2	Automobile Engineering	DSCE	98%	92.5%	99.04%	NA
3	Bachelor of Architecture	DSCE	70%	76.5%	66%	67%
4	Biotechnology	DSCE	100%	100%	99%	98%
5	Chemical Engineering	DSCE	93.54%	94.83%	91.96%	97.56%
6	Civil Engineering	DSCE	95%	88.74%	99.3%	99.14%
7	Computer Science & Engineering	DSCE	96.8%	97%	96%	92.4%
8	Construction Technology & Management	DSCE	90	92	90	NA
9	Electrical & Electronics Engineering	DSCE	75.57%	94.07%	90%	91.54%
10	Electronics & Communication Engineering	DSCE	89.05%	89.09%	90.74%	96.04%
11	Industrial Engineering & Management	DSCE	95.74%	93.75%	99.13%	98.07%
12	Information Science & Engineering	DSCE	97%	93%	100%	93%
13	Electronics & Instrumentation Engineering	DSCE	83.63%	86.93%	83.603%	95.76%
14	Mechanical Engineering	DSCE	96%	99%	100%	94%
15	Medical Electronics	DSCE	94%	96%	97%	88%
16	Telecommunication Engineering	DSCE	79.9%	82.4%	88.7%	91.13%
17	Master of Business Administration	DSCE	93.9%	94.755%	88.465%	77.08%
18	Master of Computer Application	DSCE	--	96	95	93

CRITERION III

RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

3.1.1 Does the College have a research committee to monitor and address the issues of research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.

Yes, The College has a Research Committee namely Research and Development cell to promote Research Activities.

The composition of the Research & Development Cell:

Sl No	Name	Position	Designation
1.	Dr. C.P.S. Prakash	Chairman	Principal
2.	Dr. D.R. Ramesh Babu	Member	Vice Principal and Head, Computer Science Engg, DSCE
3.	Dr. H. Ramakrishna	Member	Vice Principal and Head, Industrial Engg & Management
4.	Dr. G.A. Ravishankar	Member	Vice President, R&D (Life Sciences)
5.	Dr.A.Arokkiaswamy	Member	Head, Aeronautical Engg
6.	Dr. S. Kiran	Member	Head, Biotechnology
7.	Dr. P. Prakash	Member	Head, Construction Technology and Management
8.	Dr. Nagaraj Sitaram	Member	Head, Civil Engg
9.	Dr. K. Shanmukha Sundar	Member	Head, Electrical and Electronics Engg
10.	Dr. C.M. Joseph	Member	Head, Physics

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11.	Dr. M. Nagananda	Member	Head, Medical Electronics

The following are the recommendations of the committee:

Recommendations made by the committee for implementation:

- To identify the major thrust areas of research.
- To initiate multi-disciplinary research programs with a special focal themes.
- To identify the budgetary requirements, resources and recommending seed money grants.
- To evaluate the scientific excellence of projects before being further recommended for submission to funding agencies.
- To motivate faculty to pursue Ph.D.

Impact

- The committee has motivated many junior faculty to pursue their research leading to Ph. D programs.
- The committee has facilitated publications by research scholars in peer reviewed national and international journals.
- The institute has got research grants from AICTE, DBT, DST, ISRO, KCST, KFIST, MSME, VGST etc.
- Incentives are given to principal investigators for the grants received.

3.1.2 What is the policy of the College to promote research culture in the College?

The main policy of the College to promote research culture is to encourage the faculty members and students to involve themselves in various research and development activities and to bring out the various innovative ideas to the others so that they will gain good knowledge towards their technical skills.

The Management extends all possible support to promote research culture in the college.

- Encouraging faculty with Master's degree to register for Ph.D and involve in research activities.
- Registration fee is sponsored by the college for presenting papers in the international conferences, for the members of faculty.
- The College provides laboratory, library/e-library, internet and department wise R & D laboratory and computing with internet facilities to the faculty for research work.
- The College organizes International/National Workshops / Seminars / Conferences.
- Provides special duty leave, TA/DA to the faculty members to participate in International / National Workshops / Seminars / Conferences.
- To develop scientific temper and aptitude among students, each department organizes guest lectures, symposia and conferences periodically.
- Innovation and Entrepreneurship Development Centre (IEDC) at DSCE encourages interaction with established entrepreneurs and organizes a mentorship scheme for students which motivates the students to write project proposals and extends grants for innovative projects that are entrepreneurial in nature.
- The faculty in each department identifies topics in thrust areas where the student can take up either field studies or small projects where in they are encouraged to develop these into research projects to

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submit for financial assistance.

- Students will be given an opportunity to work with the ongoing funded projects in the departments and are encouraged to take up in-house projects in final semester.
- Timely up-gradation of Laboratory equipments are carried out in the institution to maintain scientific temperament.
- To provide a platform for the students/faculty in developing the scientific writing skill, departments have department Newsletter/College Newsletter and College Magazine. The students are encouraged to write articles in them.
- The students are provided basic facilities like reference books, journals, internet access etc.

3.1.3 List details of prioritized research area and the areas of expertise available with the College.

Sl No	Name of the faculty	Research Area
Automobile		
1.	Dr. H N Suresh	Quality, Reliability & Maintenance
2.	Dr. Sekhar N	Thermal Spray Coating
3.	Mr. Nandakumar M B	Materials
4.	Mr. Kirana Kumara P	Numerical Simulation
5.	Mr. Mahesh B R	Manufacturing Technology
6.	Mr. Sathyanarayan	Biofuels
7.	Mr. Pradeep G S	Materials
8.	Mr. Naveena B E	Thermal Spray Coating
9.	Mr. Divya G S	Composite Materials
Chemistry		
1.	Dr. K. S. Anantha Raju	Material Science
2.	Dr. C. Jayarama Naidu	Surface Coatings
3.	Dr. V. Bheema Raju	Electrochemistry
4.	Dr. M. Dinamani	Catalysis
5.	Dr. P. Adinarayana Reddy	Bio-Inorganic Chemistry
6.	Dr. R. B. Shivashankaraiah	Batteries
7.	D. Sunanda	Green Synthesis
8.	T. Naveen Kumar	Chemical Kinetics
9.	S. Malini	Organic Chemistry
10.	M. Sennappan	Organic Complex
11.	B. Uma	Surface Coatings
12.	Dr. K. R. Vishnu Mahesh	Material Science
CTM		
1.	Dr. P. Prakash	Construction materials
2.	Dr. Vivek Das	Traffic engineering
3.	Dr. Anjana S.	Urban highway safety analysis and evaluation

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4.	Pramod K.	Stabilization of expansive soils
5.	Geetha S.	Structural health monitoring
6.	Karthik M.	Sustainable concrete, Structural masonry
7.	Suhas R.	Pavement materials and design, Sustainable concrete, GIS
8.	Shivaprasad N.	Pavement materials and design
9.	Vinay N.	Structural Engineering, Construction technology
10.	Sachin V.	Structural design, Collapse mechanism of structures
EEE		
1	Mr.A.M.Nagaraj	Computation of induced voltages and currents in the aircraft wiring due to lightning strike.
2	Mrs.Harsha Ananthwar	Performance estimation of Hybrid power system.
3	Mrs.Suchana Mishra	Investigation on application of Electromagnetic theory using Fractional calculus
4	Mr.Sharath kumar.Y.N	An online Transient Fault Analysis Sensitivity Testing Of Synchronous and Asynchronous Circuits
5	Mr.Balaji Ramakrishna.S	Development of Compact device models for low power down scaled MOSFETS
6	Mrs.Madhura.S	Color image enhancement of video frames using real time DSP
7	Mrs.Vidya.M	Power quality improvement of distribution lines using D-statcom under unbalanced system conditions.
Physics		
1	Dr.C.M.Joseph	Thin films, Nanotechnology, Materials Science
2	Dr.R.Chandramani	Nanotechnology, Materials Science
3	Dr.Priya A Hoskeri	Nanotechnology, Materials Science
4	Dr.T.M.Rajkumar	Thin films
5	Dr.M.N.ravishankar	Crystal growth
6	Dr.Naveen S M	Antenna theory
Maths		
1	Smt. V. Selva Sharmila	Fluid Mechanics
2	Smt. C.S. Komala.	Fluid Mechanics
3	Smt. Suma N.Manjunath	Fluid Mechanics
4	Smt. Padmaja C.	Graph Theory
5	Smt. D.R. Sasi Rekha	Fluid Mechanics
6	Smt. Sowmya.K.	Graph Theory
7	Sri Umesha V.	Fluid Mechanics
9	Smt. Rohini Sathish	Graph Theory

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Computer science		
1.	Dr. D.R Ramesh Babu	Digital Image Processing
2.	Mr. Ramakrishna K	Real Time Embeded Software
3.	Mr. Bhaskar Rao	Digital Image Processing,Natural Language Processing
4.	Dr. Amutha S	Image processing, Computer Networks
5.	Dr. VenkatesanSelvam	Digital Image Processing
6.	Dr. Arbind Kumar Gupta	medical imaging
7.	Dr. Mohan N	Wireless Networks
8.	Dr. SasikumarGurumoorthy	Intelligent System
9.	Dr. Tarun Rao	Data Mining
10.	Mr. Prasad A M	Network Security
11.	Mr. Mohammed Tajuddin	Cryptobiometrics
12.	Mrs. KusumaMohan Chandra	Brain computer interface
13.	Mrs. Sandhya N	Doument Image Analysis
14.	Mrs. Preeti Satish	Software Testing
15.	Mrs. Shubha Bhat	Image Processing & Computer Vision
16.	Mr. SasidharBola	Digital Image Processing & Cancer Imaging
17.	Mrs. Vindhya Malagi	Digital Image Processing & Computer Vision
18.	Mrs. Monika P	Web Mining with Artificial Intelligence
19.	Mrs. Poornima A	Cloud performance testing
20.	Mrs. Rashmi S R	Video Analytics & Artificial Intelligence
21.	Mr. Nagaraj	Digital Image Processing
22.	Mr. Deepak. G	Dynamic Security Approachs for Mobile Cloud Computing
23.	Mr. Harish K	Internet of Things
24.	Mrs. SahanaDamale	Instrumentation & Imaging
25.	Ms. Asnika S	Instrumentation & Imaging
TC		
1	Preeti S Pavale	Robust design of ensemble ANN using evolutionary computation
2	Rajeshwari P	High speed, low power FLASH ADC design
3	Vinod B Durdi	Wireless Communication & Networks
4	Srividya B V	Design, analysis and verification of FEC and selective encryption in wireless sensor networks
5	Saravana Kumar	High speed robust VLSI Architecture for digital image watermarking
6	Mahesh D	Cross layer approach for energy efficient design in WSN
7	Santosh B	Medical Image Processing
8	Smitha Sasi	Secured file delivery protocol design
9	Jayanth C	Optical Networks
10	Deepthi Raj	Synthesis Optimization of FSM for Area and Power using Computational

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		Intelligence
11	Sandeep K V	Implementation of security protocols in Internet of things
12	Basavaraj S M	Software defined networking for smart grid applications and its challenges.
Information science		
1.	Dr.Naveen N C	Machine Learning
2.	Dr.Suma V	Software Engineering
3.	Dr.Sunandha dixit	Image processing
4.	Dr.rajesh	Artificial intelligence
5.	Dr.Rajashaker	Data mining
Aero		
1	Dr. A Arokkiaswamy	Experimental aerodynamics on flow control technologies
2	Dr. R Rajendran	Propulsion
3	Dr. Y R RChowdary	Evaluation of thermal and mechanical properties of hybrid MMC
4	Hareesha N G	Kinematic synthesis of robotic linkages
5	Srinivasan	Aerodynamics
6	Charles G Martin	Energy absorption studies on crashworthiness of high wing aircraft configuration.
7	Prathik S J	Condition monitoring
Civil		
1	Dr.Nagaraj Sitaram	Hydraulic Structures
2	Dr.N.Munirudrappa	Structural Health Monitoring
3	Dr.M.R.Rajasekhara	NDT Techniques for pavements
4	Dr.A.R.Rajendra	Soil Stability
Electronics & Instrumentation Engineering		
1	J S Rajashekhar	Process Control
2	Dr.V.S.Krushnasamy	Control Engineering & MEMS
3	Dr.J.Satheesh kumar	Process Control
4	SandhyaDass	Biomedical Signal Processing
5	S P Meharunnisa	Biomedical image Processing
6	Gopalaiah	Digital Signal Processing
7	T Sushma	Bio Medical Instrumentation
Chemical engineering		
1	Dr.Ravishankar.R	Waste management
2	Dr.S.Murthy Shekhar	Fluid Mechanics

3.1.4 What are the proactive mechanisms adopted by the College to facilitate smooth implementation of research schemes/ projects?

Advancing funds for sanctioned projects

- ❖ The funding organizations release the first installment amount along with project sanction order. Investigation starts as soon as the sanction order is received.
- ❖ **Providing seed money**

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The seed money will be provided by the Institute based on the request for emerging technologies which will be given to the Principal Investigators.

Autonomy to the principal investigator/coordinator for utilizing overhead charges

- ❖ Principal investigator / coordinator are free to utilize —Institutional over head component of that particular project with the approval of the Principal.

Timely release of grants

- ❖ College level research and development committee monitor the timely completion of the projects and in turn reports to funding agencies in time. Hence, release of funds from organizations without any delay.

Timely auditing

- ❖ The audit team of the Institute will conduct the timely audits.

Submission of utilization certificate to the funding authorities

The Institute will coordinate with the Principal investigator and the finance officer for timely submission of Utilization certificate to funding agency.

3.1.5 How is interdisciplinary research promoted?

Between/among different departments of the College:

Sl No	Title of the project	Faculty	Departments involved
1.	Laser Surface Modification Of Non Ferrous Alloys	Mr. Nandakumar M B (Automobile)	Mechanical
2.	Studies on the viability of the boundary element method for the real time simulation of biological organs	Mr. Kirana Kumara P (Automobile)	Mechanical
3	Impact of Petrol ethanol water mixture on performance of 4 Stroke Engine	Mr. Sathyanaryana (Automobile)	Mechanical
4.	Experimental And Numerical Evaluation Of Forming Limit Diagram For Different Alloy Sheets	Mr.Mahesh B R(Automobile)	Mechanical
5.	Development of MMC for marine applications.	Mr. Pradeep G S (Automobile)	Mechanical
6.	Development & Characterization of plasma spray, fly ash based composite coatings	Mr. Naveena B E (Automobile)	Mechanical, Chemistry
7.	Characterization Of Natural Fibre Reinforced Polymer Based Hybrid Composite With Function Fillers.	Mr. Divya G S (Automobile)	Mechanical
Cse			
	“A Novel Technique to Measure Mitochondrial Oxygen in the Corneal Endothelium Based on Fluorescence	Dr. Amutha Mrs. T Sushma (cse)	CSE E & IE

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	Lifetime.”		
	“Acquisition and Reconstruction strategies for region of interest compressed sensing”	Dr.Sairam Geethanath Mr. Amaresha K.S (cse)	Medical Electronics CSE
Aero			
1	SAE Aero Design West 2015	Dr.A. Arokkiaswamy, HOD, AE.	Aeronautical Engineering, Electrical and Electronics, Mechanical Engineering, IEM
Electronics & Instrumentation Engineering			
1	A Novel Technique to measure mitochondrial oxygen in the corneal endothelium based on Fluorescence life time spectroscopy	T Sushma (EIE)	EIE & CSE

Interdisciplinary research between departments of the college is promoted through discussion between senior faculty members of various departments to identify such projects with generous funds from the management. The students have full freedom to approach faculty and research labs of any department regarding research work and support. Expertise in interdisciplinary areas and available facilities from each department will be made available to the final year students by offering CBCS system details which in turn helps the students to select inter disciplinary project.

Collaboration with National/International Institutes/Industries

There are various collaboration forged between departments of the college is promoted through discussions between senior faculty members of various departments to identify such projects through generous funds from the management.

3.1.6 Enumerate the efforts of the College in attracting researchers of eminence to visit the campus and interact with teachers and students?

The college regularly organizes the guest lectures. The departments are always encouraged to organize Seminar, Conferences and workshops with eminent professors are invited from premier institutions, Research organizations and universities and industries as resource.

The partial list of eminent persons visited the institution during various programmes is listed below.

Sl. No.	Name	Title	Year
Automobile			
1.	Dr. Vedanth Sunti	Engine Noise	12-11-2012
2.	Dr. Ashitava Goshal	Design and Manufacture of Robotics	16-09-2012
3.	Dr. C S Ramesh	Practical Applications of FEA	15-02-2012
4.	Dr. Venkata R S	Vibrations and Waves	09-12-2010
5.	Dr. T R Seetharam	Engineering Thermodynamics	10-2011
6.	Dr. V P Raghupathi	Welding Technologies(IWS)	20-02-2015
7.	Dr. Sundharmurthy	Metallurgy (Foundry)	21-05-2016
Ise			

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1	Navin twarakavi	Machin Learning	04-03-2016
Ctm			
Physics			
1	Dr.Roddam Narasimha	JNCASR	2015
2	Dr.Praveen C Ramamurthy	IISc	2013
3	Dr.Gurumurthy Hegde	University of Malaysia	2013
4	Dr.K.N.N.Unni	CSIR	2013
5	Dr.M.Nayak	ISRO	2012
6	Dr.Manikanta	ISRO	2012

3.1.7 What percentage of faculty have utilized sabbatical leave for research activities? How has the provision contributed to the research quality and culture of the College?

About 10% on an average. The details are compiled in the table given below.

Faculties who are doing research in various universities are allowed to meet their guides from time to time by granting sabbatical leaves. On Duty leave is given to attend the Course work classes, Examination, for appear conference and workshop for research.

Sl No	Department	Percentage of faculty utilized sabbatical leave
1	Civil Engineering	10%
2	Construction Technology & Management	10%
3	Biotechnology	14%
4	Mechanical Engineering	5%
5	Electrical & Electronics Engineering	9%
6	Computer Science Engineering	15%

3.1.8 Provide details of national and international conferences organized by the College highlighting the names of eminent scientists/scholars who participated in these events.

Every year international and national conference is conducting. Also several seminars/workshops are organized by the departments and the research wing of College with focus on capacity building in term of research and imbibing research culture among the staff and students.

Table 3.4: List of Workshops/Seminar/Guest Lectures conducted in college

Number of the Workshops/Seminars/Guest Lectures				
2014-2015	2013-2014	2012-2013	2011-2012	2010-2011
96	111	102	117	115

National Conference

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Inaugural Function on Two days National Conference titled “Innovation & Sustainability in Management: Challenges & Opportunities (NCISM-2015)” on 11th September 2015 at 10.00 A.M in Dr. D.Premachandra Sagar Auditorium



National Conference on Information and Communication Technology NCICT 2015

National Conference was conducted on 11th & 12th September 2015. The two day National Conference on Information and Technology starting with Inauguration, Keynote Address, Session wise Paper Presentation, Technical Talk, Panel Discussion and Valedictory. **Dr. S.C. Sharma**, Provost-Dayananda Sagar University, Director DSCE & DSATM and **Dr. C.P.S. Prakash**, Principal, presided over the Conference, along with Shri Galiswamy, Secretary, Dayananda Sagar Institutions who graced the function as Guest of Honour. **Dr. D.R. Ramesh Babu**, Vice principal and HOD/CSE welcomed the august gathering followed by a brief note on the conference objectives were provided by **Dr. Naveen N.C**, HOD/ISE and Dr.Poornima Nataraj, HOD/MCA introduced the Chief Guest of the event **Prof. Dr. C.E. Veni Madhavan**, Professor IISC, Bengaluru graced the function as Chief Guest and delivered the key note address on Turing Points.



NCICT-16

National Conference on "Information and Communication Technology (NCICT-16) was Conducted on 17th & 18th February 2016

Dr. C.P.S. Prakash, presided over the Conference, Dr. D.R. Ramesh Babu Vice principal and HOD/CSE welcomed the august gathering, Dr. Naveen N.C. HOD/ISE briefed about the conference objectives, Shri. Bharat Lal Meena IAS Principal Secretary Higher Education Govt. of Karnataka graced the function as Chief Guest and delivered the Inaugural Address. Shri Parameshwar .R. Head R& D, United Telecoms ltd Bangalore delivered the Keynote address.

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3.1.9 Details on the College initiative in transferring/advocating the relative findings of research of the College and elsewhere to the students and the community (lab to land).

Research projects taken up by the college are mostly of national relevance both post graduate and under graduate students give preference to take up projects related to Industrial and society needs. The awareness about the latest research available at institute level is shared among the students and faculty. Apart from imparting knowledge from text book, the teaching learning activity is made practical by giving assignments on various research topics, which helps the students to do projects of industrial and social relevance. The students are motivated into creative thinking process in all spheres. The College has conducted various events like seminars/workshops/Lectures/project contests/excellence day to create research inventions by their own. The detail of the Students Project with Social relevance are listed in in **Annexure**

3.1.10 Give details on the faculty actively involved in research (Guiding student research, leading research projects, engaged in individual or collaborative research activity etc.)

Guiding student research

Sl NO	Name of the faculty	Area of Specialization	Number of students guiding	Sanctioned projects	Individual/ Collaborative research activity
Automobile Engineering					
1.	Dr. H N Suresh	Reliability & Maintenance	1	Nil	Individual
2.	Dr. Sekhar N	Thermal Spray Coating	Nil	Nil	Individual
3.	Dr. G S Bhat	Thermal	1	Nil	Individual
Chemistry					
1.	Dr. K. S. Anantha Raju	Material Science	03	---	02
2.	Dr. C. Jayarama Naidu	Surface Coatings	01	---	01
3.	Dr. V. Bheema Raju	Electrochemistry	04	---	01
4.	Dr. P. Adinarayana Reddy	Bio-Inorganic Chemistry	01	---	03
5.	Dr. K. R. Vishnu Mahesh	Material Science	02	---	01
Computer science					

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1.	Dr D R Ramesh Babu	Digital Image Processing	7	4	
2.	Dr Amutha S	Image processing, Computer Networks	1		
3.	Dr Krishnan R	Computer Vision	4	1	
4.	Dr Arbind Kumar Gupta	medical imaging			
5.	Dr Nandini C	Image processing	3	2	
6.	Mr. Amaresha K.S	Image processing		2	1
7.	Mrs Sahana amale	Image processing			1
8.	Ms Asnika	Image processing			1
EEE					
1	Dr.K.Shanmukha Sundar	Power system operation and control, Facts controller optimization ,power electronics and drives	2	NIL	Individual
2	Dr.P.Usha	HVDC Power Transmission systems	2	NIL	Individual
3	Dr.Dhanalakshmi.R	Power system control, Renewable energy conversion systems using power electronics ,power system, drives	1	NIL	Individual
ISE					
1	DR.naveen N C	Machine learning	5	2	individual
2	Dr.Suma V	Softwaer engineering	5	0	individual
3	Dr.sundedha dixit	Image processing	3	0	individual
3	Dr.rajesh	Artificial intelligence	0	0	individual
4	Dr.Rajeshaker	Data Base	0	0	Individual
Physics					
1	Dr.C.M.Joseph	Thin Film technology	5	2	Collaborative
2	Dr.R.Chandramani	Materials Science	1	0	Collaborative
3	Dr.Priya A Hoskeri	Materials Science	2	0	Collaborative
TCE					
1	Dr. A R Aswatha	VLSI and Embedded System	05		
2	Dr H C Srinivasaiah	VLSI and	03		

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		Embedded System			
3	Dr. Devaraju R	Wireless Networks	-		
CTM					
1.	Dr. P. Prakash	Structural Engineering	5	Nil	Nil
2.	Dr. Vivek Das	Traffic and Transportation Engineering	1	Nil	Nil
Maths					
1	Dr N.V.Vighnesam	Fluid Mechanics	02	NO	Individual
2	Dr Radha Gupta	Operation Research	07	NO	Individual
3	Dr Srinivasa G.	Graph Theory	02	NO	Individual
4	Dr K.T.Shivaram	Finite Elements	02	NO	Individual
5	Dr Sanjay Oli	Relativity and Cosmology	NO	NO	Individual
AERO					
1	Dr. Arokkiaswamy	Aerodynamics	05	NIL	NIL
Civil					
1	Dr.Nagaraj Sitaram	Hydraulics & water resources	4	Nil	Nil
2	Dr.N.Munirudrappa	Structural Engineerong	1	Nil	Nil
3	Dr.M.R.Rajasekhara	Highway Engineering	2	Nil	Nil
4	Dr.A.R.Rajendra	Geotechnical Engineering	1	Nil	Nil
EIE					
1	Dr. V G Sangam	Sensors & Instrumentation	03	-	-
2	Dr.G.M.Patil	Biomedica Engineering	08	-	-
Chemical engineering					
1	Dr.Ravishankar.R	Alternative Fuels	02	----	----
		Waste Water Treatment	02	----	----

3.2 Resource Mobilization for Research

3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization for last four years.

About 10% of the overall budget is earmarked for Research.

- ❖ Budget to develop the labs and purchase equipment if required for the projects sponsored by external agencies and also to organize National and International level Faculty Development Programmes, seminars, workshops etc.
- ❖ Budget for purchasing latest version of software package necessary to carryout research project.

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- ❖ Text books Reference books, journals, and hand books of advanced are available in the college library for the use of faculty and students to carry out their research activities. Digital library is also available for the faculty and students.

Table shows Actual expenditure for R&D Activities

Dayananda Sagar College of Engineering					
CONSOLIDATED BUDGET DETAILS					
2015-16					
Overall Budget	Budget -General	Exp-General	BUDGET -R&D	Exp- R&D	% of R&D Actual Exp
56,75,00,000.00	49,22,00,000.00	47,84,46,401.00	7,53,00,000.00	6,79,25,350.00	12
2014-15					
Overall Budget	Budget -General	Exp-General	BUDGET -R&D	Exp- R&D	% of R&D Actual Exp
43,60,00,000.00	37,37,35,000.00	35,83,41,272.00	6,22,65,000.00	5,79,05,882.00	13
2013-14					
Overall Budget	Budget -General	Exp-General	BUDGET -R&D	Exp- R&D	% of R&D Actual Exp
40,50,00,000.00	39,51,28,000.00	33,98,48,673.00	1,00,23,000.00	4,24,39,631.00	10
2012-13					
Overall Budget	Budget -General	Exp-General	BUDGET -R&D	Exp- R&D	% of R&D Actual Exp
41,93,50,000.00	39,04,05,000.00	37,64,44,882.00	2,89,45,000.00	2,43,65,728.00	6

3.2.2 What are the financial provisions made in the College budget for supporting student research projects?

The Institution makes financial provision to award outstanding project chosen amongst the research projects presented by the students.

A sample details is given below.

Academic Year	Funding Agency and Scheme	Project Title	Project Students	Amount Sanctioned (Rs.)
Automobiles				
2016	KSCST Under SPP	Laser Surface Modification Of Nickel Aluminum Bronze Alloys	Mr. Joseph Raj Mr. Rakesh TN Mr. Venkatram R Mr. Nischit Shetty	6,000/-

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		For Enhanced Corrosion And Wear Resistance		
Electronics & Instrumentation Engineering				
2015-16	IEDC	Indoor plant monitoring System	A Saravanan & Team	Rs.80000/-
Chemical engineering				
2016	KSCST	Production of Bio-Hydrogen from Organic Waste Material by Fermentation Method	1. Susmitha Kushary 2. Roshnee Das 3. Viswa Mehta 4. Gaurav Navlani	Rs.6000/-
	BRC, IChE			Rs.5000/-
	BRC, IChE	Production of Electricity Using Microbial Fuel Cell from Waste Substances(Urine)	1. Rahul Rawat 2. Karishma Ranjan 3. Swati Kumari 4. Vivek Daga	Rs.5000/-
	BRC, IChE	Physicochemical Characterization of Millet based Ready to use Products	1. Akash Mandal 2. Deepthi Hegde 3. Manjunath Shavi 4. Ali Aman	Rs.5000/-

3.2.3 Is there a provision in the institution to provide seed money to faculty for research? If so, what percentage of the faculty has received seed money in the last four years?

Yes.

There is a provision in the institution to provide seed money to the faculty for research. Incentives are provided to the faculty for publications in National and International Journals. Institution provides seed money for research activities like Workshops/Seminars/ Symposia. College bears all the expenditure including boarding, lodging and travelling expenses of the expert members in such activities.

Following Table shows the details of the Seed Money allotted to various departments

Budget Details dispersed from IEDC to various Departments				
	2012-2013	2013-2014	2014-2015	2015-2016
Chemical Engineering	95,000	--	--	--
Computer Science	1,85,000	--	--	--
Electronics and Communication Engineering	--	--	1,00,000	--
Electrical & Electronics Engineering	--	2,00,000	1,00,000	2,00,000
Information Science Engineering	--	2,00,000	1,00,000	--
Mechanical Engineering	75,000			1,00,000
Medical Electronics	1,17,100	1,00,000	2,00,000	1,00,000
Instrumentation Technology	--	--	--	1,00,000

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Total Amount	4,72,100	5,00,000	5,00,000	5,00,000

3.2.4 Are there any special efforts made by the College to encourage faculty to file for patents? If so, provide details of patents filed and enumerate the sanctioned patents.

Yes.

Management has given a provision to grant special incentive for applying for patents. But the college has not filed any patent so far. In future the college plans to encourage faculty to provide patents and the steps have been initiated by the management.

The list of patents list is given below:

a) Biotechnology:

- Mr. H. N. Madhu et al. 01 patent under publication.

(12) PATENT APPLICATION PUBLICATION	(21) Application No.5309/CHE/2015 A
(19) INDIA	
(22) Date of filing of Application :05/10/2015	(43) Publication Date : 23/10/2015
(54) Title of the invention : HERBAL BASED BIO-POLYMERIC CROSS LINKED HYDROGEL COMPOSITION	
(51) International classification :A61K36/00	(71)Name of Applicant : 1)Dayananda Sagar College of Engineering Address of Applicant :Department of Biotechnology, Shavige Malleshwara Hills, Kumara Swamy Layout, Bengaluru. Karnataka India
(31) Priority Document No :NA	(72)Name of Inventor : 1)Honninahalli Narayan Madhu 2)Sudhanva Madhavrao Desai 3)Dr.Kiran Sundera Raja Rao 4)Manasa Veerabhadrappe Anand 5)Priyanka Bhansali 6)Apoorva Sneha Ravi 7)Suma Ravi 8)Anushree Sridhar
(32) Priority Date :NA	
(33) Name of priority country :NA	
(86) International Application No :NA	
Filing Date :NA	
(87) International Publication No :NA	
(61) Patent of Addition to Application Number :NA	
Filing Date :NA	
(62) Divisional to Application Number :NA	
Filing Date :NA	

b) Automobile Engineering:

- Mr. M .B. Nandakumar has filed a patent on Drive analyser in 2012
- Patent applied for registration for HVOF coating of briquetting tool used in bio fuel manufacture by Mr. N. Sekhar.

c) DEPARTMENT OF MEDICAL ELECTRONICS

Pavan Poojar, Nutan DevB.J., Amaresha Sridhar Konar, Rashmi Rao, Padma C.R., Jayashree Ganguly, Nithin N. Vajuvalli, Arush Honnedevashtana Arun, **Sairam Geethanath*** “Gradient optimization for arbitrary k---space trajectory using active contour” Indian patent filed (application number -6028/CHE/2014)

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Shivaprasad Ashok Chikop, Antharikshanagar Bellapa Sachin Anchan, Girish Koulagi, Arush Honnedevassthana Arun, Shaik Imama and **Sairam Geethanath*** " Motion Correction of MR Images using DSLR Camera" Indian patent filed (application number---498/CHE/2015)

3.2.5 Provide the following details of ongoing research projects:

Senior faculties help the juniors in identifying the area of various research.

Total Value of Ongoing Funded Research Projects as on date is 1142 Lacs

DEPARTMENT OF BIOTECHNOLOGY

Sl. No.	Coordinator / PI/Co-PI	Project Title	Funding Agency	Amounts received	Year of Sanction	Status
01	Dr.N. Rajeswari	DNA Methylation studies on Glioma tissue samples using High resolution melting (HRM) based quantitative analysis	DBT	Rs.24.24 lakhs	2015	1 st installment Rs. 11.76 lakhs released
02	Dr. Saroja Narsing Rao - PI Dr. G.S.Jagannatha Rao - Co-PI	Siderophore monooxygenase – A potent drug target for tuberculosis and other bacterial diseases	DBT, Women Scientist category	Rs. 34.6 lakhs	2014	1 st installment Rs. 8 lakhs released

Mechanical engineering

1	Prof. Haseebuddin M. R	The Multi – Tasking Wheel Chair	IEDC	1,00,000/-	August 2015	
2	Dr. R. Keshavamurthy	Utilization of Industrial waste for the development of protective coating on aluminum components	KSCST	6,000/-	2016	
3	Prof. Praveen D Jadav	Design and Fabrication of a Robot for Agriculture applications	KSCST	6,000/-	2016	
4.	Dr. S.C.Sharma	Development of waste paper and plastic filled polymer based	VGST	Rs. 60,00,000/-	2016	

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		composites: waste to wealth approach				

Medical electronics

- UTERO , funded by IEDC DSI, Rs. 60,800. (2015-16)

Nature of the Project	Duration Year From To	Title of the project	Name of the funding agency	Total Grant (Rs)	Status
Biotechnology					
Major Projects	2014-17	Influence of Stress on Metabolites with Nutritional Value and Protective Function of Indian and Bulgarian Soybean Genotypes obtained by Biotechnology and Genetic Methods	DST	11.40 Lakhs	Ongoing
	2014-17	Siderophore monooxygenase – A potent drug target for tuberculosis and other bacterial diseases	DBT, Women Scientist category	29.00 Lakhs	Ongoing
	2011-16	Biotechnology Finishing School	Dept of IT and BT, Government	1.00 crore	Ongoing
Chemical Engineering					
Major Projects	2014-15	Recent advances in Downstream processing	VTU-VGST	2.00 Lakhs	Ongoing
Electronics & Communication Engineering					
Major Projects	2014-16	Study of Different Types of PN Sequences And Generation of These Sequences Using	ISRO	12.4 Lakhs	On going

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		FPGA			
Master of Business Administration					
Major Projects	2014	MSME Business Incubator	Ministry of Micro, Small and Medium Enterprises, Govt. of India	64.00 Lakhs	Ongoing
	2015-19	Technology Business Incubator	National Science & Technology Entrepreneurship Development Board Govt. of India	4.85 Crores	Ongoing
Medical Electronics					
Major Projects	2014	Indigenous Magnetic Resonance Imaging development of MRI	Department of Electronics and instrumentation technology	103.64 Lakhs	Ongoing
	2014	Novel acquisition and reconstruction strategies to accelerate magnetic resonance imaging using compressed sensing (NARAMICS)	DST	96.00 Lakhs	Ongoing
	2014	Karnataka fund for infrastructure strengthening in science and technology in higher educational institutions KFIST Level-2	VGST	40.00 Lakhs	Ongoing
Physics					
Major Projects	2011-15	Up-gradation of Physics lab to a Center for innovation in organic thin	VGST CISE grant	30.00 Lakhs	Ongoing

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		films research			

3.2.6 How many departments of the College have been recognized for their research activities by national / international agencies (UGC-SAP, CAS, DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthrough due to such recognition.

All the departments are recognized as Research Centers by the following agencies

1. Visweswarayya Technological University, Belagavi
2. Five Departments by University of Mysore
3. Five Departments by Mangalore University.
4. Scientific industrial Research Organization (SIRO)

Significant outcomes of recognition

1 - 24.52 Lacs worth research grants awarded by Viswesarayya Technological University, Belagavi

2 - A good number of Ph.D degrees have been awarded by VTU through our research centers.(7 Research scholars have got through R & D on DSCE.)

3.2.7 List details of completed research projects undertaken by the College faculty in the last four years and mention the details of grants received for such projects (funded by Industry/National/International agencies).

With the encouragement and motivational incentives provided by the College, a good number of faculties obtained their doctoral degrees and many have registered for Ph.D. Many of the faculty members are actively involved in research work and good numbers of papers are being published in National and International journals.

Name of the project /Investigator	Principle Investigator	Sponsorin g agency	Amount Sanctioned in Rupees	Duration (Start date – End date)	Status
Biotechnology					
An observational longitudinal prospective study to evaluate genes expressed in Notch pathway, prognosis and treatment response	Dr. N. Rajeswari	DST	18.00 Lakhs	2008	Completed

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in gliomas					
Chemical Engineering					
MODROBS	Mr. G. K. Mahadevaraju	AICTE, New Delhi	5.00 Lakhs	2013-14	Completed
Civil Engineering					
Geo polymer cement preparation from solid waste materials and iron ore tailings available in KIOCL	Mr. J. M. Srishaila	KIOCL	4.46 Lakhs	2011-2014	Completed
Computer Science Engineering					
Vision based way point navigation of unmanned air vehicles	Dr. D. R. Ramesh Babu	DRDO	14.99 Lakhs	2010-2012	Completed
Tracking multiple objects in aerial images by UAV	Dr. R. Krishnan	DRDO	21.20 Lakhs	2011-2013	Completed
Gait recognition	Dr. C. Nandini	VTU	7.3 Lakhs	2010-2012	Completed
Mobile Home	Dr. D. R. Ramesh Babu	DST	1.00 Lakhs	2012	Completed
Rural Dash Board	Dr. D. R. Ramesh Babu	DST	1.00 Lakhs	2012	Completed
Electronics & Instrumentation Engineering					
Upgradation of Process Control Instrumentation Laboratory with Distributed Control System(DCS)	Dr. J. S. Raja Shekar	AICTE, New Delhi	10 lakhs	2011	Completed
Electrical & Electronics Engineering					
Development of Appropriate Algorithms for Efficient Management of Energy Control Centre's	R. V. Parimala	Central Power Research Institute, Bangalore	9.5 Lakhs	2010 - 2012	Completed
Mechanical Engineering					
Investigation of Impact	Dr. H. V. Lakshminarayana	Naval Research	9.95 Lakhs	2009	Completed

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Damage Tolerance of Composites for Naval Structures / Components	Prof. Shivashankar Srivatsa	Board			
Structural Optimization Studies on Unmanned Air Vehicles for Developing Air Frames with High Strength to weight ratio characteristics required for Surveillance purpose.	Dr. C. P. S. Prakash	Institute of Engineers	1.10 Lakhs	2011	Completed
In Process Evaluation of Surface Roughness of Components in Computer Integrated Manufacturing	Dr. M. B. Kiran & D. M. Shivanna	AICTE	10.65 Lakhs	2012	Completed
Physics					
Preparation and studies on thin films relevant for electronics and solar cells applications	Dr. C. M. Joseph, C. Vidya	VTU research grants	15.22 Lakhs	2011-2014	Completed

Computer Science Engineering					
Minor Projects	2013	Rural Dashboard	IEDC- DST	1,00,000	Completed
	2014	Mobile Home	IEDC- DST	1,00,000	Completed
	2014	Automated Emergency Device	IEDC- DST	1,00,000	Completed
	2015	Farm fit-application for farmers to sell the crops directly to the customers	KSCST	3000	Completed
	2010-12	Vision based way point navigation of	DRDO	14.99 Lakhs	Completed

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		unmanned air vehicles			
	2010-12	Gait recognition	VTU	7.3 Lakhs	Completed
	2011-13	Tracking multiple objects in aerial images by UAV	DRDO	21.20 Lakhs	Completed
	2014	Acquisition and Reconstruction strategies for region of interest compressed sensing	VGST k-fist	4.00 lakhs	Completed
Chemical Engineering					
	2013-14	MODROBS	AICTE	5.00 Lakhs	Completed
Electrical & Electronics Engineering					
Minor Projects	2014	Automatic medicine dispenser and ordering machine	KSCST	6500	Completed
	2010 - 12	Development of Appropriate Algorithms for Efficient Management of Energy Control Centre's	Central Power Research Institute, Bangalore	9.5 Lakhs	Completed
Electronics & Communication Engineering					
Minor Projects	2014-15	Walk smart	IEDC-DST	1 Lakh	Completed
	2013-14	Cocoon Charger	IEDC-DST	1 Lakh	Completed
	2013-14	Low power multiplier using reversible logic	IEDC-DST	1 Lakh	Completed
	2010-11	2 Study of chaos and its Application in Communication-Implementation using DSP Processor TMS320DM6437	ISRO	4.42 Lakhs	Completed
Electronics & Instrumentation Engineering					
	2011-14	Upgradation of Process Control Instrumentation Laboratory with Distributed Control System(DCS)	AICTE, New Delhi	10 lakhs	Completed
Mechanical Engineering					
	2014	Development and	KSCST	7500	Completed

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Major Projects		characterization of industrial waste reinforced metal matrix composite			
	2014	Study of parabolic trough collector for tapping solar energy	KSCST	8000	Completed
	2009-12	Investigation of Impact Damage Tolerance of Composites for Naval Structures / Components	Naval Research Board	9.95 Lakhs Completed	Completed
	2011-14	Structural Optimization Studies on Unmanned Air Vehicles for Developing Air Frames with High Strength to weight ratio characteristics required for Surveillance purpose.	Institute of Engineers	1.10 Lakhs	Completed
	2012-15	In Process Evaluation of Surface Roughness of Components in Computer Integrated Manufacturing	AICTE	10.65 Lakhs	Completed
Physics					
Major Projects	2011-14	Preparation and studies on thin films relevant for electronics and solar cells applications	VTU research grants	15.22 Lakhs	Completed

Electronics and instrumentation engineering

Name of the project	/Investigator Principal Investigator	Sponsoring agency	Amount Sanctioned in Rupees	Duration (Start date – End date)	Status

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Indoor plant monitoring System	J S Rajashekhar	IEDC	Rs.80000/-	2015-16	Completed

Total Value of Major completed projects – 249 Lacs

3.3 Research Facilities

3.3.1 What efforts are made by the College to keep pace with the Infrastructure requirements to facilitate Research? How and what strategies are evolved to meet the needs of researchers?

Some of the strategies are evolved to meet needs of researchers.

- a) College provides well established infrastructural facilities to all departments where modern computers with internet and latest updated software have been installed.
- b) Five departments have established research facilities.
- c) College has digital library with high speed Internet and access to many National and international journals.
- d) Large number of National , International journals and magazines are subscribed.

3.3.2 Does the College have an information resource centre to cater to the needs of researchers? If yes, provide details on the facility.

Yes.

The college has an information resource centre in the form of digital library with good infrastructural facilities to enable researchers to review the recent literature.. In addition the Library subscribes DELNET, INDEST/AICTE Consortium online information resources to facilitate in acquiring the advanced knowledge in the fields of Research, Engineering, Management and Science & Humanities.

The college library provides the following facility to do research:

- Reference Books
- Magazines and Journals
- Online Journals
- Computer with internet facilities
- NPTEL audio-video study materials
- Digital Library with 100 Systems

3.3.3 Does the College provide residential facilities (with computer and internet facilities) for research scholars and faculty?

Yes.

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- The research scholars are provided with accommodation with in the college campus to enable them to pursue their research work (with Wi-Fi facilities).
- The College library is functioning from 9am to 11 pm on all working days.

3.3.4 Does the College have a specialized research centre/ workstation to address challenges of research programmes? If yes, give details.

Yes.

- Research departments have established specialized research laboratories to provide information to the researchers.
- An Exclusive laboratory on Image Processing has been established in collaboration with Indiana University.
- Research facilities in collaboration with Bosch Rexroth and Autodesk has been established.

3.3.5 Does the College have research facilities (centre, etc.) of regional, national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.

Yes.

- All Engineering departments have been recognized as research centers by VTU University, Belagavi and five departments from University of Mysore and Mangalore University respectively.
- Staff and Students are encouraged to make use of these shared resources and facilities. The neighboring college library and lab resources are also kept open for the benefit of the faculty and the students.
- Research scholars whose supervisors are in other universities do make use of the facilities available in those institutes. All research students avail VTU university resource facilities.

3.4 Research Publications and Awards

3.4.1 Highlight the major research achievements of the College through the following:

Major Papers Presented in Regional, National and International Conferences

Year	Department	Number of Major Papers Presented in Regional, National and International Conferences
	CSE	135
	EEE	13
	ECE	5
	IT	25
	BT	40
	PHYSICS	49
	CHEMISTRY	28

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	MATHS	41
	ISE	18
	IEM	232
	Physics	49
	EEE	4

3.4.2 Does the College publish research journal(s)? If yes, indicate the composition of the editorial board, publication policies and whether it is listed in international database?

Yes, The college publishes two research journals. The details are given below.

International Journal of Applied Sciences & Engineering (IJASE)

Print ISSN: _____

Online ISSN: _____

CHIEF PARTONS

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Dr. D. Premachandra Sagar, Vice-Chairman, DSI
Sri. Galiswamy, Secretary, MGVP trust, DSI

PATRONS

Dr. S.C. Sharma, Provost, DSU & Director, DSCE/DSATM
Dr. Hariprasad S.A., Chief mentor, DSCE & Pro Vice-chancellor, DSU
Dr.C.P.S. Prakash, Principal, DSCE

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Prof. Andy Chan Tak Yee, Nottingham University	Dr. Malini Udtha Lab and Research Co ordinattor The University of Texas Health Science Center Houston, Texas-77030, USA

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International Journal of Electrical Sciences & Engineering (IJESE)

Print ISSN: _____

Online ISSN: _____

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5	EC	Dr. Hariprasad S.A.	Prof. Krishnananda, Dr. T.S. Rukmini
6	ML	Prof. M.S. Nagananda	Dr. Sairam Geethanath
7	EEE	Dr. Shanmukha Sundar	Dr. P. Usha
8	MCA	Dr. Poornima Nataraja	Prof. Samitha Khaiyum

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Professor Venkatesh Saligram, Electrical & Computer Engineering, Boston University,	Dr. Xavier Fernando, Ph.D., Professor & Multimedia stream Coordinator, Department : Electrical and Computer Engineering, Ryerson University, 350 Victoria Street, Toronto, ON M5B2K3, Canada
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International Journal of Applied Sciences & Engineering (IJASE)

Print ISSN: _____

Online ISSN: _____

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Prof. Andy Chan Tak Yee, Nottingham University	Dr. Malini Udtha Lab and Research Co ordinattor The University of Texas Health Science Center Houston, Texas-77030, USA

3.4.3 Give details of publications by the faculty:

The detail of the Faculties Published in National/ International Journals are listed below.

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Name of faculty	National Journals	International Journals	Book Chapters	Books	Total
Aeronautical Engineering					
Dr.A .Arokiaswamy	1	6	0	0	7
Dr. Srinivasan .S	0	3	0	0	3
Mr.S.Prathik Jain	0	1	0	0	1
Architecture					
Dr. R. Rama Subrahmanian	3	0	0	0	3
Prof. Mondira Ganguly	3	0	0	0	3
A. R. Shruthi Murthy	1	0	0	0	1
Automobile Engineering					
N.Sekhar	01	01	0	0	2
Biotechnology					
Dr. G. A. Ravishankar	80	162	22	0	264
Dr. S. Kiran	2	9	0	0	11
Dr. N.Rajeswari	7	19	0	0	27
Dr. Nagamani S. Khandrae	0	3	0	0	3
Dr.K.Shinomol George	0	12	0	0	12
Sinosh Skariyachan	0	25	1	1	27
B.M.Arptha	0	11	0	0	11
Chemistry					
Dr. C.Jayarama Naidu	5	0	0	0	5
Dr. V. Beema Raju	0	30	0	0	30
Dr. M.Dinamani	0	13	0	0	13
Dr.P.Adinarayana Reddy	0	22	0	0	22
R.B. Shivashankaraiah	0	3	0	0	3
T. Naveenkumar	0	1	0	0	1
S. Malini	0	4	0	1	5
Chemical Engineering					
Dr. R. Ravishankar	1	9	0	0	10
Dr. S.Murthy Shekhar	0	6	0	0	6
Prof. D.C.Sikdar	0	1	0	3	4
Mrs. B.R.Veena	0	1	0	0	1
Mr. G.K. Mahadevaraju	0	5	0	0	5
Mr. B.S. Thirumalesh	2	1	0	0	3
Mr.H.N. Pradeep	0	1	0	0	1
Ms. H.A. Deepa	0	3	0	0	3
Ms. S. Priya	0	1	0	0	1
Ms. Roopa Farshi	1	2	0	0	3
Mr. H. Sunil	1	5	0	0	6
Mr. K.V. Karthik	0	2	0	0	2
Mr. Mahesh Kumar	1	5	0	0	6
Computer Science Engineering					
Dr. D.R. Ramesh Babu	3	17	0	0	20
Dr.S. Amutha	0	6	0	0	6
Prof. N. Bhaskara Rao	3	5	0	0	8
Prof. K.A. Ramakrishna	1	2	0	0	3

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A.M .Prasad	0	2	0	0	2
M. Kusuma	0	3	1	0	4
Mohd. Tajuddin	0	4	0	3	7
N. Sandhya	0	3	0	0	3
S.R. Rashmi	0	1	0	0	1
A.B. Poornima	0	1	0	0	1
Vindhya P. Malagi	0	3	1	0	4
Shubha Bhat	1	2	0	0	3
B.Sasidhar	0	3	0	0	3
G. Deepak	0	6	0	0	6
J .Nagaraja	0	5	0	0	5
Mamatha	0	2	0	0	2
K. Sonal	0	2	0	0	2
N. Harish Kumar	0	4	0	0	4
K.S. Amaresha	1	1	0	0	2
Rashmi Reddy	0	1	0	0	1
Sahana Damale	0	1	0	0	1
S. Asnika	0	1	0	0	1
Civil Engineering					
Dr. H.K. Ramaraju	0	4	0	0	4
Dr. N. Munirudrappa	0	3	0	0	3
Dr. M. Rajashekara	0	3	0	0	3
Mr. B.T.Shivendra	0	1	0	0	1
Dr. R. VivekDas	0	1	0	0	1
Mrs. V. Shanthi	0	1	0	0	1
Mrs. Neethu Urs	0	1	0	0	1
Mrs. E.K. Reshma	0	4	0	0	4
Mr. K.R. Manjunath	0	9	0	0	9
Mr. J.M. Srishaila	0	5	0	0	5
Mrs. J.Ranjitha	0	2	0	0	2
Ms. M. Meghashree	0	1	0	0	1
Mr. P.N. Vinod	0	1	0	0	1
Mr. K.N. Vishwanath	0	5	0	0	5
Mr.Deeraj Kumar	0	1	0	0	1
Mr. S.N. Suresha	0	2	0	0	2
Mr.G. Venugopal	0	1	0	0	1
Mr. Kiran	0	1	0	0	1
Electronics & Communication Engineering					
Dr. K. Karibasappa	0	1	0	0	1
Dr. Girish V. Attimarad	0	10	0	0	10
Dr. K.L. Sudha	0	11	0	0	11
Dr. P. Dinesha	0	4	0	0	4
Mrs. M.Roopu	0	2	0	0	2
Mrs. K.P. Shashikala	0	4	0	0	4
Dr. Kiran Gupta	0	6	1	0	7
Mrs. S. Jamuna	0	5	0	0	5
Mrs. K.N. Pushpalatha	0	6	0	0	6

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Mr. M.K. Nagachandra	0	1	0	0	1
Mrs. V. Anitha	0	5	0	0	5
Dr. Sayed Abdulhayan	0	6	0	0	6
Mrs. S. Thenmozhi	1	1	0	0	2
Mrs. Poonam U. Sharma	0	1	0	0	1
Mrs. P.J.Sapna	0	1	0	0	1
Mr. A. Rajagopal	0	2	0	0	2
Ms. N.P. Deepa	0	2	0	0	2
Mr. K. Shashi Raj	0	5	0	0	5
Mrs. Trupti Tagare	0	1	0	0	1
Dr. P. Vimala	0	1	0	0	1
Electrical & Electronics Engineering					
Dr.K .Shanmukha Sunder	0	17	0	0	17
Dr. P. Usha	0	9	0	0	9
Dr. Dhanalakshmi	0	11	0	0	11
Dr. B.N. Sarkar	0	0	0	1	1
Mrs. Harsha Anantwar	0	4	0	0	4
Mr. A.M. Nagaraj	0	6	0	0	6
Mr. Yogesh	0	0	0	1	1
Mr. B.S. Nagaraj	0	0	0	1	1
Mr.N. Nandan	0	0	0	1	1
Electronics & Instrumentation Engineering					
Prof. J. S. Rajashekhar	2	11	0	0	13
Dr.Aniket Wadajkar	0	23	2	0	25
Mr. S.P. Meharunissa	1	10	0	0	11
Ms. Sandhya Dass	0	3	0	0	3
Mr. Gopaliah	2	2	0	0	4
Ms. Silpa Ajith Kumar	0	1	0	0	1
Ms. Anjana Joshi	0	1	0	0	1
Ms.U.S.Pavitha	0	1	0	0	2
Ms.S.Nikhila	0	2	0	0	2
Ms. Ekta Maini	0	5	0	0	5
Industrial Engineering & Management					
Dr. H. Ramakrishna	8	15	0	0	23
Dr. S.A. Vasantha Kumara	2	12	0	0	14
Radha Halagani	0	1	0	0	1
R.Archana	1	1	0	0	2
K.S.Vinay	0	5	0	0	5
Information Science & Engineering					
Dr. R.Krishnan	1	4	1	0	6
Dr. K.N. Ramamohanbabu	0	3	0	0	3
Dr. V. Suma	0	7	1	0	8
Dr. M.Ravishankar	0	6	0	0	6
Mr.M.T. Gopalakrishna	0	1	0	0	1
Mr. M.C.Hanumantha Raju	0	1	0	0	1
Mrs. J. Rajeshwari	0	4	0	0	4
Mrs.Sunanda Dixit	0	1	0	1	2

SELF STUDY REPORT

Mrs. M. Varalatchoumy	0	4	0	0	4
Mrs. T.V. Radhika	0	2	0	0	2
Mrs. Sharon Christa	0	1	0	0	1
Mr. Kiran.Y.C	2	4	0	0	6
Mr. M.S.Patel	0	4	0	0	4
Mr. Muzameel Ahmed	0	2	0	0	2
Mrs. Vaidehi. M	0	2	0	0	2
Mechanical Engineering					
Dr. C.P.S. Prakash	3	8	0	0	11
Dr. H.V. Lakshminarayana	50	50	0	1	101
Dr. Subramanya Krishna Bhat	0	1	0	0	1
Dr. Kailash Chandra Panda	2	1	0	0	3
Dr. Keshavamurthy	1	25	0	0	26
Prof. K. Prabhakar	10	4	0	0	14
A. Shantharam	0	1	0	0	1
Shridhar U. Kurse	2	2	0	0	4
G.S. Mahesh	2	0	0	0	2
Dr. Narasimhe Gowda	1	3	0	0	4
M.K. Venkatesh	2	1	0	0	3
H. Rajashekar	0	1	0	0	1
M.R. Kamesh	1	1	0	0	2
M.D. Mahendra	0	4	0	0	4
N.D. Manjunath	1	--	0	0	1
M. Aruna Devi	0	3	0	0	3
Jacob John	1	1	0	0	2
M.R. Haseebuddin.	1	4	0	0	5
H. Ramesha	0	1	0	0	1
Kranthi Kumar Kshaurad	1	--	0	0	1
N. Kiran Kumar	1	2	0	0	3
Tejeswini	0	1	0	0	1
Medical Electronics					
Prof.G. Narasimhalu	0	1	0	0	1
Dr. D. Narayana Dutt	0	1	0	0	1
Prof. SrinivasHalvi	0	4	0	0	4
Telecommunication Engineering					
Dr. A.R. Ashwath	0	6	0	0	6
Dr.H.C. Srinivasaiah	0	6	0	0	6
Mr. H.C. Sateesh Kumar	0	8	0	0	8
Mrs. T.H. Manjula Devi	0	2	0	0	2
Mrs. Priti S. Pavale	0	4	0	0	4
Mrs. V. Anitha	1	2	0	0	3
Mr. G. Dattathreya	0	5	0	0	5
Mrs.P .Rajeswari	0	5	0	0	5
Mr. B. Vinod Durdi	0	4	0	0	4
Mrs. R. Nagarathna	0	1	0	0	1
Mrs. B.V. Sri Vidya	0	5	0	0	5

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Mr.C .Jayanth	0	1	0	0	1
Mrs. Anitha Suresh	0	1	0	0	1
Mr.B. Santhosh	0	1	0	0	1
Dr. Sayed Abdulhayan	0	5	0	0	5
Mrs. Smitha Sasi	0	1	0	0	1
Mr. T. Kiran Kumar	0	1	0	0	1
Mr. D. Mahesh	0	2	0	0	2
Mr.K.V.Sandeep	0	2	0	0	2
Mrs. Deepthi Raj	1	1	0	0	3
Mathematics					
Dr. B.H. Veena	0	1	0	0	1
Dr. G. Srinivasa	0	7	6	1	8
Dr. K.T. Shivaram	0	19	0	0	19
Dr.N.V.Vignesham	0	2	0	0	2
Physics					
Dr. C.M. Joseph	2	5	0	1	8
Dr. R. Chandramani	1	4	0	0	5
Dr. T.M. Rajkumar	1	1	0	1	3
Dr. M.N. Ravishankar	0	3	0	1	4
Dr. Priya A Hoskeri	1	1	0	0	2
P.Aruna	0	1	0	0	1
C. Vidya	1	1	0	0	2
Master of Business Administration					
Dr. K.G. Hemalatha	11	03	0	0	14
Dr. Lakshmi Jagannathan	12	03	0	0	15
Dr. B.K.Arun	4	3	3	1	11
Mrs. U. Roopa	2	0	0	0	02
Mr. G. Raghu	1	0	0	2	3
Mrs. V. Purnima Thampi	5	0	0	1	6
Mr. K.S. Ganesha	1	0	0	0	1
Mrs.Kaveri B. Jabshetty	0	0	0	0	0
Ms. T. Nayana	0	0	0	0	0
Mr. A.S. Suresh	15	0	0	0	15
Mrs. Akshatha Jain	0	0	0	0	0
Mr. S.R. Sudhir	0	0	0	0	0
Master of Computer Applications					
Dr. Poornima Nataraja	0	3	1	0	4
Manjula Sanjay	0	3	0	0	3
K. Samitha	0	5	0	0	5
M.B.Vibha	0	2	0	0	2
Ambika Nagraj	0	5	0	0	5
B. Mahendra Kumar	0	6	0	0	6
Lakshmi Madhuri	0	2	0	0	2
M.S.Pavithra M	0	2	0	0	2

3.4.4 Indicate the average number of successful M.Phil. and Ph.D. scholars guided by faculty.

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Sl.No.	Department	Name of the Faculty	Topic of Research	University	Year of Awarded
1	MCA	Dr. Samitha Khaiyum	Computer Applications- Title: A Modified FMEA Approach to Enhance the Reliability of Real Time Embedded System Projects	Visvesvaraya Technological University	2015
2	Biotechnology	Dr. Sinosh Skariyachan	Molecular characterisation of microorganism present in Cauvery River and in silico analysis for probable drug targets.	Visvesvaraya Technological University, Belagavi, Karnataka	May 2016
3	Mechanical	Dr. Aruna Devi. M	Optical selection of machining parameters in milling operation using heuristic technique	Visvesvaraya Technological University, Belagavi, Karnataka	2015
4	Computer science	Dr. Shubha Bhat	Wat-point navigation of UAV using image processing technique	Visvesvaraya Technological University, Belagavi, Karnataka	2015
5	Mechanical	Dr. M. K. Venkatesh	Simulation of technological characteristic of carbon nano tube filled pultruded carbon fiber reinforced polymer composite rods for electrical application	Visvesvaraya Technological University, Belagavi, Karnataka	2015
6	Telecommunication Engineering Department	Sayed Abdulhayan	QOS and Security in 4G Networks	Visvesvaraya Technological University	2014

3.4.5 What is the stated policy of the College to check malpractices and misconduct in research?

The college is against malpractices and misconduct on the part of the researchers. It continuously monitors the funds sanctioned by the funding agencies and the research work being carried out by the researchers. Auditing is also done on the fund received for research.

3.4.6 Does the College promote interdisciplinary research? If yes, how many inter departmental / inter disciplinary research projects have been undertaken and mention the number of departments involved in such an endeavor.

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Yes, the College is always encouraged to conduct workshops, conferences and guest lectures in the common areas of interest. Faculty members of different departments are also encouraged to apply for Sponsored Projects in their common areas of interest. Some of the faculty members, as part of their research, associate with other department faculty members and publish papers. The departments also encourage the students to participate in training programmes/paper presentations in the common areas of interest that are being organized by both industry and academia. Thus, highest emphasis is placed on interdisciplinary research.

3.4.7 Mention the research awards instituted by the College.

Following recognition and Awards have been constituted by the management.

- 1 - Best Project Award
- 2 – Best Innovation Award
- 3 – Best Project of social relevance Award.
- 4 – Best Project presentation Award

3.4.8 Provide details of research awards received by the faculty recognition received by the faculty from reputed professional bodies and Agencies

Name of the Faculty	Award	Date of Award	Place of Award
Biotechnology			
Dr G A Ravishankar	Fellow of Institute of Food Science and Technology	2009	UK, FIFST
Dr G A Ravishankar	Conferred Professional Membership	2010	Institute of Food Technologists of USA
Dr G A Ravishankar	Fellow of Society for Applied biotechnologists (FSAB)	2010	Society for Applied Biotechnologists (FSAB)
Dr G A Ravishankar	Fellow of Institute of Food Technologists (IFT) of USA	2012	Institute of Food Technologists (IFT) of USA
Dr G A Ravishankar	Life Time Achievement Award (SAB Grand Medal)	2013	Society for Applied Biotechnologists (FSAB)
Dr G A Ravishankar	Certified Food Scientists of USA	2013	Food Scientists of USA
Mr. Sinosh Skariyachan and Dr. S Kiran	Resource persons	2012	Food Biotechnology for Edusat Programme, VTU, Belgaum.
Dr. Shinomol George K	Women scientist program (WOS-A) fellowship	2010	DST

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Dr. H K Ramaraju	Bhartiya Shiksha Ratan Award	2007	Global Society for Health & Educational Growth (GSHEG), New Delhi
Dr. H K Ramaraju	Nada Prabhu Kempe Gowda Award	2011	Govt. of Karnataka (April 2011)
Industrial & Engineering Management			
Dr H Ramakrishna	Rajiv Gandhi Education Excellence Award		International Institute of Education and Management, New Delhi
Dr S A Vasantha Kumara	Outstanding Educator and Scholar Award	2014	National Foundation for Entrepreneurship development [NFED] Coimbatore.
Information Science Engineering			
Dr Suma	Academic Research Award of Excellence	2013	Additive Manufacturing Society of India
Dr Suma	Senior Woman Educator & Scholar Award on Women's Day Awards	2014	National Foundation for Entrepreneurship Development (NFED)
Dr Suma	Distinguished Educator & Scholar Award	2014	National Foundation for Entrepreneurship Development (NFED)
Mechanical Engineering			
Mr. Vijaykumar N Patil	Best paper award	2010	6 th National Conference on Innovative Developments in Manufacturing at New Horizon College of Engg, B'lore

3.4.9. State the incentives given to the faculty for receiving state, national and international recognitions for research contribution:

- ❖ Faculty members who attend Faculty development Programmes such as workshop / conference / seminar and symposium are being paid the actual expenditure if there is no financial support from the organizers of the programme.

3.5 Consultancy

3.5.1 What is the stated policy of the College for structured consultancy? List a few important consultancy services undertaken by the College.

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The College strongly encourages structured consultancy. A policy decision is taken by the college to share the revenue generated by doing consultancy among the faculty members and institution. Along with it, there are several other monetary and non-monetary benefits provided to the faculty members. Out of income received from outside sources under the head consultancy, 60% will be provided to the faculty members (both teaching & non-teaching staff) and remaining 40% will be utilized for the research work facilities like software, hardware, Consumable and non consumable items.

- DSCE strongly encourages consultancy. The staffs are free to take up consultancy work with the permission of the Management. The expertise available with the department is informed to the R & D's through contacts, alumni interactions and interaction with industry experts to advocate the consultancy activity.
- Department of biotechnology has established commercial plant tissue culture lab which supplies seedling to farmers.

3.5.2. Does the college have College-industry cell? If yes, what is its scope and range of activities?

Yes, College has Industry Institute Interaction Cell.

- ❖ Experience of our alumni, Placement Cell, Industry Institute Interaction Cell, Centre for Innovation and Leadership Cell play a pivotal role to establish Institute- Industry –Interface. Some of the faculty members, engaged in research work, frequently interact with the industry stalwarts to get to know the latest trends
- ❖ Institute- Industry relationship is a part of our educational set up. The Placement Cell of the College initiates the interface talks with the industry as well as training institutes oriented towards the technical skill set and soft skill improvement of the students so as to enhance their employability skill. The cell also at times designs the modules according to the requirement of students.
- ❖ The institute has MOUs with various organizations and College has to interact with these associations so that it evolves into more fruitful interaction with industry.

The College entertains the Industry – Institute – Interaction by engaging them in the following activities

- ❖ Eminent persons are invited for departmental guest lectures, seminars and conferences.
- ❖ Many of the students are motivated to do their academic projects in industries.
- ❖ Students are encouraged to undergo in-plant training to bridge the gap between institute and industry during every semester holidays.
- ❖ College Industry cell creates an opportunity for placement to students in core industries.
- ❖ Industrial Visits are organised
- ❖ Consultancy Projects
- ❖ Inviting industry experts
- ❖ Conducting technical events

Industrial Visits Details

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The Industry Visits are maintained in **Annexure**

3.5.3 What is the mode of publicizing the expertise of the College for consultancy services? Mention the departments from whom consultancy was sought.

In our institution we put an effort in attracting the consultancy services around the state by organizing conferences, seminars, workshops and FDP programs.

- ❖ We make them to visit the campus and interact with teachers and students of our college.
- ❖ The website of the Institute has detailed expertise and experience of the faculty members prominently displayed that help corporate and business identify suitable resource for their project work.
- ❖ Periodically the college updates its information and highlights the achievements including the facilities available with the department.
- ❖ The expertise of the college in consultancy services is made publicized through print media and reputed engineers who are in touch with the college.
- ❖ Major areas of expertise are publicized in the college website and also through technical events/programmes. It is also made known through the alumni of our college who are placed in several companies around the district.
- ❖ The consultancy services offered by various departments are published through,
 - Broachers circulated to industries
 - College website
 - Lab equipment suppliers

3.5.4 How does the College encourage the faculty to utilize the expertise for consultancy services?

The Institution is capable and resourceful enough to encourage the staff to utilize their expertise for consultancy services by networking with institutions, organizations and other agencies. The College motivates the professionally qualified faculty for consultancy services with the permission of the institute. This helps in promoting liaison with industry/companies.

Monetary benefits are offered to faculty involved in consultancy as per the College policy. To meet the present scenario demands, our faculty regularly visits industries. Our College always encourages the staff to attend seminars, workshops and FDPs of their own interest.

- The college encourages the faculty to improve their careers prospects by encouraging them to have consultancy services. The faculties based on the field of expertise are encouraged to carry out the research by using the licensed software and hardware facilities and Infrastructure available in the department.
- The Departmental Advisory Committee meeting is a platform where the expertise of the faculty will be exposed to the experts from industry and academics. Similarly the interaction during workshops,

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seminars, guest lectures help the faculty to interact with external experts and thus their expertise is publicized.

- The workload at the department level is minimized and leave with pay is approved for the Consultants.
- Consultancy services in the institute range from utilization of laboratory equipment, logistics and extending in-house expertise to the clients. Revenue generated through consultancy services would be shared between the institution and faculty-in-charge in proportion to 40:60.

3.5.5 List the broad areas of consultancy services provided by the College and the revenue generated during the last four years.

Based on the expertise of the faculty and special infrastructure available in respective departments, consultancy services are made available for revenue generation to the institute.

Details of services provided by departments during 2012-2015

Details of Service Provided	Service provided to	Revenue	Details			
		2011-12	2012-13	2013-14	2014-15	Total
Name of Department: Aeronautical Engineering						
Using of Wind tunnel Facility for final year project purposes (07.05.2015)	B.N.M Institute of Technology Bengaluru-560070		-----	-----	8,000	8,000
Biotechnology						
Supply of Banana and Ornamental Plants	• Sun Glow Biotech, Coimbatore • Shri N. V. Byrappa, Chikkabalapura • Hemavathi Nursery Farm, Rani Bennur, • Chandan Nursery, Daddahalada Mara	12,41,000	9,62,000	4,12,500	8,93,550	35,09,050

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Water Quality Testing	Karnataka Urban water supply board,Bangalore	--	--	--	23000	23000
Utilization of experimental lab facility	Jain University	--	--	--	35000	35000

Sl. No	Year	No. of plants sold		Amount (Rs)
		Banana plants	Ornamental plant	
1.	April 2011 – March 2012	3,98,000	9,900	12,41,000
2.	April 2012 – March 2013	2,78,000	4,800	9,62,000
3.	April 2013 – March 2014	96,010	18,512	4,12,500
4.	April 2014 – March 2015	2,35,300	22,700	8,96,950
5.	April 2015 – March 2016	1,66,000	1,300	5,81,000
	TOTAL	11,73,310	57,212	40,93,450

3.6 Extension Activities and Institutional Social Responsibility (ISR)

3.6.1 How does the College sensitize the faculty and students on Institutional Social Responsibilities? List the social outreach programmes which have created an impact on student's campus experience.

The institution promotes institution-neighbourhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students.

Blood donation camps, by conducting several awareness programs or rallies on/off the campus like Swachh Bharat and health awareness rally. Biotechnology Department started a terrace garden to ensure the concept of Reuse, reduce and recycle of Plastics. It has also started a small scale vermi compost project for Solid waste management.

Details of the activities conducted in the departments are mentioned in Table below

Department Name	Activity	Organization	Expenditure (Rs.)	Record available

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Automobile Engineering	Blood Donation Camp with Sagar Hospitals, Donation by Students and Staff of Automobile Engineering, DSCE on 09/09/2014	Sagar Hospitals	-	-
	Free Emission Test for two wheelers and four wheelers from 10/11/2014 to 14/11/2014	DSI, Students , Staff, and Public	-	-
Biotechnology	Preparation and distribution of 20,000 capsules of spirulina	Flood victims of Uttarakand in 2013	-	-
	Joined the 'Compassionate clowns, program at KidwaiCancer Hospital Paediatric ward. It's still continuing.	Sagar Smiles	-	-
	Terrace garden and Vermi compost	Sagar Smiles	-	-
Chemical Engineering	Educating / awareness	High school / PU students	-	-
Civil Engineering	Swach Bharath – Community service	Avalhalli - Bhanashankari 6 th Phase January 2016	-	-
	Swach Bharath – Community service	Melukote, Mandya District, February - 2015	-	-
	Swach Bharath – Community service	Melukote, Mandya District, February - 2014	-	-
	Blood Donation Camp	Lion's club - 2015	-	-

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Computer Science Engineering	To Educate the Community about the Fastest Growing Field & Technology - Computer Science.	Government Lower Primary School, Shettygowdana doddi, Bidadi Hobli, Ramanagaram Taluk	5345	No
	Organized a Community Development Programme for the Teachers and Children of Anatha Shishu Sevashrama.	Anatha Shishu Sevashrama, 14, 2 nd Cross, Wilson Garden, Bangalore, Karnataka-27.	22100	No
	Donated computers, fans, stationary items and wall clock to Government Lower Primary School, - to make the students feel comfortable and walk along with the technology to a certain extent.	Government Lower Primary School, Shettygowdanadoddi, Bidadi Hobli, Ramanagaram Taluk,	Liberal Donation	No
	Donated stationary items along with water dispenser, first aid kit and Rs. 4200 for uniform stitching of under privileged students of govt. school	Govt. Lower Primary School, Shettygowdanadoddi, Bidadi Hobli, Ramanagaram Taluk,	4200	No
	Ms. Jyothi's financial problems and eagerness to pursue engineering course, the Department of CSE sponsored her Engineering CET fees (Rs. 41,590/-) and college admission fees (Rs. 25,000/-) for the academic year 2013-2014 (1st year of BE).	Ms Jyothi	66590	Yes

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	Community Development Programme for the Teachers and Children of a Govt. School on 20 th Sept 2013	Govt. Higher Primary School, Hannedoddi, Kolaganahalli post, Kanakapura Taluk	5836	No
	In Nov, 2013, donated a hearing aid to Ms Sugana, a student studying in 8 th std in a Govt. School to help her mount her career	Govt. Higher Primary School, Hanedoddi, Kanakapura Taluk, Ramanagaram Dist.	Liberal Donation	No
	As part of CDP, the department had invited the students of Govt. Higher Primary School, Ramanagaram District, Karnataka-562112 for an educational visit to the DSCE campus on 20 th September, 2013.	Govt. Higher Primary School, Hannedoddi, Kolaganahalli post, Kanakapurataluk, Ramanagaram District, Karnataka-562112	Liberal Donation	No
	The Department of CSE, DSCE jointly through NIRAM FOUNDATION donated Rs. 35, 000/- to Ms. Shabari (Physically Challenged Person), towards her surgery in the year 2013		35000	No
	During the month of November, 2013, provided financial helping hand to around 34 students.	Govt. Higher Primary School [GHPS], Hannedoddi, Kolaganahalli post, Kanakapurataluk.	36100	No
CTM	Community Engagement Exercise, Filling of pot holes	KS Layout & ISRO Layout, Bangalore	83250	Yes
Electronics & Communication Engineering	Blood Donation Camp – (Year 2014) 45 members	Sagar Hospital		

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Industrial Engineering & Management	Financial Support	SMILE Foundations	Rs. 4800 PA	YES
Information Science Engineering	Community service wing named PARIVARTAN support and services	Orphanage and underprivileged students		
Mechanical Engineering	Desire society in association with Ray of Hope: Ray of Hope is a social initiative by engineering students of diverse backgrounds on 30.10.2014 The motto of the program is as follows ❖ Rural Empowerment ❖ To enrich the knowledge of the underprivileged by conducting training programs, workshop etc. ❖ Provide solace and medical aid to differently abled individuals and also to those challenged by disease. ❖ Provide love and support to various orphanages and old age home etc. The Department of Mechanical Engineering donated Clothes, Books and Toys to Desire society in association with Ray of Hope.	No.76/1 Behind keerthi convention Hall, KothnurDinne, 8th phase, JP Nagar, Bangalore 560078.		YES

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	The department donated Clothes, Water bottles, Tiffin Box, Flask, Clock, Blankets, Toys etc. to TejaswiSeva Trust as a part of Joy of Sharing conducted by Ray of Hope. 30.10.2014	No.72/4 Near Nanjundeshwara Temple street, 6th cross, sarvabhuma Nagar, 5th main, chikkalasandra, uttarahalli Main Road, Bangalore, 560061.		
	As part of social Development programme, the department donated shirts, Caps, T-Shirts and other cloth items to Sri Ambigarachowdaiah Education Society as a part of Joy of Sharing event conducted by Ray of Hope. 30.10.2014	37, Vasanthapura, Subramanyapura post, Beside road of saibabaMandir, Bangalore, 560061.		
	The volunteers of Ray of Hope of Department of Mechanical Engineering, collected an amount of Rs 5230/- from students community and well wishers to help the poor's and needy and the amount was utilized to help various charity organizations. The department students and faculty were also donated stationary, Toys and cloth items for helping various child improvement organizations.		Rs. 5230	
	Organized a Blood donation Camp Programme in association with Bangalore	Bangalore Medical Services Trust, New Thippasandra Main		Yes

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	Medical Services Trust on 22/09/2014 and collected 111 units of blood from 62 voluntary donors.	road, HAL III Stage, Bangalore 560075.		
Medical Engineering	AIKYA encourages students to participate in social activities.	Orphanage and old age home		
Telecommunication Engineering	Best Bangalore Vijayavani Abhiyan held on 2 nd Oct 2015	Vijayavani publishers		
	Blood donation Camp	Karnataka Vidyarthi Koota (KVK NGO)		
	Bike rally (Public awareness on AIDS)	Karnataka Vidyarthi Koota (KVK NGO)		
	Marathon(Go Green)	Karnataka Vidyarthi Koota (KVK NGO)		
MBA	Personality Integration Program	Govt. Polytechnic college in association with Karnataka Vidyarthi Koota, 2011		
	International Youth Day (Motivating Students to Join Army and to develop leadership traits) Blood donation campaign	Indian Army, 2011 KVK and Sagar hospitals		
	A Day with Underprivileged Children	Making You Smile Today (MUST), 2014		
	Swachh Bharath Abhiyan	Voluntary involvement of students in Kumaraswamy Layout, 2014		
	Rural Santh International flower bidding	Local association at shettihalli (2104) Participated in Auction in flower bidding with		

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	Auction	IFAB		

3.6.2 How does the College promote College-neighborhood network and student engagement, contributing to holistic development of students and sustained community development?

The institution promotes institution-neighborhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students.

Blood donation camps, by conducting several awareness programs or rallies on/off the campus like Swachh Bharat and health awareness rally. Details of the activities conducted in the departments are mentioned in the below Table.

Department Name	Activity	Beneficiaries
Biotechnology	Preparation and distribution of 20,000 capsules of spirulina	Flood victims of Uttarakhand in 2013
Chemical Engineering	Educating/ awareness	High school/PU students
Construction Technology & Management Engineering	Community Engagement Exercise, Filling of pot holes	Residents of neighborhood areas
Information Science Engineering	Community service wing named PARIVARTAN support and services	Orphanage and underprivileged students
Computer Science Engineering	Community Development Program	Orphanage and underprivileged students
Mechanical Engineering	Cultural fest "TORQUE"	Students to showcase their talents
Telecommunication Engineering	Marathon programs, Blood donation, Bike rally, signature campaign, AIDS awareness	General public in Bengaluru
	Environmental friendly plastic free campaign	Talakadu, Karnataka
	Education related programs	Rural students at Bagepalli, Karnataka

3.6.3 How does the College promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?

Extension activities and outreach programmes are an integral part of our educational framework. Each and every detail related to ISR Activities and other extension activities is contained in the College Information Brochure. ISR officer, Principal and faculty orient the students and make them aware of the advantages and scope of these activities. College provides on-duty and special leave to both the students and faculty for participating in extension activities. The details of the events organized by ISR Cell is maintained in **Annexure**.

3.6.4 Give details on social surveys, research or extension work (if any) undertaken by the College to ensure social justice and empower the under-privileged and most vulnerable sections of society?

- ❖ The institute has made conscious efforts to promote social justice as a value in learning process and administrative interactions. The institution sincerely practice social affirmative schemes introduced by the government for the upliftment of higher education to underprivileged communities.

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The institute organizes social surveys, research or extension work to ensure social justice and empower students from under-privileged and vulnerable sections of society.

To mention a few:

- Department of Civil Engineering in association with Indian Water Works Association (IWWA), Bangalore, India Water Partnership Activities/Global Water partnership (IWP/GWP)&Sneha Test House, Chandra Layout, Bangalore-40 organized a “World Water Monitoring (Quality/Quantity) Programme in Bangalore”. *The main objective of the on site consultation workshop is to prioritize the major issues and challenges regarding water Quality/Quantity /Resources and to know their importance (Causes & Health Impacts).*
- Dr.Sinosh Skariyachan & Dr. S. Kiran of Biotechnology Department developed a project on “formulation and characterization of novel plastic degrading microbial consortia isolated from various places of Bangalore city and study of their bio degradation potential” The objectives of the project are:
 1. Isolation and screening of plastic degrading bacteria from various samples collected from plastic polluted hotspots in Bangalore city.
 2. Study of the biodegradation efficiency of isolated bacteria by various bioassays in different type of plastics and optimization of growth parameters.
 3. Formulation of novel microbial consortia and analysis of their biodegradation potential in comparison with individual isolates.
 4. Evaluation of biodegradation of end products and molecular characterization of best plastic degrading isolates.
 5. The study of derivative mechanism of microbial consortia by various methods including bioinformatics simulation studies.
- Information Science engineering department has a team named PARIVARTAN which organizes “scholarship program” every year on October 2nd, through which they visit various government schools in the state to felicitate the toppers of SSLC examinations.
- Medical Electronics Engineering department organized a Visit to Neralawadi village in Ramanagara district, Karnataka to the final year students to interact with the people to learn about their problems. The students tried to find solutions to those problems by innovative academic projects in their final semester. After the completion of the projects, the students visited the village again to implement their ideas on the people and collected feedback for further improvement.

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- Electrical & Electronics Engineering department has received recognition by organizing community service program at Meda - Marenahalli.
- Telecommunication Engineering department has conducted Personality development programs for under privileged students.

3.6.5 Give details of awards / recognition received by the College for extension activities /community development work.

Yes the college has received awards/recognition for the extension activities / community development work like the awards received from the governor, blood donation award, award for supporting HIV diseased family.

3.6.6 Reflecting on objectives and expected outcomes of the extension activities organized by the College, comment on how they complement student's academic learning experience and specify the values and skills inculcated?

- Parallel to academics regular extension activities are organized by the institute. Such activities reflect the student's obligation towards society which will direct them to find solutions to societal problems through science and technology.
- For example, the main objective of the PARIVARTAN team in ISE department is to "change lives by spreading joy and a feeling of oneness among the people throughout the city". They create awareness among the public, donation to various organizations, scholarship and above all sharing smile and happiness are the major outcomes of the team. Through various outreach programs students realize their roles and responsibilities as a good citizen and inculcate value based education.
- Medical Electronics department has academic projects which are based on the problems at the village.
- Electrical & Electronics Engineering department has some of their term projects like Analysis of Electricity generation by waste water etc. Taking up such projects will exhibit the academic learning experience, and the principles/talents instilled.
- Computer Science engineering department gives SHUBHA PHUTELA memorial scholarships for meritorious and underprivileged students for the department students who need financial help.

3.6.7 How does the College ensure the involvement of the community in its outreach activities and contribute to the community development? Detail the initiatives of the College which have encouraged community participation in its activities.

DSCE continuously involves in the outreach activities through ISR Cell, Representatives from each club are permitted to participate in the training programmes and they monitor the activities of the respective clubs. Additionally, they also conduct special programmes/Guest Lectures to encourage the participation of student community in the outreach activities.

The college ensures the involvement of the community in its outreach activities and contributes to the community development.

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The institution has contributed to both community- institution networking and development of institutions. Extensive support from the students are witnessed during tree plantation, rain water harvesting, blood donation etc. The alumni association is also involved in all these extension activities. Competitions are held for the children and certificates and prizes are awarded. The institution has taken the initiative to educate the society about social and health problems like female foeticide, dowry system, and environment protection, consumer protection awareness, anti-corruption, HIV awareness, anti-tobacco, cleanliness awareness, Road safety and cancer awareness etc.

3.6.8 Does the College have a mechanism to track the students' involvement in various social movements / activities which promote citizenship roles?

Yes. The college has various clubs to track the student's involvement in various social movements and the activities are mentored by the faculty members.

The College encourages the students to be the members in at least one of the co-curricular / extracurricular forum/clubs which provide social service. The College motivates the students for extracurricular activities and also gives some weightage in the department appraisal

3.6.9 Give details on the constructive relationships (if any) with other institutions in the near by locality in working on various outreach and extension activities.

3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

3.7 Collaboration

3.7.1 How has the College's collaboration with other agencies impacted the visibility, identity and diversity of activities on the campus? To what extent has the College benefitted academically and financially because of collaborations?

- The Institute encourages faculty and students of different departments to take active role for collaborative research projects in the Interdisciplinary areas.
- The college has several on going process academic amalgamations. In order to complete their process a high level committee has been appointed to accomplish the MoU with leading research centers and industries.
- This has contributed in faculty exchange as resource person for seminars/workshops, collaborated Ph.D. research projects and joint research publications; and curriculum development.
- The collaboration with the Industries has resulted in students' industrial training and better placement. This has also resulted in increased consultancy activities of the faculty.
- The institution has collaboration with many companies, industries for mutually beneficial relationships that include faculty development programmes, guest lectures for students and faculty, sharing of physical resources etc.

3.7.2 Mention specific examples of, how these linkages promote

Curriculum development

SELF STUDY REPORT

The collaboration activities helped in understanding the need of the industry, and shaping up the students to match the needs. With the MOU signed industries, the benefits are attained in the following areas.

Internship/ On-the-job training

- Training provided to the students on the job to have pragmatic and experiential learning.

Faculty exchange and professional development

- Garnered the technical expertise from industrial experts and shared our resources through dissemination

Research

- Motivating the Faculties to undertake research.

Consultancy

- Faculties are engaging consulting activities with industries.

Extension

- Students are encouraged to involve in community development programmes.

Publication

- Faculties and students are publishing papers with the help of industries.

Student Placement

- Industrial contacts and rapport have helped in placing good number of students in viable employment

Curriculum Development

- To fill the gap between industries and academic institutions, suggestions from industries are obtained and content beyond syllabus are included in the teaching methodology.
- The autonomous academic syllabus is designed in such way a that it will bridge the gap between the Student's expertise and Industrial needs.

3.7.3 Does the College have MOUs nationally / internationally and with institutions of national importance/other universities/ industries/corporate houses etc.? If yes, explain how the MoUs have contributed in enhancing the quality and output of teaching-learning, research and development activities of the College?

Name of department	Collaborator	Outcome
Biotechnology	Leeds India Ltd, Skanda Life Sciences, NIMHANS, IISc, KC Das Pvt Ltd, GKVK, NIT Warangal	Research, Internships

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Aeronautical Engineering	National aerospace laboratories(CSIR)	MOU signed
	Angle of Attack System Pvt. Ltd.	MOU signed
	EDS Technologies Pvt. Ltd	MOU signed
Industrial Engineering & Management	Indian Institute of Materials Management	Research
	MSME, Govt. of India	Entrepreneurial Development work
	Indian Institute of Industrial Engineering	Research and Development activities in Industrial Management
	SAVE	Value Engineering Certification
Medical Electronics Engineering	Wipro GE Healthcare	Knowledge sharing, Have research publications, Grants writing, Student Internships
	Cardea	This company incubated in the dept. of ML, DSCE, Hands on experience through Workshops, Training for students
	Philips Innovation Campus	Knowledge partners, Student internships, Research publications (in progress)
	IISc., Bangalore	Research, Collaborations, Research publications
	IUAC, CDAC-T, CDAC-K, SAMEER, Mumbai	Knowledge Partners
Electrical & Electronics Engineering	CPRI and Suverna technologies Ltd	FDP programs
Telecommunication Engineering	RTTC-BSNL, Mysore	Training program on advanced telecom technology
	Ethnotech Academic Solutions, Bangalore	Training students on CISCO certificate program

3.7.4 Have the College industry interactions resulted in the establishment / creation of highly specialized laboratories / facilities?

Our college has excellent interaction with the needs of the Industrial expectations. Industry interaction provides more knowledge about testing equipments and latest software used in industry. This will enhance the knowledge of faculty members and helps to buy quality equipments to the laboratories. The details of the specialized lab are listed as below.

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Department	Facility/Major Equipment	Amount	Source
Biotechnology	Green House Fabrication	2,04,758.00	Biotechnology Finishing School– Department of IT & BT, Government of Karnataka
	Plant genetics Laboratory Basic Equipment	47,26,233.00	
	Total	49,30,991.00	
Chemical Engineering	Momentum Transfer Lab	4,92,442.00	AICTE MODROBs
Computer Science Engineering	Ophthalmic imaging laboratory	5,56,555.00	DSI & School of Optometry, Indiana University, Bloomington
	MATLAB (R 2012 b) and related tool set	2,07,466.00	
	Computer Vision Lab	30,00,000.00	DRDO
	Total	40,52,021.00	
Electronics & Communication Engineering	Computational Facility	1,50,00,000	TCS iON, Bangalore
Mechanical Engineering	Modernization of Energy Conversion Laboratory	7,00,000.00	AICTE
Medical Electronics	WGE, MIRC	24,00,000.00	Department of Science and Technology
	Medical Imaging Research Centre(MIRC),Advanced Biomedical Signal Processing lab	40,00,000.00	KFIST Level-2
	Total	64,00,000.00	
Telecommunication Engineering	Investigation of speed and power in sub 100nm memory circuits	10,18,000.00	VTU

CRITERION IV

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

The institution is spread over 29 acres of land with large infrastructure supported by well-equipped laboratories. The Central Library with modern facilities occupying 4500 Sq. mts of area and including Digital Library provides the knowledge base for the students. The campus is WIFI enabled with large bandwidth internet facility.

Class rooms:

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The institution has class rooms with area as per ACITE/VTU norms with good ventilation and all the class rooms are fitted with fans and lights. The total number of class rooms in the institute is 135 numbers with a seating capacity of 65 to 75 students in each class room and total area of all class rooms in the institute is 14524.8 Sq. mts.

Technology Enabled Learning Spaces:

Majority of the class rooms are fitted with LCD projectors, this will facilitate the teachers to present the lectures using power point presentations with animation. This will help the students to remember the concepts that are presented with state of art audio/video tools and make the learning more interactive. Further, three gallery class rooms exist in the institution with modern ICT facilities.

Seminar Halls:

The institution has several seminar halls and auditoriums to conduct workshops/seminars/conferences etc.



Main Administrative Block
Details of seminar halls

Auditoriums	Total Number of seats	Other facilities	Area in Sq. m
Dr. D. Premachandra Sagar Auditorium	800	1. Audio & Video facility 2. LCD Projector 3. Air Conditioned	2210.26
Dr. C.D Sagar hall	175	1. Audio & Video facility 2. LCD Projector 3. Air Conditioned	1169.52
AV Auditorium	70	1. Audio & Video facility 2. LCD Projector 3. Air Conditioned	26.0129
Amphi -Theatre	250	NIL	501.6764
Placement Rooms	---	NA	178.7454
Seminar Hall	100	1.Audio & Video facility 2.LCD Projector	211.3544

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Tutorial Spaces:

In addition to the class rooms, the institution has 12 tutorial class rooms with total area of 887.38 sq.mts. Further, the free slots of class rooms are used for tutorial classes.

Laboratories:

There are 112 well-established laboratories across various departments of the institution which occupies total area of 10520.5 sq.mts. All the laboratories are well-equipped with required infrastructure as per curriculum.

Specialized facilities and equipment for teaching, learning and research etc.:

- (i) The institution has provided class rooms with LCD projectors along with internet facility.
- (ii) The campus is wi-fi enabled, so that the staff and students can access the internet from any point in the campus and can download the learning resources from digital library.
- (iii) All laboratories are provided with all necessary infrastructure required as per curriculum.
- (iv) Majority of the departments in the institution have advanced machinery/ equipment which is used for both teaching and research work. Few examples are furnished below:

- The aeronautical department has Micro-Gas turbine and low speed wind tunnel with following features:

Utility of Low Speed Wind Tunnel:

- Low Speed Wind tunnel facility is used for conducting VTU curriculum experiments related to Aerodynamics.
- Used for carrying out UG and PG projects of multi discipline areas such as, Aerospace Engg, Automobile Engg. , Mechanical Engg. and Civil Engg.
- Used for carrying out Research and Development activities.
- Utility of Micro Gas Turbine.
- This facility is of single stage centrifugal compressor gas turbine. The maximum thrust that it can develop is about 7kg.
- Hot plume jet can be generated in this facility. This is the only facility available in aeronautical engineering offered colleges under VTU.
- This facility is utilized for UG and PG final year projects as well as to carry our research activities

- The Biotechnology department has the following infrastructure facilities:

- ✓ Plant production Laboratory
- ✓ Green House
- ✓ Research Laboratories with the following facilities
 - Thermomixer comfort Centrifugal Refrigerated table top low temperature mini horizontal

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Electrophoresis system

- Digital Electronics Balance REMI cooling centrifuges Rotor head, Bacteriological Incubator Magnetic stirrer etc.
- Walk-in cold chamber Shimadzu HPLC system UV spectrophotometer.

Extra –curricular activities:

(Sports facilities, Gymnasium, Auditorium, outdoor & indoor games facilities etc. and health and hygiene , cultural activities facilities needs to be furnished)

The institution has Physical Education and Sports Department which is headed by a qualified Physical Director. The office is equipped with administrative and support staff.

To encourage multi-dimensional growth, DSCE Provides top-notch sports facilities. The indoor sport Complex (synthetic flooring) houses two squash with modern gymnasium facility. The Basketball, Lawn Tennis Courts along with Football/Cricket ground constitute the outdoor sports facilities.

Cultural Activity:

The institution has cultural department (Center for Performing Arts) is established with a designated coordinator to facilitate all the cultural/extra-curricular activities of the institution. Seminar halls & auditorium are available for performing events. The institution has various auditoriums viz: Dr.C.D Sagar auditorium, Amphi theatre, Dr.D.Premachandra Sagar auditorium for cultural activities



Campus Model



Magnificent View of Dr.D Premachandra Sagar Auditorium

4.1.1 How does the College plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?

The Institution has a predominant system in planning and ensuring the availability of physical infrastructure and its optimal utilization. Based on the AICTE norms, the college plans the requirements for the infrastructural facilities. Infrastructure is developed based on the sanctioned intake of all courses put together and as per the requirements. Every year the requirements like Buildings, Furniture, Electrical Maintenance, Computers and Network Maintenance are obtained from each department through the Head of the Department. The gathered requirements are further consolidated with the budget and submitted to the Principal for approval.

Some of the laboratories are used for research and training purposes. Every department of the college has Seminar Hall of different seating capacity. These may be utilized by any department depending on required purpose.

4.1.2 Does the college have a policy for criterion and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.

Yes, the Infrastructure development policies are framed primarily for facilitating teaching learning process. The institution facilitates all the amenities to the welfare of the students before commencing every academic year. All class rooms with black boards and few classrooms in each department are equipped with LCD projector, to promote a good teaching learning environment. All the departments are equipped with ICT enabled classrooms to enhance good teaching-learning environment.

Recent Initiatives

- **Industry Entrepreneurship Development Cell (IEDC)**

IEDC focuses on multi-disciplinary approach for engineering problem solving. An opportunity exists to convert ideas to prototype, enabling Innovation to spur Incubation.

IEDC Cell is recognized by Department of Science and Technology(DST) Govt. of India

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4.1.3 Does the college provide all the departments with facilities like office room, common room, and separate rest rooms for women students and staff?

Yes. Each department is provided with

- ❖ Office room.
- ❖ Common room and drinking water facility.
- ❖ Rest rooms for girls in all the Academic Blocks.

4.1.4 How does the college ensure that the infrastructure facilities meet the requirements of students/staffs with disabilities?

The College provides infrastructural facilities to meet the requirements of students/staff with disabilities as given below:

- ❖ Lift facility (under construction)
- ❖ Western type toilets.
- ❖ Hostel rooms with attached Toilet and Bath room.

4.1.5 How does the college cater to the residential requirements of students? Mention Capacity of the hostels and occupancy

Facilities	Status (Yes/ No)	Details(Description)
Hostel	YES	For Boys : (i) Sardar Patel House(ii) Residences @DSI For Girls: (i) Nelson Mandela Girls Hostel, (ii) NRI Girls Hostel, (iii) Ashirwada Girls Hostel, (iv) Sharada Girls Hostel, (v) Sanjeevi Thana Girls Hostel
Recreation, Gymnasium	YES	To encourage multi-dimensional growth, DSCE Provides top-notch sports facilities. The indoor sport Complex (synthetic flooring) houses four Shuttle Badminton Courts and a Basketball Courts with a Gallery. Additionally, there is a sophisticated Gym and separate changing rooms for boys and girls. The volleyball, Throw ball, Basketball and Lawn Tennis Courts along with Football ground constitute the outdoor sports facilities
Computer facility	YES	The institution has provided internet facilities to hostels and the campus is wi-fi enabled.
Facilities for medical emergencies	YES	(i) First aid kits are available in laboratories. (ii) Hospital in the campus. (iii) Health card issued to all students from TTK.

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		(iv) Ambulance facility is available.
Library facility in the hostels	YES	The boys and girls hostels are located within the campus and hence they use the central library facility which is situated in the vicinity of the hostels.
Internet and Wi-Fi facility	YES	The internet facility is available from Spectranet with a speed of 100 MBPS and the campus is Wi-fi enabled.
Recreational facility common room with audio-visual equipments.	YES	The institution has provided common rooms for girls at appropriate locations. The common rooms in hostels are provided with TV.
Available residential facility for the staff and occupancy	NO	Not Available
Constant supply of safe drinking water	YES	Packaged mineral Drinking Water is available in all the departments and common areas.
Security	YES	The institution has facilities department which will take care of the security of the campus. The security guards are available 24 x7 within the campus. Further CCTV's are installed at appropriate locations. The institution appointed a separate women warden for girl's hostels and male warden for boys hostel.

Annexure is maintained with all Occupancy Details.

4.1.6 How does the college cope with the health related support services for its students, faculty and non-teaching staff on the campus and beyond?

- All students are covered by health insurance from TTK Health Care.
- First aid box is made available in all departments.
- Sagar Hospital is available within the campus for any health related emergencies
- Ambulance service is available 24 x 7 with the following contact details:

Sagar Hospitals : bsk105@sagarhospitals.in , Ph:080-42999999



A front View of one of the NRI Hostel

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Indoor Sports Facilities in the Hostel



Gymnasium



FOOD COURT WHICH IS AN ISO 22000 CERTIFIED FOR FOOD SAFETY

4.1.7 What special facilities are made available in the campus to promote interest in sports and cultural events?

There is a provision of indoor as well as outdoor sport facility for the students and staff. The facilities can be accessed after the college hours. All the students can participate in annual sports competition and social gathering held annually in the college. The students can also participate in any competition as per their interest in sports and cultural events organized in the campus. For each of such activities, the concerned staff advisor guides the student for the participation. Every such participation is encouraged by providing allowances as applicable. The absence in academics due to such participation

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is accounted for favorably. The best performer, in such activity are identified and awarded in annual functions.

4.2 Library as a Learning Resource

4.2.1 Does the Library have an advisory committee? Specify the composition of such a Committee. What significant interactivities have been implemented by the committee to render the Library, Student /user friendly?

Yes, the Library committee consists of the following members. The committee meetings are conducted once in a semester.

The central library has Advisory Committee with a Chairperson as Principal. All the requirements such as procurement of recommended books, print journals, extending of library timings during examination time and any suggestions given by the library users will be discussed during advisory committee meetings.

The Library Advisory Committee comprises of the following members:

1. Dr. C. P.S. Prakash, Principal, DSCE – Chairman
2. Dr. D.R. Ramesh Babu, Vice Principal, Prof. & HoD, CSE Dept., Member
3. Dr. Nagananda Prof & HoD, Medical Electronics, Member
4. HoDs of all departments
5. Mr. Madegowda, Librarian, Member
6. Dr.David, Chief Librarian, Member Coordinator.

The committee meetings are held regularly to discuss the following:

- Procurement of books
- Procurement of print Journals
- Subscription of online e-resources
- Any other issues suggested by the faculty members and students.

4.2.2 Provide details of the following

Sl.No	Particulars	Details
i	Average number of walk-ins:	800 – 1000 daily
ii	Average number of books issued/returned:	200-300 daily
iii	Ratio of library books to students enrolled:	1:27
iv	Average number of books added during last three years:	32,0000
v	Average number of login to opac (OPAC):	80-100 daily
vi	Average number of login to e-resources:	200-300
vii	Average number of e-resources downloaded/printed: semester.	100-150
viii	Number of information literacy trainings organized:	Library conducts information literacy training for students, faculty members and research scholars.

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ix	Details of “weeding out” of books and other materials:	Will be carried out once in a year

a. Total area of the Library (in sq.mts) : 4500 sq.m

b. Total seating capacity : 1200

c. Working hours

On working days (11hours) : 9.00 AM to 11 PM

On Holidays (4hours) : 9.00 AM to 1.00 PM

During vacation (9hours) : 9.00 AM to 11.00 PM

4.2.3 Give details on the library holdings

a)	Print (Books, back volumes and thesis)	Total No
	Books	34538
	Back Volumes	1,20,945
	Student Project Reports	2,200
	Journals	
	International	11357(ONLINE JOURNALS)
	National	204

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	Magazines	25
b)	Non Print (Microfiche, AV)	2,500
c)	Electronic (e-books, e-Journals)	13,0000
d)	Special collection (eg. Text book, Reference books, standards, patents)	1500

4.2.4 What tools does the library deploy to provide access to the collection?

- ❖ **OPAC:** Online Public Access Catalogue Services provided
- ❖ **Electronic Resource Management Package for e-journals:**
Subscribed VTU Consortium for electronic resource management package for e-Journals
- ❖ **Federated searching tools to search articles in multiple databases :**
YES, Through KNIMBUS Search engine(Which is connected to all subscribed databases within a single platform).
- ❖ **Library website:** Subpage in College website. www.dayanandasagar.edu
- ❖ **In house / remote access to e-publications:** Yes IP authentication for all e –journals, FTP Server, Institutional repository, Previous year question papers, and NPTEL Video Lectures.

4.2.5 To what extent is the ICT deployed in the library?

Sl No	ICT & tools Particulars	Details
i	OPAC search is available in central library.	Available, each section a dedicated system is provided for OPAC services. It is an IP based access anybody can access OPAC services within the campus 24 X 7.
ii	Electronic Resource Management package for e-journals is available in central library.	Subscribed VTU-Consortium online e-journals for the year 2016
iii	Federated searching tools to search articles in multiple databases are available in central	Subscribed Knimbus search engine is a single flat form to search the information from the subscribede-databases.
iv	Library	Available at central and at department level.
v	Library Website: Yes	www.dayanandasagar.edu or http://dayanandasagar.edu/index.php/facilities/library
vi	In-house/remote access to e-publications:	Yes-IP based access enabled
vii	Library automation:	Yes -Automated with RFID Technology
viii	Total number of computers for public	110 Numbers of dedicated systems made

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	access	available at Digital Library
ix	Total numbers of printers for public access	4
x	Internet band width/ speed:	20 mbps
xi	Content management system for e-learning:	Yes

The Benefits to the user are listed below:

1. Reprographic service
2. Book reservations
3. Internet Access
4. Reference service
5. Competitive Exam Guides
6. Multimedia service
7. Digital Library e-resources

4.2.6 Provide details of

Sl.No	Particulars	Details
i	Average number of walk-ins:	800 – 1000 daily
ii	Average number of books issued/returned:	200-300 daily
iii	Ratio of library books to students enrolled:	1:27
iv	Average number of books added during last three years:	32,0000
v	Average number of login to opac (OPAC):	80-100 daily
vi	Average number of login to e-resources:	200-300
vii	Average number of e-resources downloaded/printed: semester.	100-150
viii	Number of information literacy trainings organized:	Library conducts information literacy training for students, faculty members and research scholars.
ix	Details of “weeding out” of books and other materials:	Will be carried out once in a year

4.2.7 Give details of the specialized services provided by the Library

Specialized services	Available
Manuscripts	: Yes
References	: Yes
Reprography	: Yes
ILL (Inter Library loan service)	: Yes
Information deployment and Notification	: Yes
OPAC	: Yes
Intrenet Access	: Yes
Downloads	: Yes
Printouts	: Yes
Reading list /Bibliography compilation	: Yes
In house /remote access to e-resources	: Yes
Users orientation and Awareness	: Yes

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Assistance in Searching Databases	:	Yes
DELNET	:	Yes
IEEE	:	Yes
Science Direct	:	Yes
	:	
	:	

4.2.8 Provide details on the annual library budget and the amount spent for purchasing new books and journals.

Central Library Books and Journals Procurement Budget for the 2012-13 to 2015-16

Library Holding	2012-13		2013-14		2014-15		2015-16	
	Number	Cost (Rs.)	Number	Cost (Rs.)	Number	Cost (Rs.)	Number	Cost (Rs.)
Textbooks	5100	15,30,000	7425	22,27,500	7538	22,61,400	7875	23,62,500
Reference	1700	5,10,000	2475	7,42,500	2,512	7,53,600	2625	7,87,500
Journals	141	3,77,594	141	4,12,998	126	2,75,330	126	3,03,622
E-Resources	4111	15,23,356	6197	14,50,228	7502	12,98,022	11357	29,55,000

4.2.9 Does the library get the feedback from its users? If yes, how is it analysed and used for improving the library services.

Yes, The Institution believes that the Library services can be improved through proper feedback mechanism and accordingly collects feedback through a structure questionnaire from the users. A suggestion box is kept in the College, Every week the suggestions are collected, analyzed by the Library committee and measures are taken accordingly. Based on the feedback analysis, discussions

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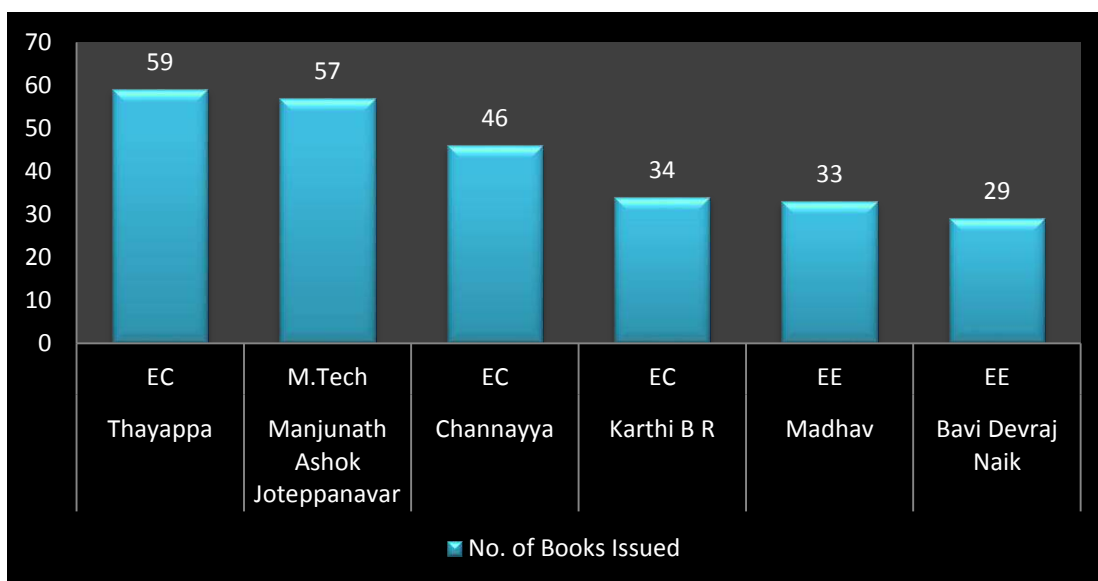
and recommendations by the Library advisory committee, further improvements were carried out in the Library in areas such as

- ❖ Extended Library hour
- ❖ Special books collection
- ❖ Other language news papers
- ❖ Increase in number of books issued to the students
- ❖ Number of computers available for public have been increased.
- ❖ Numbers of newspaper copies subscribed are also increased.

A Sample User Survey analysis is given below.

Best User for the year 2014-2015 **(01/08/2014 – 31/07/2015)**

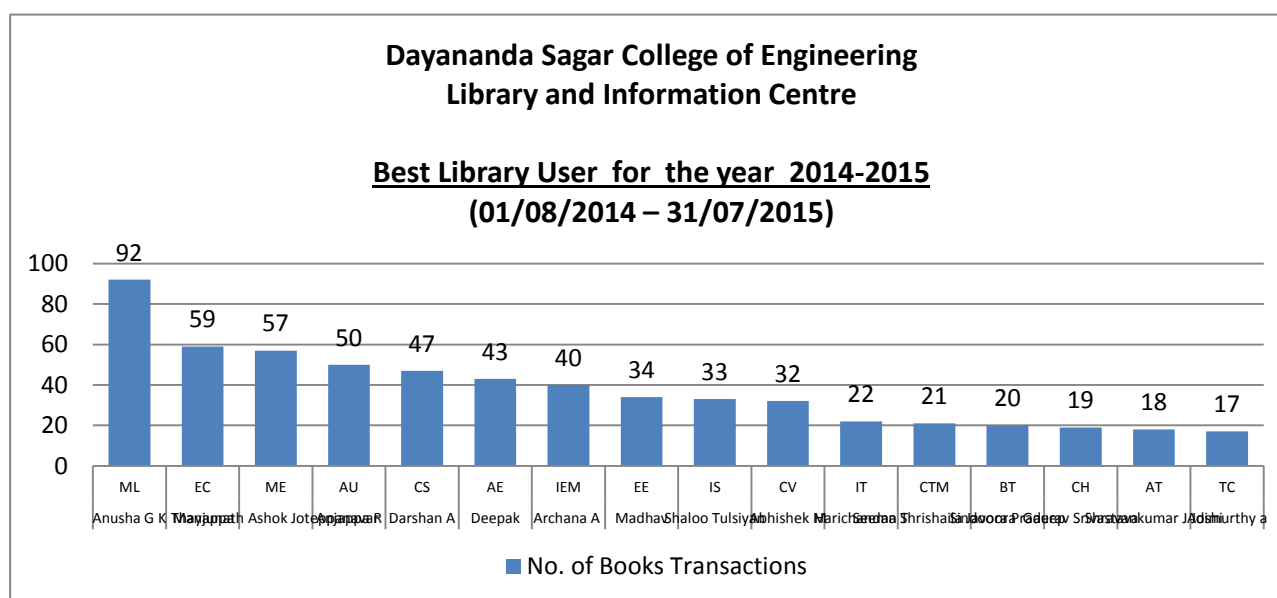
Sl.No	Name	Dept.	No. of Books Issued
1	Thayappa	EC	59
2	Manjunath Ashok Joteppanavar	M.Tech	57
3	Channayya	EC	46
4	Karthi B R	EC	34
5	Madhav	EE	33
6	Bavi Devraj Naik	EE	29



Best Library User for the year 2014-2015 **(01/08/2014 – 31/07/2015)**

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Sl.No	Name	Dept.	No. of Books Transactions
1	Anusha G K	ML	92
2	Thayappa	EC	59
3	Manjunath Ashok Joteppanavar	ME	57
4	Anjappa R	AU	50
5	Darshan A	CS	47
6	Deepak	AE	43
7	Archana A	IEM	40
8	Madhav	EE	34
9	Shaloo Tulsiyan	IS	33
10	Abhishek M	CV	32
11	Harichandan T	IT	22
12	Seema Shrishaila Javoora	CTM	21
13	Sindoor Pradeep	BT	20
14	Gaurav Srivastava	CH	19
15	Shravankumar J Joshi	AT	18
16	Adimurthy a	TC	17



4.2.10 List the infrastructural development of the library over the last four years.

- ❖ Automation System has been changed from Barcode to Fully automated with Radio Frequency Identification Technology.
- ❖ Internet Bandwidth increased.
- ❖ Renovation and maintenance work has been done.

4.2.11 Did the library organize workshop/s for students, teachers, non-teaching staff of the College to facilitate better Library usage?

Yes the library is organizing workshops and seminars for the students and faculty members. Every year Awareness program to the first year students to educate about library usage

4.3 IT Infrastructure

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4.3.1 Does the College have a comprehensive IT policy addressing standards on IT Service Management, Information Security, Network Security, Risk Management and Software Asset Management?

The College IT Service Management

The Institution has an exclusive Electronic Data Processing Department (EDP), headed by a manager. The team consists of System Administrators and Network Maintenance Engineers. This team takes care of the sporadic maintenance of all the computers in the institution Hardware/ Software and Networking. This is ensured through a well prepared maintenance schedule covering the entire IT infrastructure.

Information and Network Security

The Network security is ensured through a dedicated Hardware Firewall.

Risk Management

The students are given with unique credentials in getting access to the machine. The data accessed by students are maintained with proper data Security policies in the server.

- ❖ Periodic Maintenance of EDP team keeps backing up of Data through separate Solid Storage Devices.
- ❖ The faculty members are provided with e-mail and group mail.

Software Asset Management

- ❖ Only Licensed software or Open source Software used
- ❖ Microsoft campus agreement is renewed every year
- ❖ Windows base licenses are available in the machines

4.3.2. Give details of the College's computing facilities (hardware and software). Number of systems with configuration.

The Institution provides full - fledged computing facilities with needed software.

Sl.No	Configuration	Quantity
1.	HCL/(HDD: 320GB/250GB/80GB/20GB/160GB/512GB)/ (RAM 1GB/2GB/248MB/512MB/6GB)/(INTEL CORE 2 DUO/I3/P4)/(2.66 GHZ/2.5/2.6/2.93/3.1GHZ)/WINDOWS 7/WINDOWS Xp/linux	353
2.	DELL Desktops/ i5 Processor, 4GB RAM, 500GB Hard disk, 18.5 LCD Monitor/switch 24 port/48 port	185
3.	HCL Busy bee Desktops, P4@2.66GHZ/ Intel Processor Core 2 Duo @ 2GHz/2.53GHZ,256MB/ 512MB DDR2-RAM, 160GB/80GB SATA HDD, 15dzColor HCL TFT Monitor, Key Board, HCL 2 Button Optical Mouse.	48
4.	HP/500 GB HDD/ (3GB/4GB/8GB) RAM/1GB Graphics card/windows 7/i5 processor	352
5.	P4, 256/512 MB RAM, 40/80 GB Hard disk/2.66ghz, CRT Monitor, Standard Keyboard & Mouse	180

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6.	Intel Core2Duo CPU, 2.01/2.53/2.93GHz, 512MB/2gb RAM, 160/80GB Hard disk	610
7.	Intel® Core™ I5 2400/3470 CPU @3.1/3.20GHZ 3.19GHZ 3.41GB of Ram	16
8.	Intel (R) Core(TM) i3-2100CPU @ 3.10GH ,3.09 GHZ, 1.94 GB RAM.	32
9.	Intel Core I 7 920 -CPU, WX58BP- Mother board 8 GB DDR 3 RAM. 1 TB SATA H.D.D, DVD Writer 1 GB Graphics 9500 GT SFX Embran 44700w cabinet. Acer 18.5 "TFT monitor, Logitech keyboard and optical mouse.	2
10.	Intel(R) Core(TM)	15
11.	P3 – 40 GB hard disk, 512 + 128 MB Ram, 845 kit set mother board Genine intel x86 family 15 model stepping processor.	45

LAN Facility:

All the available systems in the college are connected in 100 mbps LAN and provided with Internet facility. The networking of all departments is made through Optical Fibre Cables (OFC).

Wi-Fi Facility

All the hostels in the college (UG Hostel and PG Hostels) are provided with Wi-Fi facilities for accessing the Internet using their Personal laptop. Wi-Fi connectivity with a bandwidth of 100 Mbps are available to all on 24×7 basis. .

4.3.3. What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

- ❖ The institution has IT Infrastructure plans comprising with the growth of the development in technology and tools used. Hardware up gradations is carried out in every three years. Up gradation like Processor, RAM, Graphics Card and Hard drives is also carried out as and when required. Software Licenses renewal will be done annually.

4.3.4. Give details on access to online teaching and learning resources and other knowledge, and information provided to the staff and students for quality teaching, learning and research.

- ❖ The institution has widespread internet connectivity throughout all the departments ensuring the availability of the technical resources for the entire faculty. There are also some of the Local Open Source Platforms used like Moodle to enable the higher level of teaching learning process.
- ❖ NPTEL Materials are being shared in the LAN
- ❖ Spoken Tutorials are used for programming languages
- ❖ All the E-journals can be accessed through the LAN and hence E-Learning has been made easy

4.3.5. Give details on the ICT enabled classrooms/learning spaces available within the College and how they are utilized for enhancing the quality of teaching and learning.

- ❖ Class rooms are ICT enabled. Majority of the class rooms are equipped with a computer, LCD with LAN and internet Connectivity. Webinars are conducted in the class room.
- ❖ All the Laboratories are provided with Internet facility accessing the e-learning resources for placement drives and mock tests.
- ❖ Hostels are equipped with Wi-Fi Facility to access e-journals and internet access.

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- ❖ Departments have seminar Halls / Conference Rooms provided with Internet Connectivity to facilitate workshops and other department activities.
- ❖ Webinars are conducted periodically to enhance the quality in teaching and learning process. An exclusive digital library has been provided to facilitate access to e - journals.

4.3.6. How are the faculty facilitated to prepare computer aided teaching-learning materials? What are the facilities available in the College or affiliating University for such initiatives?

All the faculties are provided with access to the computer system and are provided with Internet connection with a speed of 100 Mbps. The content management tools like Department intranet and facility available for sharing the computer aided content materials to the students. Content preparation workshops are conducted for all faculty members of the college to initiate the content preparation process. Video recording facility is available in the college or the enhancement of teaching learning process.

4.3.7. How are the computers and their accessories maintained? (AMC, etc.)

Week	Monday	Tuesday	Wednesday	Thursday	Friday
First	CSE	IT	ECE / Comm. Lab	Bio -Tech	EEE
Second	ECE / Comm. Lab	EEE	CSE	IT	Bio -Tech
Third	EEE	Bio –Tech / Comm. Lab	IT	CSE	ECE
Fourth	IT	CSE	Bio – Tech	ECE	EEE / Comm. Lab

4.3.8. Does the College avail of the National Knowledge Network connectivity directly or through the affiliating University? If so, what are the services availed of?

- The Institution does not have the National Knowledge Network connectivity. However, the lecture notes of VTU-EDUSAT programmes are available at <http://elearning.vtu.ac.in>
- The institution was identified as nodal centre for EDUSAT-based distance education which telecasts live lectures or recorded lectures from VTU studios.

4.3.9. Provide details on the provision made in the annual budget for update, deployment and maintenance of the computers in the College?

The EDP has a periodic maintenance schedule to maintain the computers and other accessories.

4.4. Maintenance of Campus Facilities

4.4.1. Does the college have an estate office/ designated officer for overseeing Maintenance of buildings, class-rooms and laboratories? If yes mention a few campus specific initiatives undertaken to improve the physical ambience.

Yes. The College has well secured campus and is maintained periodically with scrupulous care. A few campus specific initiatives undertaken to improve the physical ambience are given below:

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Building Maintenance:

The College campus has good maintenance department which includes Civil Engineer, Electrical Engineer, Supervisor, Electricians, Plumbers, Carpenters, Welders and Civil workers to take care of every day needs of all departments and meet their various requests.

Campus keeping and Garden development:

The grounds and gardens are maintained aesthetically by the gardeners in the college campus. Classrooms and Corridors are cleaned with sophisticated machines. The Pest treatment is provided periodically to safe guard our campus from Mosquitoes, Cockroaches, rats, rodents, etc.

Power supply, Electrical and UPS Maintenance:

Facility Department looks after the daily maintenance of electrical fittings and UPS in the buildings and campus. Supply is maintained through electricity board or captive generator sets.

4.4.2. Does the College appoint staff for maintenance and repair? If not, how are the infrastructure facilities, services and equipment maintained? Give Details.

Yes. The Table gives the number of Staff who is appointed exclusively for maintenance and repair.

Sl. No.	Category	Number of Persons
1	Estate Officer	1
2	Assistant Engineer (Work Section)	1
3	Assistant Engineer (Electrical)	1
4	Administrative Assistant	1
5	Site Engineer	1
6	Store Clerk	1
7	AC Mechanic	2
8	Wireman, Electrician & Helper	5
9	Carpenter	2
10	Welder	2
11	Plumber	3
12	Gardener	10

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13	Sweeper	30
14	Security	25

- ❖ Apart from them, regular trained technicians from various departments are also involved in maintenance and repair.
- ❖ Petty contractors are appointed for some of works by calling quotations for the works.
- ❖ Usually equipments are maintained through AMC with supplier. However if the equipment needs calibration or repairs any service provider is consulted to set it right.

CRITERION V

SELF STUDY REPORT

STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1 Does the College have an independent system for student support and mentoring? If yes, what are its structural and functional characteristics?

Yes, the College has an independent system for student support and mentoring. The student support system comprises of Proctor, Class Teacher, HOD and Principal. The support system functions through several units such as Departmental Mentoring System, Guidance and Counseling Cell, Placement Cell, Grievance Redressal Cell and Committees for all co-curricular and extra-curricular activities. These committees include 15 staff members and student representatives and carry out the activities under the supervision of the Principal. The mentor meets the students once in a week in group and individually as and when required

5.1.2 What provisions exist for academic mentoring apart from class room work?

Students are exposed to in-depth subject knowledge and other multilevel tasks through departmental association/clubs activities, seminars and workshops organized by the departments. Students update their subject knowledge themselves on recent trends and developments in the subjects by participating in the training programmes and presenting papers in the state / national level seminars and inter-college competitions. Class tests, assignments and seminars are conducted to evaluate the extent of understanding of fundamentals. Use of video lessons (NPTEL) and open courseware PPT's for better understanding of topics by the students outside classroom schedules. Students are encouraged to participate in technical events at various technical institutions, workshops and quizzes with adequate support. Training is provided in soft skill, personality development and group discussion to increase the chances of placement.

5.1.3 Does the College provide personal enhancement and development schemes for students? If yes, describe techniques employed e.g., career counselling, soft skill development, etc

Skill development (spoken English, computer literacy, etc.)

- Yes, the college **Centre for English & Foreign Languages(CEFL)** is setup in the Institution which provides effective training in English and other various Foreign languages to promote effective learning and Language Proficiency.
- **Centre for Innovation & Leadership (CIL)** Is the centre where highly specialized programs are conducted to students which helps in improving the communication skills, soft skills and the efficiency of the students at corporate levels.

5.1.4 Does the College publish its updated prospectus and handbook annually? If yes, what are the activities / information included / provided to students through these documents? Is there a provision for online access?

Yes

The prospectus of the institution is published annually with the following information:

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General Introduction, Institution Strength, Facilities, Details of the courses, Placements, Affiliation and Official recognition.

5.1.5 Specify the type and number of scholarships / free ships given to students by the College Management during the last four years. Indicate whether the financial aid was available on time.

Scholarships/Awards/Recognition:

DSCE's commitment towards societal needs dates back to the days of its founder who started revolutionizing the education sector with a strong moto: education for all sections of the Society. This academic year onwards, the following scholarships/awards/recognition is announced which includes:

Sri R. Dayananda Sagar Memorial merit scholarship

Top ten students from who secure CGPA of 9.5 and above will be awarded a scholarship amount of Rs.5000/- per semester, along with a certificate of Appreciation. This scholarship is awarded during 5th and 7th semester onwards based on the CGPA of I to IV and I to VI semesters respectively.

Free Engineering Education to Rural Students:

Dayananda Sagar Institutions is committed to upliftment of weaker sections of the society. In order to bring these people into main stream, students belonging to below poverty line (BPL) families from Bangalore rural district will be given five free engineering seats every year.

Dr. Chandramma Sagar Memorial award:

First Rank holders of each program will be awarded gold medals at the Annual Graduation Ceremony along with a certificate of Merit.

Dr. D. Hemachandra Sagar Distinction award:

Top three graduating students who secure highest grading across all branches of Engineering in respective order will be honored with Dr. D. Hemachandra Sagar Distinction Award, a cash Prize of Rs.25000/-, Rs.20000/- and Rs.15000/- every year during Graduation Ceremony.

Dr. D. Premachandra Sagar Merit award:

Every Semester, students who secure SGPA over 9 will be awarded a cash incentive 2500/- along with a certificate of Merit

The Chemical Engineering Department in the Institution is giving scholarship to outstanding students in the name "Mr. H. Srinivas Rao and Mrs. Kamalamma Scholarships.

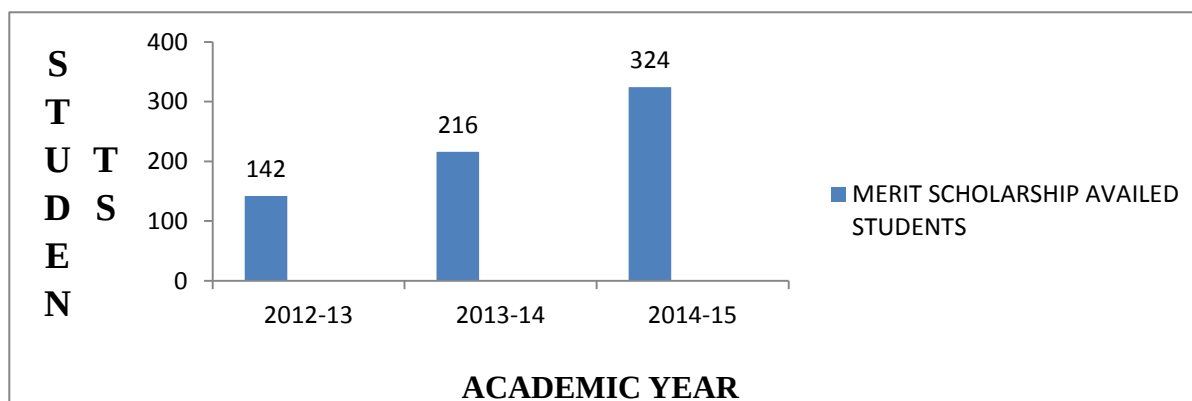
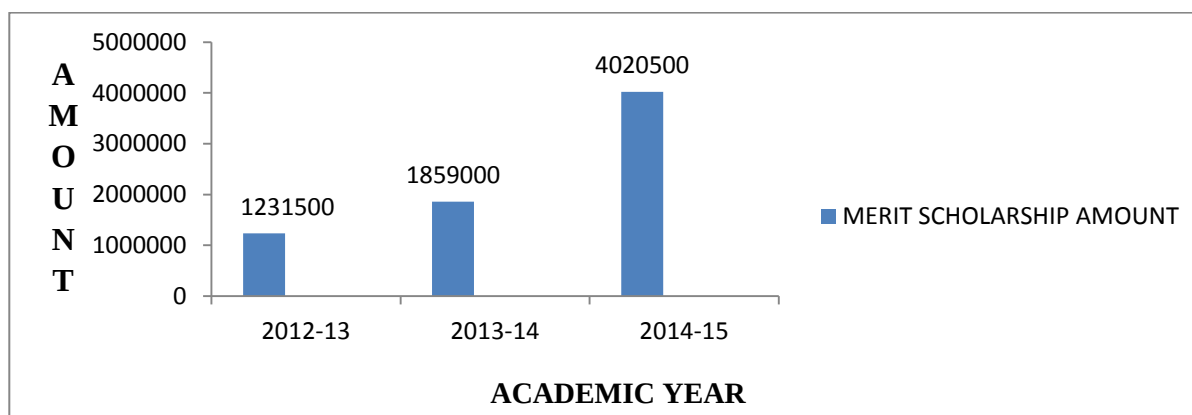
DETAILS OF GOVT. SCHOLARSHIP RECEIVED COMMUNITY WISE

S.No	Academic Year	BC/MBC Scholarships		
		No. Of Students Applied	No. Of Students Availd	Total Scholarship Amount in Rs.
1	2012-13	533	533	93,07,290/-
2	2013-14	552	552	---
3	2014-15	1023	1023	1,96,69,795/-

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S.No	Academic Year	SC/ST Scholarships		
		No. Of Students Applied	No. Of Students Aailed	Total Scholarship Amount in Rs.
1	2012-13	212	212	76,93,680/-
2	2013-14	304	304	1,23,53,610/-
3	2014-15	559	559	2,31,49,930/-

S.No	Academic Year	Merit Scholarships	
		No. Of Students Aailed	Total Scholarship Amount in Rs.
1	2012-13	---	---
2	2013-14	7	2,05,630/-
3	2014-15	6	1,79,540/-



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5.1.6 What percentage of students receives financial assistance from state government, central government and other national agencies?

Year	Total No of Students	Total No of students recd assistance	Percentage	Remarks
2012-13	745	142	19%	
2013-14	862	216	25%	
2014-15	1589	324	21%	

5.1.7 Does the College have an International Student Cell to cater to the needs of foreign students? If so, what measures have been taken to attract foreign students?

Yes. We have International students cell to cater the foreign students.

* State of the art international hostel is provided with good security measure to meet the requirement of international students has been provided by the management

5.1.8 What types of support services are available for overseas students

- physically challenged / differently abled students
- SC/ST, OBC and economically weaker students
- Students to Participate in various competitions / conferences in India and abroad.
- Health centre, health insurance etc
- Skill development (spoken English, computer literacy, etc.,)
- Performance enhancement for slow learners / students who are at risk of failure and dropouts
- Exposure of students to other institutions of industrial persons/ colleges, etc.
- Publication of Student Magazines

Overseas students

Round the clock internet facility and International Canteen Facility

Physically challenged / differently abled students

The college is providing the following facilities to the differently abled students

- ❖ Preference is given for hostel / in campus accommodation.
- ❖ Lift Facility is provided.
- ❖ Extra time is given for examination of theory paper and labs.
- ❖ Scribe facility is provided.

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- ❖ Western type toilets are available.
- ❖ Administrative support to avail financial assistance.

SC/ST, OBC and economically weaker students

- ❖ SC/ST, OBC and economically weaker students are given fee reimbursement provision provided by the Government.
- ❖ Admissions to various programmes are provided in line with the State Government reservation policies.
- ❖ All Government Scholarships are arranged to the students as per the norms.

Students to Participate in various competitions / conferences in India and abroad.

- ❖ Students are encouraged to participate in various competitions and conferences in India.
- ❖ Large number of students participate in various events organized outside the college. They are provided with necessary
- ❖ Students are provided with necessary guidance for the competitions / conferences, etc.
- ❖ Financial support is provided for the students who present in international programs/conferences.

Health centre, health insurance etc.

- ❖ First aid boxes are made available at department and laboratories.
- ❖ College vehicle is available 24 × 7 for emergency.
- ❖ The college campus also has got Dental College and Hospital in the adjacent premises. Arrangements are made to provide medical services for students and staff members.
- ❖ Frequent medical check –up and blood donation camps are arranged
- ❖ **Skill development (spoken English, computer literacy, etc.,)**
 - There is a special centre called **Centre for English & Foreign Languages (CEFL)** setup in the Institution which provides effective training in English and other various Foreign languages to promote effective learning and Language Proficiency.
 - **Centre for Innovation & Leadership (CIL)** It is the centre where highly specialized programs are conducted to students which helps in improving the communication skills, soft skills and the efficiency of the students at corporate levels.

Performance enhancement for slow learners / students who are at risk of failure and dropouts

Slow learners/students who are at risk of failure and dropout are identified and based on the performance of the students up to the first half of the semester, students are provided counseling for performance enhancement. Remedial classes are conducted for students who have backlogs.

Exposure of students to other institutions of industrial persons/ colleges, etc.

- ❖ Experts from industry are invited for seminar/workshop/conference.

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- ❖ Students are encouraged and guided to participate in events organized by the college and other institutions.
- ❖ Students are encouraged to take internship / sponsored projects at other reputed institutes and organizations.
- ❖ Industrial visits and expert talk of professionals from industry are arranged for practical exposure.
- ❖ Workshops on entrepreneur development are organized for the students to enhance the business development qualities in students.
- ❖ Project guidance.
- ❖ Entrepreneurship Training.
- ❖ Project Assistance.

Publication of Student Magazines

- ❖ College magazine is published periodically. It serves as a platform for the exhibition of the creative potentialities of the students.
- ❖ In the College, Departmental Association magazines are published every academic year.

5.1.9 Does the College provide guidance / coaching classes for Civil Services, Defense Services, NET/SLET and any other competitive examinations? If yes, what is the outcome?

Outcome of the Guidance/Coaching provided by all departments is shown below.

Department: Automobile Engineering

Year	Competitive Examination	Number of Students
2013	PGCET	02
	TOEFL	08
	GRE	08
	GATE	00
	CAT	00
	IELTS	04

Year	Competitive Examination	Number of Students
2014	PGCET	00
	TOEFL	05
	GRE	05
	GATE	00
	CAT	00
	IELTS	05

Year	Competitive Examination	Number of Students
2015	PGCET	00
	TOEFL	06
	GRE	06
	GATE	00
	CAT	00

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	IELTS	06

Bio Technology

Year 2009-2015	Competitive Examination	Number of Students
	PGCET/TOEFL/GRE/GATE/CAT	79

Chemical Engineering

Year	Competitive Examination - Number of Students					
	PGCET	TOEFL	GRE	GATE	CAT	IELTS
2015-16	---	03	01	---	---	---
2014-15	01	---	02	---	---	---
2013-14	---	---	01	01	---	---
2012-13	---	---	---	03	---	---
2010-11	---	---	01	01	---	---
Total	01	03	05	05	---	---

Civil Engineering

Year	Competitive Examination	Number of Students
2014-15	PGCET	81
	TOEFL	6
	GRE	9
	GATE	9
	CAT	-
	IELTS	8
2013-14	PGCET	76
	TOEFL	6
	GRE	5
	GATE	5
	CAT	-
	IELTS	4
2012-13	PGCET	69
	TOEFL	4
	GRE	4
	GATE	2
	CAT	-
	IELTS	2

Computer Science & Engineering

Year	Competitive Examination	Number of Students
	PGCET	
2010-2014	TOEFL	4
2010-2014	GRE	7
2010-2014	GATE	2
2010-2014	CAT	3
2010-2014	IELTS/GMAT	2

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Construction Technology Management and Highway Technology

Year	Competitive Examination	Number of Students
(2012-2016)	PGCET	20
	TOEFL	10
	GRE	10
	GATE	1
	CAT	1
	IELTS	--

Aeronautical Engineering

Year	Competitive Examination	Number of Students
2009	PGCET	02
2010		04
	TOEFL	
	GRE	
2009	GATE	01
2010		03
2012		03

Mechanical Engineering

Year	Competitive Examination	Number of Students
2014-2015	TOEFL	5
2013-2014		2
2012-13		3
2015-16	GRE	2
2014-15		5
2013-14		2
2012-13		4
2014-15	GATE	3
2013-14		1
	CAT	
2015-16	IELTS	2
2014-15		2
2013-14		2
2012-13		1

Medical Electronics

Year	Competitive Examination	Number of Students
2015	GRE	04

Telecommunication Engg

Year	Competitive Examination	Number of Students
2015	PGCET	
2015	TOEFL	9
2015	GRE	9
2015	GATE	5

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5.1.10 Mention the policies of the College for enhancing student participation in sports and extracurricular activities through strategies such as Additional academic support, flexibility in examinations, Special dietary requirements, sports uniform and materials, any other.

Additional academic support, flexibility in examinations

- ❖ To ensure active participation of students in sports and extracurricular activities, attendance exemption (with prior approval) by the faculty members.
- ❖ Provision for repetition of lab work
- ❖ Provision to conduct extra lectures for topics missed by the students due to the participation in the sports, cultural and other extracurricular events.
- ❖ Remedial and make-up classes are conducted.

Special dietary requirements, sports uniform and materials

- ❖ The College provides sports uniform and sports kit to the students participating in sports.

Any other

- ❖ The students are encouraged to participate under the guidance of staff advisors appointed for each sport.
- ❖ Annual sport competition is organised every year and winners are honored by certificate and memento.
- ❖ Every year Award is given to Best Sportsman of the Year in annual graduation ceremony.
- ❖ Free Transport.
- ❖ Kit to be provided for State / National level participants.

5.1.11 Does the College have an institutionalized mechanism for placement of its students? What services are provided to help students identify job opportunities, prepare themselves for interview, and develop entrepreneurship skills?

Yes. The College has an exclusive Placement and Training Centre to facilitate on-campus Placement opportunities to the students. The Centre facilitates pre-placement training in soft skills to all pre-final year students to enable them to acquaint to the current corporate requirements. The centre facilitates students to face interviews & get jobs of their choice. More than 100 top and well established companies across the country from all sectors visit the campus for recruitment. Every year more than 90% of students are being placed.

The following are some of the activities which ensure progression to employment:

- The Placement Centre and along with Centre for Innovation and leadership (CIL) organizes a compulsory four day training in soft skills (like Personality Development, CV Writing, Communication Skills, Aptitude tests, Interview Technique etc.) to all students during their pre-final year. The students are given a choice of opting for two job opportunities (choice being one core & one IT Company during the recruitments).

5.1.12 Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus annually for the last four years).

Placement Department Wise

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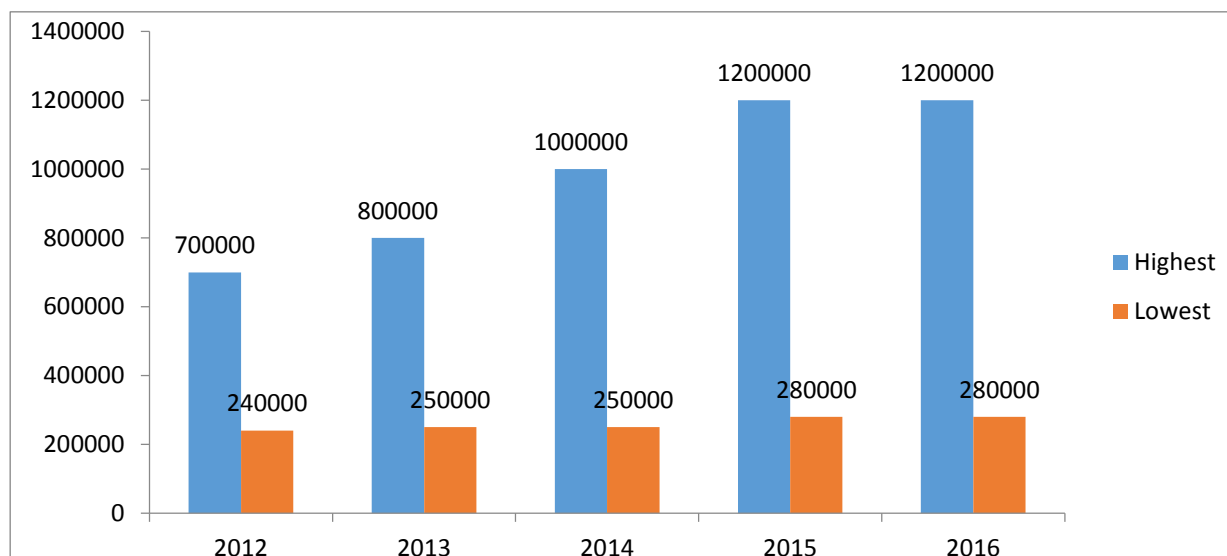
Departments	2012-13	2013-14	2014-15
MECHANICAL ENGINEERING	34	42	69
CHEMICAL ENGINEERING	7	19	23
INSTRUMENTATION TECHNOLOGY	12	21	23
INDUSTRIAL ENGINEERING AND MANAGEMENT	15	21	22
TELECOMMUNICATION ENGINEERING	56	72	70
MEDICAL ELECTRONICS	13	17	22
COMPUTER SCIENCE AND ENGINEERING	84	79	102
INFORMATION SCIENCE AND ENGINEERING	71	81	98
BIOTECHNOLOGY	9	7	27
AUTOMOBILE ENGINEERING	12	7	17
CONSTRUCTION TECHNOLOGY AND MANAGEMENT	2	2	5
AERONAUTICAL ENGINEERING	12	17	30
CIVIL ENGINEERING	11	13	29
ELECTRONICS & COMMUNICATION ENGG	81	67	103
ELECTRICAL AND ELECTRONICS ENGINEERING	36	66	75
MASTERS IN BUSINESS ADMINISTRATION	28	18	41
MASTERS IN COMPUTER APPLICATIONS	14	17	19
ARCHITECTURE		3	2
BIOINFORMATICS		1	1

Major Recruiters

Sl.No.	Companies	2015	2014	2013	Total Offers
1	Accenture	469	10	15	494
2	Amazon	21	3	4	28
3	Bosch	18			18
4	Dell	5		16	21
5	Deloitte	13	12	8	33
6	Deutsche Bank	36			36
7	FACE			30	30
8	HCL Technologies	36		310	346
9	HDFC	10	4	4	18
10	HP	8	35		43
11	Huawei		11		11
12	IBM	18	32	10	60
13	ICICI Securities	12	5	9	26

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14	iGate	20	62	16	98
15	Infosys	228	166	120	514
16	L & T Infotech	48	57	12	117
17	Tech Mahindra	107	43	26	176
18	TESCO	13	42	34	89



Analysis of Salary Package

5.1.13 Does the College have a registered Alumni association? If yes, what are its activities and contributions to the development of the College?

The college has alumni association registered under Societies Act, Government of Karnataka.

The Objectives of the alumni association are

1. To create a platform of all the old students of Dayananda Sagar College of Engineering
2. To help the present students of DSCE for placements, pursue higher education
3. To provide Scholarship for the students of weaker section and Prizes for the toppers

Each department in the Institution has its own alumni group. Alumni meet at department level, regularly alumni meets are organized

5.1.14 Does the College have a student grievance redressal cell? Give details of the nature of grievances reported and how they were redressed.

The grievances of students is taken care by the Dean, at college level. Further, at department level, the grievance of individual students is addressed in the proctor meeting, which intern is discussed with the HoD to solve the problems.

Details of mentoring system:

Student's problems such as

- shortage in attendance,
- lack of average IA marks,
- placements, notes,

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- issues with subject and subject delivery system/resource person
- issues related to students facilities
- ward's personal issues are also interacted

Efficacy of mentoring system:

- Significant improvement in the IA marks and attendance on post counseling from the mentor
- Student's personal issues like home sickness, finance management, time management have improved after interaction meeting with the respective proctors.
- Student's latent talent in sports and cultural activities are tapped and exposed.

Grievances reported

- More photocopying machines
- Additional Internet facility
- Extending the working hours of the library
- Better catering service from the canteen and Hostel Mess
- Purified Drinking Water facility

A record of the grievances and redressal measures taken are maintained by the Member Secretary of the Grievance Redressal Cell. Grievances mentioned above are redressed by the cell with due representation to the management

5.1.15 Does the College have a cell and mechanism to resolve issues of sexual harassment?

Yes, we have a cell to resolve the issues related to sexual harassment. There is no room for such issues inside the campus, but minor problems related to the sexual harassment outside the college are handled by the mentors and staff counsellors of the Anti-Sexual Harassment Committee.

Women's grievances redressal committee:

DSCE has adopted the guidelines in Compliance with the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 ("**Sexual Harassment Act**") and guidelines laid down by the Supreme Court judgment on the Writ Petition (Criminal) for prevention and deterrence of sexual harassment in the workplace.

The objectives of the committee are:

- Prevent discrimination and sexual harassment against women, by promoting gender harmony among students and employees;
- Deal with cases of discrimination and sexual harassment against women, in a time bound manner, aiming at ensuring support to the victimized and termination of the harassment;
- Recommend appropriate disciplinary action against the guilty party to the Principal.

The committee seeks to achieve these goals through:

Dissemination of information: Through production, distribution and circulation of printed materials, posters and handouts.

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Awareness workshops: About sexual harassment for faculty, non-teaching staff and students. The aim is to develop non-threatening and non-intimidating atmosphere of mutual learning.

Counselling: Confidential counselling service is an important service as it provides a safe space to speak about the incident and how it has affected the victim because sexual harassment cases are rarely reported and is a sensitive issue.

5.1.16 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

Yes. The Institution has established Anti Ragging Committee. The Objectives and Activities are listed below.

- Creating ragging free atmosphere in and outside the campus.
- Seniors are expected to maintain self-imposed discipline and restraint. In particular, they must be careful about:
 - Creating cordial relations among students for fulfilling organizational mission and objectives.
 - Creating awareness among students regarding how the self confidence of the individual influences the national interest.
- The Convener has conducted several interaction meetings with Anti Ragging Committee members and advised them to create a ragging free environment.
- Anti-ragging squads comprising of faculty members, non-teaching staffs and senior students have been formed to make surprise visits to very sensitive location within the campus and outside the campus.

5.1.17 How does the College elicit the cooperation from all stakeholders to ensure overall development of the students considering the curricular and co - curricular activities, research, community orientation, etc.?

The institution is able to elicit the cooperation from all the stakeholders which ensures the overall development of the students. On account of the extensive cooperation from all the stakeholders the students are developed well not only in academia but also in co-curricular, extracurricular activities and research.

Teachers

- The teachers who handle the subjects of the common group discuss amongst themselves resulting in improved content, delivery and also the outcome.

Employer

- Feedback from the employer helps for the overall improvement of the system.
- ❖ The feedback on industry expectations and academic and industry gap help the institution to revise the curricula, add new electives and improve the hands on sessions and to decide upon the value additions to be provided
- ❖ The employers feedback on the performance of the candidates recruited help to refine the methodology of training so that the performance of the students can improve
- ❖ The employer/recruiters feedback motivates the students for participation in co curricular and extracurricular activities for profile building.

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Alumni

- ❖ The interaction with the alumni provides the feedback on several aspects including the industry expectations, academic industry gap and also the requirements and the expectations from the students perspective.
- ❖ Alumni are invited to motivate the students in curricular and co-curricular activities.
- Motivation and guidance by eminent scientists and researchers regarding the summer projects and fellowships.
- Leadership training and conduct of competitions by Soft Skill Trainers.
- External Judges are invited for cultural and sport activities.
- Expert lectures for community and social developments.

5.1.18 What special schemes / mechanisms are in place to motivate students for participation in extracurricular activities such as sports, cultural events, etc?

Sports:

- The college has provided necessary infrastructure that helps the students to inculcate good habit of participating in sport activities and also to develop sportsmanship and friendship.
- The college has provided necessary facilities for outdoor games namely Cricket, Volleyball, Football, Basketball, Badminton, Hockey, Kabbaddi, Athletics and Tennis, etc.
- The college has provided with indoor facilities for Badminton, Table Tennis, Caroms, Chess.
- Annual competitions (annual social gathering) in various games and sports are being conducted for the students.
- The college sport teams and individuals win at zonal, inter zonal levels and other tournaments.
- For each and every sport staff advisor is deputed by the institute.

Many sports events are in place to nurture the talents of the students and help them showcase their skills through various cultural and creative events.

5.1.19 How does the College ensure participation of women in 'intra' and 'inter' institutional sports competitions and cultural activities? Provides details of sports and cultural activities in which such efforts were made?

Frequently our students participate in zonal, inter-collegiate and other competitions. Facilities are arranged for students to participate in

Students are encouraged to participate actively in inter collegiate tournaments like games and athletics. Many individual events are organized and they are also encouraged to participate in hostel sports activities. On duty for all the participants during competitions is granted. The winners and participants are felicitated during Annual Sports day celebrations.

5.2 Student Progression

5.2.1 Provide details of programme-wise success rate of the College for the last four years. How does the College compare itself with the performance of other autonomous Colleges / universities (if available)

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SN	Programme Name	Institution Name	Pass Percentage of students			
			2014-2015	2013-2014	2012-2013	2011-2012
1	Aeronautical Engineering	DSCE	88%	95%	100%	NA
2	Automobile Engineering	DSCE	98%	92.5%	99.04%	NA
3	Bachelor of Architecture	DSCE	70%	76.5%	66%	67%
4	Biotechnology	DSCE	100%	100%	99%	98%
5	Chemical Engineering	DSCE	93.54%	94.83%	91.96%	97.56%
6	Civil Engineering	DSCE	95%	88.74%	99.3%	99.14%
7	Computer Science & Engineering	DSCE	96.8%	97%	96%	92.4%
8	Construction Technology & Management	DSCE	90	92	90	NA
9	Electrical & Electronics Engineering	DSCE	75.57%	94.07%	90%	91.54%
10	Electronics & Communication Engineering	DSCE	89.05%	89.09%	90.74%	96.04%
11	Industrial Engineering & Management	DSCE	95.74%	93.75%	99.13%	98.07%
12	Information Science & Engineering	DSCE	97%	93%	100%	93%
13	Electronics & Instrumentation Engineering	DSCE	83.63%	86.93%	83.603%	95.76%
14	Mechanical Engineering	DSCE	96%	99%	100%	94%
15	Medical Electronics	DSCE	94%	96%	97%	88%
16	Telecommunication Engineering	DSCE	79.9%	82.4%	88.7%	91.13%
17	Master of Business Administration	DSCE	93.9%	94.755%	88.465%	77.08%
18	Master of Computer Application	DSCE	95%	96%	95%	93%

5.2.2 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the observed trends.

SN	Programme Name	Institution Name	Pass Percentage of students			
			2014-15	2013-14	2012-13	2011-12
1	Aeronautical Engineering	UG-PG	3	2	--	--
		Employed	22	18	--	---
2	Automobile Engineering	UG-PG	3	2	---	---
		Employed	34	32	---	---
3	Bachelor of Architecture	UG-PG	--	--		
		Employed	30	22	21	18
4	Biotechnology	UG-PG	33	9	37	30
		PG-Ph.D	2	--	2	5
		Employed	46	41	45	45
5	Chemical Engineering	UG-PG	7	4	5	6

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		Employed	93	65	67	53
6	Civil Engineering	UG-PG	3	22	16	14
		Employed	40	45	55	43
7	Computer Science & Engineering	UG-PG	20	25	20	15
		PG-Ph.D	5	8	5	5
		Employed	92	94	88	86
8	Construction Technology & Management	UG-PG	20	8	--	--
		Employed	75	15	--	--
9	Electrical & Electronics Engineering	UG-PG	3	1	3	2
		Employed	50	28	34	52
10	Electronics & Communication Engineering	UG-PG	2	4	6	--
		Employed	40.9	39.47	70.42	77.58
11	Industrial Engineering & Management	UG-PG	1	16.66	25.86	15.68
		Employed	35	50	38	65
12	Information Science & Engineering	UG-PG	82	72	89	85
		PG-Ph.D	94	100	100	100
		Employed	74	59	63	65
13	Electronics & Instrumentation Engineering	UG-PG	4	1	4	7
14	Mechanical Engineering	UG-PG	10	11	6	4
		PG-Ph.D	6	2	1	--
		Employed	79	56	45	32
15	Medical Electronics	UG-PG	4.1	7.5	10.52	8.1
		PG-Ph.D	--	--	20.57	2
		Employed	95	67.5	73.68	75.66
16	Telecommunication Engineering	UG-PG	21	18	14	08
		Employed	82	80	65	54
17	MBA	Employed	83	95	94	96

5.2.3 What is the Programme -wise completion rate/dropout rate within the time span as stipulated by the College / University?

Sl No	Programme	Total strength of students joined	Programme-wise completion rate (%)	Total strength of students not completed	Programme-wise dropout rate (%)
1	Aeronautical Engineering	120	95	02	Nil
2	Automobile Engineering	120	97	04	Nil
3	Bachelor of Architecture	120	86	04	Nil
4	Biotechnology	183	100	nil	Nil
5	Chemical Engineering	220	100	nil	Nil
6	Civil Engineering	640	96	04	Nil
7	Computer Science &	720	97	02	Nil

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	Engineering				
8	Construction Technology & Management	120	98	nil	Nil
9	Electrical & Electronics Engineering	760	90	05	15
10	Electronics & Communication Engineering	675	91	56	14
11	Industrial Engineering & Management	240	100	nil	Nil
12	Information Science & Engineering	568	82	81	18
13	Electronics & Instrumentation Engineering	230	92	26	8
14	Mechanical Engineering	624	83	76	6
15	Medical Electronics	211	54	96	45
16	Telecommunication Engineering	480	89	04	13
17	Master of Business Administration	106	95	6	6
18	Master of Computer Application	200	86	03	12

5.2.4 What is the number and percentage of students who appeared/ qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defense, Civil Services, etc.

Year	Competitive Examination	Number of Students
2015	PGCET	18
2015	TOEFL	60
2015	GRE	74
2015	GATE	41
2015	CAT	07
2015	IELTS	05

5.2.5 Provide details regarding the number of Ph.D. / D.Sc. / D.Litt. theses submitted, accepted, resubmitted and rejected in the last four years

Academic Year	PhD Thesis Submitted	PhD Thesis Accepted
2014-15	05	05
2013-14	03	03
2012-13	05	05

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2011-12	01	01

5.3. Student Participation and Activities

5.3.1 List the range of sports and games, cultural and extracurricular activities available to students. Provide details of participation and program calendar

Sports/Games : The Physical Education and Sports Department is existing in the Institution and is headed by qualified director. The office is equipped with administrative and support staff. To encourage multi-dimensional growth, DSCE Provides top-notch sports facilities. The Institution has indoor sport Complex (synthetic flooring) with different facilities and outdoor facilities and the details are furnished in Table below.

Sports Facilities

Sl No.	Name of the Facility	Numbers	Remarks
1	Basketball Courts	1	Along with gallery
2	Gym	1	Various Gym equipments are provided
3	Volleyball Court	1	--
4	Basket Ball Court	1	--
5	Lawn Tennis	1	--
6	Football Ground	1	

The Institution provides reward/financial incentive for the students representing in National/State/University level events. The Institution provides all necessary support and facilities to achieve excellence in their pursuits. The Institution ensures that sufficient funds are available to encourage sports and extra-curricular activities.

The activities are monitored by the Sports and Cultural Committee nominated by the Management. The Committee meets periodically to determine its programs.

Cultural Activity:

The Institution has cultural department (Center for Performing Arts) which conducts various activities at college level.

The Institution has various auditoriums namely, Dr. C.D Sagar Auditorium, Amphi Theatre, Dr. D. Premachandra Sagar Centre for Performing Arts for cultural activities.

5.3.2 Provide details of the previous four years regarding the achievements of students in co-curricular, extra-curricular activities and cultural activities at different levels: University / State / Zonal / National / International, etc.

Sl. No	Date	Name of the Student (s)	Event	Organized by	Remarks
Aeronautical Department					

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1	16th July 2014	Mr. Preetham Kumar and Ms. Sanikabirithi	RC aircraft design and fabrication, AEROTTRIX	NHCE, Bangalore	Felicitated for best design
2	24th to 30 July 2014	Ms. SanikaBirithi	Workshop, ROBOVERSITY	NHCE, Bangalore	Best performer award
3	2013	Mr. Ashwin Gandhi	In lift-off at national students space challenge 2013	IIT Kharagpur	First place
4	2013	Mr. Ashwin Gandhi	GLIDOWARZ at AEROBUZZ 2013	MVJ College of Engineering, Bangalore	Second place
5	2013	Ms. Ganga Shankar	LIFT OFF	IIT Kharagpur	Second place
6	2014	Mr. Ashwin Gandhi	GLIDOWARZ at VERTEX 4.0	MVJ College of Engineering, Bangalore	Second place
7	2011	Mr.S.Selvamurugan	Painting	PESIT	First
Architecture					
1		BIHAG MAJEED & ASWINKUMAR	REVERSIBLE		the 2 nd place for the short film trophy
2		Bhuvana Shankar	Berkeley Prize Essay Competition		
3		Shashank P.S. and Ashiq Patra	“ARCHUMEN”		
Biotechnology					
1.	2010	Mohammed Hussain J.	Foot Ball		University Level
2.	2011	Arushi Umesh Kumar Gupta	Basket ball		Championship
3.	2011	L. Priyanka	Basket ball		Championship
4.	2011	B.R.Priya	Basket Ball	R.V. Institution (VTU, FEST) New Horizon	
5.	2012	Rakhee Joshi	Table Tennis	VTU Table Tennis Tournament, VTU Inter zonal Table Tennis Tournament	2 nd Place
6.	2013	K.Keerthi	Basketball	BMS, Pesit , RNSIT Tournament (Basketball)	
7.	2011	Arushi Umesh	Basket ball	Championship	

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		kumar Gupta			
8.	2011	L.Priyanka	Basket ball	Championship	
9.	2014	Sagnik Das	Bangalore Marathon	National, 10 Place	
10.	2013		World 10K international Marathon-	International, 66 position out of 35000 participants	
Chemical Engineering					
1	2014	Ms.Brunda	Charchasparde (Kannada Debate) Intercollegiate Cultural Fest	2014 DSCE, Bangalore.	2 nd Prize
2	2013-14	Mr. Manjunath Shavi AarzooTandan Sujith Athri Akash Mandal	Treasure Hunt, Mathematical Collegiate Club 2013-14	DSCE, Bangalore	1 st Prize
3	17.09.2012	Ms. Prabh Sharan	Clear & Clear Bangalore Times Fresh Face winner	DSCE, Bangalore.	Winner
4		Mr. Somarshi Bhattacharya	Swayam 2011 8 th Mile 2012 Vismay 2012 Felicity'12	MVJCE Bangalore RVCE, Bangalore Bosco Institution of Technology Bangalore IIT, Hyderabad	1 st Prize 2 nd Prize Winner 1 st Prize
5	2012	Ms.Nisha	Verve'12 (Group Dance) Aakriti Varchasva'12	JSS Academy 2011-12 3 rd & 4 th May 2012 EWIT, Bangalore. SJBIT, Bangalore	Winner 2 nd Prize 2 nd Prize
6		RohanKakkar	Intercollegiate Zonal Tournament of VTU	G C E Ramanagara	Runners
7	11.05.2012	Ms. Pavithra Ms. Dhanya Ms. Sathya Shivani Ms. Suvana Chutia	Best Project Selection	AT RVCE by Bangalore Regional Centre, IICHE	Best Project Award
8	22.12.2012	Ms.Manasa V Anand	Best Project	AT KSCST Bangalore	3 rd Prize for the Project
9	09.03.2013	Ms. Parimala	Scholarship Award		Selected for National Scholarship Award
10	14 th May	Mr. Chirayu D Belthur	Best Project	MVJCE Bangalore	Best Project Award

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	2013	Mr. George Jeevan Mr. Ranjan Athreyas Mr. Ramesh			
11	17 th May 2014	Ms. Madhuri Manjunath Ms. M. R. Nagashree Ms. Nagarpita Ms. Apoorva	Best project Award	Organized by IICHE- BRC, at BMSCE Bangalore	2 nd Prize in Best Project Award
12	29 th July 2014	Ms. B.R. Keerthi Ms. Ujwala .K Mr. H. B. Santhosh Mr. V. Harsha.	Best Project	At KLE Society's BVB Institution of Engineering and Technology, Hubli	Project of the Year Award
13	28 th March 2015	Ms. Swetha Karanth	Paper Presentation	MSRIT, Bangalore	1 st Prize
Construction Technology and Management					
1	2014	Rishabh R Narain	Music	MVIT	2 nd
2	2014	Rishabh R Narain	Music	PESIT	3 rd
3	2010	S Praveen Kumar	Swimming	M P Swimming Pool	3 rd
4	2015	Nithin Krishna	Dance	CMRIT	1 st
5	2015	Nithin Krishna	Dance	V – Fest	3 rd
6	2014	U. S. Vinayaka	Sports – TT	Mangalore	3 rd
7	2013	Somya Jain	Modelling	MVIT	1 st
8	2015	Y.S.Sujan	Cricket	MSRIT	1 st
Civil Engineering					
1	2014	Mr. Swaroopkishan	Solo Dance- Beat It	UTSAV 2014 held from 28th – 30th march 2014	1 st Prize
2	2014	Mr. Swaroopkishan	AT's got talent	Aatmatrishas' 14, PES on 7th & 8th March 2014	1 st Prize
3	2014	Mr. Swaroopkishan	Solo Dance	Chiguru 2014, Cambridge Institute of Technology, 21st and 22nd march 2014	2 nd Prize
4	2014	Mr. Swaroopkishan	Western solo	8th mile 2014, R.V .College of Engineering, 19th - 23rd march 2014	1 st Prize
5	2014	Mr. Swaroopkishan	Nach – Solo Dance	Lasya 2014- Filmistaan, JainUniversity	3 rd Prize
6	2014	Mr. Swaroopkishan	Electric Wheels	CMR Cultra, CMR institute of Technology, 22and	1 st Prize

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				February 2014	
Electronics and communication					
1	2012-2013	K.S.Prithvi	SWIMMING	AIU, Kolkata	
2	2011-2012	K.S.Prithvi	SWIMMING	AIU, Kolkata	
Industrial Engineering and Management					
1	8 th September 2011	Pratheek Ranjan	Research internship	BOEING Aerospace, USA	Participated
2	August 2011	N. M. Nitesh	Tech Rhapsody	NIIT	Won 1 st prize in quiz
3	13 th August-8 th October-2011	Harshavardhan	Mahindra NBA Challenge	Indiranagar Basket ball club, Bangalore, held at Sree Kateerava stadium, Bangalore	Participated
4	22 nd October-2011	Harshavardhan	Rotary RR Nagar Basket Ball Tournament	Rotary Bangalore Rajarajeshwari Nagar Centennial, Bangalore	Semi Finalist
5	2012	Bharath	Waves-2012 held at Birla Institution of Technology & Science, Pilani	Birla Institution of Technology & Science, Pilani	Won 2 nd position in Silence of the Amps
6	1 st February 2012	Bhate Anand Bharat	National conference on recent trends in industrial engineering as applied to manufacturing, service and allied sectors (IEMSA-2011)	Department of IE&M, DSCE	Certificate of special recognition
7	11 th -18 th February 2012	Devansh Yadav	E-week celebrations, 2012	DSI-Entrepreneurship Development Center	Won 2 nd prize in quiz
8	11 th -18 th February 2012	N.M.Nitesh	E-week celebrations, 2012	DSI-Entrepreneurship Development Center	Won 2 nd prize in quiz
9	2012	N.M.Nitesh	MANTHAN-2012	BIT-MANTHAN-2012	Won 1 st prize in quiz
10	2012	Devansh Yadav	Illuminati-2011	Center for English and Foreign	Participated in quiz

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				Languages, DSI	
11	2012	N.M.Nitesh	Illuminati-2011	Center for English and Foreign Languages, DSI	Won 1 st prize in quiz
12	14 th February 2012	Swaroop Dinakar, S. Dhananjay, Gagandeep Singh	BAJA-2011	IEMSA-2011, DSCE, Bangalore	Participated
13	10 th - 12 th May 2012	G.K.Harshavardhan	Inter Collegiate inter Zone sports competition -2012 held at CMRIT, Bangalore (Basket ball Tournament) organized by VTU, Belguam	CMR Institution of Technology, Bangalore	Won 2 nd prize
14	25 th March, 2011	Devansh R. Yadav	Silver jubilee celebrations of NCB Quiz Competition	NMKRV Institution for women	Won 1 st prize in quiz
15	25 th March 2011	N.M Nitesh	Silver jubilee celebrations of NCB Debate Competition	NMKRV Institution for women	Won 1 st prize in Debate
16	26 th and 27 th February 2011	Adithya Siddarth	Two day workshop in 'Car stayling and career options in design'	Design skill set Bangalore	Participated
17	20 th October- 2010	C. Sneha	One day national workshop on Six Sigma and lean manufacturing	DSCE,IEM Bangalore	
Mechanical Engineering					
1	2010	Supreeth Gopal	Triple jump	16 th VTU Inter-Collegiate meet in Shimoga	First
2	23/2/2012 to 27/2/2012	Nithin	Softball team	Inter-University Championship held at Punjab University	Represented VTU Team
3	1/2/2012 to 12/2/2012	Soumitra Verma		South zone inter-university competition	Represented VTU Team
Medical Electronics					
1	2015	Abdul Rahmansharif and Rahul Chhetri	Power lifting	VTU power lifting meet September at NITTE 2015	Gold medals
Telecommunication Engineering					
1	18/2/2014- 19/2/2	Arun Kumar	Volley Ball	VTU, Inter Collegiate Zonal Tournament at	Runners-Up

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	014			Global Academy of Technology, Bangalore	
2	6/3/2014-13/3/2014	V. Manoj Acharya	Cricket	Dr. Mumtaz Ahmed Khan Cricket Tournament, Ghousia Institution of Engineering	Joint Winners
3	5/5/2014-10/5/2014	Deepak Kumar	Tennis	Gopalan Engineering Institution	Third Place
4	8/5/2014-10/5/2014	Ritwik Raj	Tennis	Inter Collegiate Inter Zone Tournament, 2014 by Department of Physical education and Sports, Belgaum	Third Place
5	5/11/2014-8/11/2014	P. N. Praseetha	Athletics	VTU, Inter Collegiate Athletic Meet, 2014 by Department of Physical education and Sports, Belgaum	Bronze Medal
6	September 2014	Praseetha, Anand, Siddhanth, Ritwik Rakshitha, Harpreet Siddhanth	Vibrations 2014-Fashion Show	Center for Performing Arts, DSCE	First Place
7	April 2013	D.R.Vaibhavi	Fashion Show-MANTHAN (Inter-Institution Fest)	Bangalore Institution of Technology	First Place
8	2013	D.R.Vaibhavi	Fashion Show	DECCAN HERALD METRO LIFE	Third Place

5.3.3 How often does the College collect feedback from students for improving the support services? How is the feedback used?

- The Institution organizes alumni meet regularly and during this meet, the feedback is collected from alumnus for overall improvement of the Institution.

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- Each department conducts Alumni meet once in a year. Their valuable inputs are collected and is used to improve the teaching methodologies, to bridge the gap between academics and industrial requirements. The feedbacks during farewell to final year students are also useful for development of department and institution.

5.3.4 Does the College have a mechanism to seek and use data and feedback from its graduates and employers, to improve the growth and development of the College?

Yes. Graduate exit survey is designed for the purpose of obtaining feedback from the students. This is for improving the courses and the programme.

- ❖ Feedback from the graduates is obtained once in a year in graduation day ceremony and Alumni meet every year.
- ❖ Informal feedback is obtained from the employers during Campus Drives. The college also gets the feedback during industry visits from the employer.
- ❖ Innovative techniques of teaching, infrastructural facilities such as additional laboratories, Wi-Fi at college and hostel premises, extension of library working hours, renovation of gym are done based on the feedback. The needs and expectations of the students are identified and fulfilled.
- ❖ The feedback has helped us to organize few inter-collegiate competitions.

5.3.5 How does the College involve and encourage students to publish materials like catalogues, wall magazines, College magazine, and other material? List the major publications/ materials brought out by the students during the previous academic session.

The college has various publications such as Newsletter, Souvenir, annual Magazine etc. which are edited by the teachers and students that create a platform for the students' creative thinking. It focuses on the socio cultural and academic issues. It encourages the students to sharpen their imagination.

Sl	Name of the Department	Student Magazine/ Newsletter Name
1	Bachelor of Architecture	Arch Beat, Aspire
2	Chemical Engineering	Catalica
3	Civil Engineering	GATEWAY
4	Computer Science & Engineering	CSE Bugle
5	Electrical & Electronics Engineering	SAMVAHAN
6	Electronics & Instrumentation Engineering	Transduze
7	Industrial Engineering & Management	I Epistle, IM-PACT
8	Information Science & Engineering	Mahithi
9	Mechanical Engineering	Yantra
10	Master of Business Administration	DOMS BEAT
11	Master of Computer Application	CHANAKYA

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12	Biotechnology	INVIVO

5.3.6 Does the College have a Student Council or any similar body? Give details on its constitution, major activities and funding.

Yes, in every department there is an association. The aim of forming student association is:

- ❖ To improve academics, co-curricular, cultural and extracurricular activities.
- ❖ To motivate the students for team work.
- ❖ To acquire leadership qualities.
- ❖ To interact with college management to resolve the difficulties of the student's in day to day activities.

Activities of student association:

- ❖ To organize national or international level technical symposium for each year to motivate students to participate in technical and nontechnical events.
- ❖ To organize the college level events which include cultural and sports events.
- ❖ Celebration of Nationally important days like Independence day, Republic day etc., to develop the feeling and sense of nationalism
- ❖ To celebrate Teacher day, Engineers Day, Batch day, Salutation day.

5.3.7 Give details of various academic and administrative bodies that have student representatives on them. Provide details of their activities.

The students are included in various bodies at department and institution level. The student members in various committees are given below:

- ISA DSCE Student Section
- Technical Association
- Placement Committee
- Sports & Cultural Committee
- Anti Ragging committee
- IEEE Student Branch
- Hostel Committee
- Different Clubs

Role of Student Representatives

- ❖ Feedback, Suggestion to Associate committee.

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- ❖ Disseminate the information from the college administration to all students
- ❖ Organize technical, non-technical and social events.
- ❖ Conduct Quiz Competitions on current affairs.

CRITERION VI

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the College.

VISION

To impart quality technical education with a focus on Research and Innovation emphasizing on Development of Sustainable and Incl

usive Technology for the benefit of society.

MISSION

- To provide an environment that Enhances Creativity and Innovation in Pursuit of Excellence.
- To nurture teamwork in order to transform individuals as responsible Leaders and Entrepreneurs.
- To train the students to the changing technical scenario and make them to understand the importance of Sustainable and Inclusive technologies.

6.1.2 Does the mission statement define the College's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, College's traditions and value orientations, vision for the future, etc.?

Yes.

VALUES: The values that drive DSCE and support its vision:

The Pursuit of Excellence - A commitment to strive continuously to improve ourselves and our systems with the aim of becoming the best in the field.

Fairness - A commitment to objectivity and impartiality, to earn the trust and respect of society.

Leadership - A commitment to lead responsively and creatively in educational and research processes.

Integrity and Transparency - A commitment to be ethical, sincere and transparent in all activities and to treat all individuals with dignity and respect.

Addressing the needs of the society: Every individual student is imbibed with ethical responsibilities towards the society. The students are groomed to apply their knowledge creatively so as to develop sustainable technologies for the betterment of society.

The students it seeks to serve: Students with quest for knowledge are nurtured to attain success in all aspects of their life. Alumni form the major stakeholders to bring in the students of high interest.

Institution tradition & value orientations: The institute strives to incorporate disciplinary and ethical values among the student community, to make them responsible citizens.

Vision for the future: To provide the world with leaders and entrepreneurs who can change the world in a positive direction. The alumni of the institute are in high positions across the world.

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6.1.3 How is the leadership involved in ensuring the organization's management system development, implementation and continuous improvement interaction with stakeholders reinforcing culture of excellence identifying needs and championing organizational development (OD)?

To ensure the organization's management system development, implementation and continuous improvement, the college has a competent secretarial constitution comprising of :

- ❖ The top management comprises of the Chairman, Vice Chairman, Secretary and Managing Trust members, and other members of the trust. The Vice Chairman holds the Executive Committee Meeting with the Principal to review the academic administration, research and development, testing and consultancy services and any other agenda planned for the growth of the institution. This meeting is held every month in the college premises. Major policy decisions are being taken in such meetings.
- ❖ The Principal conducts weekly meetings with all the Heads of the departments regarding academic activities, following up of the academic calendar, students' progress, placement and training details, research and extension activities, industry interaction, consultancy assignments, alumni interaction etc.,
- ❖ The Principal conducts monthly meetings with all the faculty members to discuss about the vision of the management and also motivate them for their continued good performance and contributions. The heads of the departments regularly conduct department meetings with all the members of the faculty.
- ❖ The Internal Quality Assurance Cell ensures maintenance of the quality of the teaching learning process ensuring continuous improvement.

❖ Interactions with the stakeholders

- There is a regular interaction with all the stakeholders of the system
- Monthly review meetings with the top management
- Monthly meetings with the heads of the departments and the meetings of the heads of the departments with their faculty
- Parent teacher meetings every year
- Interaction sessions with the alumni per year
- Interactions with the students through class committee meetings and tutor ward meetings
- Interactions with the employers through industry engagement programmes
- Parents are invited for Orientation Programmes, Graduation Day and for meeting with faculty regularly to infer about the progress of their ward

❖ Reinforcing culture of excellence

- The college is an Autonomous Institution, receiving grants & awards from various State and Central Government organizations. Outstanding practices such as Quality Management System under ISO 9001:2015, Student Activity Clubs and Professional Body chapters are adopted by the college.
- The college over the years has grown through channelizing its policies and procedures for the increasingly demanding stakeholders.
- The management of the college provides excellent infrastructure, state of art laboratory facilities and also constantly upgrading them. Merit based recruitment policy, implementation of revised pay scales and encouraging faculty for research and programs for knowledge development ensure commitment to excellence.

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- The college conducts National Level Technical Symposiums and project contests.
- The college awards the top rank students in academic performance.
- The college always benchmarks itself against the best industry practices by establishing Centre's of Excellence collaborating with industry leading to product development.

❖ Identifying needs and supporting organizational development (OD)

- All the departments identify the needs for their respective programmes in terms of curriculum, syllabi and infrastructure. They take some of the leading premier academic institutions and standards of professional society challenges as benchmark. The needs of the relevant industries are also identified. Based on this need analysis, the organization development is being championed by the members of faculty. The needs are also triggered by,
 - Suggestions from Governing Council, Academic Council and Board of Studies meetings.
 - Feedback from stakeholders
 - Interactions with students at all levels and faculty members
 - Self Appraisal system of faculty members
 - Evaluation by academic performance and survey reports
 - Review of Examination Results
 - Placement of Students
 - Needs of relevant industries.

6.1.4 Were any of the senior leadership positions of the College vacant for more than a year? If so, indicate the reasons.

No.

6.1.5 Does the College ensure that all positions in its various statutory bodies are filled and conduct of meetings at the stipulated intervals?

Yes.

6.1.6 Does the College promote a culture of participative management? If yes, indicate the levels of participative management.

Yes. The college promotes a culture of participative management at all levels right from the students up to the senior members of faculty.

COMMITTEES FOR CURRICULAR ACTIVITIES

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S. No	Name of the Committee	Convener and Members	Purpose	Activity	Periodicity of meeting
1.	Institution Development Committee (IDC)	Principal & HODs of all Departments, Manager, Librarian, Physical Education Director, Maintenance Manager, Timetable Coordinator, Placement Officer, First Year Chief Coordinator, Cultural Coordinator etc. based on the Agenda	Planning, Implementing, Monitoring and Updating all required activities of the Institute including proposing necessary rules, norms and guidelines to achieve the excellence in providing quality education to the students through planned activities.	Discussing and finalizing the curricular, co- curricular and extracurricular activities to be carried out in each department in each semester discussing and finalizing necessary rules, norms and guidelines to carryout various activities in the departments and for the effective and smooth functioning of the institute .Motivating counseling and guiding the students to improve and development their behavior and performance to achieve excellence in their education and endeavors.	Every month and on any exigency
2.	Budget Committee	Vice Chairman., Principal, HODs of all Departments and Manager	To motivate all departments and sections to have long term /short term budgets to improve and develop the various planned activities of the departments /section.	Conducting meeting to assess the requirements of each department/ section in all respects, obtaining necessary particulars, preparing necessary interim budget, annual /semester wise budget for obtaining approval of Principal and Vice Chairman.	Once in a year
3	Purchase Committee	Three Senior Professors, Manager, and HoD concerned	To assess the requirements of the various departments / Sections periodically and arrange for purchases in time effectively.	Collecting all requirements of equipments, consumable and other materials from all departments / sections periodically through the prescribed format including compiling consolidating and obtaining approval of the Principal and Chairman.	As and when required

S. No	Name of the Committee	Convener and Membe	Purpos e	Activity	Periodi city of meetin g

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4.	Library Advisory Committee	Senior Faculty Member, One Teaching Staff per Department and Librarian	To develop, improve and maintain the library satisfying the norms and standards considerably in all respects. Monitoring its functions periodically, improving /adding facilities for the effective use of the students and staff.	Planning, developing and maintaining all required facilities including norms and guidelines for the smooth and effective functioning of the library satisfying norms and standards. Assessing and arranging the purchase of books journal etc. As required for use of students and staff, conducting periodical meetings.	Once in a Semester and on any exigency
5.	Time Table Committee	Three Senior Professors from Different Department	To provide a calendar to each students containing some of the basic and necessary information on the present status, facilities and strength of the various departments of the institution including scheduled working days for the academic year.	Collection of required information from the various departments in the prescribed format including editing and arranging for publishing the calendar, in time every year.	During April month
6	Academic Committee	Principal, Vice-Principal & HODs of all Departments	To plan, execute and monitor all academics related activities	Academic monitoring throughout the semester/year.	Every month and on any exigency
7.	Periodical Tests & Performance Analysis Committee	Dept. level committee constituted by the HOD concerned	To conduct periodical tests similar to that of University examination pattern. Assessing the performance of the students in time. To analyze the results after every test. To make entries in the online portal of AU regularly as per the schedule.	Obtaining necessary question papers from the staff members in time and conducting periodical tests as per the time schedule with proper arrangements for all courses simultaneously by allotting invigilators etc. Suggestion for improvements.	Thrice in a Semester

S. No	Name of the Committee	Convener and Members	Purpose	Activity	Periodicity of meeting

SELF STUDY REPORT

8.	Question papers Review Committee	Dept. level committee constituted by the HOD concerned	To develop and improve the quality of the question papers prepared for periodical tests semester wise. Review of University question papers and representing for specific consideration/moderations. If any to the University through Principal	Conducting Periodical meetings and review previous question papers for periodical tests. Providing guidelines, remedial measures etc., for the improvements of the system. Review of University questions papers and representing for moderation, etc required if any to the University through Principal.	On any exigency
9.	Result Review Committee	Principal, Vice-Principal & HOD and Faculties of the Department concerned	To analyze the University results every semester, sorting out problems, suggesting remedial measures for implementation to improve the result.	Conducting meeting periodically suggesting remedial measures. Monitoring the process of teaching, training and testing activities regularly.	Once in a semester and on any exigency
10.	Students Attendance & Performance Review committee	Dept. level committee constituted by the HOD concerned	To identify the regular and poor performance students and suggest necessary remedial measures to improve their academic performance in time.	Review student's attendance and performance and taking necessary actions on the students. Arranging special coaching for the below average students. Counseling them if needed.	Once in a month
11.	Ragging Prevention Committee	First Year Chief Coordinator, Hostel Wardens, Faculty Members	To create brotherly movements and good relationship among students and to avoid undesirable incidents among students through a periodical watch and ward and advice.	Maintaining passport size photo copy of each student along with necessary data and information, branch wise/section wise for an immediate identification of any student at any time. Developing brotherly movements among students by motivation. Closely watching the students and maintaining discipline.	Once in a year and on any exigency
12.	AICTE Cell	Senior Faculty supported by a Junior faculty	To carry out all AICTE, VTU University and all Regulatory bodies related activities.	AICTE, VTU, NBA, NAAC approval related activities as per the instructions from the Principal.	As and when required

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COMMITTEE FOR CO-CURRICULAR ACTIVITIES					
S. No	Name of the Committee	Convener and Members	Purpose	Activity	Periodicity of meeting
1.	News Letter Editorial Committee	Principal, HOD and Senior Faculty of English Dept., One Faculty from each Departments	To prepare a consolidated report enumerating all the important activities of all the departments / Sections of the Institute and conveying them in the form of news letter periodically.	Collecting all necessary data and particulars from all departments / Sections at frequent interval through the prescribed formats. Compiling them in the required format as news letter and arranging to send to the concern members/departments/ Other institutes as desired.	Once in 3 months
2.	College Magazine Committee	Principal & HOD and Senior Faculty of English Dept., One Faculty from each Departments	To provide opportunity and motivate the students and staff to bring out their skills and knowledge through a descriptive college magazine every year, in time.	Planning and preparing norms and guidelines for the submission of articles /papers/scripts for the magazine by the students and staff including collecting, compiling them for printing & issuing to students etc.	Once in a year and on any exigency
3.	Training & Placement and Career Guidance Cell	Head of Placement, One Faculty from each Departments	To provide necessary training to students and arrange for campus interview and placements by various companies, private sectors etc, effectively. To provide career guidance to the students.	Creating, developing and maintaining necessary database of students as required by various companies. Visiting companies and highlighting them about our college activities, college facilities, performance level of students etc, Including inviting companies to conduct interviews. Arranging campus interviews. Maintaining necessary lists of students placed through the T& P cell. Arranging necessary training programmes and guest lecture.	Once in a Semester and on any exigency

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4	Committee for Professional and other Association Activities	Dept. level committee constituted by the HOD concerned	To Provide opportunities to staff, students to bring out their knowledge, innovative talents, skills and to develop leadership qualities, team spirit etc. through their respective departments association / club activities.	To arrange and conduct various seminars, workshops, guest lecturers short term courses, competitions etc., in each department independently based on the prescribed norms and guide lines with periodical review.	Once in a semester and on any exigency
5.	Alumni Association Committee	Senior Faculty as Coordinator with One Faculty from each Department	To facilitate interaction between the alumni and current students of the college so as to create awareness about the industry needs, standards, state of technology etc., and also to arrange for placement and resource persons from the industry for guest lectures.	Prescribing guide lines for the various activities of the association, Selecting Association student members periodically. Publishing and circulating News letter. Conducting alumni meetings. Inviting alumni students to share their industry experience and render their helps in inviting companies for placements and experts for guest lectures.	Once in a year
6.	Professional Society Chapters <i>ISTE /IE(I)/IETE/ CSI/ ICTACT / ISA /IEEE, Renewable Energy Club etc.</i>	One Teaching Staff from the care taking department as Coordinator, HOD concerned as the Mentor	To motivate all the Teaching Staff/Technical staff and students to be members of the society and arrange for conducting workshops/ Seminars/Short term Course etc., by availing grant etc., of various professional societies periodically so as to enable the staff and students to develop their knowledge, skills and leadership qualities.	Motivating all the staff and students to be member of the ISTE/IE/CSI planning, preparing and sending proposals to various professional societies such as ISTE/CSI, etc, for obtaining their grants/permissions etc., Arranging and conducting students chapter activities programmes effectively. Conducting meeting periodically for the effectiveness of the activities.	Once in six months

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7.	Industry-Institute-Interaction Cell & Entrepreneurship Development Cell	Head of Placement as Coordinator with One Faculty from each Department	To promote the level of interaction between industry & institute to give exposure to students and staffs on real life situations of industries and make them understand the industrial atmosphere about the latest technological challenges and developments in the industries. To explore the potential available for research and consultancy works. To acquire knowledge from industrial experts.	Arranging industrial visits. Coordinating with the departments for inviting industry experts for special/guest lecturers/conference/workshops/short term and refresher courses, FDP etc. Facilitating students to do mini/regular projects in industries. Arranging industrial training for staff/students during summer/winter vacations.	Once in 3 months

6.1.7 Give details of the academic and administrative leadership provided by the University to the College?

The Affiliating University provides the required academic and administrative leadership Nominates senior members for Board of Studies of the respective programmes

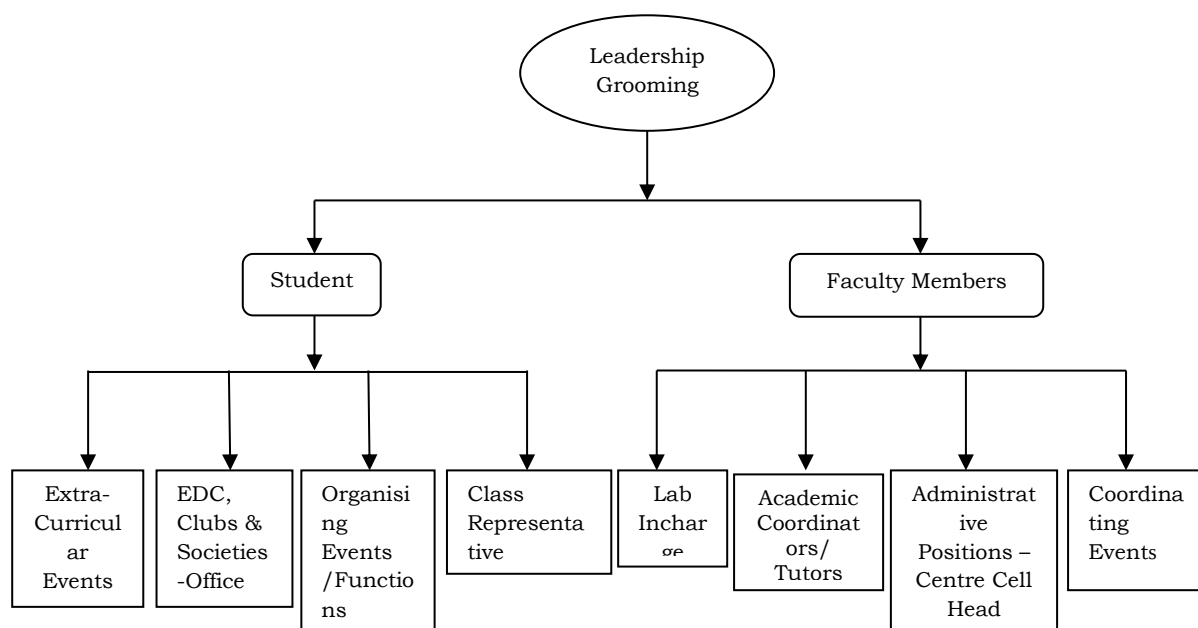
- ❖ Nominates senior members to the Governing Council, Academic Council and Recruitment board.
- ❖ Approval of establishment of any new programme and approval for additional intake in any of the existing programmes
- ❖ The University recognizes the eligible departments as approved Research Centers of the University enabling scholars to pursue research either as full time or as part time scholars.

6.1.8 How does the College groom the leadership at various levels?

The institution is very keen to groom leadership at various levels. The Management always provides opportunity to the faculty members & students to improve their leadership skill at various levels through different committees at institution level, departmental level and at the student level.

- ❖ Both the students and the members of the faculty are encouraged and sponsored to attend experiential learning through - out bound training for developing the leadership qualities.
- ❖ The faculty members are sponsored for attending programmes like - higher education summit, quality improvement initiatives, industry interaction programmes to make the vision broad based and also to develop the leadership qualities.

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6.1.9 Has the College evolved any strategy for knowledge management? If yes, give details.

Yes. The college has evolved the following strategies for knowledge management.

- ❖ Reorganization of knowledge growth helps in arranging workshops and training on varied subjects throughout the year benefiting the entire cross section of the faculty members.
- ❖ Inflow of knowledge through special talks by eminent persons in fields of research, academics, industry and social awareness is very well supported by the college.
- ❖ The National and International conferences, seminars, workshops etc., organized becomes a great platform to develop the knowledge base among faculty members and students to improve their knowledge level, skill and ability.
- ❖ Establishment of R&D and Innovation Centre, Center of Excellence, membership in different Professional Bodies, MoUs for interaction with industries and foreign universities to swap over of thoughts, knowledge and build up inter-disciplinary projects.
- ❖ Support for research activities, facilitate IPR filing, assistance to get patents etc, providing a platform for sharing the knowledge with other organizations.

6.1.10 How are the following values reflected in various functions of the College?

Contributing to national development

- ❖ Motivating the students for Entrepreneurship, thus producing Job creators, rather than Job seekers, contribute to the National development, by generating employment opportunities and also in alignment with “Make in India”.
- ❖ Institute Social Responsibility Cell and other professional bodies contribute to the National as well as Regional developments.

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Fostering global competencies among students

- ❖ The college has taken necessary steps to make its students internationally competent through outcome based education. The syllabus is benchmarked with other premier institutes to equip the students to be high-quality professionals. The Institution offers essential platform for the students to get themselves equipped with the modern technological advancements, soft and interpersonal skills.
- ❖ Sponsorship by the management for students to present papers in various forums.
- ❖ Training the students to take up globally recognized certifications like IBM, Autodesk, etc.
- ❖ Organizing lectures through video conferencing and inviting experts from abroad.
- ❖ Relevant information for students about foreign universities through Bureau of overseas education, for higher education abroad.

Inculcating a value system among students

- ❖ Students are encouraged to carry out additional activities through various club activities and professional societies. Blood donation camps, medical camps, spreading social awareness, educating rural students are some of the regular activities carried out by students.
- ❖ Professionals are invited to interact with students to inculcate moral, ethical and social values.
- ❖ Contributory Personality Development(CPD) has been included in the curricula of all UG Programmes
- ❖ Community projects is a part of the curriculum for students of Management studies.
- ❖ Planting of Banana Sapling is carried out in our campus to empower rural people and enhance the economic status.

Promoting use of technology

Use of **Information Communication Technology** is promoted in all spheres for teaching –learning to be more effective.

- ❖ Class room with audio-visual facility and internet connectivity
- ❖ Wi-fi enabled campus
- ❖ Webinars through Confederation of Indian Industries, R & D and other industry professionals.
- ❖ Computerized Campus Management systems
- ❖ Digital Library
- ❖ Simulation, demonstration packages and real time model are provided in all laboratories for better learning.
- ❖ Results published online
- ❖ Online tests for placement training

Quest for excellence

- ❖ The institute is motivated for excellence in view of recent technologies and improved teaching and learning environment, introduction of choice based credit system, conducting various FDP on latest technologies, Industry – Institute interaction and focus on Research & Development have proven the institution's search for excellence. Faculty members are encouraged to publish research articles in

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refereed journals with high impact factor. International collaborations and MoUs with various companies have been maintained and signed for student's welfare. Well equipped laboratories with latest software are available.

- ❖ The Vision and Mission of the institution itself reveals the focus quest for excellence. College participates in various National surveys as a measure of projecting excellence.

6.1.11 Give details of the UGC autonomous review committee's recommendations and its compliance. Autonomous Review committee is expected after one year of grant of autonomy.

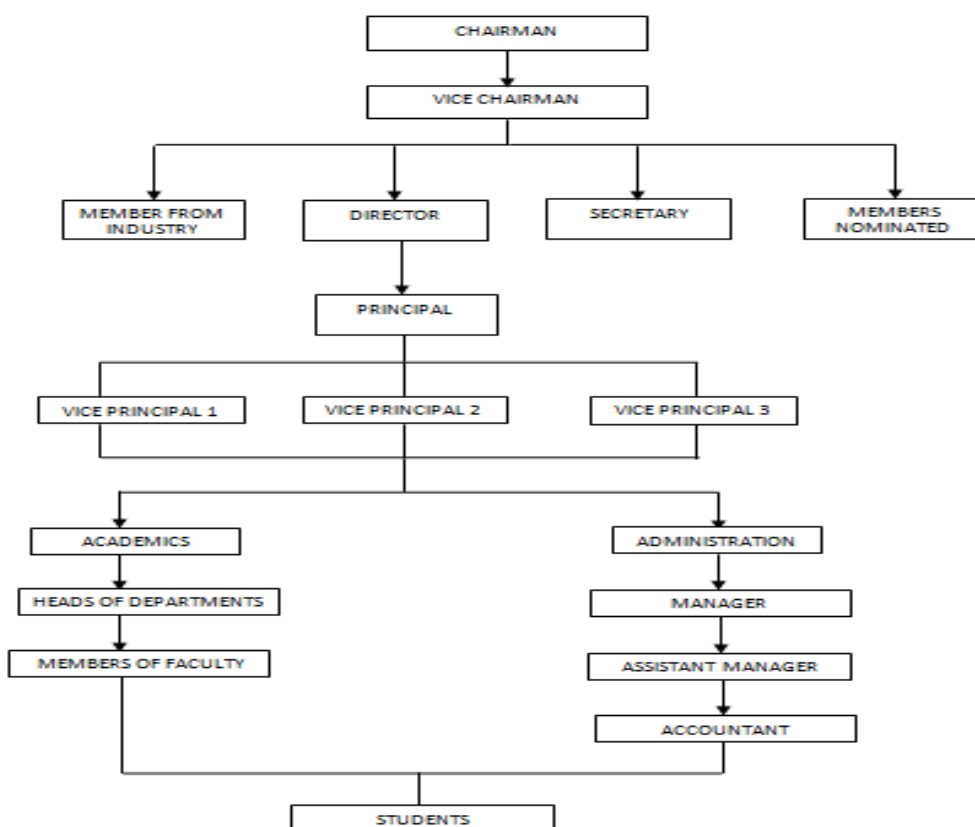
6.2 Strategy Development and Deployment

6.2.1 Does the College have a Perspective Plan for development? If so, give the aspects considered in development of policy and strategy.

Yes. The college has a perspective plan for development. The aspects considered are

- ❖ IEDC
- ❖ Development of laboratories in collaboration with industries
- ❖ Enhancement of Interaction with universities abroad through MoU
- ❖ Establishment of Research Centre in all departments
- ❖ Establishment of technology incubator
- ❖ Student Counseling Cell

6.2.2 Enunciate the internal organizational structure of the College for decision making processes and their effectiveness.



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6.2.3 Specify how many planned proposals were initiated/ implemented, during the last four years. Give details.

Sl No	Dept	Proposal for Dept Up gradation	Budget	Implementation/Utilization	Year
1	Chemical Engg	Up gradation of Existing lab	25 Lakhs	Purchased AAS, UV Spectrophotometer, Sonochemical Reactor, ,	2014-15
				HOD's Chamber renovated, Plate Type Heat Exchanger, Heat Flux Apparatus, Steam Distillation Unit, Fermentor	2015-16
2	Biotechnology	Up gradation of Existing lab	3107751.00	PCR Hood (2 numbers), BIOBEE 6K TABLETOP Centrifuge System (1.5ml tubes- 2 numbers, 0.5ml tubes, 2 places 8*200ul tubes), BIOBEE UV Transilluminator, Digital Electronic Balance, Bacteriological Incubator, BOD Incubator, REMI Cooling Centrifuges (Rotor Head 24*1.5ml, 8*50ml & 6*50ml), REMI Cooling Centrifuges (Rotor Head 24*1.5ml, 8*50ml & 6*50ml), Deep Freezer - 200 C, Samsung Ref Sbs 589L RSA2NQ Ts1, Micro plate Elisa Reader, Gel Documentation system, Laminar Air flow, Low Temperature Freezer (Vertical Type), Thermomixer Comfort, Refrigerated Table Top Centrifuge, Eppendorf Research Plus, Mini Horizontal Electrophoresis, Midi Horizontal Electrophoresis	2012-13
			1,23,660.00	Servo Stabilizers, Digital Electronic Balance	2013-14
			2,65,451.00	UV –VIS Spectrophotometer	2014-15
			803620.56	Master Cyclex nexus PCR machine, Qsonica sonicator Pipetman Eppendorf (10µ, 100µ & 1000µ) Ricoh Xerox machine	2015-16
3	Electronics & Communication Engg	Up gradation of Existing lab	1,0900,000/-	Furniture, Hardware Equipment & Software	2015-16
4	Electrical & Electronics Engg	Up gradation of Existing lab	5,00365.00	H.V Lab	2012-13
			3,46,088.00	M.Tech Power Electronics Lab I equipment	2013-14
			1,07,100.00	M.Tech Power Electronics Lab II equipment	2014-15
			28,40,172.25	TIM Lab, Computers ,UPS system	2015-16

6.2.4 Does the College have a formally stated quality policy? How is it designed, driven, deployed and reviewed?

Yes. The college has a formally stated quality policy. This policy has been designed by involving and considering the inputs from all the stakeholders of the system. The quality policy reflects the vision and mission of the institution. The stated quality policy for imparting quality technical education with Outcome Based Education is driven and deployed to all the stakeholders of the system. It is driven by the global quality standards in technical and management education as discussed and approved by Internal Quality Assurance Cell.

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The deployment of the quality policy is through –competent, dedicated and experienced team of faculty. All these policies are governed by ISO 9001:2015 standards and are periodically reviewed by periodic internal auditing and by external auditing done annually.

6.2.5 How does the College ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder-relationship?

- ❖ The institute has got a redressal committee, for complaints and grievances with a senior professor as convener and other senior faculty members in the team.
- ❖ In addition to this a complaint cum grievances cell is also in its place having the members of faculty and deputy warden of the hostel. These committees receive the grievances if any from the students and forward them to the respective departments for redressal.
- ❖ In addition to these two committees, students can also represent their problems through suggestion box or in class committee meeting, mentor meeting, hostel meeting, Anti Ragging Committee and Disciplinary Committee. This ensures a better relationship with the stakeholders.

6.2.6 Does the College have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?

- ❖ Yes. The college has a mechanism for analyzing student feedback on institutional performance.
- ❖ For example, there was a representation from the students to extend the library timing in the evening till 11.00 p.m. This feedback was immediately responded to make the provision for the same.

6.2.7 In what way the affiliating University helped the College to identify the developmental needs of the College?

- ❖ The affiliating university nominates senior academicians as the member for the Governing Council, Academic Council as well as board of studies which helps for the development of the institution. In addition to this Centre for Faculty Development sponsors the institution to conduct the Faculty Development Programmes every semester. for newly recruited faculty..
- ❖ The affiliating university recognizes the eligible departments as the research centre of the university and also eligible professors as research supervisors. This enhances the research culture with quality research publications.
- ❖ Providing Common Placement for the students by the University
- ❖ Resource persons for Faculty Development Programmes/ Conferences/Symposiums etc.,

6.2.8 Does the affiliating university have a functional College Development Council (CDC) or Board of College and University Development (BCUD)? If yes, In what way College is benefitted.

No, as the institution is Autonomous, the affiliating university does not have a functional College Development Council or Board of College and University Development.

6.2.9 How does the College get feedback from non-teaching, teaching, parents and alumni on its functioning and how it is utilized?

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- ❖ The feedback from the teaching faculty members are collected during the department meeting and also through the annual appraisal.
- ❖ The non-teaching faculty members submit the feedback to the Head of the Department.
- ❖ The feedbacks from the parents are collected in the parent's teachers meeting annually.
- ❖ Alumni feedbacks are collected through various alumni meetings conducted at college and department level.
- ❖ These feedbacks are analyzed by various relevant committees and used for improvement of overall functioning.

6.2.10 Does the College encourage autonomy to its academic departments and how does it ensure accountability?

- ❖ Yes. The college encourages autonomy to its academic departments.
- ❖ Each of the Heads of Departments conducts their Board of Studies meetings once a year to revamp the syllabi in accordance with the emerging trends in higher education and employment. They have the freedom of taking the inputs from the stakeholders and to modify syllabi and various other aspects in the curriculum.
- ❖ Advanced topics, job-oriented courses and emerging fields have been incorporated into the curriculum, which enables the students to acquire competency to meet the challenges at the national and international levels.
- ❖ Training, Faculty Development Programmes, seminars, conferences and such other co-curricular activities are completely dealt with by the departments with full autonomy.
- ❖ Certificate Courses in the form of Value Added Courses are also offered in the latest technology so that students equip themselves, and become industry ready.
- ❖ Any suggestions for improvement are discussed in the HOD's meeting with the Principal.
- ❖ Accountability is ensured through regular monitoring and review process at departmental level by HOD and college level by the Principal.
- ❖ Faculty performance is accountable through performance appraisal system, to maintain the continuous development in the areas of teaching, enhance their potential and to motivate the individuals in improving their area of weakness.

6.2.11 Does the College conduct performance auditing of its various departments?

Yes, The College regularly conducts performance auditing.

- ❖ Annual Audit with respect to functioning of Autonomy
- ❖ Internal Audit with the help of in-house team for ISO Certification
- ❖ Annual external audit for ISO certification

6.3 Faculty Empowerment Strategies

6.3.1 What efforts are made by the College to enhance the professional development of teaching and non teaching staff?

Teaching Staff

- ❖ The faculty members are encouraged to attend the conferences, workshops, seminars and symposia and On-Duty leave is sanctioned
- ❖ Special permission to the members of faculty to serve as the resource person in various forums - Board of Studies of other institutions and Universities, to be a member of Doctoral Committee for research scholars and to act as examiner for Ph.D viva- voce examinations
- ❖ Encouragement to conduct in house faculty development programmes, workshops nurturing inter departmental activities and professional development
- ❖ Motivation and support to participate in industry institute interactionp which also contribute to the professional development Training teachers for excellence

Non-Teaching Staff

- ❖ Non-teaching staff members are permitted for higher studies.
- ❖ Training for strengthening the knowledge of using latest facilities and equipments.
- ❖ Encouragement to attend workshops and seminars.

6.3.2 What is the outcome of the review of the Performance Appraisal Reports? List the major decisions.

Performance appraisal:

Performance Appraisal of the faculty is done with reward.

- ❖ Every year, faculty members have to submit a self appraisal form. This Performance Appraisal of the faculty is evaluated according to the split up of marks for his/her teaching methodologies, course delivery, correction of answer scripts, regularity in taking classes and uniform coverage of syllabus and etc., These points carries 90 marks out of 100.
- ❖ The targets are set for each of the categories. The faculty members below the minimum target level are advised to attend Faculty Development Programmes inside or outside the college and opportunities are given for their improvement.

6.3.3 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

- ❖ ESI & PF are given as per the statutory norms.
- ❖ Gratuity provide to all employees
- ❖ Vacations of 15days for Teaching Staff
- ❖ EL facilities for Nonteaching
- ❖ 10 days of Sick leave for teaching & non teaching

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- ❖ OOD facility for Research work, Seminar, workshop.
- ❖ Paid maternity leave for 3months further it can extended on request without salary.
- ❖ Sabbatical Leave for Higher Qualification
- ❖ Uniform for Attenders, Housekeeping Staff, Workshop staff & Drivers
- ❖ Creech facility available for Children of Employees.

6.3.4 What are the measures taken by the College for attracting and retaining eminent faculty?

To attract and retain the eminent faculty the management provides the following facilities

- ❖ Incentives/promotions on the acquiring higher degree.
- ❖ Yearly increment will be given based on performance.
- ❖ Faculty members are encouraged to do research activities
- ❖ Faculty members are permitted to undertake valuation assignments in other institutions.
- ❖ Faculty members are permitted to take up consultancy activities.
- ❖ Faculty members are permitted to teach in distance education classes.
- ❖ Faculty members who are involved in funded projects are given incentives by the management.

The college has autonomy in selecting and recruiting faculty. The college follows the schemes of Govt., AICTE, UGC and Visvesvaraya Technical University (VTU). University nominee is a part of recruitment process

selection process is controlled centrally by the Principal and the Governing Body. Immediate promotions, additional salary increments and responsibilities are some of the means for retaining the eminent Faculty members.

6.3.5 Has the College conducted a gender audit during the last four years? If yes, mention a few salient findings.

Yes. The college has conducted gender audit during the past four years. - The following table provides the information about the survey of gender audit carried out during the last four academic years.

6.3.6 Does the College conduct any gender sensitization programs for its staff?

Yes. The college conducts gender sensitization programs to both staff and also for the students.

- ❖ The Women Empowerment Cell, co-ordinate and organizes such gender sensitization programs.
- ❖ These forums also celebrate international women's day which is again a programme for gender sensitization.

6.3.7 What is the impact of the University's UGC-Academic Staff College Programmes in enhancing competencies of the College faculty?

The parent university does not have an Academic Staff College. However the University has the Centre for Faculty Development through which they support sponsorship for Faculty Development Programs both during winter and also during summer sessions. These programs help enhancement of the competencies of faculty members towards better teaching, learning and also take up research work.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective and efficient use of financial resources?

- ❖ The budget requirements for the forthcoming year are collected from every department and consolidated.
- ❖ The utilization of the current year approved budget along with the budget projected for the forthcoming year is presented to the Finance Committee after discussions in the Executive Committee.
- ❖ The various heads of the budget include the department capital requirements, consumables, maintenance, other incidental expenses, etc.
- ❖ After the approval of the finance committee, it is also approved by the Governing Council.

6.4.2 Does the College have a mechanism for internal and external audit? Give details.

The institution has a pre-defined mechanism for internal and external audit.

- Internal audit conducted by the internal auditor of the Institute once in a semester.
- External audit conducted by the chartered accountant once in a year.

6.4.3 Provide audited income and expenditure statement of academic and administrative activities of the previous four years.

The purchase will be made strictly following the given budget proposal. If any deviation occurs in the budget, respective HODs have to address the issue and give justification so that subsequently the same will be approved. Following this procedure, unnecessary purchases are avoided and the available funds are effectively utilized.

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Dayananda Sagar College of Engineering					
CONSOLIDATED BUDGET DETAILS					
2015-16					
Overall Budget	Budget -General	Exp-General	BUDGET -R&D	Exp- R&D	% of R&D Actual Exp
56,75,00,000.00	49,22,00,000.00	47,84,46,401.00	7,53,00,000.00	6,79,25,350.00	12
2014-15					
Overall Budget	Budget -General	Exp-General	BUDGET -R&D	Exp- R&D	% of R&D Actual Exp
43,60,00,000.00	37,37,35,000.00	35,83,41,272.00	6,22,65,000.00	5,79,05,882.00	13
2013-14					
Overall Budget	Budget -General	Exp-General	BUDGET -R&D	Exp- R&D	% of R&D Actual Exp
40,50,00,000.00	39,51,28,000.00	33,98,48,673.00	1,00,23,000.00	4,24,39,631.00	10
2012-13					
Overall Budget	Budget -General	Exp-General	BUDGET -R&D	Exp- R&D	% of R&D Actual Exp
41,93,50,000.00	39,04,05,000.00	37,64,44,882.00	2,89,45,000.00	2,43,65,728.00	6

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Dayananda Sagar College of Engineering Consolidated Budget for the Financial year 2015-16							
SLNo	Non Recurring	Overall Budget	Budget - General	Exp-General	BUDGET - R&D	Exp- R&D	% of R&D Actual Exp
1	Library	50,00,000.00	50,00,000.00	12,63,898.00	-	-	-
2	Vehicles	30,00,000.00	30,00,000.00	26,80,706.00	-	-	-
3	Laboratory Equipment	1,09,25,000.00	39,25,000.00	24,23,823.00	70,00,000.00	54,95,262.00	50
4	Equipment -Office	2,50,00,000.00	2,50,00,000.00	2,32,42,704.00	-	-	-
5A	Furniture and Fixture	51,30,000.00	23,40,000.00	14,63,268.00	27,90,000.00	18,02,868.00	35
5B	Furniture and Fixture -Office	1,50,00,000.00	1,50,00,000.00	1,23,32,215.00	-	-	-
6A	Computer & Software	1,61,70,000.00	43,90,000.00	30,64,060.00	1,17,80,000.00	87,75,230.00	54
6B	Computer & Software (Office)	1,50,00,000.00	1,50,00,000.00	1,13,20,570.00	-	-	-
7	Electrical & Fittings	8,00,000.00	8,00,000.00	7,54,986.00	-	-	-
	TOTAL	9,60,25,000.00	7,44,55,000.00	5,85,46,230.00	2,15,70,000.00	1,60,73,360.00	
	Recurring	Overall Budget	Budget - General	Exp-General	BUDGET - R&D	Exp- R&D	% of R&D Actual Exp
1	Laboratory Consumables	33,40,000.00	9,75,000.00	5,57,120.00	23,65,000.00	19,73,051.00	58
3	Training & Travel (TA/DA - Seed Money)	10,50,000.00	4,20,000.00	-	6,30,000.00	3,51,381.00	33
4	Journals & Subscriptions	32,00,000.00	4,50,000.00	2,86,792.00	27,50,000.00	25,91,500.00	81
5	Seminar & Workshop	38,85,000.00	9,00,000.00	5,99,377.00	29,85,000.00	24,26,963.00	62
6	Miscellaneous Expenses: Other, specify Rent, Electricity, Water, Printing & Stationery, Security, Transport, Newspaper & Periodicals, Guest Lecture, R&M -Equipment, Advertisement, Dept. Maintenance and Consumables, Garden Maintenance, Administration, Building Maintenance etc.	46,00,00,000.00	41,50,00,000.00	41,84,56,882.00	4,50,00,000.00	4,45,09,095.00	10
	Total	47,14,75,000.00	41,77,45,000.00	41,99,00,171.00	5,37,30,000.00	5,18,51,990.00	
	GRAND TOTAL	56,75,00,000.00	49,22,00,000.00	47,84,46,401.00	7,53,00,000.00	6,79,25,350.00	

SELF STUDY REPORT

Dayananda Sagar College of Engineering							
Consolidated Budget for the Financial year 2014-15							
SLNo	Non Recurring	Overall Budget	Budget - General	Exp-General	BUDGET - R&D	Exp- R&D	% of R&D Actual Exp
1	Library	5,00,000.00	5,00,000.00	3,26,389.00	-	-	-
3	Laboratory Equipment	62,50,000.00	17,50,000.00	4,52,000.00	45,00,000.00	29,12,047.00	47
4	Equipment -Office	40,00,000.00	40,00,000.00	37,11,473.00	-	-	-
5A	Furniture and Fixture	24,00,000.00	12,80,000.00	1,23,515.00	11,20,000.00	8,24,942.00	34
5B	Furniture and Fixture -Office	13,00,000.00	13,00,000.00	11,00,666.00	-	-	-
6A	Computer & Software	22,00,000.00	12,60,000.00	-	9,40,000.00	5,10,000.00	23
6B	Computer & Software (Office)	14,00,000.00	14,00,000.00	13,17,988.00	-	-	-
	TOTAL	1,80,25,000.00	1,14,90,000.00	70,32,031.00	65,35,000.00	42,46,989.00	
SLNo	Recurring	Overall Budget	Budget - General	Exp-General	BUDGET - R&D	Exp- R&D	Actual Exp
1	Laboratory Consumables	1,50,00,000.00	37,50,000.00	28,81,912.00	1,12,50,000.00	1,03,19,398.00	69
2	Training & Travel (TA/DA - Seed Money)	7,95,000.00	4,65,000.00	-	3,30,000.00	1,73,313.00	22
3	Journals & Subscriptions	6,80,000.00	3,80,000.00	17,875.00	3,00,000.00	2,35,290.00	35
4	Seminar & Workshop	15,00,000.00	6,50,000.00	3,57,112.00	8,50,000.00	6,91,546.00	46
5	Other, R & D Rent, Electricity, Water, Printing & Stationery, Security, Transport, Newspaper & Periodicals, Guest Lecture, R&M -Equipment, Advertisement, Dept. Maintenance and Consumables, Garden Maintenance , Administration , Building	40,00,00,000.00	35,70,00,000.00	34,80,52,342.00	4,30,00,000.00	4,22,39,346.00	11
	TOTAL	41,79,75,000.00	36,22,45,000.00	35,13,09,241.00	5,57,30,000.00	5,36,58,893.00	
GRAND TOTAL		43,60,00,000.00	37,37,35,000.00	35,83,41,272.00	6,22,65,000.00	5,79,05,882.00	

SELF STUDY REPORT

Consolidated Budget for the Financial year 2013-14							
Sl.No	Non Recurring	Overall Budget	Budget - General	Exp-General	BUDGET - R&D	Exp- R&D	% of R&D Actual Exp
1	Library	10,00,000.00	10,00,000.00	7,67,937.00	-	-	
2	Vehicles	31,00,000.00	31,00,000.00	30,36,325.00	-	-	
3	Laboratory Equipment	44,50,000.00	22,50,000.00	12,27,210.00	22,00,000.00	14,98,487.00	34
4	Equipment -Office	30,00,000.00	30,00,000.00	13,41,906.00	-	-	
5A	Furniture and Fixture	15,50,000.00	8,00,000.00	1,48,352.00	7,50,000.00	5,34,261.00	34
5B	Furniture and Fixture -Office	8,50,000.00	8,50,000.00	7,57,366.00	-	-	
6A	Computer & Software	51,00,000.00	16,55,000.00	3,65,558.00	34,45,000.00	26,32,042.00	52
6B	Computer & Software (Office)	55,00,000.00	55,00,000.00	54,09,831.00	-	-	
7	Sports Equipment	3,00,000.00	3,00,000.00	1,26,421.00	-	-	
	TOTAL	2,48,50,000.00	1,84,55,000.00	1,31,80,906.00	63,95,000.00	46,64,790.00	
Sl.No	Recurring	Overall Budget	Budget - General	Exp-General	BUDGET - R&D	Exp- R&D	% of R&D Actual Exp
1	Laboratory Consumables	25,30,000.00	5,30,000.00	16,93,773.00	20,00,000.00	16,77,420.00	66
2	Training & Travel (TA/DA - Seed Money)	6,50,000.00	3,00,000.00	-	3,50,000.00	2,09,875.00	32
3	Journals & Subscriptions	7,50,000.00	2,60,000.00	-	4,90,000.00	4,12,998.00	55
4	Seminar & Workshop	12,20,000.00	4,30,000.00	2,66,915.00	7,90,000.00	5,86,948.00	48
5	Miscellaneous Expenses; Other, R & D Rent, Electricity, Water, Printing & Stationery, Security, Transport, Newspaper & Periodicals, Guest Lecture, R&M - Equipment, Advertisement, Dept. Maintenance and Consumables, Garden Maintenance, Administration, Building Maintenance etc.	37,50,00,000.00	34,00,00,000.00	32,47,07,079.00	3,50,00,000.00	3,48,87,600.00	9
	TOTAL	38,01,50,000.00	37,66,73,000.00	32,66,67,767.00	36,28,000.00	3,77,74,841.00	
	GRAND TOTAL	40,50,00,000.00	39,51,28,000.00	33,98,48,673.00	1,00,23,000.00	4,24,39,631.00	

SELF STUDY REPORT

Dayananda Sagar College of Engineering							
Consolidated Budget for the Financial year 2012-13							
Sl.No	Non Recurring	Overall Budget	Budget -General	Exp-General	BUDGET - R&D	Exp- R&D	% of R&D Actual Exp
1	Library	25,00,000.00	25,00,000.00	19,08,361.00	-	-	-
2	Vehicles	1,50,00,000.00	1,50,00,000.00	1,45,67,816.00	-	-	-
3	Laboratory Equipment	1,79,50,000.00	94,30,000.00	92,78,870.00	85,20,000.00	75,53,514.00	42
4	Equipment -Office	20,00,000.00	20,00,000.00	17,50,059.00	-	-	-
5A	Furniture and Fixture	32,50,000.00	12,00,000.00	10,27,830.00	20,50,000.00	13,40,606.00	41
5B	Furniture and Fixture -Office	60,00,000.00	60,00,000.00	52,78,278.00	-	-	-
6A	Computer & Software	87,00,000.00	61,00,000.00	56,82,815.00	26,00,000.00	14,99,155.00	17
6B	Computer & Software (Office)	75,00,000.00	75,00,000.00	61,08,535.00	-	-	-
	TOTAL	6,29,00,000.00	4,97,30,000.00	4,56,02,564.00	1,31,70,000.00	1,03,93,275.00	
Sl.No	Recurring	Overall Budget	Budget -General	Exp-General	BUDGET - R&D	Exp- R&D	% of R&D Actual Exp
1	Laboratory Consumables	34,00,000.00	6,50,000.00	32,17,891.00	27,50,000.00	26,87,410.00	79
2	Training & Travel (TA/DA - Seed Money)	9,40,000.00	3,65,000.00	-	5,75,000.00	3,68,382.00	39
3	Journals & Subscriptions	7,60,000.00	2,60,000.00	-	5,00,000.00	-	0
4	Seminar & Workshop	13,50,000.00	4,00,000.00	5,52,383.00	9,50,000.00	8,04,261.00	60
5	Miscellaneous Expenses: Other, R & D Rent, Electricity, Water, Printing & Stationery, Security, Transport, Newspaper & Periodicals, Guest Lecture, R&M Equipment, Advertisement, Dept. Maintenance and Consumables, Garden Maintenance, Administration, Building Maintenance etc.	35,00,000.00	33,90,000.00	32,70,72,044.00	1,10,00,000.00	1,01,12,400.00	3
	TOTAL	35,64,50,000.00	34,06,75,000.00	33,08,42,318.00	1,57,75,000.00	1,39,72,453.00	
	GRAND TOTAL	41,93,50,000.00	39,04,05,000.00	37,64,44,882.00	2,89,45,000.00	2,43,65,728.00	

6.4.4. Have the accounts been audited regularly? What are the major audit objections and how are they complied with?

Yes, the accounts been audited regularly and no major audit objections have been raised.

6.4.5 Narrate the efforts taken by the College for resource mobilization:

The major resource mobilization for the institution is through the collection of tuition fees at the beginning of every academic year..

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6.4.6 Is there any provision for the College to maintain the 'corpus fund'? If yes, give details.

Yes. The college maintains the corpus fund as per the stipulated norms.

6.5. Internal Quality Assurance System.

6.5.1 Does the College conducts an academic audit of its departments? If yes, give details.

Yes. At the end of every semester the senior faculty members from the various departments are appointed as internal auditors by the IQAC Coordinator for verifying internal assessment records of the students and course file of each faculty. Current end semester question paper with answer key

6.5.2 Based on the recommendations of academic audit what specific measures have been taken by the College to improve teaching, learning and evaluation?

The academic gaps are communicated by the IQAC to the Head of the Institution (HOI). Teaching, learning and evaluation gaps are discussed with the faculty members by the HOI. The faculty members are advised to improve such weaknesses in the forthcoming academic work in the subsequent semester.

6.5.3 Is there a central body within the College to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

i. Structure

IQAC is comprised of Principal, Vice Principals, IQAC Coordinator, members from teaching staff, alumni, and industrialists.

ii. Methodology of Operations

IQAC is responsible for student's feedback and interaction with stakeholders. There is a computerized questionnaire for the students to evaluate teaching, learning and evaluation.

IQAC after going through the consolidated evaluation report of the each staff member, necessary members will be called for counseling and they are advised to improve their teaching learning and evaluation

iii. Outcome

Student feedbacks, stakeholder interactions and academic audit has been formalized.. The preparation of departmental academic calendar, course plans, remedial classes, and induction and orientation activities, mentoring processes, academic audit and career counseling activities have become regular.

6.5.4 How has IQAC contributed to institutionalizing quality assurance strategies and processes?

To impart quality education the IQAC closely monitors the teaching-learning environment of the college. It also encourages the teachers to undertake research activities and the departments to organize various events such as national/international conference and workshop. Also it directs the departments to conduct seminars, competitions among students for enhancing their leadership quality. The IQAC also co-ordinates between the Principal and the various Committees working for implementation of

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various quality related plans. An orientation programme on SWOT Analysis was conducted by IQAC to improve the assessment skills of the faculty.

6.5.5 Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.

Yes. Besides academicians, external members such as an Alumni and industry person are part of IQAC. Apart from offering suggestions for the betterment of the college, they help the IQAC to conduct various extension activities inside and outside of the college.

6.5.6 Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?

IQAC has identified the following findings to enhance the academic growth of students from disadvantaged sections of society:

- Slow learners have to be provided with lecture notes on difficult topics
- Periodic Remedial classes are conducted for slow learners.
- Career and Academic counseling and guidance is to be given to them

6.5.7 What policies are in place for the periodic review of administrative and academic departments, subject areas, research centers, etc.?

- i. IQAC monitors the planning and execution of the curricular, academic and research activities of the Departments by conducting an audit every year to review the progress, evaluate and give suggestions for substantial improvement.
- ii. Every faculty and staff member attends a performance evaluation discussion chaired by the Principal once in a year to analyze options for betterment.
- iii. Gives top priority upgradation of laboratory and teaching activities.
- iv. Policy matters are discussed and put into practice within short duration of taking decision

CRITERIA VII:

INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1 Does the College conduct a Green Audit of its campus?

- ❖ Yes. Green Audit is conducted by both Internal and External Agencies. The methodology and implementation of the green audit findings are recorded in a manual . Institution maintains a clean and green environment within the campus. The Institution ensures the green environment by establishing a separate maintenance department. The maintenance team takes care of the up-keeping of the environment and ensures to keep the surroundings clean. It maintains the lawn and plantations by employing gardeners and the cleanliness has been maintained by employing sufficient number of sweepers. The maintenance staff members do periodic checks and maintain records for the same. The green audit of the campus and its facilities is a regular event in this Institution.
- ❖ Our Institution takes more interest in maintaining the campus highly eco - friendly and energy conservative. The campus looks green by planting more trees which ultimately gives a pleasant feeling for the students to learn and for the faculty members to work. Many initiatives are taken by the management to inculcate the eco-friendly culture among the student community. The lush green campus provides the facilities such as Rain Water Harvesting, Well Grown Trees and Water Reuse Treatment Plant.

7.1.2 What are the initiatives taken by the College to make the campus eco-friendly?

- ❖ **Use of Renewable Energy:**
- ❖ **Water Harvesting:**
- ❖ **Plantation:**
- ❖ **Hazardous Waste Management:**
- ❖ **e-waste Management:**

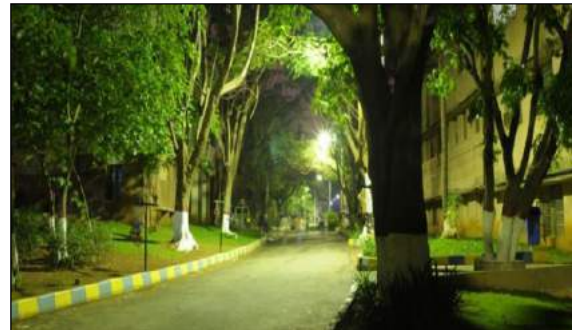
The campus is gifted with adequate greenery like banana plantation, Green house, nursery plants and tree plantations. The greenery in the campus also aids in soil quality protection, watershed, landslide stabilization erosion control, and windbreaks. Such plantations are established to foster native species and promote forest regeneration on degraded lands as a tool of environmental restoration. The college is surrounded by ample greenery along with artificial landscaping in the heart of the campus. Vegetation

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is maintained and nurtured around main areas of the campus. The campus is enveloped by the canopy of huge trees. Details of trees in the last three years are given in table below.

Efforts for Carbon neutrality

DSCE have begun necessary steps like implementing green house and several plantations across the campus; hence making the weather at campus pleasant always regardless of temperature outside the campus. Our college makes significant efforts for Carbon neutrality by restriction of vehicle traffic within the campus and providing specific parking lots separately for students and staff. Lush greenery around the campus is maintained to reduce the effect of pollution. Paper waste is recycled from time to time and it is ensured that dried leaves and twigs are not disposed by setting on fire. A green house is also maintained in the campus.



➤ **Plantation**

The campus is gifted with adequate greenery like banana plantation, Green house, nursery plants and tree plantations. The greenery in the campus also aids in soil quality protection, watershed, landslide stabilization erosion control, and windbreaks. Such plantations are established to foster native species and promote forest regeneration on degraded lands as a tool of environmental restoration. The college is surrounded by ample greenery along with artificial landscaping in the heart of the campus. Vegetation is maintained and nurtured around main areas of the campus. The campus is enveloped by the canopy of huge trees.



Ariel view of Greenery in the Campus



Banana Plantations

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Details of Trees and plants in campus

SL.NO	NAME OF THE TREES	NUMBERS (2016)	NUMBERS (2015)	Numbers (2014)
1	MANGO	17	17	17
2	COCONUT	11	11	11
3	TAMMARAND	23	20	16
4	JAMOON	02	02	02
5	MUNTINGIA	29	19	12
6	SANDALWOOD	98	78	68
7	BANYAN	22	17	17
8	ASHOKA	23	18	10
9	NEAM	29	19	14
10	CHRISMAS	4	4	4
11	TEAK WOOD	27	22	17
12	SILVER OAK	37	33	23
13	JACK FRUIT	10	9	9
14	JUNGAL	317	257	217
15	COTTON	07	07	07
16	SAMPIGE	07	07	07
17	BAAGE	10	10	10
18	BILLAPATRE	09	09	09
19	OTHERS	25	20	15
TOTAL		706	579	485
% Tree Planted		24	16.1	

Details of E-Waste generated and disposal

Old and obsolete computers, printers and other equipments which are discarded by the department after complete inspection and verification by the hardware engineers from EDP are sent to the central store at EDP to store the electronics equipment and computer. Salvageable parts are reused in other defective systems and making it in working condition, then there after those computers and equipments are send

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to schools of DSI and other organizations for further use. Remaining parts of the equipment are outsourced through vendors as scrap material for further e-waste management or through buy back arrangement by the EDP.



Fig –Scrap key boards collected in EDP department for disposal

Details of E-waste collected and disposed from college

Sl. No	Description	Numbers
1	Pentium III & IV Computers	250
2	CRT Monitors	14
3	CPU P2 & P3	15
4	Cabinet with Mother Board	8
5	Old white Monitors	9
6	Key board	27
7	Mouse	23
8	Cabinet	1
9	SMPS	22
10	Hard disk	10
12	Epson Printers	6
13	Konica Minolta Printer	2
14	Konica Minolta Cartridge	4
15	Sharp Old Projector	1
16	Microprocessor old power supply	7
17	Microprocessor old wooden kit	4
18	IC Tester	2
19	UV Light Source	1
20	temperature controller kit	1
21	DAC Keyboard Kit	6
22	Switch	5
23	Phone	1
24	Fax Machine	1

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Water quality monitoring and air quality monitoring

Every year water quality will be tested through a separate testing agency. This is done through SNEHA Test House a NABL accredited laboratory (T-3037 & 3038) & OHSAS 18001: 2007 certified laboratory at Nagarbhav, i Bangalore. The details of test results for last three years are furnished below.

WATER QUALITY ANALYSIS IN CAMPUS

TEST PARAMETER	UNIT	2016	2015	2014	MAXIMUM ACCEPTABLE LIMIT AS PER IS:10500:1991
colour	-	<2	<2	<2	5
pH	-	7.4	7	7.2	6.5-8.5
Turbidity	NTU	1	1	1	500
conductivity		912	875	793	-----
Total dissolved solids	mg/L	498	445	410	500
Total alkalinity	mg/L	270	275	230	200
Total hardness	mg/L	266	240	190	300
Calcium as Ca	mg/L	67.2	70.9	68.1	75
Magnesium as Mg	mg/L	13.8	15.5	14.5	30
Chloride as Cl	mg/L	66.6	69.8	64	250
Sulphate as SO ₄	mg/L	20.7	22.7	21.4	200
Nitrate as NO ₃	mg/L	18.4	21.2	19.3	45
Flouride as F	mg/L	0.44	0.41	0.38	1
Iron as Fe	mg/L	0.02	0.02	0.02	0.3
Residual free chlorine	mg/L	0.2	0.2	0.2	0.2
E-coli	-	Absent	Absent	Absent	Absent

Electricity generations using non conventional energy

The college uses renewable energy in particular solar energy/photovoltaic system in hostels for provision of hot water and outdoor lighting purpose.

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Details of solar cells used for water heating

Sl No	Hostel	No. of Panels	Capacity of water tank (lts)	Savings in KWH
1	NRI Residency	96	12000	562.71
2	Sharda Women's Hostel	48	6000	281.35
3	Nelson Mandela Hostel	20	5000	234.46
4	Sardar Patel Hostel	56	7000	328.25



Solar Cells above college hostel

Water heated through solar cells



Class rooms, staff rooms, office rooms are provided with CFL lights in the campus. A CFL light bulb is also known as a compact fluorescent lamp or a compact fluorescent light, were made to replace incandescent light bulbs. CFLs use 1/3rd to 1/5th the electrical power of incandescent lighting and can last 8 to 15 times longer. An average CFL bulb which provides 800 lumens will use only 13 to 15 watts

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compared to a similar incandescent bulb which uses 60 watts. Savings due to CFL as compared to Incandescent lamps are explained below.

- 10 CFLs per room
- 3 rooms per floor
- 5 Floors per building
- Total CFLs per building: 150. (Approx)
- No. Of buildings with CFL: 20(Approx)
- Total No. of CFLs in use (Approx) : 3000.
- Energy Saved due to One CFL as compared to 60W incandescent lamp: 40W
- With 8 Hours average usage, and a tariff of 3.9 Rs/ unit, savings per CFL = Rs 4.68/Month
- Total Savings per month = Rs 14040.(Approx) *



Installation of Solar Street lights

Rain Water Harvesting

The college campus is on a hilly terrain and is suitable for rain water harvesting. The campus has small check bunds/trenches to arrest rainwater during rainy season. The rainwater/runoff water is collected in harvesting pond constructed near parking area. Further, an open well which is situated within the campus is also used for rainwater harvesting. The collected rain water is used for lawns and garden in the campus. Point recharge measures are taken to protect bore wells for sustainability of water management.

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Trenches



Collection/Percolation tank



Bunds



Point Recharge for a Bore well

Water Recycled Report

The DSI campus spreads over 28 acres. The international hostel with a capacity of 800 members is located in the campus. The hostel canteen will be used by other students and staff during working hours. 80,000 litres of waste water is generated from hostel and canteen. This waste water will be taken to STP for tertiary treatment (Extended Aeration-ASP). The recycled water will be used for gardening /horticulture.



Picturesque View of Greenery managed by recycled water

7.2 Innovations

7.2.1. Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

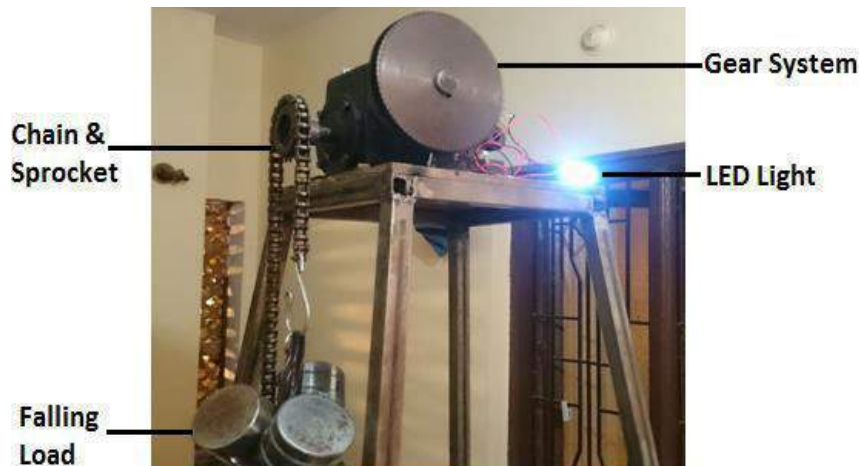
- **Early research initiatives**-The Bright students will be identified from each class and encourage them to do the project which leads to research. This activity helps to develop the attitude of the students for the research and also apply the result of their work further in their career.
- **Chemical equipment model craft making competition**- Creating models out of available materials. This competition is held every year among students of chemical engineering in South Karnataka region. This provides a platform to exhibit creativity and competitiveness, enhancing the chemical engineering skills. Since it involves groups of students for each of the problems, a team building spirit and cooperation is executed. Helps the students in networking thereby more and more academic opportunities are realized by the students involved in the activities.
- **IDP competition**- IDP is an event where “**Industry Defined Problem**” is given to participating students. Students from different colleges of Karnataka studying chemical engineering participate in this event. The problem will be posed through the web site as defined by an industry or a senior faculty. They need to solve the problem at their ease and bring their solution on a specific day for presentation. The best IDP solution will be judged by a panel. This exposes the students to live industrial problems making them to use their analytical and technical skills for the solution.
- **Production of Ethanol from Lignocellulosic Materials using *Phomaexigua* & *Saccharomyces cerevisiae* (Low cost Fermenter design and fabrication for home appliances)**

In this project, Student of Chemical Engineering Department has designed and fabricated a fermenter using cost effective materials which facilitates maintenance of the required fermentation conditions including pH, temperature, anaerobic conditions and proper agitation of the media which indeed increases the ethanol yield. A full-fledged fermentation process can be carried out maintaining all the optimum conditions using our fabricated fermenter, and spanning a time of 5 days. We have successfully produced ethanol with an encouraging yield of 29.56 mg/ml from wood shavings and 32.01mg/ml from tissue paper.

- 1) Low cost materials for fabrication like SS304, PID controllers
- 2) Specifications: 2 Litres capacity, temperature range 20-60° C, aerobic –anaerobic condition, pH-manual, Agitation: 150-2000 rpm.

Low Cost lighting using Gravity: Working Prototype:

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This project is aimed at serving poor people who are off-grid. In short, assembly converts loss in potential energy of a certain falling weight into rotational kinetic energy of a gear system, which is further used to generate light.

The prototype developed uses a load of about 15kg, which takes a total drop-time (from a height of 2 metres approx) of around 3 minutes, during which power transmission takes place and light is produced from the LED. During this time, the cells of the LED are charged, such that even after the load has descended till the ground, LED produces light for around 10 minutes.



➤ Design and Fabrication of Power Handle Wheel Chair For the Disabled.

Thrust area as per KSCST – SPP : Smart Technology For Physically Challenged

The main objective of this project is to develop a low cost locomotive which will help disabled people easy to drive it on road with simple attachments and to provide mobility to wheelchair by attaching detachable power handle.

A power handle for wheel chair for disabled was designed and fabricated which was funded by KSCST. The main technical issues in developing this type of power handle for wheel chair are the stability, weight handling capacity and speed of the power handle-wheel chair. In this project students have designed and fabricated powered handle provided with an e-kit to drive the wheel. Power handle is attached to the wheel chair with the help of clamps .This converts it into a vehicle.

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Innovation in student welfare

Ms. Shubha Phutela Merit Scholarship, the memento of remembrance of our beloved student late Ms Shubha Phutela , has shown light to financially deficit students and academic toppers to greatly encourage them and keep their passions alive.

The generosity shown by her parents, DSI Management and Mr. SuhasGopinath is making a lot of difference in the lives of many students.

The details of the contribution for the scholarship are as follows:

Dr. Rajpal Phutela - Rs. 3.5 Lakhs (2 Lakhs in 2013 + 1 Lakh in 2014 + Rs. 50,000 in 2016)

Dr. Premachandra Sagar D – Rs 3 Lakhs (in 2013)

Mr. SuhasGopinath -Rs. 75,000 (Rs. 50,000 in 2014 and Rs. 25,000 in 2016)

Mr. Rohit Sachdeva - Rs. 5,000.00 (in 2014)

7.3 Best Practices

7.3.1 Give details of two best practices which have contributed to better academic and administrative functioning of the college.

Best Practice 1:

1. Title of the Practice: Proctor system for the students

2. Goal

The goal of the proctor system is to implement a system that helps in the overall development of the student during his/her stay in the college. The system also aims to keep the parents/guardians informed about the academic progress of their children on a regular basis helping them to guide their wards in the right direction.

3. The Context

The proctor system requires continuous interaction of the student and the proctor. The proctor and student should meet at the beginning of the semester to discuss the goals for the semester and also analyze the previous year performance. The meeting between the proctor and the student should happen before and after every internal test to discuss his/her performance and any other issue he/she might be having in the semester. Though these meetings are meant to be beneficial to the students, they take time to come up and speak to the proctors freely with out any hindrance. The proctors are also encouraged to help students to enhance their skills in extracurricular activities which will help in their overall developments.

4. The Practice

A faculty member is assigned as a proctor to every student as soon as he/she enters the campus. The proctor's rule is to act as a guide, a mentor, a role model and a counselor for the student during his/her stay in the campus.

The proctor will be the first point of contact for the student for any issues within the college that he/she needs guidance of support in.

Many of the students come to the college from various parts of the country and are forced to stay away from their homes. The proctor can help such student in settling down in the campus by acting as a counselor and guiding them in the right direction. The parents who too are anxious at the beginning regarding their children being away from home can interact with the proctors to find out about the performance and well being of their children.

Once the student settles in the college he/she will have numerous decisions to take, like choosing the right elective, choosing the correct company for the placements, attending various extra curricular activities, during the course for all of which the proctor can act as a guide.

5. Evidence of Success

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The proctors are meant to guide students in the college, the feedback from the parents and the students have clearly shown that the guidance obtained by the students by the proctor system has helped them in completing the course successfully.

The parents also have provided positive feedback on receiving regular updates about the performance of their children.

The faculties are also satisfied that their efforts have helped the students of the college to become a better graduate which is visible in the improvement of the academic performance of the students.

6. Problems Encountered and Resources Required

It requires continuous updates of the activities of the students, their marks, attendance etc. Though these can be easily obtained, the students themselves sometimes refuse to communicate with the proctor. It sometimes takes a lot of effort from the proctor to encourage such students to open up and communicate to be able to guide them. Still with all the efforts there are cases when the proctor system fails in its objectives and students either drop out of the college or fail to pass in the examination. This clearly indicates the system on the whole can be improved further to achieve greater results.

Best Practice 2:

1. Title of the Practice :

Scholarship based on Merit for Chemical Engineering students

(Mr. H. Srinivas Rao and Mrs. Kamalamma Scholarships.)

2. Goal

To provide funds for the students to be used for tuition, books, and other general educational expenses. Every year 4-6 students of final and third year are selected and awarded scholarship based on the academic, cultural, sports, extracurricular activities and also on financial needs.

3. The Context

This Scholarship has been awarded in memory of Mr. H. Srinivas Rao and Mrs. Kamalamma, late parents of Dr. Ponnammam Muralidhara and Dr. H.S. Muralidhara, President, Incepppcon, USA for the needy students from the year 2011-12. The sponsors of this Scholarships wish that the recipients will excel in their studies and bring outstanding reputation to their Institution and Chemical Engineering Profession in the future.

4. The Practice

Students who are in need of financial aid are awarded with 'Mr. H. Srinivas Rao and Mrs. Kamalamma Scholarships'. More number of applications are received every year in which the applications are scrutinized based on the following conditions:

- The Candidate should have scored min of 60% in the earlier exams.
- Candidate should have completed 2nd and 3rd year Chemical Engineering in DSCE.
- The Candidates character and conduct in College is exemplary.

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- The Candidates parents' income is low (Left to the discretion of the selection committee members).
- The candidates should utilize the scholarship amount only for paying fees and study related matters and
- Candidates should purchase text books to the amount equal to at least 20% of the scholarship amount and return the books to the department library after the completion of the course.

5. Evidence of Success

List of outstanding students who received “Mr. H. Srinivas Rao and Mrs. Kamalamma Scholarships” from the year 2011-12

Table 7.2: List of students for scholarships

Name of the Student	Year	Scholarship Amount (INR)
Mr. Prakash.N	2011-12	10,000.00
Ms. Divya C N		10,000.00
Ms. Dhanyashree B.C		10,000.00
Mr. Jagannath Kyadappa		10,000.00
Ms. Keerthi.B.R	2012-13	10,000.00
Ms. Divyashree.R		5,000.00
Mr. Abdul Samad .B.M.		5,000.00
Prakash .N		5,000.00
Ramki .M.C		5,000.00
Ramesh		5,000.00
Chandan Bhat		5,000.00
Ms. Divya Shree.R	2013-14	8000.00
Ms. Keerthi .B.R.		8000.00
Mr. Sudhir Kumar .H.K.		8000.00
Ms. Brunda.M		8000.00
Ms. Shashikala		8000.00
Mr. Sudhir Kumar H K	2014-15	10,000.00
Ms. Sowmya.B.A.		10,000.00
Ms. Ranjana.P.N.		10,000.00
Mr. Halesh.H.R		10,000.00

6. Problems Encountered and Resources Required

More number of applications are received every year in which scrutinizing the applications is becoming tough, as most number of students meet the required criteria.

Best Practice-3:

1. Title of the Practice

Value added programmes for students apart from regular curriculum.

2. Goal

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- To provide quality education to the students of the country as a whole and State of Karnataka in particular.
- To produce competent Engineering graduates with intellectual capability and scientific skills.
- To train the students and encourage the graduates for achieving personal and professional success with awareness and commitment to their ethical and social responsibilities both as individuals and as team members.
- To make students understand the importance of student's involvement in various professional bodies, which helps them to build the technology gap between Industry- academia, enrich knowledge and skill in latest industry trends.
- To conduct events to streamline the career options and motivate graduates to explore new career opportunities.
- To constantly innovate, acquire new knowledge and skills & provide solutions to the challenges faced by power sector.

3. The Context

The syllabus needs to be updated to meet the challenges of the Industry. The college is affiliated to VTU and the students have to follow the syllabus framed by the university. The Institution is not having the flexibility to change the syllabus as per the industry needs. The skills and knowledge acquired by the students/graduates is not sufficient due to the restricted syllabus/curriculum.

The Value added training programmes, invited technical talks will enable the students to understand the importance of student's involvement in various professional bodies, which helps them to build the technology gap between Industry- academia, enrich knowledge and skill in latest industry trends. Placement and entrepreneur programmes motivate the students to strengthen their skills and will provide a platform to streamline the career options and pave ways for recent graduates to explore new career opportunities.

4. The Practice

The faculty members are encouraged to attend various FDP/conference/ workshops/ seminars/training programmes etc., so that they can transform the knowledge acquired to the students. Further, the department regularly organizes FDP/ conferences/ seminars/ workshops/ hands - on training programmes for faculty members to enhance their knowledge and skills. Value added training programmes, industrial visits, invited technical talks by eminent speakers from industries/research institutions are organised regularly so that the students can understand the importance of their involvement in various professional bodies, which helps them to build the technology gap between Industry- academia. Placement and entrepreneur programmes are conducted for the students to enhance their skills and opportunities in placements.

5.Evidence of Success

- The placement percentage is improved

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- The number of in-house projects carried out by students has increased
- The quality of the projects carried out by the students has improved
- The students are able to get internships in various industries/ organizations.
- The faculty are engaged in research work and are pursuing Ph.D.
- The students of V-Sem EEE branch have secured first place in Innovation category at “SUSTAINABLE ENERGY CHALLENGE-2012”, organized by SELCO foundation at IIMB Campus, Bangalore. A batch of students has won first prize.
- Percentage of students appearing and qualifying for GATE/other competitive exam has improved.

6. Problems Encountered and Resources Required

The industry experts are busy with their own assignments and work, so getting them into the campus is difficult task. Managing the time required for regular curriculum and the tests are tedious and to be balanced between the value added courses and regular curriculum. The slow learning students have to be taken care separately. The infrastructure/resources allotment for various programmes is a challenging task. Arranging computing facilities for the entire batch is difficult and needs to be addressed. Motivating and making the students to attend value added courses will be difficult task and needs special attention & care.

7. Notes (Optional): NA

8. Contact Details

Name of the Principal: Dr. C.P.S. Prakash

Name of the Institution: Dayananda Sagar College of Engineering

City: Bangalore

Pin Code: 560078

Accredited Status: Not Accredited

Work Phone: 080 42161753 Fax: 080 2666 0789

Website: www.dayanandasagar.edu

E-mail: ppl-dsce@dayanandasagar.edu

Mobile: 9448667198

PART - II

EVALUATIVE REPORT OF THE DEPARTMENTS

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Evaluative Report of the Department

1. Name of the department : **Aeronautical Engineering**
2. Year of Establishment : **2009**
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) :

Under Graduate Programme

4. Names of Interdisciplinary courses and the departments/units involved:

Yes- Institutional Electives – 8 credits

5. Annual/ semester/choice based credit system (programme wise):

Choice based credit system

6. Participation of the department in the courses offered by other departments:

Yes- Institutional Electives – 8 credits

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: **Nil**
8. Details of courses/programmes discontinued (if any) with reasons: **Nil**
9. Number of Teaching posts

	Sanctioned	Filled
Professors	1	3
Associate Professors	3	1
Asst. Professors	8	8

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. A. Arokiaswamy	BSc Maths, DMIT (Aero. Engg.), ME (Aero. Engg.), Ph.D(Engg.)	Prof & Head of Dept	Aeronautical	36	Nil
Dr. M.K. Sridhar	BE (Mechanical), M.E, Aeronautical Ph.D	Professor	Aeronautical	41	
Dr. Rajendran	BE (Mechanical) M.Tech, Ph.D		Thermal Turbomachinery	36.8	
Dr. Yanamandala R R Chowdary	BE (Mechanical), M.Tech, Ph.D	Assoc. Prof	Energy Systems	10.0	

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Hareesha NG	BE, M.Tech (Mechanical) (Ph.D)	Asst.Prof	Mechanical	11.9	
Srinivasan S	BE (Mech) M.Tech (Aero. Engg) (Ph.D)		Aeronautical	10.8	
Charles G Martin	BE (Mech) M.Tech (Aerospace) (Ph.D)			6.3	
Prathik Jain S	BE (Mech) M.Tech (Mechanical) (Ph.D)		Mechanical	3.8	
Devjani Bhattacharya	BE, (EEE), ME (Electrical Control System)		Electrical Control System	4.8	
Harsh Bardhan Jha	BE, M.Tech (Mechanical) (Ph.D)		Machine Design	1.7	
Suresh P	BE, Aero. ME Aero		Aeronautical	4.3	
Jamuna A B	BE, IEM M.Tech		Mechanical	3.8	

11 List of senior visiting faculty: **Nil**

12 Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty:
Nil

13 Student -Teacher Ratio (programme wise):

1:16

14 Number of academic support staff (technical) and administrative staff; sanctioned and filled:

	Sanctioned	Filled
Technical Staff	06	04
Administrative Staff	01	01

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. : **PhD – 4, PG - 8**

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: **Nil**

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: **Nil**

18. Research Centre /facility recognized by the University:

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Research Centre Aeronautical Department - Recognized by VTU Belgavi

19. Publications:

- * a) Publication per faculty
- * Number of papers published in peer reviewed journals (national / international) by faculty and students

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Publication per faculty:

Name of Faculty	Year	National Journal	International Journal	International Conference	National Conference
Dr.A. Arokkiswamy	2016				2
	2015		1		
	2014				
	2013		1	2	
	2012		3	1	1
	2011				
Dr. R. Rajendran	2016	2	2		
	2015				
Hareesha N G	2016				
	2015				1
	2014				
	2013				
	2012				
	2011			2	
S Srinivasan	2016				
	2015				
	2014				
	2013			1	
	2012		3		
	2011				2
Charles G Martin	2016				
	2015				
	2014				
	2013				
	2012				
	2011				
Prathik S Jain	2016				
	2015				
	2014				
	2013				
	2012				
Suresh P	2016		1		
Devjani Bhattacharya	2016		1		
Total		2	12	6	6

Publications by Faculty: International Journals

Dr. A. Arokkiaswamy:

1. A. Arokkiaswamy, S.B.Verma and S. Venkateswaran "Experimental Studies On Rectangular Jets With Trapezoidal Tabs," The Aeronautical Journal, Royal Aeronautical Society, London, May 2013 Volume 177 No 1191.(ISSN: 0001-9240, Impact Factor: 0.47)

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2. Arokkiaswamy, S.B.Verma and S. Venkateswaran,” A. Arokkiaswamy, S.B .Verma and S. Venkateswaran, “Effect Of Tab Geometry on the Development of a Jet Issuing from a Rectangular Nozzle”, International Journal Turbo and Jet engine, June issue, 2012.(ISSN: 0334-0082, Impact Factor: 0.22)
3. Arokkiaswamy, S.B.Verma and S. Venkateswaran,” Effect of Delta Tab Geometry on the Development of Rectangular Jets”, International Journal of Fluid Engineering, Vol.4, pp.75-89, 2012. .(ISSN 0974-3138, Impact Factor: 1.84)
4. S. Srinivasan, and A. Arokkiaswamy, “Drag reduction of V shaped ring gutter of an afterburner by tandem bluff bodies using CFD”, IOSRJMCE International Sept. 26-27, 2013(ISSN: 2278-1684, Impact Factor: 1.753).
5. A. Arokkiaswamy, “ Experimental Investigation on Plain Circular and 2:1 Rectangular Jets at Low Speed.” American International Journal of Research in Science, Technology, Engineering & Mathematics”, AIJRSTEM 15-118, Vol.9(1), pp. 34-38, Dec. 2014 – Feb. 2015, IISN(Print): 2328-3491, ISSN(Online): 2328-3580, ISSN(CD_ROM): 2328-3629, Impact Factor:1.237)

Prathi K Jain

1. Prathik Jain S, B N UmeshGowda, Dr. H.V Ravindra, Mohinder N and Ugrasen G “Comparitive study of surface roughness and cylindricity of Aluminium Silicon Nitride material using MRA GMDH & PATTERN RECOGNITION TECHNIQUE in drilling” Elsevier, *Procedia Materials Science*, Volume 6, 2014, Pages 1770-1779.

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- * Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- * Monographs: **Nil**
- * Chapter in Books: **4**
- * Books Edited: **Nil**
- * Books with ISBN/ISSN numbers with details of publishers: **Nil**
- * Citation Index: **Nil**
- * SNIP: **Nil**
- * SJR: **Nil**
- * Impact factor: **Nil**
- * h-index: **Nil**
- 20. Areas of consultancy and income generated:
 - Jain University Students utilized the department lab facility and they have been charged Rs. 35,000/-
- 21. Faculty as members in
 - a) National committees b) International Committees c) Editorial Boards....:

02

I. Dr. A Arokkiaswamy:

- 1) Promotion assessment committee member at NAL.
- 2) Official reviewer for two international journals
- 3) BOS member, Aeronautical Board, VTU.
- 4) BOS Convener, DSCE-Aeronautical dept, Autonomous.
- 5) BOE Member, Mechanical composite board during 2013-14
- 6) BOE Member, Aeronautical Board, board during 2015-16

II. Dr. R Rajendran:

- 1) Member in GATET review committee
- 2) Member in ARDB Propulsion Panel
- 3) ASME- International gas turbine review member
- 4) ASME- International gas turbine(I)
- 5) BoS member in MS Ramaiah school of advanced studies
- 6) Research committee member in Thimmaiah institute of technology,VTU

III. Hareesha N G:

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Member for Institute for Research and Development India (IRD India)

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/programme:

S. No.	Academic Year	% of students
01	2012-2013	85
02	2013-2014	80
03	2014-2015	85
04	2015-2016	69

- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:

S. No.	Academic Year	% of students
01	2012-2013	15
02	2013-2014	20
03	2014-2015	15
04	2015-2016	31

23.Awards / Recognitions received by faculty and students

(a) Award Received by Faculty:

Dr. R. Rajendran, Awarded Best Teacher in Aeronautical Engg, for the year 2015, By VIJAYAVANI

(b) Achievements by the Students:

VTU ranks during **2012-2013: 4 Ranks (I,II,VI & X)**

S.No.	USN	NAME	RANK	%	REMARKS
1	1DS09AE007	Anjali Shekhar	I	85.74	Gold Medal
2			II		

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	1DS09AE011	Anutha M.A		85.68	
3	1DS09AE033	Pavithra S.	VI	82.52	
4	1DS09AE040	Sandeepa T.S.	X	80.67	

VTU ranks during **2013-2014 : 4 Ranks** (II,III,IV & X)

S.No.	USN	NAME	RANK	%	REMARKS
1	1DS10AE040	Ramya Menon	II	89.28	
2	1DS10AE024	Ganesh Prabhu	III	87.10	
3	1DS10AE055	Sushma M	IV	86.87	
4	1DS10AE053	Surabhi Mathur	X	84.52	

VTU ranks during **2013-2014 : 3 Ranks** (I,VI & IX)

S.No	USN	NAME	RANK	%	Remarks
1	1DS11AE026	KIRAN N.	I		
2	1DS11AE009	CHANDRA SHEKAR R.	VI	84.26	
3	1DS11AE001	ABHILASH TANKASALI	IX	83.51	

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STUDENTS PARTICIPATION IN COMPETITION AT NATIONAL AND INTERNATIONAL LEVEL: Annexure Maintained

24. List of eminent academicians and scientists / visitors to the department

- (i) **Dr. J J Issac** Ex- Joint Director, NAL
(presently Advisor to the Propulsion NAL(CSIR) Division, NAL)
- (ii) **Dr. K. Balakrishna** Ex- General Manager, RWRDC, HAL TATA HAL
HAL (presently Senior Consultant, TATA HAL)
- (iii) **Dr. Kishore Kumar** Scientist and Group Director (CFD) GTRE(DRDO)
- (iv) **Dr. S.N. Omkar** Principal scientist, Aerospace Engg. Dept. IISc
- (v) **Dr. S B Verma** Scientist Deputy head, EAD & Group Head
Flow structure Management and Aircraft & Spacecraft
Aerodynamics NAL(CSIR)National Aerospace
Laboratories
- (vi) **Mr. Manjunath P** Chief Scientist, Head, Propulsion Division, NAL(CSIR)
National Aerospace Laboratories,
- (vii) **Mr. Rajashekar** Scientist, Joint Head, Propulsion Division, NAL(CSIR)
National Aerospace Laboratories
- (viii) **Dr. P Kulkarni** Professor, Aerospace Engg. Dept. IISc

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National Conference:

1	“Role of Mechanical Engineering and Computational Science for a Sustainable Future” (Jointly organized by Dept. of AE/ME/AU/Maths)	National	25 th & 26 th Sept 2015
2	“Advances in Fluid Mechanics and its Application in Engineering (Jointly organized by Dept. of AE/ME/AU/Maths)	National	19 th & 20 th Feb 2016

b) International Conference:

S.No.	Conference Title Name	National/International	Year in which conference was organized
1	International Conference on Convergence Science Engineering & Management Education & Research 2013, DSCE	International	2013

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c) National Workshops:

S.No.	Name of the Workshop Organized	Date
1	One Day Workshop on “Advances in Fluid Mechanics and its Application. (Jointly organized by Dept. of AE/ME)	04 th November 2015
2	Two Days Workshop on ‘Aero Drone Technologies ‘	28 th Feb & 01 st March 2015
3	Two Days Workshop on Quad copter Design & Flying Competition is association with IIT(M).	25 th & 26 th Feb 2016

26. Student profile programme/course wise:

Name of the course/programme	Application received	Selected	Enrolled		Pass Percentage
			M	F	
AE -2010	60(1 st year)+6(Lateral entry)	66	50	16	87.87
AE -2011	62(1 st year)+11(Lateral entry)	73	60	13	Final Year
AE -2012	62(1 st year)+12(Lateral entry)	74	61	13	Pre- Final Year
AE -2013	61(1 st year)+12(Lateral entry)	73	53	20	2 nd Year
AE -2014	60(1 st year)	60	47	13	1 st Year
AE -2015	54(1 st year)	54	43	11	1 st Year

*M = Male *F = Female

27. Diversity of Students

Name of the course	% of the students from Karnataka	% of students from other states	% of students from abroad
AE -2010	66.66	33.33	0
AE -2011	71.23	28.77	0
AE -2012	71.62	25.67	2.70
AE -2013	73.97	26.03	0
AE -2014	76.66	23.33	0
AE -2015	77.77	22.22	0

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28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

S.No.	Name of the Student	Rank Details
GATE Rank Details		
1.	Abhijit	109/4559
2.	Punith .P	140/4559
3.	Ashwin Gandhi	303/4171
4.	Abhram Benjaminin	36
5.	Srivasta Bhat K	28/3770
6.	Akshay Kumar	79/3770
7.	Lakshmipathi N	447/3770

29. Student progression

Student progression	Against % enrolled
UG to PG	
2009-2013 Batch:	11%
2010-2014 Batch:	18%.
2011-2015 Batch:	10%
PG to M.Phil	NA
PG to Ph.D	NA
Ph.D to Post-Doctoral	NA
Employed	
Campus Selection	
2009-2013 Batch	12
2010-2014 Batch	19
2011- 2015 Batch	43
2012- 2016 Batch	26
Other Than Recruitment	Nil
Entrepreneurship/Self Employment	

30. Details of Infrastructural facilities

- a) **Library:** Department library has 459 books for the students benefit
- b) Internet facilities for Staff & Students: Internet facility available for staff and students and also with WIFI connection.
- c) Class rooms with ICT facility: Projector, Black board and White board
- d) Laboratories: Six laboratories available as per the VTU curriculum

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31. Number of students receiving financial assistance from college, university, government or other agencies

ABSTRACT OF SC/ST SCHOLARSHIP SANCTIONED				
AERONAUTICAL ENGINEERING				
SL. NO.	FINANCIAL YEAR	ACADEMIC YEAR	NO. OF STUDENTS	TOTAL AMOUNT SANCTIONED
1	2011-12	I YEAR	7	231,890.00
		II YEAR	3	115,150.00
		III YEAR	2	48960.00
		IV YEAR	Nil	Nil
2	2012-13	I YEAR	6	228,670.00
		II YEAR	4	160,670.00
		III YEAR	Nil	Nil
		IV YEAR	2	45440.00
3	2013-14	I YEAR	4	136,960.00
		II YEAR	7	243,220.00
		III YEAR	2	75,440.00
		IV YEAR	2	74240
4	2014-15	I YEAR	3	128,130
		II YEAR	2	79,240.00
		III YEAR	4	143,080.00
		IV YEAR	3	109860.00

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

S. No.	Name of the Invited Scholar with full Address	Title of the Lecture delivered	Date of the Lecture
1	Group Captain Ganesh Basthi , retired IAF Aeronautical Engineer	Inauguration of Aero Modeling	9 April 2011
2	Mr. D.Prabhakar	Aircraft Materials-Role of Steel and Steel Alloys in Aircraft Structures.	3 March 2012.
3	DR.C S Ramesh Professor PESIT College of Engineering Bangalore	Finite Element Analysis, Fatigue, Structural Analysis	3 April 2012
4	Shri Rajgopal Scientist ADE (DRDO) Head Composite Technology Centre	Advances in UAV & Applications	14 Sept 2012
5	Dr. CRL MURTHY , Professor, IISc, Bangalore	Aerospace Engineering, Current & Future	3 October 2012

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6	Dr G K Suryanaryan Scientist NAL Bangalore	Wind tunnel Testing of Aerospace Vehicles	26 Feb 2013
7	Shri T K Sundarmurthy Mission director, Mission planning and analysis division mission development groups ISRO satellite centre	Glimpses of Indian Space Program & Spacecraft mission operations	27 Mar 2013
8	Mr Annam Thygaraja Kishore Deputy General Manager Alcatel- lucent India limited	Latest trends of Aeronautical Engineering	19 Mar 2013
9	Dr. Omkar SN , Principal Research Scientist Department of Aero Space Engineering IISc Bangalore	Uninhibited Aerial Vehicles and their Applications	9 Oct 2013
10	Dr. R M O Gemson Ex-AGM, ARDC HAL, Bengaluru	"Development of Integrated Flight Control Systems	20. Feb 2014
11	Prof. Ananthraman Director, Jaya College Group, Chennai, Tamil Nadu, India	Avionics and Communication Buses	23 Sept 2014
12	Mr. Arunachalam Former Scientist ISRO Satellite Centre	"Mangalyan India'S First Mission to Mars"	25 Feb 2015
13	Dr. S B Verma, Deputy Head, EAD National Aerospace Laboratories, Bengaluru-560017	Research on High Performance Rocket Engines : Where Are We?	26.Aug. 2015
14	Mr. Manjunath P Chief Scientist & Head, Propulsion Division National Aerospace Laboratories, CSIR Bangalore - 560 017	"High Speed Air-Breathing propulsion"	16.Mar. 2016

33. Teaching methods adopted to improve student learning

Conventional methods, Presentation through LCD projectors, Providing E-learning resources viz, NPTEL, VTU e resources, Providing softcopy of Lecture notes, assignments , Tutorials and conducting Technical quiz, practical application relevant to subject are discussed during teaching

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Providing financial support for OXFAM a recognized NGO
- Students participated in blood donation camp

35. SWOC analysis of the department and Future plans

STRENGTH

- The department has a great strength in terms of qualified teaching faculties with a bend of Doctorates and who have registered for doctorate, having both academic and industrial expertise.
- The department is equipped with high tech laboratories and infrastructure catering to university curriculum. A good academic environment is maintained in the department such that the students and faculty interact to achieve betterment.

SELF STUDY REPORT

- The students securing university ranks every year.
- Those students who are completing their UG programme, pursue their higher studies in India and abroad.
- The students are being placed in premier industries and organizations.
- The students secure prizes and awards by participating in national and international competitions.
- The department is a recognized research center for aerospace domain by VTU, Belgaum.
- The department has excellent interaction with premier institute, R&D establishments and Industry and also signed MOU's with Private and Government organizations.

WEAKNESS

- Currently the Department has funded projects and department is working towards realizing the same

OPPORTUNITIES AND CHALLENGES

- There is a huge demand of engineers with aerospace domain specialization in current scenario and the department tries to fill the gap by supplying better human resource to work in aerospace sector. Platform for better opportunities are created for pursuing higher education in aerospace domain.
- The department has challenges for further growth in terms of securing more university ranks, Improvement in placements, Establishing research labs and acquiring grants.

Future Plans:

- To start PG program in M.Tech Aerospace Engineering
- Preparing the students for better placements
- Motivating the students for taking competitive Exams.
- Augmentation of experimental facilities in the dept.
- Augmentation of Research Activities and targeting of publication of research papers in referred international/national journals.

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Evaluative Report of the Department

1. Name of the department : ARCHITECTURE
2. Year of Establishment : 1992
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) :
- B.Arch / UG
Ph.D.
4. Names of Interdisciplinary courses and the departments/units involved :

Building Services - Electrical: Dealt by Prof. Rajaram of Electrical & Electronics Department, DSCE
Building Structures, Semesters I to VII - Dealt by Prof. CP Ramesh & Prof. KM Shivappa, B.E. Civ., M.E. Structures. Visual Arts & ART Appreciation - Dealt by Prof. SJ Bhaskar, Artist
5. Annual/ semester/choice based credit system (program wise) : SEMESTER
6. Participation of the department in the courses offered by other departments
 - Survey lab and concrete lab usually supervised by Civil Dept.
7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Annual Collaborative Studio with Prof. Einar Hler Einarsson, Iceland University of Arts, Reyjavik, Iceland. Annual Collaborative Studio with Prof. Florian Betzler, Dept. of Architecture, University of Wismar, Germany.

Annual Collaborative Studio with Prof. Juerg Grunder, Dept. of Architecture, University of Berne, Switzerland.
8. Details of courses/programs discontinued (if any) with reasons : None
9. Number of Teaching posts

	Sanctioned	Filled
Professors	02	02
Associate Professors	04	04
Assistant Professor	12	10

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

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Name	Qualification	Designation	Specialization	No. of Years Experience	No. of Ph.D. Students guided for the last 4 years
Dr.Rama R. Subrah manian	B.Arch,JNTU, Hyd M.H, SPA, ND PhD, IDS, Mysore	HOD & Professor	Urban Planning &Housing	32 Yrs	04
KR Ganesh	B.Arch, UVCE M.BA, Submitted PhD/VTU	Professor	Sustainable Design	41 yrs.	-
S.Sudhakar	B.Arch, UVCE	Professor	Sustainable Design	41 yrs.	
C.T Manjunath	B.Arch, BU M.Arch, Anna Univ	Associate Professor	Sustainable Design	29 yrs.	-
Dennis Sam Shaju	B.Arch, NIT PG Dip. CEPTUniv	Associate Professor	Sustainable Design	25 yrs.	
Pankaj Modi	B.Arch, BU M.Arch, CEPT Univ	Associate Professor	Sustainable Design	24 yrs.	
Bhaskar S.J	BFA, BU MSc Multimedia PTU	Assistant Professor	Fine Arts	19 yrs.	-
Triveni Amarnath	B.Arch, BU M.Arch, BU	Assistant Professor	Landscape Architecture	16 yrs.	
Aparna Shastri	B.Arch, VTU M.Arch, VtU	Assistant Professor	Habitat Design		
Dominic L Harper	B.Arch, Anna Univ., Chennai M.Arch, UNSW,Sydney	Assistant Professor	Sustainable Architecture	10 yrs.	
Manisha Nupur	B.Arch, VTU	Assistant Professor	Architecture	06 yrs.	
Shruthi A Murthy	B.Arch, BU M.Arch, CEPT	Assistant Professor	Landscape Architecture	06 yrs.	
Sharad Narayan	B.Arch, BU M.Arch, VTU	Assistant Professor	Habitat Design	05 yrs.	
Divya Jammu	B.Arch, JNAFAU, Hyd M.Arch,	Assistant	Sustainable Architecture	10 yrs.	

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	CEPTUniversty	Professor			
Pooja Suryakumar	B.Arch, VTU M.Arch, Glasgow	Assistant Professor	Sustainable Architecture	05 yrs.	
Shwet a D Malagi	B.Arch	Lecturer	Architecture	0.5	

11. List of senior visiting faculty :-

- 1) Ar. Satej Alur
- 2) Ar .S Ragupathi
- 3) Ar. Sayee Deodhar
- 4) Ar. Deepa Hurali
- 5) Ar. Mahesh SD

12. Percentage of lectures delivered and practical classes handled(program wise) by temporary faculty
35%

13. Student -Teacher Ratio (program wise) :-

- Architectural Design - 1:10
- Bldg. Const., Graphics and other drawing Subjects - 1:20

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

- Academic support staff (technical) - 01
- Administrative staff - 01

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.:-

No. of Faculty with Ph.D- 01

No. of Faculty with PG. - 12

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received - None

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received - None

18. Research Centre /facility recognized by the University

Sl. No	Name of the Department with Research Center	Year of	Name of the Research Coordinator
1.	B. Architecture	20012-13	Dr. Rama R. Subramanian

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19. Publications:

a) Publication per faculty

1. Experiential learning: the need of the hour - Dr. Rama R.Subrahmanian, IIID Journal antarya, July 2013
2. Organic architecture - Prof. Mondira Ganguly, COA Journal: Architecture Time Space and People, August 2008
3. The forbidden city - Prof. Mondira Ganguly, COA Journal: Architecture Time Space and People, August 2013
4. Environmental Management of Riverine Islands – Case study Srirangapatna: Ar.Shruthi Murthy, JIIA Kar. Chapter
5. Integrating Space Place and Identity- Case: MG Road, Bangalore: Ar. Samhita BS, JIIA Kar. Chapter
6. National workshop on Smart Cities – Concepts for Innovation Ecosystem” - (SCCIE – 2015)
Alternate building material and practice"-Manisha Nupur,
"Water efficient landscapes -- Understanding surface and ground water for smart cities landscaping Shruthi A Murthy
"Traditional house forms and their response to change in lifestyle and resource usage : A case of old city of Hyderabad- Divya Jamm "Integrating sustainable tourism development in world heritage site planning and management"-Aparna Shastri
7. National Conference on “Recent Advances in Civil engineering and Architecture for Sustainable Development”(2016)

* Number of papers published in peer reviewed journals (national / international) by faculty and students-15

* Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanitie International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

* Monographs

* Chapter in Books

* Books Edited

* Books with ISBN/ISSN numbers with details of publishers

* Citation Index

* SNIP

* SJR

* Impact factor

* h-index

20 Areas of consultancy and income generated :

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Projects undertaken in last three years is maintained as Annexure

21. Faculty as members in

- a) National committees : Dr. Rama R.Subrahmanian-
 - Member, Thesis Awards Committee, NIASA (National Institute of Advanced Studies in Architecture), Pune
 - Member of Board of Studies, PG Program, School of Planning Architecture, New Delhi.
 - Member of Board of Studies in Architecture, VTU, Belgaum
 - Member (VTU Nominee) BoS in Architecture, GIT Belgaum
 - Member, BoS in Architecture, Acharya Nagarjuna University
 - Member, BoS in Architecture, Shillong University
 - Member, IT Committee, ITPI, New Delhi
 - Member (ex Chairman) Board of Examiners in Architecture, VTU, Belgaum
 - Member of the Board of Examiners, Bangalore University.
- b) International Committees
- c) Editorial Boards....

22. Student projects

- b) Percentage of students who have done in-house projects including inter departmental/program : 100 % in THESIS SEMESTER
- c) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies : 100 % in PRACTICAL TRAINING

23.Awards / Recognitions received by faculty and students

Name of the student	Dept	Title of Paper	Publication citation	National or International Journal
Bhuvana Shankar	Arch			Annual Berkeley Essay C University of California,

24. List of eminent academicians and scientists / visitors to the department

Architect Florian Betzler – University of Wismar, Germany
Architect Einar Hler Einarsson – Iceland Academy of Arts, Reykjavik
Architect Herwig Baumgartner – Southern California Institute of Architecture, USA
Architect Gita Balakrishnan - ETHOSArchitect Jaffer A Khan -Auckland University of Technology,AUT Auckland,NZ

25. Seminars/ Conferences/Workshops organized & the source of funding

- a) National - ICCSEM
“SUSTAINABLE ARCHITECTURE – CONCEPT TO EXECUTION’ - Seminar on Sustainable Technologies in application - Oct 25, 2013.

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NATIONAL WORKSHOP ON Smart Cities – Concepts for Innovation Ecosystem” -
(SCCIE – 2015)

National Conference on “Recent Advances in Civil engineering and Architecture for
Sustainable Development”(2016)

b) International –

Seminar Work shop on Design Process for Environmental Building” Mar 9 – 21, 2015 -

Resource Person - Architect Florian Betzler, University of Wismar, Germany

26. Student profile program/course wise:

Name of the Course/program (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Arch – 2015-16	40	40			97%
B.Arch – 2014-15	80	74	22	49	93%
B.Arch – 2013-14	40	40			96%
B.Arch – 2012-13	40	40			94%
B.Arch – 2011-12	40	40			95%

27. Diversity of Students

Name of the Course	% of Students from the same State	% of students from other States	% of students From abroad
B.Arch	77	18	5

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

GATE : 5 in last five years (intake of 40)

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29. Student progression

Student progression	Against % enrolled
UG to PG	25%
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed Campus selection Other than campus recruitment	Campus selection & Also other than campus
Entrepreneurship/Self-employment	Self-employment

30. Details of Infrastructural facilities

- a) Library : Available – Main Library & Departmental Library
- b) Internet facilities for Staff & Students : Available
- c) Class rooms with ICT facility : Available
- d) Laboratories : CAD LAB with 40 systems

31. Number of students receiving financial assistance from college, university, government or other agencies - 3

32. Details on student enrichment programs (special lectures / workshops / seminar) with external experts :- Lectures, Seminars & Workshops.

- a) National - “Sustainable Architecture – Concept To Execution” Seminar on Sustainable Technologies in application - Oct 25, 2013.
- b) International –
Seminar Work shop on Design Process for Environmental Building” Mar 9 – 21, 2015
- Resource Person - Architect Florian Betzler, University of Wismar, Germany

33. Teaching methods adopted to improve student learning

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Teaching methods adopted by the faculty for different courses:

1. Lectures
2. Seminars
3. Studios
4. Interactive discussion sessions
5. Site visits, field visits, study tours and surveys
6. Special lectures
7. Slide shows
8. Films of interest
9. Industry visits
10. Resources on the Internet

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Nil

35. SWOC analysis of the department and Future plans

Strengths :-

- Committed Faculty
- Distinguished Visited Faculty
- Research activities carried out by students and faculty members
- Tie up with industry
- Live studio projects to give due exposure to students.
- Regular Study Tours, Site visits to places of Architectural importance
- Seminars Workshops conducted on regular basis

Weaknesses:-

- Faculty Positions Vacant
- Space Crunch
- Lack of systemic processes leading to lesser time for faculty to carry out research
- No QIP / sabbatical programs

Opportunities:

- Faculty Exposure/ Undertake part in national and international activities
- Funds availability for professional growth
- Establishment of department at international levels
- Filling up of all vacant posts with dedicated teachers

Threats:-

Delays in administrative work
Lack of research

Future plans of the department

The future plans for the Department includes the following:

- Segregation as School of Architecture
- Completion and Occupation of the New Block on the same Campus
- Starting of a postgraduate course in Masters in Architecture
- Strengthen our research affairs and ideas

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- Short term and degree courses and certificate to professionals/students.

Evaluative report of the Department

1. **Name of the department :** Automobile Engineering
2. **Year of Establishment :** 2009
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) :** Under Graduate Programme, B.E
4. **Names of Interdisciplinary courses and the departments/units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise):** Semester System
6. **Participation of the department in the courses offered by other departments:** Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses/programmes discontinued (if any) with reasons:** Nil
9. **Number of Teaching posts**

Teaching posts	Sanctioned	Filled
Professors	01	01
Associate Professors	03	03
Asst. Professors	08	08

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)**

Sl. No	Name	Qualification	Designation	Specialization	No. of Ph.D. Students guided for the last 4 years
1.	Dr.H.N.Suresh	BE(Mech),M.Tech,Ph.D	Prof & Head of Dept	Mechanical (Reliability)	01
2.	Dr.Sekhar. N	BE(Mech),M.E, Ph.D	Associate professor	Mechanical	Nil
3.	Kirana Kumara P	BE (Mechanical) M.Tech, Ph.D	Associate professor	Mechanical	Nil
4.	Nandakumar.M.B	BE,Mtech,(Ph.D)	Associate professor	Automobile	Nil
5.	Mahesh B.R	BE, M.Tech	Assistant professor	Mechanical	Nil
6.	Naveena B.E	BE, M.Tech ,(Ph.D)	Assistant professor	Automobile	Nil
7.	Pradeep kumar G S	BE, M.Tech (Ph.D)	Assistant professor	Automobile	Nil
8.	Sathyanarayana. A	BE (Mech) M.Tech (Ph.D)	Assistant professor	Mechanical	Nil
9.	Divya G. S	BE (IP) M.Tech, (Ph.D)	Assistant professor	Mechanical	Nil

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10.	Vijay T	BE. M.Tech	Assistant professor	Mechanical	Nil
11.	Murgayya	BE , M.Tech	Assistant professor	Mechanical	Nil
12.	Manjunath Pattar	BE , M.Tech	Assistant professor	Automobile	Nil

11 List of senior visiting faculty: Nil

12 Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty: Nil

13 Student -Teacher Ratio (programme wise): 1:15

14 Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Staff	Sanctioned	Filled
Technical Staff	03	02
Administrative Staff	01	01

15 Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. : 01

16 Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17 Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

18 Research Centre /facility recognized by the University: Automobile Department - Recognized by VTU Belgaum

19 Publications:

a) Publication per faculty

b) Number of papers published in peer reviewed journals (national / international) by faculty and students - Maintained in Annexure as the list is Big

20 Areas of consultancy and income generated: Nil

21 Faculty as members in

i. **National committees b) International Committees c) Editorial Boards :** NIL

22 Student projects

i. **Percentage of students who have done in-house projects including inter departmental/programme:**

Sl. No.	Academic Year	% of students
01	2012-2013	85
02	2013-2014	81
03	2014-2015	85

ii. **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:**

Sl. No.	Academic Year	% of students

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01	2012-2013	12
02	2013-2014	20
03	2014-2015	15

23 Awards / Recognitions received by faculty and students

Our Department students secured 8 ranks during 2012-2013 under VTU, Karnataka

Our Department students secured 3 ranks during 2013-2014 under VTU, Karnataka

Our Department students secured 5 ranks during 2014-2015 under VTU, Karnataka

STUDENTS PARTICIPATION IN COMPETITION AT

1. Dewanshu Setiya has secured 2nd prize in AUTO WISSEN 2012

- Joy Pansari has secured 1st & 2nd prizes in 5 Cultural programmes.
 - Inter-collegiate cultural fest- New Horizon, 5th-6th October 2012 won 3rd prize
 - East West Institution won 2nd Prize, on 26-28th May 2012
 - JSS academy- 1st place, on 26-28th April 2012
 - SJBIT- 3-4th May, 2012 won 2nd prize
 - AMC college won 1st place, on 25th April 2012
- Anoop Desai has participated in AUDI fat track test drive on NICE road.
- Students of 3rd semester participated in SAE sponsored Baja National competition in Indore, Madhya Pradesh during February 16th -21st 2012.
- Students of 5th semester participated in SAE sponsored Baja National competition in Indore, Madhya Pradesh during February 18th -21st 2013.
- Students of 7th semester pursuing their EFFICYCLE project –a National Competition
- Dewanshu Setiya won 2nd prize in a National Conference (Auburn-12) paper presentation held at Trichy, TN on 27th & 28th September 2012.
- A Workshop on Aero models was conducted by M/s Jaypee Group for 150 students in the department on 14th -16th Sept 2012.
- Darshan Ankith Kumar (5th Sem) and Richie Kushalappa B (7th Sem) took part in the annual Mahindra Auto Quiz, 2013 held on 23rd Nov 2013 at MSRIT, Bangalore.
- Students of 3rd, 5th & 7th Semester participated in the National Go-Kart championship held in Kholapur, Maharashtra on 17th -19th Oct 2013 and won 1st place in Acceleration test & Assembly & Disassembly test, and the team qualified for International Go-kart championship to be held in Jallandar, Punjab in March 2014.
 - Team Supra is building a 600cc Formula I (F1) car based on the virtual held at KIIT, Bhubaneswar in 21st -25th of August 2013.
 - Virtuals of Efficycle 2013 held in Dayananda Sagar College of Engineering from July 13th - 14th, 2013.
 - Two day department fest “OTTOMANIA 13” was held on 29th & 30th April 2013.

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24 List of eminent academicians and scientists / visitors to the department

- (vi) Dr. Ranganayakalu Scientist 'G', General Systems, DRDO, Bangalore.
- (vii) Mr. B M Ravi M.D of M/s. Madhus Garage Equipment Pvt. Ltd., Bangalore
- (viii) Mr Sahadev Panch Senior General Manager of M/s Bosch

25. Seminars/ Conferences/Workshops organized & the source of funding

a. National: Nil

b. International: ONE

S.No.	Conference Title Name	National/ International	Year in which conference was organized
1	International Conference on Convergence Science Engineering & Management Education & Research 2013, DSCE	International	2013
2	Two Day Workshop on “ Welding Challenges in Automotive Engineering” 20-21 Feb, 2015. Organized by Automobile Engineering, DSCE and Indian Welding Society, Bangalore Centre.	National	2015
3	Role of Mechanical Engineering and Computational Science for a Sustainable Future” was held on 25th and 26th of September .	National	2015
4	“Advances in Mechanical Engineering and Applied Sciences”	National	2016

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
NIL	NIL	NIL	NIL	NIL	NIL

*M = Male *F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from Abroad
Automobile	50	48	2%

UG- B.E- AU	No. of students admitted									
Year	SC	ST	GM	OBC	TOTAL	TOTAL	Karnataka	Non-Karnataka	NRI	Foreign

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	M	F	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F
2009-10	4	0	2	0	33	2	14	1	53	3	56	27	2	26	1	0	0	0	0
2010-11	5	0	0	0	42	0	13	0	60	0	60	35	0	24	0	0	0	1	0
2011-12	4	0	1	0	43	0	11	0	59	0	59	37	0	21	0	1	0	0	0
2012-13	4	0	1	0	41	0	16	0	62	0	62	40	0	22	0	0	0	0	0
2013-14	4	1	2	0	41	0	15	0	62	1	63	41	1	21	0	0	0	0	0
2014-15	4	0	1	0	41	2	12	0	58	2	60	43	2	15	0	0	0	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? NIL

29. Student progression – Annexure Maintained.

30. Details of Infrastructural facilities

- a. Library: Department library has 150 books for the students benefit
 - b. Internet facilities for Staff & Students: Internet facility available for staff and students and also with WIFI connection.
 - c. Class rooms with ICT facility: Projector, Black board and White board
 - d. Laboratories: Three laboratories available as per the VTU curriculum
- 31. Number of students receiving financial assistance from college, university, government or other agencies :** Financially weaker students are supported with Scholarships.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Ajit. K., DGM.(production), WeldCraft, Peenya,Bangalore. Has given a guest lecture on Aug, 2011.

Dr.Ashitav Ghosal , Professor ,IISc delivered a guest lecture on “Design and Manufacture of Robotics”-Sept ,2011 .

Prof.A Raghunandan of PG Studies of Oxford College of Engineering delivered a guest lecture on “Analogies in Thermal Engineering”-Oct,2011.

Dr. C S Ramesh , Prof ,Mechanical Engg, PESIT delivered a lecture “Practical Applications of FEA” – Feb, 2012.

Dr Badrinath former ISRO Director delivered a talk on “Thermal Controls of Satellite Systems”-Aug 2012.

Dr. Venkat Sunti ,Professor,IISc on “Engine Noise Control”

Mr. Balakrishna,COO, M/s Maini Precision Products on “Case Study in Manufacturing Problem of Automobile Ancillary Production”.

Mr. B M Ravi M.D of M/s. Madhus Garage Equipment Pvt. Ltd., Bangalore delivered a guest lecture on “Emerging Trends in Automobile Garage Equipments & Their Job Potential” on 28/10/2014

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Mr Sahadev Panch & Ashwin Thondavadi of M/s Bosch delivered a guest lecture on “Denox” on 25/08/2014

Mr Pavan Kumar Singh of M/s L&T alumni of DSCE, Automobile Engg., shared his academic and professional experience on 26/09/2014

33. **Teaching methods adopted to improve student learning**

Conventional methods, Presentation through LCD projectors, Providing E-learning resources viz, NPTEL, VTU e resources, Providing softcopy of Lecture notes, assignments, Tutorials and conducting Technical quiz, practical application relevant to subject are discussed during teaching

34. **Participation in Institutional Social Responsibility (ISR) and Extension activities**

- Providing financial support for OXFAM a recognized NGO
- Students participated in blood donation camp

35. **SWOC analysis of the department and Future plans**

<u>STRENGTH</u>	<u>WEAKNESS</u>
▪ Highly qualified, well trained and experienced faculty ▪ Well established classrooms with LED overhead projectors. ▪ Well Established Automobile Lab with the following facilities – CNC Wheel balancing, CNC Wheel aligner, Emission Testing equipments, Cut-section model of Automobile engines etc. ▪ Teaching faculties are pursuing Ph.D and are actively involved in research. (90% of staff are registered for PhD) ▪ Top ranking Automobile students are pursuing higher studies in Germany, USA and Italy. ▪ Students of Automobile department are placed in Mercedes-Benz, Tech-Mahindra, Continental, Infosys, Cognizant, HCL, L&T Construction and Infotech, PACE, mu-sigma, Mahindra and Mahindra	▪ Job opportunities in core companies inadequate (Automobile) ▪ R and D Activities (funded projects)

Evaluative Report of the Department

- 1. Name of the department:** BIOTECHNOLOGY
- 2. Year of Establishment:** 2006
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 - UG: B.E. – Biotechnology
 - PG: M.Tech – Bioinformatics
 - MSc. (Res & Engg)
 - Ph.D– Biotechnology/Allied Sciences
- 4. Names of Interdisciplinary courses and the departments/units involved:** NIL
- 5. Annual/ semester/choice based credit system (programme wise):**

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Semester based system for both the programmes.

UG: B.E. – Biotechnology

PG: M.Tech - Bioinformatics

6. Participation of the department in the courses offered by other departments: NIL

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:
NIL

8. Details of courses/programmes discontinued (if any) with reasons: NIL

9. Number of teaching posts:

UG: B. E. Biotechnology

	Sanctioned	Filled
Professors	3	3
Associate Professors	4	4
Asst. Professors	8	8

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Sl. No.	Name of the Teaching Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
01	Dr. S. Kiran	Ph.D.	Professor & Head	Plant tissue culture	21	04
02	Dr. G. A. Ravishankar	Ph.D.	Professor	Plant Biotechnology	40	02
03	Dr. G. S. Jagannatha Rao	Ph.D.	Professor	Biochemistry	45	01
04	Dr. N. Rajeswari	Ph.D.	Assco. Professor	Genetics	20	02
05	Dr. Sahabudeen .S	Ph.D.	Assco. Professor	Neurotoxicology	04	Nil
06	Dr. Nagamani S. Khandre	Ph.D.	Assco. Professor	Biochemistry	16	Nil
07	Dr. Sinosh Skariyachan	Ph.D.	Assco. Professor	Microbiology & Bioinformatics	11	Nil
08	Dr. Shinomol George	Ph.D.	Asst. Professor	Biochemistry	10	Nil
09	Dr. K. M. Kumar	Ph.D.	Asst. Professor	Bioinformatics	05	Nil
10	Mr. Madhu .H	BE, M. Tech (Ph.D)	Asst. Professor	Chemical Engg.	6.7	Nil
11	Ms. Shilpashree .N	BE, M. Tech	Asst. Professor	Bioinformatics	3	Nil
12	Ms. K. Supreetha	M.Sc.	Asst. Professor	Biotechnology	5	Nil
13	Ms. Manasa V Anand	BE, M. Tech	Asst. Professor	Chemical Engg.	2	Nil

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14	Ms. Arpitha B.M	BE, M. Tech	Asst. Professor	Bioinformatics	2	Nil
15	Ms. Bhanu Revathi K	BE, M. Tech	Asst. Professor	Biotechnology	3	Nil

11. List of senior visiting faculty: NIL

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: NIL

13. Student -Teacher Ratio (programme wise): 15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

DETAILS OF SUPPORTING ACADEMIC SUPPORT STAFF (TECHNICAL)

STAFF (including Commercial Plant Tissue Culture Lab)

Details of Supporting Non-Technical Staff are given in the Table Below

Sl. No.	Name of Technical Staff	Qualification	Designation	Date of Joining in DSCE	Total Experience (in yrs)
01	Shashank A.T	M.Sc	Project Assistant	18-Mar-13	03
02	Rashmi	BE, PG Diploma	Lab Instructor	14 – Dec-15	0.3
03	Prabhakar	M.Sc	Lab Instructor	14 – Dec-15	0.3
04	Sohan .R	PUC	Lab Attender	06 – Sep - 08	10.6
PLANT TISSUE CULTURE LABORATORY STAFF					
05	G. Sundar Kumar	PUC	Lab Technician	26-May-08	18
06	S. Siddaraju	PUC	Lab Technician	26-May-08	19
07	Narayana .M	X	Lab Technician	26-May-08	18
08	Nataraja .D	PUC	Lab Technician	20-Jul-10	15
09	Ashwathanarayan .T	X	Lab Technician	13-Apr-11	12
10	Balakrishana .V	X	Lab Technician	11-Oct-10	13
11	Muniraju .H	X	Lab Technician	06-Mar-13	10
12	Hanumantha J.M	X	Lab Assistant	21-Jan-09	12

DETAILS OF SUPPORTING ADMINISTRATIVE STAFF (NON – TECHNICAL) STAFF

Sl. No.	Name of the Office Staff	Qualification	Designation	Date of Joining In DSCE	Experience in Present College/ Organization (Years)	Previous Exp. College/ Organization (Years)	Total Exp. (Years)
1	Radha . N	BBM	Office Asst.	27.06.2008	7.6	2.0	9.6

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15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Sl.No.	Name of the Teaching Faculty	Qualification
01	Dr. S. Kiran	Ph.D.
02	Dr. G. A. Ravishankar	Ph.D.
03	Dr. G. S. Jagannatha Rao	Ph.D.
04	Dr. N. Rajeswari	Ph.D.
05	Dr. Sahabudeen .S	Ph.D.
06	Dr. Nagamani S. Khandre	Ph.D.
07	Dr. Sinosh Skariyachan	Ph.D.
08	Dr. Shinomol George K	Ph.D.
09	Dr. K. M. Kumar	Ph.D.
10	Ms. Shilpashree .N	BE, M. Tech
11	Ms. K. Supreetha	M.Sc.
12	Ms. Manasa V Anand	BE, M. Tech
13	Ms. Arpitha B.M	BE, M. Tech
14	Ms. Bhanu Revathi K	BE, M. Tech

16. Number of faculty with ongoing projects from

a) National b) International funding agencies and grants received

SPONSORED PROJECT

Sl. No.	Coordinator / PI/Co-PI	Project Title	Funding Agency	Amounts received	Year of Sanction	Status
01	Dr. N. Rajeswari	DNA Methylation studies on Glioma tissue samples using High resolution melting (HRM) based quantitative analysis	DBT	Rs.24.24 lakhs	2015	1 st installment Rs. 11.76 lakhs released
02	Dr.G.A. Ravishankar PI Dr. S. Kiran Co-PI	Influence of Stress on Metabolites with Nutritional Value and Protective Function of Indian and Bulgarian Soybean Genotypes obtained by Biotechnology and Genetic Methods	DST	Rs. 11.40 lakhs	2014	1 st installment Rs. 3.8 lakhs released
03	Dr. Saroja Narsing Rao - PI Dr. G.S.Jagannatha Rao - Co-PI	Siderophore monooxygenase – A potent drug target for tuberculosis and other bacterial diseases	DBT, Women Scientist category	Rs. 34.6 lakhs	2014	1 st installment Rs. 8 lakhs released
04	Biotechnology Department	Biotechnology Finishing School	Government of Karnataka	Rs. 1 Crore	2011	Ongoing

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TOTAL - A	Rs. 1,83,54,000	

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

COMPLETED PROJECTS

Sl. No.	Coordinator / PI/Co-PI	Project Title	Funding Agency	Amounts received	Year of Sanction	Status
1	Mr. Sinosh Skariyachan	Prudent Elucidation of Physiochemical & bacterial characteristics of Byramangala Tank, Ramanagara District	VGST/ SPiCE, GoK	Rs. 0.30	2011	Completed
2	Dr. N. Rajeswari	An observational longitudinal prospective study to evaluate genes expressed in Notch pathway, prognosis and treatment response in gliomas	DST	Rs. 18.42 lakhs	2010	Completed
3	Dr. S. Kiran Co-PI	High Volume Propagation and Development/ Refinement of protocol of selected Bamboo species (2007-2010)	NMBA-DST	Rs. 27.55 lakhs	2007	Completed
TOTAL - B				Rs. 46,27,000		
GRAND TOTAL				Rs. 2,29,81,000		

PROJECTS FROM KSCST

Sl. No.	Guide	Project Title	Amounts received	Year of Sanction
1.	Dr. Sinosh Skariyachan	Application of Novel thermophilic bacterial consortia screened from cow dung as an eco-friendly approach for the degradation of plastic garbage in Bengaluru city	Rs. 6,000	2016
2.	Dr. Shinomol George K	Amelioration of oxidative stress in acrylamide induced neurotoxicity <i>in vitro</i> using aged garlic extract, S-ally cysteine, N-acetyl cysteine	Rs. 6,000	2016
3.	Dr. S. Kiran	Production of Efficient grade biodiesel from azolla filliculoides and extraction of nutraceuticals (DHA, EPA) from remaining processed fatty acids	Rs. 5,000	2015
4.	Mr. Sinosh Skariyachan	Formulation and characterization of novel plastic degrading microbial consortia isolated from various places of Bangalore city and study of their bio degradation potential	Rs. 8,000	2015
5.	Mr. Madhu H.N	Preparation of innovative cross linked pva gels for bone fracture dressing application using herbal products	Rs. 7,000	2015
6.	Mr. Sinosh Skariyachan	Selection and Screening of Microbial consortia for efficient and eco-friendly degradation of plastic wastes in urban and rural areas of Bangalore	Rs. 5,000	2014

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7.	Mr. Madhu H.N	Energy efficient algae bio mass cultivation for sustainable bio diesel and bio gas production	Rs. 10,000	2013
8.	Mr. Madhu H.N	Photo bioreactor design for continuous hydrogen production using Micro algae	Rs. 9,000	2012

18. Research Centre /facility recognized by the University:

- ❖ YES in 2010 by *Visvesvaraya Technological University, Belagavi*
- ❖ YES in 2015 by *University of Mysuru, Mysuru*

RESEARCH FOCUS AT THE DEPARTMENT

Under the guidance of Dr. S. Kiran, Professor and Head and Dr. G. A. Ravishankar, Professor the Department has focused on several research initiatives. The following are our department mandates:

Mandates:

The specific mandates of the Centre are to:

- Enhance research infrastructure.
- Expand and develop faculty research capability.
- Initiate multi-disciplinary research programmes with a special focal theme in the areas of nanomedicine, cancer biology and regenerative medicine (Stem cells biology).
- Develop an interface with the industry.
- To establish a Masters Program in Forensic Genetics.

Current, Ongoing Projects:

- Crop Biotechnology and Agriculture: **(Dr. G. A. Ravishankar and Dr. S. Kiran)**
 - Large scale production of commercially important plants through tissue culture techniques such as Banana & Ornamentals.
- Enhancement of isoflavene level of Soybean by using VAM and Elicitor **(Dr.G.A. Ravishankar and Dr. S. Kiran)**
 - Collection of Soybean genotypes.
 - Standardized the tissue culture protocol.
 - Applied the VAM fungi to Soybean genotypes and monitored the plant effect.
- Cancer Biology **(Dr. N. Rajeswari)**
 - Genetic and Epigenetic analysis of cancer
- Bioinformatics and Rational Drug Design **(Dr. Sinosh Skariyachan)**
 - Molecular modeling of various drug targets.
 - Computer aided virtual screening for novel natural ligands.
 - Screening of novel therapeutic agents against the selected drug targets.
- Siderophore monooxygenase – A potent drug target for tuberculosis and other bacterial diseases **(Dr. Saroja Narsing Rao).**

19. Publications:

- * Publication per faculty
- * Number of papers published in peer reviewed journals (National / International) by faculty and students

The following Table provides the number of publications from each faculty:

Sl. no	Faculty name	Publications	
		From DSCE	Total
1.	Dr. G. A. Ravishankar	03	243
2.	Dr. G. S. Jagannatha Rao	00	60
3.	Dr. S. Kiran	10	13
4.	Dr. N. Rajeswari	15	30

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5.	Dr. Sahabudeen .S	00	13
6.	Dr. Nagamani S.K	00	03
7.	Dr. Shinomol George K	03	16
8.	Mr. Sinosh Skariyachan	31	31
9.	Mr. Madhu. H. N	04	04
10.	Ms. Manasa. V. Anand	02	02
11.	Ms. Bhanu Revathi .K	01	01
12.	Ms. Arpitha. B. M	11	11

BOOKS WRITTEN BY FACULTY

Sl. No	Year of Book Published	Name of the Faculty	Title of the Book Published	Publisher
1.	2012	Dr. Rajeswari .N Associate Professor	Micronucleus Test: Buccal Cell Assay	LAP LAMBERT Academic Publishing ISBN 9783-659-24-129
2.	2012	Mr. Sinosh Skariyachan Assistant Professor	Introduction to Food Biotechnology	CBS Publishers & Distributors Pvt. Ltd. ISBN 978-81-239-2207- 2
3.	2015	Mr. Sinosh Skariyachan Assistant Professor	Inhibition of virulence potential of <i>Vibrio cholerae</i> by natural compounds	Genomics and Drug discovery, River Publishers , Germany

Students Publication

International Publications with students (2012-2015)

- Skariyachan S, Acharya A, Subramaniyan S, Babu S, Kulkarni S, Narayanappa R (2015). Secondary metabolites extracted from marine sponge associated *Comamonas testosteroni* and *Citrobacter freundii* as potential antimicrobials against MDR pathogens and hypothetical leads for VP40 matrix protein of Ebola virus: An *in vitro* and *in silico* investigation. *J Biomol Struct Dyn*.18:1-19.
- Skariyachan S, Mahajanakatti AB, Grandhi NJ, Prasanna A, Sen B, Sharma N, Vasist KS, Narayanappa R (2015). Environmental monitoring of bacterial contamination and antibiotic resistance patterns of the fecal coliforms isolated from Cauvery River, a major drinking water source in Karnataka, India. *Environ Monit Assess*. 187(5):279. doi: 10.1007/s10661-015-4488-4
- Skariyachan S, Prasanna A, Manjunath SP, Karanth SK, Nazre A (2015). Exploring medicinal potential of the mushroom fruit bodies of *Pleurotus ostreatus* (Jacq.: Fr.) P. Kumm., against multi-drug resistant bacterial isolates. *Int J Med Mushrooms*. (Accepted, In Press).
- Skariyachan S, Pachiappan A, Joy J, Bhaduri R, Aier I, Vasist KS (2015). Investigating the therapeutic potential of herbal leads against drug resistant *Listeria monocytogenes* by computational virtual screening and *in-vitro* assays. *J Biomol Struct Dyn*. 11:1-13
- Patil P, Skariyachan S, Mutt E, Kaushik S (2015). Computational analysis of the domain architecture and substrate-gating mechanism of prolyl oligopeptidases from *Shewanella woodyi* and

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identification probable lead molecules. *Interdiscip Sci Comput Life Sci.* (doi: 10.1007/s12539-014-0244-7).

6. Skariyachan S, Megha M, Kini MN, Mukund MK, Rizvi A, Vasist K (2014). Selection and screening of microbial consortia for efficient and ecofriendly degradation of plastic garbage collected from urban and rural areas of Bangalore, India. *Environ Monit Assess.* 187 (1): 4174.
7. Skariyachan S, Narayan NS, Aggimath TS, Nagaraj S, Reddy MS, Narayanappa R (2014). Molecular modeling on streptolysin-O of multidrug resistant *Streptococcus pyogenes* and computer aided screening and in vitro assay for novel herbal inhibitors. *Curr Comput Aided Drug Des.* 10 (1): 59-74.
8. Skariyachan S, Rao AG, Patil MR, Saikia B, Bharadwaj KNV, Rao GSJ (2014). Antimicrobial potential of metabolites extracted from bacterial symbionts associated with marine sponges in coastal area of Gulf of Mannar Biosphere, India. *Lett Appl Microbiol.* 58(3): 231-241.
9. Mahajanakatti AB, Murthy G, Sharma N, Skariyachan S (2014). Exploring inhibitory potential of curcumin against various cancer targets by *in silico* virtual screening, *Interdiscip. Sci.* 6(1): 13-24.
10. Skariyachan S, Lokesh P, Rao R, Kumar AU, Vasist K, Narayanappa R (2013). A pilot study on water pollution and characterization of multidrug resistant superbugs from Byramangala tank, Ramanagara district, Karnataka, India. *Environ Monit Assess.* 185(7): 5483-5495.
11. Skariyachan S, Jayaprakash N, Bharadwaj N, Narayanappa R (2013). Exploring insights for virulent gene inhibition of multidrug resistant *Salmonella typhi*, *Vibrio cholerae*, and *Staphylococcus aureus* by potential phytoligands via *in silico* screening. *J Biomol Struct Dyn.* 32(9): 1379-1395.
12. Skariyachan S, Prakash N, Bharadwaj N (2012). *In silico* exploration of novel phytoligands against probable drug target of *Clostridium tetani*. *Interdiscip Sci Comput Life Sci* (2012) 4: 1-10.
13. Skariyachan S, Mahajanakatti AB, Sharma N, Karanth S, Rao S and Rajeswari N (2012). Structure based virtual screening of novel inhibitors against multidrug resistant superbugs, *Bioinformation* 8(9): 420-425.
14. Skariyachan S, Bharadwaj N, Prakash N (2012). Computer aided virtual screening and selection of novel phytoligands against shigellosis, *International Journal of Current Research.* 4(5): 84-90.
15. Skariyachan S, Krishnan RS, Siddapa SB, Salian C, Bora P and Sebastian D (2011). Computer aided screening and evaluation of herbal therapeutics against MRSA infections. *Bioinformation* 7(5): 222-233.

Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

* Monographs: NIL

* Books Edited: 03

* Citation Index: Available for each Publication

* SNIP: Nil

* SJR: Nil

* Impact factor: 0.57 and above

* h-index: Available for each Publication

20. Areas of consultancy and income generated:

- Plant tissue culture unit at Department of Biotechnology:

Plant tissue culture unit at Department of Biotechnology is established to provide an improved variety of Banana and ornamental plants

The following are the firms with whom consultancy work is associated and income is generated.

Firms:

1. Shri. Chandra Naik, Hemavathi Nursery, Ranebennur
2. Shri N. V. Byrappa Nursery, Chikkaballapura
3. Sri Anjanadri Nursery, Hassan
4. Sunglow Biotech, Coimbatore

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Sl. No.	Year	Income generated in Rs	Total
1.	April 2010 – March 2011	6,82,800	50,66,850
2.	April 2011 – March 2012	12,41,000	
3.	April 2012 – March 2013	9,62,000	
4.	April 2013 – March 2014	4,12,500	
5.	April 2014 – March 2015	8,93,550	
6.	April 2015 – March 2016	8,75,000	

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards....

The following are the faculty members in various committees

- a. Dr. G. A. Ravishankar selected as Expert Member of Department of Science and Technology, Government of India, New Delhi in its International Division of Carbon dioxide sequestration Task Force.
- b. Dr. G. A. Ravishankar was appointed as Chairman of Board of Studies in Biotechnology by VTU, Belgaum. 2013-till date
- c. Dr. S. Kiran, BOE Member, VTU 2011-12, 2014-15
- d. Dr. N. Rajeswari, BOE Member, VTU 2013-14, 2015-16
- e. Prof. G. S. Jagannatha Rao appointed as Adjunct Faculty at
 - UNT Health Science Centre, Texas, USA.
 - Richand College, Dallas, Texas, USA.
- f. Dr. Sinosh Skariyachan, BOE member, Calicut University, 2007-till date.
- g. Dr. Sinosh Skariyachan – Journal Editorial Board Member.
- h. Dr. Shinomol K George – Journal Editorial Board Member.

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/ programme
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies

Sl.no	Academic year	in-house projects	Projects outside the college	Total no of projects
1	2015	09 groups	01 groups	10
2	2014	10 groups	02 groups	12
3	2013	09 groups	02 groups	11

23. Awards / Recognitions received by faculty and students;

The following table enlists the awards /Recognitions by Faculty

- a. Dr. G. A. Ravishankar was awarded the title CFS-Certified Food Scientist by Institute of Food Technologists of USA in June 2013.
- b. Dr. G. A. Ravishankar received GRAND MEDAL as Life time Achievements Award in Food Biotechnology from Society of Applied Biotechnology (India).
- c. Dr. N. Rajeswari - International Travel Grant Fellowship: International Travel grant received from SERB, DST (Ref No. ITS/4470/2015-16) to attend International conference "EMBL Cancer Genomics Conference" held at Heidelberg, Germany from November 1-4, 2015.
- d. Dr. Sinosh Skariyachan – American Society for Microbiology (ASM) Travel Grant, 2014. International Society of infectious disease, 2016
- e. Dr. Shinomol George K – International Brain Research Organization IBRO travel grants to attend 'Japanese Neuroscience Society Meeting (2015). University ranks of students

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UG

Sl. No	Year	Name	Rank
1.	2011 - 2012	USHA B. BIRADAR	➤ University Topper for all the branches of Engg., ➤ 1 st Rank in Biotechnology Engg.,
2.		RAO SHRUTI KRISHNAN	8 th Rank, Biotechnology Engg.,
3.	2012 - 2013	NISHA G.J	1 st Rank in Biotechnology Engg.,
4.		NAVYA C.P	9 th Rank, Biotechnology Engg.,
5.	2013 - 2014	LAMIYA ALI	3 rd Rank in Biotechnology Engg.,
6.		SAGAR GOYAL	4 th Rank in Biotechnology Engg.,
7.	2014 - 2015	DISHA MOHAN BANGALORE	3 rd Rank, Biotechnology Engg.
8.		SANGEETHA R	1 st Rank, Biotechnology Engg.
9.		SUBIYA SULTANA	2 nd Rank, Biotechnology Engg.
10.		S.R. APOORVA	6 th Rank, Biotechnology Engg.
11.	2014 - 2015	ARCHANA B ACHARYA	7 th Rank, Biotechnology Engg.
12.		CHANDANA JOIS	9 th Rank, Biotechnology Engg.
1.	2014 - 2015	SUMAN KAMATH	1 st Rank, M.Tech Bioinformatics
2.		NAIK SOWMYA LAXMI NARAYAN	2 nd Rank, M.Tech Bioinformatics

ACHIEVEMENT AND AWARDS

- Research Centre recognition by Visvesvaraya Technological University (VTU) in 2010.
- Research Centre recognition by University of Mysuru in 2015.
- Results – High percentage of FCD's and FC's in all semesters.
- R&D Center for Life Sciences is registered under DSIR since 2012 and renewed in 2015-2018.
- Started the Association of Microbiologist of India (AMI), Bangalore Chapter under the official approval by AMI Central Committee, 2012.
- BT Finishing School awarded by Government of Karnataka has been started from September 2011. The course is in process (1 year Course affiliated to Karnataka State Open University) One Crore grant has been given by Govt. of Karnataka.

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- g. Department has Organized an International Conference on “Frontiers in Carcinogenesis and Cancer Prevention: Scientific Advances and Public Health Initiatives” on February 16-19, 2011. (38 overseas participants).
- h. MOU with Institution – Kennasaw State University, Georgia – USA.
- i. MOU with Institution – Ural Federal University, Russia.
- j. 13 Students and 2 Faculty from Kennesaw State University majoring in Biology are visiting the Department of Biotechnology for training Life Science domain for a period of 9 days during **August, 2014**.
- k. 16 Students and 2 Faculty from Kennesaw State University majoring in Biology are visiting the Department of Biotechnology for training Life Science domain for a period of 9 days during **August, 2015**.

STUDENTS PARTICIPATION/AWARDS IN THE EVENTS- Annexure Maintained

24. List of eminent academicians and scientists / visitors to the department

The following table gives the details of visitors to the department.

Sl. No.	Name of the scientists / visitors to the department	Date and Year
1.	Prof. S. S. Easwaran, Academic Director, Biocon Academy, Bangalore, gave a lecture on “Trends and Opportunities in Indian Biotech Segment & Collaborative Outreach for Skill Development”	24.03. 2016
2.	Dr. Kumaresan M D, Senior Director, Global Delivery Network, Quintiles, Bangalore, Gave a lecture on “Contemporary Perspectives of Biological and Biosimilars” .	27.02.2016
3.	Dr. K. V. Venketesh, Department of Chemical Engg., IIT, Mumbai provided lecture on Evaluation of Phenotypic Space in Metabolic Networks – Connecting Genotype to Phenotype.	12.02.2016
4.	Mr. Vishwas V, alumni (2006-10 Batch), MS in water resources and environmental management, Leibniz university hannover, Germany Career opportunities	14.08.2015
5.	Mr. Narasimha Sharma, Alumni(2007-11 Batch) Associate Project (Healthcare Division), Cognizant career opportunities	08.08.2015
6.	Mathew J Palakal and Suman Nayak (School of Informatics and computing, Indiana University – Purdue University) Career Opportunities in Biotechnology in US Universities	18.09.2015
7.	Dr. Meenakshi Singh, Scientist, CSIR, Delhi “Food Safety & Standards Authority of India (FSSAI)”	10.10.2015
8.	Dr. K.V. Venkatesh, Professor, Chemical Engineering - IIT Bombay “Evaluation of Phenotypic Space in Metabolic Networks – Connecting Genotype to Phenotype”	30.03.2015
9.	Dr. Jagadish Mittur, Head, BT Facilitation Cell, KBITS Department of IT BT and S&T, GOK Career opportunities in Biotechnology	31.03.2015
10.	Dr. Leela Mythri, Scientist and Mr. Shamsurya Narayanan, Project Think, Bangalore Innovative opportunities in Life Sciences: Group dynamics	09.08.2014
11.	Dr.B.Obul Reddy, University of Heidelberg, Germany. Inauguration of Activities for 2014-15	29.12.2014
12.	Dr. Jagadish Mittur, Head – BT Facilitation Cell, KBITS – Department of IT BT and S&T, GOK	14.03.2014
13.	Dr. Georgina Kosturkova, Scientist, Bulgaria Academy of Sciences, Bulgaria	01.02.2014

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14.	Dr. Ravi Vannella, Ph.D.Assistant Professor (Research), Biodesign Institute, Arizona State University	04.09.2013
15.	Mr. Justin V. Thomas,Leeds Clinical Services Private Ltd, Bangalore	10.09.2013
16.	Prof. D. J. Bagyaraj, Senior member of AMI and Fellow of the Association	25.02. 2013
17.	Dr. Ramanujam, Senior Vice Presidents, CoMocell (Life Sciences Association)	19.10.2012
18.	Dr. Jamboor K. Vishwanatha, Dean, Graduate School of Biomedical Sciences, Univ. of North Texas Health Science Centre, USA	14.03.2012
19.	Madavan Vasudevan, Director, Research & Training, BIONIVID	8 Nov, 2011
20.	Dr. Geetha, Sr. Scientist, Invitrogen Bioservices	18.09.2010
21.	Dr. Subodh Kulkarni, Head, R&D, Merck Millipore India Pvt. Ltd	16.09.2010
22.	Mrs. Preetha Thilak, Scientist, Department of Anatomy, St. John's Hospital	26.08.2010
23.	Dr. H.G. Nagendra, Prof. & Head, Dept. of Biotechnology, Sir MVIT, Bangalore	16.08.2010
24.	Dr. Jamboor Vishwanatha, Dean, Graduate School of Biomedical Sciences, UNTHSC,USA	8.02.2010
25.	Matheu, V. Kodibagkar, Dr. Vidya Shankar, KPFF Consulting engineer, Dr. K.U.Muthu, Head & Prof. MSRIT, Dr. Chandra Kishan, Professor IISc. etc.,	21-23 April, 2010
26.	Dr. B. V. Ravi Kumar, Chairman & Managing, Director, XCyton Diagnostics Limited, Bangalore	11.04.2009
27.	Dr. D. N. Rao, Professor, Dept. of Biochemistry, IISc., Bangalore	21.02.2009
28.	Dr. Kal Ramnarayan, CEO, Focus Synthesis, CA, USA	31.12.2007

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National b) International SEMINAR / CONFERENCE CONDUCTED

Sl. No.	Topic of the Seminar/Conference	Name of the Speaker	Date and Year
1.	Advances in Synthesis and separation in chemical and biological processes	NCASSCB 2016	16-17 Feb, 2016
2.	Utilization of Bio-diversity for Value added products: Food, Pharma, Nutraceuticals and Biofuels	NCUBD-2015	25-26 Sep,2015
3.	Science Day "Food is source for living on world food day"	Professor Chetan, fssai	16.10.2015
4.	International conference on Convergence of Science, Engineering & Management in Education & Research	Dr. Sivasubramanyam, Phyco Spectrum, Chennai Dr. Viswanadhan, Vice President R&D, Jubilant Biosys Dr. A. Ramakrishna, Scientist, Mosanto India, Bangalore Dr. Chandramouli Ganesh, Director, Unilever, Bangalore	26-27 Sep, 2013
5.	Association of Microbiologist, Bangalore Chapter	Dr. K. P. Gopinathan, Professor Emeritus, IISc, Bangalore Dr. D. J. Bagyaraj, INSA, Sr. Scientist, Bangalore Dr. S. G. Prapulla, Chief	15 May, 2013

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		Scientist, CFTRI, Mysore Dr.V. Nagaraja, Professor & Chair, IISc, Bangalore Dr. M. S. Thakur, Chief Scientist, CFTRI, Mysore Dr. K. N. Shashikanth, Former Quality control Head, Britannia India Ltd.	
6.	Seminar	Prof. U. R. Rao, Chairman, KSTA/Chairman, PRL Council, ISRO	19 – 20 Dec.,2012
7.	International Conference on “Frontiers in Carcinogenesis and Cancer Prevention: Scientific Advances and Public Health Initiatives”	Dr. Paul Brandt-Rauf, Univ. of illinois, Chicago, Dr. Gopala Kovvali, President Carcongenesis Foundations etc. (38 overseas participants)	16-19 Feb, 2011
8.	International Conference on “Convergence of Science & Engineering in Education&Research – A Global Perspective in the New Millennium”	Matheu, V. Kodibagkar, Dr. Vidya Shankar, KPFF Consulting engineer, Dr. K.U.Muthu, Head & Prof. MSRIT, Dr. Chandra Kishan, Professor IISc. etc.,	21-23 April, 2010
9.	National Conference on Genomics, Proteomics and Systems Biology	Three International and Twelve National speakers presented plenary lectures	1-3 Oct 2008

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Name of the Course/programme (refer question no. 4)	Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
B.E. BIOTECHNOLOGY	2009 - 2010	60	53	20	33	100%
B.E. BIOTECHNOLOGY	2010 - 2011	60	60	28	32	100%
B.E. BIOTECHNOLOGY	2011 - 2012	60	53	14	39	97.7%
B.E. BIOTECHNOLOGY	2012 - 2013	60	46	14	32	100%
B.E. BIOTECHNOLOGY	2013 - 2014	60	54	12	42	100%
B.E. BIOTECHNOLOGY	2014 - 2015	60	45	08	37	100%

26. Student profile programme/course wise: Annexure Maintained with 4 years data

*M = Male *F = Female

27. Diversity of Students

Name of the Course	Year	% of students from the same state	% of students from other States	% of students From abroad
B.E. BIOTECHNOLOGY	2009 - 2010	73.58	26.41	0
B.E. BIOTECHNOLOGY	2010 - 2011	71.66	28.33	0
B.E. BIOTECHNOLOGY	2011 - 2012	73.58	24.52	1.88
B.E. BIOTECHNOLOGY	2012 - 2013	84.78	15.21	0
B.E. BIOTECHNOLOGY	2013 - 2014	77.77	22.22	0
B.E. BIOTECHNOLOGY	2014 - 2015	86.66	13.33	0

28. How many students have cleared national and state competitive examinations such? as NET, SLET, GATE, Civil services, Defense services, etc. ?

Sl. no	Batch	Number of students who cleared GATE, PG CET, GRE, TOFEL
1	2007	13
2	2008	12
3	2009	07

29. Student progression

Batch 2007

Strength=45

Student progression	Against % enrolled
UG to PG	11
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	24
• Campus selection	
• Other than campus recruitment	
Entrepreneurship/Self-employment	

Batch 2008

Strength=44

Student progression	Against % enrolled
UG to PG	27
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA

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Employed	12
• Campus selection	
• Other than campus recruitment	
Entrepreneurship/Self-employment	

Batch 2009

Strength=46

Student progression	Against % enrolled
UG to PG	14
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	20
• Campus selection	
• Other than campus recruitment	
Entrepreneurship/Self-employment	

30. Details of Infrastructural facilities

a) Library

DEPARTMENTAL LIBRARY FACILITIES

Sl. No	Particulars	Availability
1.	Number of titles of the books	200
2.	Number of volumes of the books	215
3.	Number of Journals (National & International)	Nil
4.	Furniture	Table -04 Chairs - 12
5.	Stacking & Seating area	Racks - 08

b) Internet facilities for Staff & Students

COMPUTING FACILITIES

Sl.No	Particulars	Availability
1.	Number of computers Terminals	23
2.	Hardware Specification	P III, 1 GB Ram, 80GB HD
3.	No. of Terminals on LAN/WAN	23
4.	Relevant Legal Software	Downloadable from internet
5.	Peripherals	

c) Class rooms with ICT facility Made Available

d) Laboratories

Area of Laboratories in Square Meter is given in the Table Below

Sl. No.	Course	Required	Available in the Department	Lab Area Shared with other Department*	Total Area Available	% Short Fall
		K	L	M	N=L+M	(K-N)/Kx100
01	Biotechnology	525	735.68	513.42	1,249.1	Nil

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LABORATORY DETAILS

SL. NO.	Year	Semester	Code	Laboratory	Room No.	Carpet Area in m ²
1.	II	III	10BTL37	Biochemistry	2.06	59.46
			10BTL38	Unit Operations	MMT&MO/G001 CH Dept.*	328.02
		IV	10BTL47	Cell and Molecular Biology	3.07	107.02
			10BTL48	Microbiology	3.08	88.30
2.	III	V	10BTL57	Genetic Engineering and Immunotechnology	3.07	107.02
			10BTL58	Bioinformatics	DSI Computer Centre – 3.04	98.11
		VI	10BTL67	Bioprocess Control and Automation	HT&PC LAB BLOCK CH Dept.*	185.40
			10BTL68	Biokinetics and Enzyme Technology Lab		
3.	IV	VII	10BTL77	Upstream Processing	3.08	88.30
			10BTL78	Downstream Processing	MMT&MO/G001 CH Dept.*	209.43
		VIII	10BT85	Project Work	Labs of R&D Centre, 5 th Floor (5.06,5.07, 5.08)	198
4.	Research Laboratory					
5.	Plant Tissue Culture Laboratory				5.01, 5.02, 5.03 & 5.09	184.79
6.	Green House				BTR 7	111.48

* Shared with Chemical Engineering Department

31. Number of students receiving financial assistance from college, university, government or other agencies For SC/ST/OBC scholarship from Govt of Karnataka.

Academic year	2011-12	2012-13	2013-14	2014-15
Number of students	5	3	2	Yet to received
Total amount sanctioned	162510	113150	82330	

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

The following programmes are conducted to bridge the curricular gaps in various subjects

- Guest lectures, invited talks, seminars.
 - Workshop.
 - Discussing case studies.
 - Student presentations.
 - Group discussion.
 - Technical quiz programme.
- a. A panel of experts from industry and academia are actively involved in the designing and revising the curriculum.
 - b. The department signed MOUs with various industries such as Biozeen etc.

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- c. Students are encouraged to carry out the internships and training program in institutes such as IISc, NIMHANS, BIOCON etc.
- d. Experts from various industries are included in the department advisory committee to provide inputs about the industry needs and standards to the curriculum.
- e. The department has organised technical talks and guest lectures by the experts from industries and institutes to enhance the knowledge of the students in various fields of basic science and engineering.
- f. Faculty participated in various faculty developing programs and workshops conducted by several scientific bodies such as ASM, EMSI, AMI etc.
- g. The final year students are encouraged to peruse their project work in collaboration with several industries such as GKVK, DRDO, Metahelix, azymes, NIMHANS, K.C.Das, Leeds, etc, to enhance their domain knowledge.

Note : Annexure Maintained

33. Teaching methods adopted to improve student learning:

Apart from VTU prescribed syllabus some of the methods are employed for better learning

1. Posters, 2. Quiz, 3. Seminars.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Association of microbiologists of India (AMI), Bangalore chapter, made a effort to reach needy persons in Uttarakhand natural disaster in 2013 by providing a nutritious microbial product **SPIRULINA**. The team headed by Dr.G.A.Ravishankar along with an NGO at Dehradun.

35. SWOC analysis of the department and Future plans:

Strength:

1. Highly qualified teaching faculty.
2. VTU recognized R&D centre, having national funded projects like DST and DBT.
3. Effective teaching learning process which resulted in top ranks at VTU level.
4. Strong consultancy in the area of Plant Biotechnology.

Weakness:

1. Lower CET rank students.
2. Low Industry Institute Interaction.

Opportunities:

1. Signing MOU with premier research institutes and core biotechnology industry.
2. Training students for overall growth to suit the societal demand.

Challenges:

1. Campus recruitment in core Biotechnology Company.

Future plan:

1. To become centre of excellence in Biotechnology

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EVALUATIVE REPORT OF THE DEPARTMENT

1. **Name of the Department** : Department of Chemical Engineering
2. **Year of Establishment:**
UG-Established in the Year 1982.
PG-Established in the Year 2007.
PhD – Established in the Year 2003.
3. **Names of Programmes / Courses offered (UG, PG, M.Phil, Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 - i) UG In Chemical Engineering
 - ii) PG in Chemical Engineering
 - iii) PhD in Chemical Engineering
4. **Interdisciplinary courses and departments involved** : Mathematics, IEM, Biotechnology.
5. **Annual/ Semester /choice based credit system**
UG- semester system
PG – semester system
(PG is autonomous from 2015-16 onwards)
6. **Participation of the department in the courses offered by other departments**
Design (Solid Edge, CAD), Biotechnology, IEM (MSME) entrepreneurship.
7. **Courses in Collaboration with other Universities, Industries, Foreign Institutions etc.** NIL
8. **Details of Courses/Programmes Discontinued. If any with reasons.** NIL
9. **Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst.Professors)**

	Sanctioned	Filled
Professors	02	02
Associate Professors	04	04
Asst.Professors	10	10
10. **Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D/M.Phil., etc)**

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Name	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D students guiding in the last 4 years
Dr.Ravishankar.R	PhD	Prof & Head	Chemical Engineering	22	04 Msc Engg – completed.
Dr.Murthy Shekhar.S	PhD	Professor	Chemical Plant Design	24	
D.C.Sikdar	M.Tech	Associate Professor	Chemical Plant Design	29	
B.R.Veena	M.Tech (PhD)	Associate Professor	Chemical Engineering	27	
G.K.Mahadeva Raju	ME (PhD)MBA (HR)	Associate Professor	Chemical Engineering	26	
S.M.Desai	ME(PhD)	Associate Professor	Chemical Engineering	24	
Rajani.M.R.	M.Tech (PhD)	Assistant Professor	Environmental Engineering	12	
B.S.Thirumalesh	M.Tech	Assistant Professor	Chemical Plant Design	11	
Pradeep.H.N.	M.Tech (PhD)	Assistant Professor	Chemical Plant Design	12	
Deepa.H.A.	M.Tech	Assistant Professor	Chemical Engineering	07	
Manjula.P	M.Tech(PhD)	Assistant Professor	Chemical Engineering	02	
Sathya.T	M.Tech(PhD)	Assistant Professor	Chemical Engineering	06	
S.Priya	M.Tech (PhD)	Assistant Professor	Chemical Engineering	08	
Roopa Farshi	M.Tech (PhD)	Assistant Professor	Chemical Engineering	08	
Karthik.K.V.	M.Tech(PhD)	Assistant Professor	Chemical Plant Design	04	
Mahesh Kumar	Msc Engg	Assistant Professor	Chemical Engineering	07	

Professor		Associate Professor		Assistant Professor	
Male	Female	Male	Female	Male	Female
02	---	03	01	04	6

11. List of Senior Visiting Faculty –NIL

12. Percentage of Lectures delivered and practical classes handled(Programme wise) by temporary faculty- NIL

13. Programme-wise Student Teacher Ratio - 15:1

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14. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Sanctioned	Filled
Technical Staff	5	2+1
Administrative Staff	3	3

15. Qualifications of Teaching Faculty with (D.Sc./D.Litt./Ph.D/M.Phil/ PG)

Name	Qualification
Dr.Ravishankar.R	PhD
Dr.Murthy Shekhar.S	PhD
D.C.Sikdar	M.Tech
B.R.Veena	M.Tech (PhD)
G.K.Mahadeva Raju	ME (PhD)MBA (HR)
S.M.Desai	ME (PhD)
Rajani.M.R.	M.Tech (PhD)
B.S.Thirumalesh	M.Tech
Pradeep.H.N.	M.Tech (PhD)
Deepa.H.A.	M.Tech (PhD)
Manjula.P	M.Tech(PhD)
Sathya.T	M.Tech(PhD)
S.Priya	M.Tech (PhD)
Roopa Farshi	M.Tech (PhD)
Karthik.K.V.	M.Tech(PhD)
Mahesh Kumar	Msc Engg

16. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.

On Going Projects

Name of Faculty	National or International Funding	Title	Funding Agency	Grant Amount	Year of Grant	Remarks
Mrs.Priya.S	State	Production of Biohydrogen from waste organic materials by Fermentation	KSCST	Rs.6000/-	2015-16	On Going
Mrs.Roopa Farshi	Bangalore Region	Characterization of millet based ready to use product	BRC, IICHE	Rs.5000/-	2015-16	On Going
Mrs.Priya S	Bangalore Region	Hydrogen Production from Organic Waste by Fermentation	BRC, IICHE	Rs.5000/-	2015-16	On Going
Mr.Karthik K V	Bangalore Region	Production of Electricity from Waste material (urine)	BRC, IICHE	Rs.5000/-	2015-16	On Going

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Completed Projects

Dr.Ravishankar,R	International	UKIERI-PTS on Health and Safety	British Council	14 Lakhs	2009-10	Completed
D.C.Sikdar	State	Development of Biohydrogen Dependent fuel Cell using Microalgae	KSCST	9000/-	2011-12	Completed
Mrs.Roopa Farshi	State	Reduction of Municipal Plastic Waste by catalytic degradation to Produce fuel	KSCST	5000/-	2012-13	Completed
Thirumalesh.B.S.	State	Removal of Heavy Metals using combination of Rice Husk, Coconut Shell, Sea Shell, Activated carbon and Commercial Zeolite as adsorbents-A case study using Industrial”	KSCST	5300/-	2013-14	Completed
Prof.S.C.Maidargi	State	“Manufacture of C-11 Compound from Castor Oil”	KSCS T	8000/-	2013-14	Completed
G.K. Mahadeva Raju	National	MODROBS for Momentum Transfer Lab	AICTE	5,00,000/-	2013-14	Utility Certificate sent balance money awaited
Dr. Ravishankar R	State	FDP on “Recent advances in Downstream processing”	VTU - VGST	2,00,000/-	2015-16	Completed
Mrs.Deepa.H.A.	State	“Characterization and Applications of Activated Carbon Prepared From Corn Cobs”	KSCST	7000/-	2015	Completed
Mrs Deepa H.A	Bangalore Region	“Characterization and Applications of Activated Carbon Prepared From Corn Cobs”	IICHE, BRC	5000/-	2015	Completed
Mrs.Priya.S	Bangalore Region	“Study on growth Kinetics of the bacterium Thermatogo Maritima for hydrogen production”.	IICHE, BRC	5000/-	2015	Completed

17. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received - NIL

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18. Research facility: Research Centre with: State recognition –Department is recognized as Research Centre by Visveshwaraya Technological University, Belgaum

19. Publications – Annexure Maintained

❖ Chapter(s) in Books- 3

Name of faculty	Details of book chapter
Dr.Ravishankar R	Title: Carbon Sequestration Publisher: Dayananda Sagar Institutions ISBN No: 978-93-85682-12-4
Dr. Murthy shekhar	Title: Carbon Sequestration Publisher: Dayananda Sagar Institutions ISBN No: 978-93-85682-12-4
D. C Sikdar	Title: Production of Starch From Mango (MagniferIndica L.) Seeds Kernel and its Characterization Publisher: Dayananda Sagar Institutions ISBN No: 978-93-85682-12-4

❖ Books with ISBN numbers with details of publishers

Name of the Faculty	Name of the Book	ISBN No	Details of Publishers	
D.C.Sikdar	Chemical Process Calculations	978-81-203-4782-3	PHI Learning New Delhi(2012)	
D.C.Sikdar	Instrumentation & Process Control	81-7409-222-6	Khann Publishers New Delhi(2007)	
D.C.Sikdar	Chemical Engineering Thermodynamics	978-81-7409-254-0	Khann Publishers New Delhi(2015)	
S.C Maidargi	Chemical equipment design and drawing volume -I	978-81-203-4496-9	PHI Learning New Delhi(2011)	

- ❖ Number listed in International Database (For e.g. web of Science, Scopus, Humanities, International complete, Dare Database – International Social Sciences Directory, EBSCO host, etc.)
- ❖ Citation Index – range /average
- ❖ SNIP
- ❖ SJR

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- ❖ Impact factor- range / average
- ❖ H- index

20. Areas of consultancy and income generated

1. Testing of Biomass Sample – Consultancy service to Honey Well Technology Solutions Lab Pvt Ltd, Bangalore-560 226.
Amount Rs 20,000/-
2. Material balance and theoretical yield of the product HALQUINOL B.P 80- Consultancy service to Karnataka Nutraceuticals India Limited.
Amount Rs. NIL

21. Faculty as members in – NIL

- a) National Committees
- b) International Committees
- c) Editorial Boards

22. Student projects

UG

- Percentage of students who have done in-house projects including inter-departmental

YEAR	TOTAL NO OF PROJECTS	IN –HOUSE PROJECT	PERCENTAGE
2015-16	12	11	92%
2014-15	16	16	100%
2013-14	13	11	84.6%
2012-13	14	8	57.1%
2011-12	11	6	54.5%
2010-11	11	6	54.5%

- Percentage of students doing projects in collaboration with industries /institutes

YEAR	TOTAL NO OF PROJECTS	PROJECT Collaboration with industries /institutes	PERCENTAGE
2015-16	12	01	8%
2014-15	16	0	0
2013-14	13	2	15.4%
2012-13	14	6	42.8%
2011-12	11	5	45.5%
2010-11	11	5	45.5%

PG

- Percentage of students who have done in-house projects including inter-departmental

YEAR	TOTAL NO OF PROJECTS	IN –HOUSE PROJECT	PERCENTAGE
2015-16	06	0	0
2014-15	16	04	25%
2013-14	09	01	11%

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2012-13	16	01	6%
2011-12	10	01	10%
2010-11	06	01	16%

- Percentage of students doing projects in collaboration with industries /institutes

YEAR	TOTAL NO OF PROJECTS	PROJECTS In Collaboration with industries	PERCENTAGE
2015-16	06	06	100%
2014-15	16	12	75%
2013-14	09	08	88.88%
2012-13	16	15	93.75%
2011-12	10	09	90%
2010-11	06	05	84%

- Awards/ recognition received by Faculty & Students at the national and international level by Faculty**

Name of the Faculty	Award	Date of Award	Place of Award	Amount
Prof.D.C.Sikdar	Best Project Award	22/12/2012	Bio Fuel Bord , Bangalore.	Rs 50,000/-

Students

Sl.No.	Name of the Student	Award Name	Date of Award	Place of Award	National/ International
1	Ms.Pavithra Ms.Dhanya.B.C. Sathya Shivani Suvana Chutia of 8 th Sem 2012	Best Project Award	11 th May 2012	RVCE Bangalore by Indian Institute of Chemical Engineers, Bangalore Regional Centre.	State Level
2	Ms.Pairmala Prasad	National Scholarship award	9 th March 2013	National Academy of Sciences, Bangalore	National
3	Mr.George Jeevan	The Best Libro	13 th March 2013	APSCE, Bangalore	State Level
4	Mr.Chirayu D Belthur Mr.George Jeevan Mr.Ranjan Athreyas Mr.Ramesh	Best Project Award	14 th May 2013	MVJCE, Bangalore.	State Level
5	Ms.Madhuri Manjunath Ms.Nagashree.M.R Ms.Nagarpita Ms.Apoorva	Second place in Best project Award	17 th May 2014	Organized by IICHE- BRC, at BMSCE Bangalore	State Level
6	Ms.Keerthi.B.R. Ms.Ujwala.K Mr.Santhosh.H.B. Mr.Harsha.V	Project of the Year	29 th July 2014	At KLE Society's BVB College of Engineering and Technology, Hubli.	State Level
8	Ms.Swetha Karanth	Paper presentation	28 th March 2015	MSRIT, Bangalore	National Level
9	Mr.Vinay S Ms.Siri Hegde	Poster Presentation (First Place)	30 th September 2015	BIET, Davangere	National Level
10	Mr.Vishwanath.M Ms.Prathiksha P	Poster Presentation (Second Place)	30 th September 2015	BIET, Davangere	National Level

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	Prabhu				
11	Ms.Bhanushree R Ms.Harshitha Pai	Oral Paper (Second Place)	30 th September 2015	BIET, Davangere	National Level
12	Mr.Vikas Gunaki	Poster Presentation (First Place)	9 th October 2015	Sastra University, Thanjavur	National Level
13	Mr.Vinay S Ms.Siri Hegde	Paper Presentation (First Place)	31 st October 2015	MIT, Manipal	National Level
14	Ms. Susmitha Kushary Ms. Roshnee Das Mr. Viswa Mehta Mr. Gaurav Navlani	Second Place in Best Project Award	14 th May 2016	SIT, Tumkur	State Level

23. List of eminent academicians and scientists / visitors to the department - Annexure Maintained.

24. Seminars/ Conferences/Workshops organized and the source of funding (national/ international) with details of outstanding participants, if any.

Sl	Title of the Event Organized	Type of Event	Source of Funding	Place of Event	Date of Event	No. of Participants
1	“Leveraging Innovation For Chemical Sciences ”	Seminar	DSCE	Premchandra sagar auditorium, DSCE	May 2011	10
2	CFD Studies on Static Mixes-an Introduction”	Workshop	DSCE	Chemical Engineering Seminar Hall	16/6/2011	12
3	“Solid Edge”	Work Shop	DSCE	DSCE	20 th to 29 th july2011	Prof.Shivashan kar shrivatsa “solid edge” in Mechanical Department.
4	Chemovation 12	National Conference	KSPCB	CD Sagar Hall, DSCE	5 th & 6 th March 2012	70 participants from different parts
5	“The Science and art of coffee along the value chain”.	Seminar	DSCE	CD Sagar Hall	21/09/2012	500 Members
6	“Modeling Competition	Seminar	DSCE	Chemical Engg Dept , DSCE	9/10/2012	13 teams+200 Students
7	“Chemical Day”	Seminar	DSCE	CD Sagar Hall	25/3/2013	100 member s
8	International Conference on Convergence of Science, Engineering & Management in Education & Research”(ICCSEM)	International Conference	DSCE	Premchandra Sagar Auditorium	26 th & 27 th September 2013	600 Member s
9	“Opportunities for chemical Industries”	Workshop	DSCE	Chemical Engineering Dept	24 th October 2013	50 Members
10	Chemovation’14	National Level	KSPCB, DSCE,	CD Sagar	28 th & 29 th March 2014	220 Members

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		Symposium	Kuberan Silks, K-Pack			
11	National Conference on Utilization of Bio diversity for Value Added Products: Food, Pharma Nutraceutical and Biofuels (NCUBD-2015)	National Conference	DSCE, M/s Deeksha instruments	CD Sagar Hall & Class Rooms in CD Sagar	25 th & 26 th September 2015	150 Members
12	National Conference on “Advances in Synthesis and Separations in Chemical and Biological Processes” NCASSCB 2016	National Conference	DSCE, Flow & Force Engineers, MSME	CD Sagar Hall	16 th & 17 th Feb 2016	200 Members

25. Student profile course- wise

Name of the Course (refer question no.2)	Applications received	Total Admitted	Year	Selected		Pass percentage	
				Male	Female	Male	Female
Chemical Engineering	60	48	2010-11	31	17	64.58	35.41
	60	56	2011-12	34	22	60.71	39.28
	60	54	2012-13	32	22	59.25	40.74
	60	55	2013-14	39	16	70.90	29.09
	60	54	2014-15	34	20	62.29	37.03
	60	51	2015-16	29	22	56.86	43.13

26. Diversity of students

Name of the Course	Year	Total Number of Students	% of students from the college	students from the state		students from other States		students from other countries	
				Number of Students	Percentage	Number of Students	Percentage	Number of Students	Percentage
BE Chemical Engineering			---						
	2010-11	48	---	29	60.41%	19	39.58%	---	---
	2011-12	56	---	32	57.14	23	41.07	01	1.7%
	2012-13	54	---	35	64.81	19	35.18	--	--
	2013-14	55	---	28	50.90	24	29.16	03	1.5%
	2014-15	54	---	39	72	14	25.92	01	1.0%
	2015-16	51		38	74.50	12	23.52	1	1.0%

27. Details of students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

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Name of the Competitive Exam	Name of the Student	Year
BARC	Anusha R	2015-16
BARC	Manjunath Shavi	2015-16
BARC	Asha P	2015-16
GRE	Vivek Daga	2015-16
TOEFL	Vivek Daga	2015-16
TOEFL	Sushmita Kushary	2015-16
TOEFL	Pavithra Valliappan	2015-16
PGCET	Harshitha P	2014-15
Defence	Ashwin Y	2014-15
GRE	Shreyas Pathreker	2014-15
GRE	Vinays A V	2014-15
PI	Subhransu Dora	2014-15
GRE	Abhishek B Raju	2013-14
GATE	Nikhil Kumar	2013-14
GATE	George Jeevan A	2012-13
GATE	Parimala.S	2012-13
GATE	Prathusha Chenna	2012-13

28. Student progression

Student progression	No of students		Year	Percentage against enrolled
UG to PG	01		2011-12	
	02		2012-13	
	02		2013-14	
PG to M.Phil	----		--	--
PG to Ph.D	---		--	
PhD to Post Doctoral				
Employed	Campus	Other		
❖ Campus selection	26	---	2015-16	52.08
❖ Other than campus recruitment	33	---	2014-15	40.32
	17	33	2013-14	85.41
	28	32	2012-13	66.66
	24	13	2011-12	84.21
Entrepreneurs / Self Employment	4		2014-15	0.64
	3		2013-14	0.62
	5		2012-13	0.83
	2		2011-12	0.48

Present details about infrastructural facilities

a) Main Library

Sl no	Number of Books	Number of Journals
1	595	10

Department Library
Area 20.47 Sq ft

SI NO	YEAR	NO OF BOOKS	NO OF BOOKS	TOTAL NO OF

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		DONATED	PURCHASED	BOOKS
1	01/01/10 – 31/12/10	22	00	22
2	01/01/11 – 31/12/11	31	06	37
3	01/01/12 – 31/12/12	23	09	32
4	01/01/13 – 31/12/13	12	-	12
5	01/01/14 – 31/12/14	17	10	27
6	01/01/15—31/12/15	103	02	105
	TOTAL	208	27	235

b) Internet facilities for staff and students

Internet facility given to Staff and Students: 08+05=13

c) Total number of class rooms

04 Class Rooms

d) Class rooms with ICT facility- All Classrooms are with ICT Facility

e) Students laboratories

Sl No	Name of the Laboratory	Area(Sq Ft)
1	Momentum transfer laboratory	185.29 Sq.ft
2	Mechanical operations laboratory	
3	Pollution control laboratory	89.51 Sq.ft
4	Mass transfer laboratory	
5	Heat transfer laboratory	183.09 Sq.ft
6	Instrumentation analysis lab	43.54 Sq.ft
7	Process control	92.06 Sq.ft
8	Chemical reaction engineering	
9	Computer applications and simulation	44.60 Sq.ft
10	Computer aided chemical equipment drawing	
a) Research laboratories		
1	Biochemical Engineering Laboratory.	25.52 Sq.ft
Class Rooms		
1	NEB 101	95.25 Sq. ft
2	NEB 103	74.37 Sq. ft.
3	NEB 102	52.16 Sq. ft.
4	CH 201	49.45 Sq. ft.

29. Number of Students receiving financial assistance from college, university, government or other agencies SC/ST Scholarship (from government)

CHEMICAL ENGINEERING					
SL.NO.	FINANCIAL YEAR	ACADEMIC YEAR	NO. OF STUDENTS	TOTAL AMOUNT SANCTIONED in (Rs.)	SC/ST SCHOLARSHIP
1	2011-12	I YEAR	1	37,510.00	
		II YEAR	NIL	NIL	
		III YEAR	4	150,880.00	
		IV YEAR	NIL	NIL	
2	2012-13	I YEAR	1	42,710.00	
		II YEAR	1	37,720.00	
		III YEAR	3	112,060.00	
		IV YEAR	NIL	NIL	
3	2013-14	I YEAR	3	128,130.00	

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		II YEAR	NIL	NIL	
		III YEAR	2	67,860.00	
		IV YEAR	NIL	NIL	
4	2014-15	I YEAR	YET TO BE SANCTIONED		
		II YEAR			
		III YEAR			
		IV YEAR			
5	2015-16				

Department is giving scholarship to outstanding students in the name “Mr.H.Srinivas Rao and Mrs. Kamalamma Scholarships

Name of the Student	Year	Scholarship Amount
Mr.Prakash.N	2011-12	RS 10,000/-
Ms.Divya C N		Rs 10,000/-
Ms.Dhanyashree B.C		Rs 10,000/-
Mr.Jagannath Kyadappa		Rs 10,000/-
Ms.Keerthi.B.R	2012-13	Rs 10,000/-
Ms.Divyashree.R		Rs 5,000/-
Mr.Abdul Samad.B.M.		Rs 5,000/-
Prakash.N		Rs 5,000/-
Ramki.M.C		Rs 5,000/-
Ramesh		Rs 5,000/-
Chandan Bhat		Rs 5,000/-
Ms.Divya Shree.R	2013-14	Rs 8000/-
Ms.Keerthi.B.R.		Rs 8000/
Mr.Sudhir Kumar.H.K.		Rs 8000/
Ms.Brunda.M		Rs 8000/
Ms.Shashikala.		Rs 8000/
Mr.Sudhir Kumar H K	2014-15	Rs 10,000/-
Ms.Sowmya.B.A.		Rs 10,000/
Ms.Ranjana.P.N.		Rs 10,000/
Mr.Halesh.H.R		Rs 10,000/
Ms.Nisha.P	2015-16	Rs 8000/-
Ms.Sindhu.S		Rs 8000/
Ms.Sowmya B A		Rs 8000/
Ms.Ranjana P		Rs 8000/
Mr.Halesh H R		Rs 8000/

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30. Details on Student Enrichment Programmes (Special Lectures/Workshops/Seminar) with external experts

SI	Name of the Speaker	Area of Specialization	Date of the Talk
1	Dr.Y.J.Rao, Registrar, IICChE, Kolkata.	Academic	13-04-2011
2	Dr Anil Achyuta from Drapper Bio-Engineering centre ,Florida ,USA	Industry	17- 05- 2011
3	Mr.Ravindra H.C Vice president-Corporate Projects Indorma group, Jakarta-Indonesia	Industry	20-08-2011
4	Mr. Shivakumar. Siminfosystem, Chennai	Industry	08-09-2011
5	Dr. K Seshan, Faculty of Science & Technology University of Twente , Netherlands	Academic	15-09-2011
6	Mr.Sadashivaiah, Chairman, KSPCB & Mr.C.Bajgur, Shell Technology Ltd, Dr. LakshminarayanaSr. Env. Officer, KSPCB.	Industry	5 th & 6 th March 2012
7	Dr.P.S Rao (Director Life sciences, DSCE),	Academic	6 th March 2012
8	Dr. Jan-Olof Drangert, EM-Associate Prof, Linkoping University from Sweden	Academic	19/02/2013
9	Dr.Anand B Halgeri, Director, PPISR	Academic	27-02-2013
10	Dr.Balaram, Executive Director, Department of High Technology, Ministry Petroleum and natural gas	Industry	14.08.2013
11	Dr.Dhananjaya Dendukuri, CEO & Co-Founder , Achira Labs Pvt Ltd	Industry	20 th August 2013
12	Ms.Jothsna.M.C. Asso. Design Engineer Novata Engineering Pvt.Ltd. Bangalore.	Industry	5 th October 2013
13	Mr.Rajashekar & Mr.Cheluva Kumar PRENTAC, Bangalore	Industry	24 th October 2013
14	Mr.Laxminarasimhan,General Manager (Projects & Technologies) Shell Technologies, Bangalore	Industry	28 th March 2014
15	Dr.S.Manjappa, Special Officer VTU Regional Office , Bangalore	Academic	28 th March 2014
16	Mr.Purushotham, General Manager Karnataka Renewable Energy Development Limited(KREDL)	Industry	28 th March 2014
17	Mr.Venkateshwarulu, Secretary, National Safety Council, Bangalore	Industry	28 th March 2014
18	Mr.Pradeep Kumar Jain, Head, Pharma Manufacturing, Hikal Ltd	Industry	29 th March 2014
19	Dr.Sudhir Ranganath Post.Doc.R.F.JNCASR	Academic	29 th March 2014
20	Dr.Aruna ,Principal Scientist CSIR-NAL, Bangalore	Scientist	20 th May 2014
21	Mr.K.V.Venkatesh Professor in Chemical Engineering, IIT Bombay	Academic	20 th May 2014
22	Dr.J.R.Mudakavi Principal Research Scientist,	Scientist	16 th September 2014

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	IISC, Bangalore.		
23	Mr.Ravinath Shetty Unit Head,Cipla, Bangalore	Industry	16 th September 2014
24	Prof.Kamath Former Dean, NITK Surathkal	Academic	11.02.2015
25	Mr.S.Saimani, General Manager (Tech Development) Alkyl Amines Chemicals limited, Pune	Industry	18.02.2015
26	Mr.Shaik Mahammad Raffi, Consultant- Environmental Solutions	Industry	05.05.2015
27	Mr.S.Saimani, General Manager (Tech Development) Alkyl Amines Chemicals limited, Pune	Industry	05.05.2015
28	Dr. Nakkeeran E Associate Professor of Biotechnology, Sri Venkateswara College of Engineering, Pennalur,Irungattukottai ,Sripeumbudur	Academic	16.06.2015
29	Mr. Shivakumar Manager Process Engineering, Edgesolutions India	Industry	16.06.2015
30	Dr. Thomas Theodore Associate Professor, SIT, Tumkur	Academic	16.06.2015
31	Abhishek M Shrikant Associate,ResearchScientist Process safety and Engineering department Biocon Bristol Myers Squib R&D centre, Bangalore	Academic	17.06.2015
32	Dr. C. D. Madhusoodana Senior Deputy General Manager, Ceramic Technological Institute, Corporate R&D, Bharat Heavy Electricals Ltd., Bangalore	Industry	17.06.2015
33	Dr. Prasanna Belur.D Assistant Professor, Dept. of Chemical Engg., NITK Surathkal, Srinivasnagar, Mangalore	Academic	17.06.2015
34	Dr. I. Regupathi Assistant Professor, Dept. of Chemical Engg., NITK Surathkal, Srinivasnagar, Mangalore-	Academic	17.06.2015
35	Vikas Shetty CIPLA,	Industry	19.06.2015
36	Dr.A.R. Phani Managing Director, Innovative Nano & Micro Technologies Private Limited, Bangalore.	Industry	19.06.2015
37	Dr. Ganapathi Patil Kumar organics, Hassan,	Industry	19.06.2015
38	Dr. N. Srinivas Murthy Kemwell Biopharma, Bangalore. Research Scientist in AR&D	Industry	19.06.2015
39	Rajashekhar & Cheluva Kumar PRENTAC, Bangalore.	Industry	19.06.2015
40	Mr.Ravindra Asst. Vice President, Indorama Inc., Dubai, UAE.	Industry	18.08.2015
41	Prof.M.S.Mohan Kumar Secretary, KSCST.	Industry	25.09.2015
42	Dr.K.N.Ganeshaiah Professor, UAS, GKVK, Bangalore.	Academic	25.09.2015
43	Dr.Shama Rao Ex-Scientist, ADA	Academic	20.10.2015

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44	Dr.Raghavendra Director, Mayura Analytical Pvt Ltd,Bangalore.	Industry	20.10.2015
45	Dr.Shanth A Thimmaiah Director, Metamorphosis.	Industry	16.02.2016
46	Dr.H.S.Muralidhara President, Inceppcon, USA.	Industry	16.02.2016
47	Mr.Ranga Prasad Director, MSME.	Industry	16.02.2016
48	Ms.Pavithra Bailey IMDS Engineer	Industry	27.04.2016
49	Mr.Azim Shaikh Scientific Manager, Biocon, Bangalore.	Industry	17.05.2016

31. Teaching Methods adopted to improve student learning: PPT, Modeling, Case studies, Lecture Videos.

32. Participation in institutional social responsibility(ISR) and extension activities

ISR	Activity	Faculty Members	Year
Sri Krishna International School, Bangalore.	Collaboration with neighboring Schools of SEVP Program	Mrs.Deepa H A Mrs.Sathya.T Mr.Karthik.K.V. Mr.Mahesh Kumar	20.01.2014
Prarthana School & Mitralaya Girls High School	Change to Excel	Mrs.Rajani.M.R	09.01.2014
Dayananda Sagar University	Principal's Conclave	DCS, RR, KVK, PHN ,MK,BST,DHA, RF,GKM, Tara, Suma,	2016

33. SWOC analysis of the department and Future plans.

STRENGTHS:

- Adequate and qualified faculty and supporting staff.
- State of the Art equipments in laboratory.

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- Library with adequate numbers of books titles, journals, e-line journals.
- Scholarship to students on Merit cum means basis.

WEAKNESSES:

- Improvement required for R&D efforts
- Counseling of students for competitive examinations needs to be enhanced.
- Need to enhance interaction with industry for projects / consultancy.

OPPORTUNITIES

- On getting Autonomous status liberty to introduce topics required by industry.
- Many global R&D centers availability.

CHALLENGES.

- Less Chemical Industries nearby.
- Core industry placements.

RANK HOLDERS

Name of the Student	Rank Obtained	Year
Yashaswini S Vasisth	4 th Rank	2014-15
Shreyas Pathreker	5 th Rank	
Prabh Sharan	6 th Rank	
Kritika Mahantha	10 th Rank	
Dwani V Gowda	1 st Rank	2013-14
Nagarpita M V	2 nd Rank	
Abhishek B Raju	3 rd Rank	
Madhuri Manjunath	4 th Rank	
Nagashree M R	5 th Rank	2012-13
Ashish Kumar Mohapathra	7 th Rank	
Manish Kumar	8 th Rank	
Abdul Samad	9 th Rank	
Parimala S	2 nd Rank	
Shruthi S B	4 th Rank	
Chirayu D Belthur	5 th Rank	
Kaushik Kumar Khan	6 th Rank	
Vaishnavi Kathavi	7 th Rank	2011-12
Pooja R Hegde	9 th Rank	
Sakshi Nath	2 nd Rank	
Radha Kaimal	4 th Rank	
Nandita Chawla	7 th Rank	
Pavithra R	8 th Rank	
Bindu Chawla	1 st Rank	2010-11
Ravikumar Niraj	3 rd Rank	
PG		
Manisha Sonthalia	2 nd Rank	2014-15
Apoorva M A	3 rd Rank	
Shashikala K J	2 nd Rank	2013-14

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Dakshayini B S	1 st Rank	2012-13
Spoorthy N Patel	2 nd Rank	
Manasa V Anand	1 st Rank	2011-12
Veena Rani	2 nd Rank	
Rajeshwari P	3 rd Rank	

Evaluative Report of the Department

1. Name of the department: **Department of Chemistry**

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2. Year of Establishment
UG Established in the year-**1979**
Ph.D Established in the year-**2014**
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):
UG in Bachelor of Engineering
Ph.D in Chemistry
4. Names of Interdisciplinary courses and the departments/units involved : **Not applicable**
- 5 Annual/ semester/choice based credit system (programme wise) : **Semester**
- 6 Participation of the department in the courses offered by other departments
Department of Chemistry conducts one subjects for second year of BE Chemical Engineering
- 7 Courses in collaboration with other universities, industries, foreign institutions, etc.
Not applicable
- 8 Details of courses/programmes discontinued (if any) with reasons : NIL
- 9 Number of Teaching posts

Designation	Sanctioned	Filled
Professors	2	2
Associate Professors	7	7
Asst. Professors	6	6

- 10 .Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt.Ph.D. / M. Phil. etc.,)

Sl. No	Name	Qualification	Designation	Specialization
1.	Dr. K. S. Anantharaju	Ph.D.	Associate Professor & Head	Inorganic Chemistry
2.	Dr. C. Jayarama Naidu	Ph.D.	Professor	Liquid Dielectrics
3.	Dr. Bheema Raju V	Ph.D.	Professor	Solid State
4.	Dr. Dinamani M	Ph.D.	Associate Professor	Batteries
5.	Dr. Adinarayana Reddy P	Ph.D.	Associate Professor	Bio-inorganic
6.	Dr. R. B. Shivasankaraiah	Ph.D.	Associate Professor	Batteries
7.	Dr. K R. Vishnu Mahesh	Ph.D.	Assistant Professor	Physical Chemistry

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8.	Mrs. Lakshmi Devi K P	M.Phil	Associate Professor	Organic Chemistry
9.	Mrs. Chandrakala K S	M.Sc	Associate Professor	Physical Chemistry
10.	Mr. B R Thippeswamy	M.Sc	Assistant Professor	Organic Chemistry
11.	Mrs. Sunanda D	M.Phil	Associate Professor	Physical Chemistry
12.	Mr. Sennappan M	M.Phil	Assistant Professor	Chemical Kinetics
13.	Mr. Naveen Kumar T	M.Phil	Assistant Professor	Electro-chemistry
14.	Mrs. Malini S	M.Phil	Assistant Professor	Organic Chemistry
15.	Ms. Uma B	M.Sc	Assistant Professor	Dielectrics

11 List of senior visiting faculty : Nil

12 Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : Nil

13 Student -Teacher Ratio (programme wise) 60:1

14 Number of academic support staff (technical) and administrative staff; sanctioned and filled : Sanctioned: 4; Filled: 4

15 Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D (07)/ MPhil (05) / PG (03).
List enclosed above

16 Number of faculty with ongoing projects from a) National b) International funding Agencies and grants received: Nil

17 Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants Received: Nil

18 Research Centre /facility recognized by the University : **Yes**
State recognition- Department of Chemistry is recognized as Research center by Visvesvaraya Technological University, Belgaum.

19 Publications:
a) Publication per faculty: 10
b) Number of papers published in peer reviewed journals (national / international) by Faculty and students: 150

Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : 150

- * Monographs: 01
- * Chapter in Books: 11

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- * Books Edited: 06
- * Books with ISBN/ISSN numbers with details of publishers:
 - ❖ ISBN: 978-81-203-4279-8, PHI Learning Private Limited, New Delhi.
- * Citation Index:

Sl. No.	Name of the Faculty	Citation Index
1.	Dr. K. S. Anantharaju	300
2.	Dr. Adinarayana Reddy P	784
3.	Dr. K R. Vishnu Mahesh	101

- * SNIP: Available
- * SJR: Not available
- * Impact factor: Available
- * h-index: Available

Sl. No.	Name of the Faculty	h-index
1.	Dr. K. S. Anantharaju	12
2.	Dr. Adinarayana Reddy P	15
3.	Dr. K R. Vishnu Mahesh	6

20 Areas of consultancy and income generated : Nil

21 Faculty as members in

i.National committees b) International Committees c) Editorial Boards :

Dr. C. Jayaram Naidu and Dr. P. Adinarayana Reddy are the editorial members for the International journal of applied sciences and engineering (IJASE)

22 Student projects

i.Percentage of students who have done in-house projects including inter departmental/programme : Not applicable

ii. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies : Not applicable

23 Awards / Recognitions received by faculty and students :

Dr. P. Adinarayana Reddy: 1. Japanese Society Promotion of Science 2003-2005
2. Marie Curie International Incoming Fellow-2009-2011

24 List of eminent academicians and scientists / visitors to the department:

Details Mainatained as Annexure

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25 Seminars/ Conferences/Workshops organized & the source of funding

- a. National :03
- b. International : 01 c) Seminar: 01

26 Student profile programme/course wise:

Name of the Course: Engineering Chemistry	Total Number of Students	Enrolled		Pass percentage
		*M	*F	
B.E. (2015-16)	1468	1017	451	91
B.E. (2014-15)	1593	1123	470	80.5
B.E. (2013-14)	1564	1093	471	90
B.E. (2012-13)	1548	1153	395	92
B.E. (2011-12)	1341	940	401	91

Name of the Course: Engineering Chemistry	Total Number of Students	Enrolled		Name of the Course: Engineering Chemistry
B.E. (2015-16)	1468	1017	451	99
B.E. (2014-15)	1593	1123	470	98.5
B.E. (2013-14)	1564	1093	471	98
B.E. (2012-13)	1548	1153	395	97
B.E. (2011-12)	1341	940	401	97

27. Diversity of Students:

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.E. (2015-16)	73.6	26.2	0.2
B.E. (2014-15)	74.8	24.9	0.3
B.E. (2013-14)	62.8	36.1	1.1
B.E. (2012-13)	61.3	38.3	0.4
B.E. (2011-12)	60.8	38.4	0.8

28 How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? : Not applicable

29. Student progression : **Not applicable**

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Student progression	Against % Enrolled
UG to PG	
PG to M.Phil	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed	
- Campus selection - Other than campus recruitment	
Entrepreneurship/Self-employment	

30. Details of Infrastructural facilities

- a. Library: The library has a total collection of 100 books pertaining to Engineering Chemistry, Technical Chemistry and Instrumental Methods of analysis.
- b. Internet facilities for Staff & Students: Facilities have been provided for all the teaching staffs.
- c. Class rooms with ICT facility: First year B.E. lecture halls are provided with ICT facility which includes PC, LCD Projector and Internet facility.
- d. Laboratories: There are Three Laboratories catering to Ist Year Engineering students as well as 3rd and 4th Chemical Engineering students.

Engineering Chemistry	Lab I - 175 sq.mt.
Laboratory	Lab II - 167 sq.mt.
	Lab III- 98 sq.mt
Research Laboratory	75 sq.mt

31. Number of students receiving financial assistance from college, university, government or other agencies: Three research scholars receiving financial assistance from College and working in the field of Material Science.

Sl. No.	Name of the student	Date of Appointment
1	L. Renuka	11-09-2015
2	Krushitha Shetty	11-09-2015
3	K. Ashwini	11-09-2015

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts :

33. Teaching methods adopted to improve student learning: In addition to black board teaching power point presentation was also adopted.

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34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Sl. No.	Name of Speaker	Topic	Date of talk
1.	Dr. A R Phani	Guest lecture on Nanomaterials	23-09-2015
2.	Dr. R Manoharan	Guest lecture on Advances in Battery Technology	02-11-2015
3.	Dr. M R Devaraj	Guest lecture on Intellectual Property Rights and Procedure for obtaining patents	23-03-2016
4.	Dr. M Shekar Kumar	Guest lecture on 'Chemistry Aspects of Thermal Power Generation'	02-04-2016

- A group of 60 students studying in 10th Std. from Dayananda Sagar International School were given instructions followed by demonstration of experiments in volumetric and Instrumental analysis.
- Guidance was given to M.Sc., students studying in K.L.E. College, Rajajinagar in terms of Synthesis, Characterization and analysis of results for the project.

35. SWOC analysis of the department and Future plans :

Strengths:

- Highly regarded faculty with exceptional commitment to teaching
- Motivated research activities with active publishing
- Strong administrative leadership with well-honed organizational skills

Weaknesses:

- Lack of industry-department partnership
- Lack of product development and patents
- Lack of consultancy services

Opportunities:

- Collaborative programs in science and technology with reputed national and international organizations
- Industry-department interface programs
- Opportunities for real research project programs

Challenges:

- Updating the fast changing technology in the regular curriculum
- Exposure of students to the practical industrial experience
- Industry Relevance of Research and creation of World Quality academic and research ambiance

Future plans:

- To leverage contact with alumni to build centers of excellence
- To secure projects from funding agencies for research and development work
- Inter-institutional interactions across the nation

Evaluative Report of the Departments

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1. Name of the department – Department of Civil Engineering

2. Year of Establishment - 1979

3. Names of Programmes / Courses offered

(UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

UG – BE in Civil Engineering

PG – M-Tech in Structural Engineering, M-Tech in Highway Technology

MSc Engineering (Research) – Civil Engineering

PhD – Approved Research centre for all specialization in civil engineering

4. Names of Interdisciplinary courses and the departments/units involved – NA

5. Annual/ semester/choice based credit system (programme wise) –

UG – Semester

PG – Semester

6. Participation of the department in the courses offered by other departments

All the labs in Civil Engineering are shared by Construction technology and management and Civil Engineering department of Polytechnic institute.

7. Courses in collaboration with other universities, industries, foreign institutions, etc. –

Department made MOU with industries involved for Internship opportunities and Project for student with the

- 1) GBB CONSTRUCTION SOLUTION , No.14/16, Sri Venkateshwara Building, DVG Road, Basavanagudi.Bangalore-560004.
- 2) X-treme (Bangalore) Pvt. Ltd, No.32 1st Main, 2nd cross, Bikasipura, B.D.A Layout, BSK 5th Stage, Bangalore.
- 3) SriLakshmi Associates ,Consulting Engineers and Builders, # 2520, Sri Lakshmi, 14th Main , K.S.Layout, 2nd stage,Bangalore-560078

8. Details of courses/programmes discontinued (if any) with reasons - Nil

9. Number of teaching posts (1:2:6)

	Sanctioned	Filled
Professors	6	6
Associate Professors	12	5
Assistant Professors	29	32

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Sl No	Name of the Faculty	Qualification, University and year of graduation	Designation	Specialization

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1	Dr.NagarajSitaram	B.E (Bhopal University -1986), M.E (Mysore University -1989), Ph.D (IISc-1997),	Professor & Head	Hydraulics
2	Dr.NMunirudrappa	B.E (Bangalore University -1967), M.Tech (IIT Bombay -1969), Ph.D (Bangalore University-1981),	Professor	Earthquake Engineering
3	Dr.A.R.Rajendra	B.E (Bangalore University -1981), M.Tech (IIT Madras -1983), Ph.D (Kuvempu University-2009),	Professor	Geo Technical Engineering
4	Dr.M.Rajashekara	B.E (Bangalore University 1980), M.E(Bangalore University -1982), Ph.D (Bangalore University -2006),	Professor	Highway Engineering
5	Dr. Ramesh	BSc (Bangalore University – 1973) MSc (Bangalore University – 1975) PhD (Guwahati University-1995)	Professor	Geology
6	Dr.Krishnamurthy	B.E (Bangalore University -1981), M.Tech (IIT Madras -1983) M.Tech (IIT Delhi) PhD (IIT Delh)	Professor	Structural Engineering
7	Dr.Munirama Reddy	B.E (Nagarajuna University -1999), M.Tech (IIT Delhi -2004), Ph.D (IIT-Madras -2009),	Associate Professor	Structural Enginnering
8	Prof.B.T.SHIVENDR A	B.E (Bangalore University -1989), M.Tech (Mysore University -2005)	Associate Professor	Environmental Engineering
9	Mrs. R.SHANTHI VENGADESHWARI	B.E (Madurai Kamaraj University- 1995), M.E (Madurai Kamaraj University- 1997),	Associate Professor	Structural Engineering
10	Mrs. NeethuUrs	B.E (Mysore University-1999), M.Tech(Visvesvaraya Technological University -2002)	Associate Professor	Industrial Structures
11	Mr.MRITYUNJAY PANDEY	B.Tech (Utkl University, Odhisha- 1999), M.Tech(Anna University -2007)	Associate Professor	Structures
12	Mr.M.A.RAGHU	B.Tech(IIT Bombay-1979), M.S(Syracuse University, USA -1982)	Associate Professor	Structures

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13	Mrs. RESHMA E.K	B.E (Visvesvavaraya Technological University -2007), M.Tech (NITK - 2009),	Assistant Professor	Transportation Engineering and Management
14	Mr.SANTHOSH KUMAR PATIL	B.E (Visvesvavaraya Technological University -2007) M.E (Bangalore University-2010),	Assistant Professor	Earthquake Engineering
15	Mrs.SOWMYA H.N	B.E (Mysore University -1999), M.Tech(Visvesvavaraya Technological University -2002)	Assistant Professor	Environmental Engineering
16	Mr.Channabasavaraj Wollur	B.E (Visvesvavaraya Technological University -2010) M.E (Bangalore University-2012),	Assistant Professor	Geo Technical Engineering
17	Mrs.J.RANJITHA	B.E (Visvesvavaraya Technological University -2003) M.Tech (Visvesvavaraya Technological University -2006)	Assistant Professor	Highway Technology
18	Mrs.MEGHASHREE .M	B.E (Visvesvavaraya Technological University -2010), M.Tech (Visvesvavaraya Technological University -2012)	Assistant Professor	Structural Engineering
19	Mr.G.VENKATESH	B.Sc (Bangalore University -1997), M.Sc (Bangalore University -2000),	Assistant Professor	Geology
20	Mr.VINAY.A	B.E (Visvesvavaraya Technological University -2011) M.Tech (Visvesvavaraya Technological University -2013),	Assistant Professor	Highway Technology
21	Mr.VINOD.P.N	B.E (Visvesvavaraya Technological University -2011), M.Tech (Visvesvavaraya Technological University -2013),	Assistant Professor	Hydraulic Engineering
22	Mrs.C.K.SUSHMA	B.E (Bangalore University -2007), M.Tech (Visvesvavaraya Technological University -2010)	Assistant Professor	Industrial Structures
23	Ms.M.ARCHANA	B.E (Visvesvavaraya Technological University -2010) M.Tech (Bangalore University -2012),	Assistant Professor	Water Resources
24	Mr.P.G.ASHOKA	B.E (Visvesvavaraya Technological University -2003) M.E (Bangalore University -2006),	Assistant Professor	Construction Technology

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25	Mr.SHAILESH HUNDEKAR	B.E (Visvesvavaraya Technological University -2012), M.Tech (Visvesvavaraya Technological University -2014),	Assistant Professor	Hydraulics
26	Ms.TEJASWINI.M	B.E (Visvesvavaraya Technological University -2012), M.Tech (Visvesvavaraya Technological University -2014),	Assistant Professor	Environmental Engineering
27	Mr.H.N.SRIDHAR	B.E (Visvesvavaraya Technological University -2010)M.E (Bangalore University -2015)	Assistant Professor	Geotechnical Engineering
28	Mr.M.ABHISHEK TALAGERI	B.E (Visvesvavaraya Technological University -2012) M.E (Bangalore University -2015)	Assistant Professor	Structural Engineering
29	Ms.PARVATHI.K.S	B.E (Visvesvavaraya Technological University -2011) M.Tech (Visvesvavaraya Technological University -2014)	Assistant Professor	Water and Land Management
30	Mrs.P.S.TEJASWINI	B.E (UVCE -2009) M.Tech (Visvesvavaraya Technological University -2011)	Assistant Professor	Structures
31	Mr.CHANDRASHEKAR.V.C	B.E (Visvesvavaraya Technological University -2012) M.Tech (PESCE, Mandya -2014)	Assistant Professor	structures
32	Mr.SANTHOSH.M. MALKAPUR	B.E (Visvesvavaraya Technological University -2005) M.Tech (NITK, Suratkall -2010)PhD(NITK, Suratkall – 2016)	Assistant Professor	Structural Engineering
33	Mr.NITIN KUMAR	B.E (UVCE -2011) M.Tech (UVCE - 2013)	Assistant Professor	Highway Technology
34	Mr.B.V.PRAMOD	B.E (Visvesvavaraya Technological University -2013) M.Tech (Visvesvavaraya Technological University -2015)	Assistant Professor	Construction Technology

11. List of senior visiting faculty - NIL

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12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty - NIL
13. Student -Teacher Ratio (programme wise)
PG – 1:6
BE – 1:15
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled - **09**
15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. – Same as 10
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received – One (Prof B T Shivendra, Associate Professor)
17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received
Our leading academics are addressing many of society's grand challenges in transport, the built environmental energy. The Students and the Faculty members are actively involved in the Research and Development Activities in the area of Structural Engineering, Highway Technology and Environmental / Water Supply Engineering. The Department is identified as Research Centre by the VTU. The Department also offers Master's and Doctoral Degree Research Program. Research work leading to Ph.D. Department has done several R D funded projects from KSCST, VTU, AICTE, UGC ISRO.

Grant Amount (Rs.)	Grant Details	Funding Agency	Investigator(s)
Rs.2.00 Lakhs	National workshop on Water and Energy (February –June 2014)	WRDO, GOK	Dr. H. K. Ramaraju
Rs.40,000/-	“Application of GIS /GPS in Civil Engineering Resource Management” (July 2013)	DRDO, GOI	Ms. Thanu Elizabeth Mathew & Ms. Meghashree M.
Rs.23.79 lakhs	“ Study of pollution mechanisms in urban aquifers of BBMP area by integrated geo physical, RS and GIS techniques”	ISRO, April 2013	Dr. H. K. Ramaraju
Rs.2.00 Lakhs	Water Cooperation : Building Partnerships” and Water user efficiency and integrated water resources management in Karnataka	Rural Development and Panchayat Raj Department, GOK (March 2012)	Dr. H. K. Ramaraju
Rs.7.0 lakhs	Assessing risk to ground water from pm-site sanitation systems in Bangalore-Urban District	AICTE, New Delhi. (2009)	Dr. H. K. Ramaraju
Rs.5.26 lakhs	An optimization of Municipal Solid Waste Flows: Environmentally Sustainable Strategies for Municipalities	UGC, New Delhi. (2009)	Dr. H. K. Ramaraju
Rs.4.00 Lakhs	Accelerate Biodegradation process of Municipal Solid Waste by co-culture Fungi and methanogens for Bio-Energy	VTU Sanctioned Proposal approved in June 2012 - 2014	Dr. H. K. Ramraju
Rs.25,000/-	World Water Quality	IWWA, Bangalore,	Dr. H. K. Ramaraju,

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	Monitoring Program	approved in October-2012	Dr. Girish K. H. and Prof. B. T. Shivendra
Rs.15,000/-	5 days short term course on “Preparing office tools for quantity estimation and design of conventional structures”	VTU Sanctioned Proposal approved in September 2012	Dr. A. R. Rajendra & Prof. K. N. Vishwanath
Rs.71,000/-	Workshop on the topic “Earthquake Resistant Design of Structures”	Ministry of Earth Sciences, in September 2012	Mrs. Shanthi Vengadeshwari & Mrs. Neethu Urs
Rs.2.43 lakhs	Rain Water Harvesting with Special Reference to Urban Areas (World Water Day celebration)	KUWDB Department, Government of Karnataka, approved in March 2012	Dr. H. K. Ramaraju
Rs.2.00 lakhs	‘Water Energy and Food Security’ (World Water Day celebration)	Rural Development & Panchayat Raj Department, Government of Karnataka (2012)	Dr. H. K. Ramaraju
Rs.10.19 lakhs	The studies on biodegradability potential of biomass in co culture by anaerobic fungi methanogens	AICTE Sanctioned Proposal approved in August 2011	Dr. H. K. Ramaraju

18. Research Centre /facility recognized by the University – Approved research centre by VTU

19. Publications:

* a) Publication per faculty

* Number of papers published in peer reviewed journals (national /international) by faculty and students

Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

* Monographs

* Chapter in Books

* Books Edited

* Books with ISBN/ISSN numbers with details of publishers

* Citation Index

* SNIP

* SJR

* Impact factor

* h-index

Request Details for last 5 Years (2011-12, 2012-13, 2013-14, 2014-15, 2015-16)

The list of Journal Publications by Faculty Members – Annexure Maintained

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20. Areas of consultancy and income generated – Nil

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards....

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme – 80 %

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies – 20 %

23. Awards / Recognitions received by faculty and students **Dr A R Rajendra – Professor**

Best teacher award

Grants received from KSCST			
Grant Amount (Rs.)	Title	Faculty	Year
Rs.4,500/-	Manufacturing of Eco-Bricks from Solid Waste	Prof. B. T. Shivendra	2014
Rs.3,500/-	Pushover Analysis (Nonlinear Static Analysis of RC Buildings using SAP Software)	Mr. Mohammed Ismail	2014
Rs.4,000/-	Phytoremediation	Mrs. Reshma E. K.	2013
Rs.4,000/-	Analysis of Strength Characteristics of Black Cotton Soil using Bagasse ash and Silica fume and fly ash as additives	Mr. Kiran R. G.	2013
Rs.4,000/-	Workability Study on Mix Properties of Self Compacting Concrete with different Cement replacement Materials for Optimum Ratio	Prof. K. N. Vishwanath and Sri. J. M. Srishaila	2013
Rs.4,000/-	Bacteriologic quality of Drinking Water and Sanitation in Doddaballapura Town	Prof. B. T. Shivendra	2013

24. List of eminent academicians and scientists / visitors to the Department

A Guest Talk on “Application of GIS in Civil Engineering Industry” Mr. Raghu Raj, Sunsoft Technologies, Bangalore.

A Guest Talk on “Scope of Civil Engineering in Power Transmission Projects” by Mr.Sunku S Lakshman KEC International Ltd , Jeddah, Saudi Arabia.

A Guest Talk on “Building Information Modeling (BIM)& its Benefits” Mr. Chandra Shekar L.H, Engineering Manager, BIM Solutions – Project Delivery, Tekla India Pvt Ltd, Bangalore

A Guest Talk on “Sustainable Technology For Civil Engineering” by Dr. B.C.Udayashankar, Pro & Head, Department of Civil Engineering, RV College Bangalore.

A Guest Talk on “Fourier Transform Infrared(FTIR) Spectroscopy Boon or Curse for Modified Bitumen” Dr.B.V.KiranKumar, Member TEQIP, Associate Professor, Department of Civil Engineering, Government SKSJIT, Bangalore

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

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b) International

2012-13				
Sl	Seminar, lectures, Technical events	Date	Title of the Program	Resource Person name and organization
1	conference	13, 14 th and 15 th Sept 2012	3 day short term course on a) preparing office tools for quantity estimation and design of conventional structures	VTU, BELGAUM
	conference	13, 14 th and 15 th Sept 2012	b) Seismic Design of structures for Disaster mitigation	Govt. of India. Ministry of Earth Sciences
2	Workshop organized to celebrate World Water Day at Premachandra Sagar Auditorium and A V Hall-Library	22-03-2013	National Workshop on “Water Cooperation : Building Partnerships” and Water user efficiency and integrated water resources management in Karnataka”	Rural Development and Panchayat Raj Water Resources Department Government of Karnataka
3	Workshop	26-04-2013	Workshop on Earth Day	DSCE
2013-14				
4	conference	23-08-2013	“Pollution Mechanism in Urban Aquifers of BBMP Area by Integrated Geophysical, Remote Sensing and GIS Techniques”	DRDO & ISRO
5	International Conference	26 th and 27 th of September 2013	International Conference on Convergence of Science, Engineering and Management in Education and Research- A Global Prospective	DSCE
6	National workshop	21-03-2014	National workshop on Water and Energy	DSCE, IWWA, RDPR & Krishna Bhagya Jala Nigam Ltd
2014-15				
7	National workshop	15-09-2014	Frugal Engineering Innovations for Sustainable Built Environment	DSCE, IWWA, BBMP, IPHE

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8	National workshop	26 th March 2015	National Workshop On “Water And Sustainable Development”	Defence Research And Development Organization (New Delhi) And Rural Development And Panchayath Raj Department (Govt. Of Karnataka)
9	National workshop	24 th APRIL 2015	Brain storming workshop on “To Understand The Pollution Mechanism In Urban Aquifers Of Bbmp Area By Integrated Geophysical, Remote Sensing And Gis Technique”	ISRO, SERB, DEPT. OF CIVIL ENGINEERING, DSCE
2015-16				
10	National Conference	10 th and 11 th September 2015	National Conference on “Smart cities – Concept for innovation eco system”	CADD centre Banashankari
11	National Conference	18 th to 19 th February 2016	A National Conference on Recent Advances in Civil Engineering and Architecture for Sustainable Development	1. Techno instruments company 2. Milenium technologies India pvt ltd 3. Tched

The list of seminar, lectures and other technical events conducted

26. Student profile programme/course wise

Name of the course /programme	Application Received	Selected	Enrollment		Pass percentage
			M	F	
BE	180	173	157	16	70 %
M-Tech Structures	18	17	13	4	94 %
M-Tech Highway Technology	18	18	13	5	100 %

27. Diversity of Students

Name of the course	% students from the	% students from other	% students from

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	state	state	abroad
BE	73	26.995	0.005
M-Tech Structures	78	22	NIL
M-Tech Highway Technology	78	22	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? – 10 students per year

29. Student progression – Not Applicable

30. Details of Infrastructural facilities

a) Library

b) Internet facilities for Staff & Students

c) Class rooms with ICT facility

d) Laboratories

g) Laboratories

Room Description		Usage	Shared/ Exclusive	Capacity	
Class Room	NEB 305	2 nd Year “A” Sec	Exclusive	80	
	NEB 306	2 nd Year “B” Sec		80	
	NEB 301	3 rd Year “A” Sec		80	
	NEB 304	3 rd Year “B” Sec		70	
	AU 202	3 rd Year “C” Sec		80	
	NEB 201	2 nd Year “A” Sec		80	
	NEB 204	2 nd Year “B” Sec		80	
Tutorial Room	NEB 602		Exclusive	20	
	NEB 502				
Seminar Room	1)CD Sagar Hall 2) Heritage Seminar Hall 3)Dr. Premachandra Sagar Auditorium 4) AV Auditorium		Share	250	
				150	
				705	
				70	
Meeting room	NEB 601		Exclusive	25	
Faculty rooms	NEB610	HOD Room	Exclusive	01	
	NEB609	Staff Room		14	
	NEB607	Civil Dept. Office		03	
	NEB509	Staff Room	Share	04	
	GTL-1	Staff Room	Exclusive	1	

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	GTL-2	Staff Room	Exclusive	2	
	HML-1	Staff Room		1	
	BML-1	Staff Room		2	
	BML-2	Staff Room		2	
	BML-3	Staff Room		1	
	BML-4	Staff Room		1	
	SS-1	Staff Room		1	
	SS-2	Staff Room		1	
Departmental library	NEB – 603	Departmental library	Exclusive		

Class Room No.	Area sqm	Total Number of Desk [2 seater]	Staff Table	No. of Fans	No. of Tube light	White Board	LCD Projector	Computer
NEB 201	90	40	1	06	08	1	1	1
NEB 202	90	40	1	06	09	1	1	1
NEB 301	90	40	1	06	08	1	1	1
NEB 304	90	35	1	06	09	1	1	1
NEB 305	90	40	1	06	09	1	1	1
NEB 306	90	40	1	06	09	1	1	1
AU 202	90	32	0	06	08	1	---	---

31. Number of students receiving financial assistance from college, university, government or other agencies

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts – Same as 25

33. Teaching methods adopted to improve student learning

- Smart Class rooms
- NPTEL Lecture Notes
- VTU – Edusat
- Tutorial Classes
- CIL

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Blood Donation Camp
- Swach Bharat Camp At Melukote

35. SWOC analysis of the department and Future plans

Strength

1. Research grants received from sponsored agencies worth 1 crore
2. Most of the faculty members have registered or completed PhD

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3. Laboratories with advance equipments

Weakness

1. Faculty student ratio

Opportunities

1. Recognized research centre
2. Experienced senior faculties

Challenges

1. Research contribution and consultancy has to be strengthened further

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Evaluative Report of the Departments

1. Name of the department : **Computer Science & Engineering**
2. Year of Establishment : **1986**
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) : **UG, PG, Ph.D**
4. Names of Interdisciplinary courses and the departments/units involved : **Mathematics**
5. Annual/ semester/choice based credit system (programme wise) : **Semester**
6. Participation of the department in the courses offered by other departments : **NIL**
7. Courses in collaboration with other universities, industries, foreign institutions, etc. :
JAVA , PYTHON.
8. Details of courses/programmes discontinued (if any) with reasons : **NIL**
9. Number of Teaching posts – Filled as per the AICTE norms
10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Designation	Qualification	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Ramesh Babu D.R.	Professor & Head	BE, M.Tech, Ph.D	Image Processing & Computer Vision	17	05
Dr. Amutha S.	Professor	BE, M.Tech, Ph.D	Image Processing, Big Data	23	01
Dr. Arbind Kumar Gupta	Professor	B.Tech, M.Tech, Ph.D	Medical Imaging	23	-
Dr. Venkatesan S	Professor	B.E, M.E , Ph.D	Digital Image Processing	13	-
Dr. TarunRao	Professor	B.E , MTech- (Ph.D)	Data Mining	13	-

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Dr. Mohan N	Associate Professor	BE, M.E, Ph.D	Wireless Networks	10	-
Prof. Ramakrishna K.A	Professor	B.E, M.S	Artificial Intelligence	44	-
Prof. BhaskaraRao N	Associate Prof.	B.E, M.Tech	Natural Language Processing	46	-
Mr. Prasad A.M.	Associate Prof.	B.E, M.S - (Ph.D)	Networks	22	-
Mr. Mohd. Tajuddin	Associate Prof.	B.E, M.Tech- (Ph.D)	Biometrics	17	-
Mrs. Kusuma M	Associate Prof.	B.E, M.Tech - (Ph.D)	Signal Processing	22	-
Mrs. Sandhya N.	Associate Prof.	B.E, M.Tech - (Ph.D)	Document Image Analysis	11	-
Mrs. PreetiSatish	Associate Prof.	B.E, M.Tech - (Ph.D)	Combinatorial Testing	10	-
Mrs. ShubhaBhat	Associate Prof.	B.E, M.S - (Ph.D)	Aerial Imaging	07	-
Mrs. Vindhya M	Asst. Prof.	B.E, M.Tech - (Ph.D)	Aerial Imaging	15	-
Mr. Sasidhar B	Asst. Prof.	B.E, M.Tech - (Ph.D)	Medical Image Processing	07	-
Mrs. Rashmi S.R	Asst. Prof.	B.E, M.Tech - (Ph.D)	Artificial Intelligence	11	-
Mr. Ravichandra H	Asst. Prof.	B.E, M.Tech	Bigdata	8.5	-
Mrs. Monika P	Asst. Prof.	B.E, M.Tech	Web& Data Mining	06	-
Mrs. Sunitha M.S	Asst. Prof.	B.E, M.Tech - (Ph.D)	Networks	6.5	-
Mr. Nagaraja. J	Asst. Prof.	B.E, M.Tech - (Ph.D)	Image Processing	06	-
Mrs. Muquitha Almas	Asst. Prof.	B.E, M.Tech	Software Engineering	07	-
Mrs. Poornima A.B	Asst. Prof.	B.E, M.Tech	Cloud	06	-
Mr. Deepak.G	Asst. Prof.	B.E, M.Tech - (Ph.D)	Cloud Computing	05	-
Mrs. Mamatha. R	Asst. Prof.	B.E, M.Tech	Image Processing	05	-
Mr. Amaresha K.S	Asst. Prof.	B.E, M.Tech - (Ph.D)	Medical Imaging	04	-

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Mr. Harish Kumar N	Asst. Prof.	B.E, M.Tech	Networks	3.6	-
Mrs. Anitha M	Asst. Prof.	B.E, M.Tech	Networks	6.5	-
Mrs. Sonal N Kharecha	Asst. Prof.	B.E, M.Tech	Biometrics	07	-
Mrs. Rashmi. Reddy	Asst. Prof.	B.E, M.Tech – (Ph.D)	Medical Imaging	03	-
Mrs. SmeraLingesh	Asst. Prof.	B.E, M.Tech	Image Processing	02	-
Mrs. Swetha M.D	Asst. Prof.	B.E, M.Tech	Bigdata	03	-
Ms.Asnika. S	Asst. Prof.	B.E, M.Tech	Ophthalmology Imaging	01	-
Ms.SahanaDamale	Asst. Prof.	B.E, M.Tech	Ophthalmology Imaging	01	-
Ms. Nayana. N	Asst. Prof.	B.E, M.Tech	Biometrics	01	-
Ms. Anitha P	Asst. Prof.	B.E, M.Tech	Networks	01	-
Mrs. Annapoorna B R	Asst. Prof.	B.E, M.Tech	Computer Networks	01	-
Ms. Dhara K N	Asst. Prof.	B.E, M.Tech	Computer Networks	01	-
Mr. Anil Sagar T	Asst. Prof.	B.E, M.Tech	Big Data Management	01	-
Mrs. Bhanupriya M P	Asst. Prof.	B.E, M.Tech	Cryptography	01	-
Mr. Arun Kumar N	Asst. Prof.	B.E, M.Tech	Computer Networks	02	-
Mrs. Asha Thomas	Asst. Prof.	B.E, M.Tech	Computer Science	02	-
Mr. Vishwajith M V	Asst. Prof.	B.E, M.Tech	Computer Science	01	-
Ms. Deepa H Byadgi	Asst. Prof.	B.E, M.Tech	Image Processing	01	-
Mrs. Prathyusha J	Asst. Prof.	B.E, M.Tech	Image Processing	01	-
Ms. Vijayalakshmi M V	Asst. Prof.	B.E, M.Tech	Computer Science	01	-

11. List of senior visiting faculty members :

1. Prof. Vinay M S, IISC, Bangalore.
2. Prof. Vasudhendra ,Entrepreneur, Bangalore.
3. Prof. VenkateshPatil, Entrepreneur, Bangalore.

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12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty : **NIL**

13. Student -Teacher Ratio (programme wise) : **12:1**

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Academic Support Staff	05	05
Administrative Staff	02	02

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification
Dr. Ramesh Babu D.R.	BE, M.Tech, Ph.D
Dr. Amutha S.	BE, M.Tech, Ph.D
Dr. Arbind Kumar Gupta	B.Tech, M.Tech, Ph.D
Dr. Venkatesan S	B.E, M.E , Ph.D
Dr. Tarun Rao	B.E , M.Tech-(Ph.D)
Dr. Mohan N	BE, M.E, Ph.D
Prof. Ramakrishna K.A	B.E, M.S
Prof. Bhaskara Rao N	B.E, M.Tech
Mr. Prasad A.M.	B.E, M.S - (Ph.D)
Mr. Mohd. Tajuddin	B.E, M.Tech- (Ph.D)
Mrs. Kusuma M	B.E, M.Tech – (Ph.D)
Mrs. Sandhya N.	B.E, M.Tech – (Ph.D)
Mrs. Preeti Satish	B.E, M.Tech – (Ph.D)
Mrs. Shubha Bhat	B.E, M.S – (Ph.D)
Mrs. Vindhya M	B.E, M.Tech – (Ph.D)
Mr. Sasidhar B	B.E, M.Tech – (Ph.D)
Mrs. Rashmi S.R	B.E, M.Tech – (Ph.D)

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Mr. Ravichandra H	B.E, M.Tech
Mrs. Monika P	B.E, M.Tech
Mrs. Sunitha M.S	B.E, M.Tech – (Ph.D)
Mr. Nagaraja. J	B.E, M.Tech – (Ph.D)
Mrs. Muquitha Almas	B.E, M.Tech
Mrs. Poornima A.B	B.E, M.Tech
Mr. Deepak.G	B.E, M.Tech – (Ph.D)
Mrs. Mamatha. R	B.E, M.Tech
Mr. Amaresha K.S	B.E, M.Tech – (Ph.D)
Mr. Harish Kumar N	B.E, M.Tech
Mrs. Anitha M	B.E, M.Tech
Mrs. Sonal N Kharecha	B.E, M.Tech
Mrs. Rashmi. Reddy	B.E, M.Tech – (Ph.D)
Mrs. SmeraLingesh	B.E, M.Tech
Mrs. Swetha M.D	B.E, M.Tech
Ms.Asnika. S	B.E, M.Tech
Ms.SahanaDamale	B.E, M.Tech

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : 01

Faculty members have received grants from funding agencies. The details are given in the below tabular column.

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Sl #	Name of the Granting Authority	Name of the Faculty	Grant Amount	Year of Sanction	Title	Status
1.	ER&IPR, DRDO	1. Dr. D R Ramesh Babu 2. Prof. Ramakrishna K A 3. Prof. Vindhya M 4. Prof. ShubhaBhat	Rs. 14.95 Lakhs	2010	Vision Based WavepointNavigation of Unmanned Air Vehicles	Completed
2.	VTU, Belgaum	1. Dr. Nandini C 2. Prof. Mohd. Tajuddin	Rs. 7.3 Lakhs	2011	Gait Based Unauthorised	Completed

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					Recognition For Covert Security System	
3.	DRDO	1. Dr. Krishnan R 2. Dr. Amutha S	Rs. 21.20 Lakhs	2011	Tracking Multiple Objects in Aerial Image Sequence from an Unmanned Air Vehicle	Completed
4.	TRIP , Vision Group on Science and Technology (VGST)	Mr. Amaresha K.S	Rs.34,000	2013	Application of Region of Interest Compressed Sensing to Accelerate Magnetic Resonance Angiography	Completed
5.	SMYSR, Vision Group on Science and Technology (VGST)	Mr. Amaresha K.S	Rs. 4 lakhs	2014	Acquisition and Reconstruction strategies for region of interest compressed sensing	On going

18. Research Centre / facility recognized by the University

Visvesvaraya Technological University recognized Research Centre

19. Publications:

a) Publication per faculty

S.No	Faculty	No. of publications
1.	Dr. Ramesh Babu D.R.	75
2.	Dr. Amutha S.	20
3.	Dr. Arbind Kumar Gupta	05
4.	Dr. Venkatesan S	21
5.	Dr. TarunRao	06
6.	Dr. Mohan N	11
7.	Prof. Ramakrishna K.A	06
8.	Prof. BhaskaraRao	09
9.	Mrs. Kusuma M.	17
10.	Mr. Prasad A.M.	11
11.	Mr. Mohd. Tajuddin	06
12.	Mrs. Vindhya M.	12
13.	Mrs. ShubhaBhat	09

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14.	Mrs. Sandhya N.	06
15.	Mrs. Preeti Satish	03
16.	Mrs. Monika P	01
17.	Mr. Sasidhar B	09
18.	Mrs. Sunitha M.S	02
19.	Mr. Nagaraj J	10
20.	Mr. Deepak.G	09
21.	Mrs. Mamatha.R	02
22.	Mr. Amaresha K.S	12
23.	Mr. Harish Kumar N	05
24.	Mrs. Sonal N Kharecha	04
25.	Ms. Rashmi Reddy	03
26.	Ms. Asnika.S	02
27.	Ms. Sahana Damale	01
28.	Ravichandra H	02
29.	Swetha M D	02
30.	Bhanupriya M P	01
31.	Deepa Halesh Byadgi	02
32.	Muquitha Almas	01
33.	Anitha M	01
34.	Shubha Bhat	10
35.	Dhara K N	01
36.	Anil Sagar T	01
37.	Arun Kumar N	02
38.	Asha Thomas	02

* Number of papers published in peer reviewed journals (national / international) by faculty and students

Publications by faculty & Students: 302

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* Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

Web Of Science : 20

Google Scholar : 220

EBSCO : 50

THOMSON REUTERS : 60

CITE FACTOR : 100

CROSS Ref : 100

SCOPUS : 10

* Chapter in Books :

- Dr. D.R.Ramesh Babu
- Dr. Amutha S
- Dr. Venkatesan S
- Mrs. Kusuma .M

Contributed to book chapters in their respective research fields.

* Books Edited :Prof. Mohd. Tajuddin has edited book

* Citation Index: **330**

20. Areas of consultancy and income generated :NIL.

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards....

- Dr. D R Ramesh Babu, Member of LIC committee of VTU
- Dr. D.R.Ramesh Babu, Editorial Member in IJESE
- Dr. Venkatesan S, Editorial Member in IJESE

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/programme: **90%**
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies : **20%**

23. Awards / Recognitions received by faculty and students

SELF STUDY REPORT

Faculty Details

- Mr. Amaresh EK Zaboisky stipend award – Approx. \$1600Year 2015
- Mr. Amaresh VGST – young scientist award – Year 2014

Student Details

Undergraduate level

S.No	Student Name	Year	Rank
1.	Sumeet Jain	2014-15	2 nd
2.	Sunag C. S	2014-15	4 th
3.	Hemanth Kumar	2012-13	9 th
4.	Rashmi V	2007-08	3 rd
5.	Hemabindu	2006-07	10 th
6.	AbhishekPatodia	2004-05	9 th

Postgraduate level

S.No	Student Name	Year	Rank
1.	Navya L	2012-13	1 st
2.	Surya Raju	2010-11	2 nd
3.	Shivamalini L	2010-11	3 rd
4.	ShubhaTheja	2009-10	2 nd
5.	Sahana B	2009-10	3 rd
6.	Pushapavathi T	2007-08	2 nd

24. List of eminent academicians and scientists / visitors to the department

- Prof. B N Chatterji, IIT Kharagpur
- Mr. Raj Sundaresan, Visa Inc., USA
- Dr. KashinathBasu, Brooks University
- Dr. S P Srinivas, Indiana University
- Dr. C.E. VeniMadhavan, IISC, Bangalore
- Shri. Paremeshwar R, Head, R&D, United Telecoms Ltd., Bangalore

25. Seminars/ Conferences/Workshops organized & the source of funding

- a) National Conference 06, funded by DSI
- b) International Conference 02, funded by DSI

26. Student profile programme/course wise:

SELF STUDY REPORT

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
UG -B.E	120	120	96	54	93 %
2011 -12					
2012 -13	120	120	92	51	92 %
2013 -14	120	120	80	61	96 %
2014 -15	120	120	96	54	97 %

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of Students From Abroad
B.E- Computer Science & Engineering	52 %	31 %	One student

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Thirteen students have cleared national and state competitive examinations.

Sl. #	Type Of Exam	No. Of students
1.	NET	01
2.	GATE	11
3.	Civil services	01

29. Student progression

Student progression	Against % enrolled
UG to PG	NIL
PG to M.Phil.	NIL
PG to Ph.D.	08

SELF STUDY REPORT

Ph.D. to Post-Doctoral

NIL

Employed

- Campus selection 75 %

Details of Infrastructural facilities

a) Library :

- Area : 120 sqft.
- Total books :1500
- Books are issued to students and faculty members

b) Internet facilities for Staff & Students : Yes, Wifi enabled campus

c) Class rooms with ICT facility- 02 classrooms with ICT facility

d) Laboratories : 10 Labs

30 Number of students receiving financial assistance from college, university, government or other agencies

- 2011-12 : 20
- 2012-13 : 17
- 2013-14 : 26
- 2014-15 : 25

31. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Guest Lecture :

Prof. Vinay from IISc gave lectures on Probability and statics which is useful for research.

Dr Shah from PES south campus gave a talk on research oriented applied mathematics.

Mr. Dinesh Tomar, Project manager, IBM gave a talk on Blue Mix by IBM.

Dr. SudarshanIyengar, Asst. Professor, IIT,Ropar gave a talk on Crowd Computing.

Certification Program :

Advanced Java Program certification Program conducted by HEDX.

PYTHON Program certification Program conducted by HEDX.

Bridge Course :

“C Program” Classes conducted for non IT students of DSCE

Mathematics classes were conducted for Lateral entry Diploma students.

32. Teaching methods adopted to improve student learning

- **Lesson Plan:** Useful for students to prepare about the topic well-in-advance.

SELF STUDY REPORT

- **Case-studies:** Enrich the subject knowledge.
- **Technical Quiz:** Improves the analytical skills.
- **Learning :** Deputation to national and international Conference/Workshop/Symposium.

Hands-on session on various up-coming technologies.

33. Participation in Institutional Social Responsibility (ISR) and Extension activities

- **Community Development** program: Adopted children's from school near Ramanagar, helping them with school fees, books and uniform.
- **Social awareness program:** Conducted an awareness program on traffic rules in DSI campus.
- To Educate the Community about the Fastest Growing Field & Technology
- Organized a Community Development Programme for the Teachers and Children of AnathaShishuSevashrama.
- Donated computers, fans, stationary items and wall clock to Government Lower Primary School, - to make the students feel comfortable and walk along with the technology to a certain extent.
- Donated stationary items along with water dispenser, first aid kit and Rs. 4200 for uniform stitching of under privileged students of govt. school
- Ms. Jyothi.'s financial problems and eagerness to pursue engineering course, the Department of CSE sponsored her Engineering CET fees (Rs. 41,590/-) and college admission fees (Rs. 25,000/-) for the academic year 2013-2014(1st year of BE).
- In Nov, 2013, donated a hearing aid to MsSugana, a student studying in 8th std in a Govt. School to help her mount her career

34. SWOC analysis of the department and Future plans

Strengths:

Dedicated Faculty Members

Industry Institute Collaboration (HCL , Infosys, HEDX, Anthea Consultancy Ltd.)

Research Collaboration with Indiana University

University ranks in UG and PG.

Upliftment of the socio-economically weaker students

Weaknesses:

Consultancy activities need to be improved in spite of having necessary

Infrastructure

Opportunities:

Looking for further industry collaborations, Research funding and patents.

Challenges:

To improve the intake of quality students.

Future Plans:

SELF STUDY REPORT

- a. Organizing International conference, symposium & workshop to increase the research publication in reputed journal.
- b. Getting research fund from government .
- c. Conducting more guest lectures inviting expertise from the market.
- d. Placing students in reputed companies.

Evaluative Report of the CTM& HT Department

1. Name of the department **CONSTRUCTION TECHNOLOGY
MANAGEMENT AND HIGHWAY TECHNOLOGY**
2. Year of Establishment 2009
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
UG PROGRAM IN CONSTRUCTION TECHNOLOGY MANAGEMENT
PG PROGRAM HIGHWAY TECHNOLOGY
MSc RESEARCH PROGRAM
Ph.D RESEARCH PROGRAM
4. Names of Interdisciplinary courses and the departments/units involved -
Geotechnical Lab in Civil Engineering
Highway Lab in Civil Engineering
Material testing Lab in Civil Engineering
5. Annual/ semester/choice based credit system (program wise)
SEMESTER BASED PROGRAMME
6. Participation of the department in the courses offered by other departments -
 - Advance Structural Engineering in Civil Engineering
7. Courses in collaboration with other universities, industries, foreign institutions, etc. -NA
8. Details of courses/programs discontinued (if any) with reasons - NA
9. Number of Teaching posts

	Sanctioned	Filled
Professor	02	03
Associate Professor	04	01
Assistant Professor	09	11

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

SELF STUDY REPORT

Name	Qualification	Designation	Specialization	No. of Years Of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Prakash.P	Ph.D	Professor & Head	Structures	27 years	03
Dr. Maqsood Ahmed	Ph.D	Professor	Structures	16 years	-
Dr. Vivek R Das	Ph.D	Professor	Traffic & Transportation	10 years	03
Dr. Anjana S	Ph.D	Associate Professor	Traffic & Transportation	03 years	-
Mr. K. Pramod	M.E	Assistant Professor	Geotechnical Engineering	05 years	-
Mr. Karthik. M	M.Tech	Assistant Professor	Construction Technology	05 years	-
Mrs. Geetha L	M.Tech	Assistant Prof	Structures	05 years	-
Mr. Suhas.R	M.Tech	Assistant Professor	Highway Technology	04 years	-
Mr. Manjunath KR	M.Tech	Assistant Professor	Highway Technology	05 years	-
Mr. Abhijith.C	M.S	Assistant Professor	Construction Project Management	01 year	-
Mr. Shivaprasad N	M.Tech	Assistant Professor	Highway Technology	02 years	-
Mr. Vinay N	M.Tech	Assistant Prof	Structures	01 year	-
Mr. Sachin V	M.Tech	Assistant Prof	Structures	01 year	-
Mrs. Chinmay (Sabatical)	M.Tech	Assistant Prof.	Cad Structures	05 years	-
Mr. Shyam Agasthya (Sabatical)	M Tech	Assistant Prof.	Construction Technology	03 ears	-

11. List of senior visiting faculty -NIL

SELF STUDY REPORT

12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty -NIL
13. Student -Teacher Ratio (programme wise) - **15:1**
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled
 academic support staff (technical) -01
 administrative staff -01
15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. :
 Ph.D-04
 MTech -09
16. Number of faculty with ongoing projects from
 a) National -NIL
 b) International funding agencies and grants received -**NIL**
17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received - **NIL**
18. Research Centre / facility recognized by the University : **YES**
19. Publications: * a) Publication per faculty

Sl. No.	Name of the Faculty	Topic	Venue	Remarks
1	Dr. Prakash P	Influence of Flyash and Silica Fumes on the behavior of SCC	International Journal of Engineering Trends and Technology	Vol 12, Issue 12 Pg No: 246 - 254 (Published)
2	Dr. Prakash P	Experimental Study on workability and strength characteristics of flyash and GGBS based SC Geo-polymer Concrete	International Journal of Engineering Research and Development	Vol 10, Issue - 6, PP 68 - 77 (Published)
3	Dr. Prakash P	Combined Effect of GGBS and Metakolin on Mechanical Properties of SCC	International Journal of Engineering Science Invention	Vol 3, Issue - 6, PP 22 - 28 (Published)
4	Dr. Prakash P	Durability and Strength Properties on High SCC with GGBS and Silica Fumes	Journal of Engineering Research and Applications	Vol 4, Issue 6 (version 1) (Published)
5	Mr. Suhas R	Utilization of copper slag as fine aggregates in cement concrete pavements	International Journal of Research in Engineering and Technology	Vol 2. Issue VI, pISSN:2321- 9653 (Published)
6	Mr. Suhas R	Utilization of iron ore tailings as replacement to fine aggregates in cement concrete pavements	International Journal of Research in Engineering and Technology	eISSN: 2319-1163 pISSN: 2321-7308 (Published)
7	Mr. Pramod K	Stabilization of B C Soils using RBI Grade - 81 of Gulbarga Region	JIT	ETET National Level Conference/ Publication Page No. 26 - 32

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8.	Dr.Vivek R Das	Perception Based Level of service for uncontrolled pedestrian crossing	3rd Conference of the Transportation Research Group of India	Published in the proceedings with Paper ID 460

* Number of papers published in peer reviewed journals (national / international) by faculty and students

* Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

* Monographs

* Chapter in Books

* Books Edited

* Books with ISBN/ISSN numbers with details of publishers

* Citation Index

* SNIP

* SJR

* Impact factor

* h-index

20. Areas of consultancy and income generated -**NIL**

21. Faculty as members in

- i. National committees -**NIL**
- ii. International Committees - **01**
- iii. Editorial Boards.... - **NIL**

22. Student projects

- i. Percentage of students who have done in-house projects including inter departmental/programme
- 100%In house projects
- ii. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies -Nil

23. Awards / Recognitions received by faculty and students
Facutly-01

24. List of eminent academicians and scientists / visitors to the department

SELF STUDY REPORT

Academician/ Visitor's name	Designation /From
Dr. K.R. Suresh	Professor, Department of Civil Engineering, B. M. S. College of Engineering
Dr. V. Ramachandra	Zonal Head-Technical, Ultratech cements Ltd, Bangalore
Dr. M.N. Hegde	Professor, Dr. Ambedkar Institution of Technology, Bangalore
Dr. R.V.Ranganath	Principal, BMSIT, Bangalore
Dr. S. Raghunath	Professor, Department of Civil Engineering, B. M. S. College of Engineering
Dr. B. R. Shreenivas Murthy	Chairman, Task force for Quality Assurance, and control, in Public Construction, Emeritus Professor, Indian Institute of Science, Bangalore
Mr. N. Ranganath	Director , EI Technologies, Bangalore
Mr. M. N. Ramesh	Managing Director, TALRAK Construction, Chemicals Pvt. Ltd.
Mr. Arivarasan Pandian	M/s Pashmina Developers as DGM Contracts & QS
Dr. Radhakrishna.K	Director, Construction, DRDO, Bangalore
Dr. Veeraragavan	Professor, IIT Chennai
Mr. Yogananda	Managing Director, Mrinmayi Consultants

25. Seminars/ Conferences/Workshops organized & the source of funding

a. National

Sl. No	Name of Faculty and Students	Date	Topic	Venue	Remarks

SELF STUDY REPORT

1	Dr. Prakash P	17 th to 18 th Jan 2014	Indian Water Works Association IWWA	Bangalore	Conference
2	Mr. Pramod K	27 th to 29 th Jan 2014	Research Avenues in Geotechnical Engineering	R V College of Engineering, Bangalore	TEQIP-II
3	Mr. Suhas R	14 th to 15 th Feb 2014	Use of Eco-friendly and Alternate Materials in Highway Construction	Sir. MVIT, Bangalore	National Conference
4	6 th Sem Students	25 th to 26 th Feb 2014	ICI-KBC Concrete Panorama & Deminar	BMSCE, Bangalore	National Workshop
5	Mr. Suhas R	8 th Mar 2014	Basics of Asphalting & Traffic Management	L&T- CTEA- Bangalore	Training of GET & FLS's
6	Mr. Pramod K	28 th to 29 th July	'Project of the Year'- KSCST -Student project program	KLE Society's BVBCET, Hubli	Seminar and Exhibition
7	CTM Department	29 th August 2015	Advances in Construction Technology (ACT-2015)	C D Sagar	Workshop
8	CTM Department	10 th & 11 th September 2015	Smart Cities- Concepts for Innovative Ecosystems	C D Sagar	National Conference jointly org by CTM/ Civil/ Arch Dept
9	Mr. Pramod K/ CTM & HT students	18 th & 19 th Feb 2016	Recent Advances in Civil Engineering & Architecture for sustainable Development	C D Sagar	National Conference jointly org by CTM/ Civil/ Arch Dept
10	Mr. Karthik M / CTM & HT Students	22 nd April 2016	Alternative Buildings Materials & Technology 2016	C D Sagar	One Day Workshop/ Talk by Mr. Yogananda & Mr. Pramod A N

b. International -NIL

26. Student profile programme/course wise:

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Categories	SC		ST		OBC		GM		TOTAL		TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
2010-2011	4	0	0	1	12	0	36	7	52	8	60
2011-2012	3	0	0	1	8	5	23	7	34	13	47
2012-2013	2	2	2	0	12	2	33	3	49	7	56
2013-2014	2	2	0	0	8	5	32	8	42	15	57
2014-2015	0	0	2	0	7	5	20	11	29	16	45
2015-2016	1	0	1	0	3	2	28	7	33	9	42

27 Diversity of Students

Programmes BE-CTM	Number of Application	Number of students admitted	Demand Ratio
2010-2011	60	60	1 : 1
2011-2012		47	1 : 0.78
2012-2013		56	1 : 0.93
2013-2014		57	1 : 0.95
2014-2015		45	1 : 0.75
2015-2016		42	1:0.70

28 How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.-2

29 Student progression

Student progression	Against % enrolled
UG to PG	20
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed	
☐ Campus selection	10
☐ Other than campus recruitment	60
Entrepreneurship/Self-employment	10

30 Details of Infrastructural facilities

a. Library

SELF STUDY REPORT

Sl.No.	Particulars	Availability
a	Titles for UG	27,947
b	Volumes for UG	87,651
c	Titles for PG	5,950
d	Volumes for PG	30,100
e	National Journals	204
f	International Journals (e-journals)	5716

- b. Internet facilities for Staff & Students -Wi-Fi Available
- c. Class rooms with ICT facility

CLASS ROOM	USAGE	CAPACITY	AREA
AU 201	4 TH YEAR	60	125 sqm
NEB -303	2 ND YEAR	60	75 sqm
NEB 501	SURVEY LAB	20	85 sqm
NEB 503	CADD-LAB	20	75 sqm
NEB 505	3 RD YEAR	60	120 sqm
NEB 507	HOD ROOM	-	40 sqm
NEB 508	CTM DEPT. OFFICE	04	25 sqm
NEB 507	DEPARTMENTAL LIBRARY	-	40 sqm
NEB 509	STAFF ROOM	16	115 sqm
NEB 506	REST ROOM	-	40 sqm

31 Number of students receiving financial assistance from college, university, government or other agencies : Annexure Maintained.

32 Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

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- Every Year in the since the inception of CTM program in the month of October a one day workshop on 'Advances in Construction Technology (ACT)' is being conducted.

Programs	Subject	Presented by	Year
Deminar	Innovations in Repair & Rehabilitation of Structures	Indian Concrete Institute - Karnataka Bangalore Center	2013
Deminar	Innovative Concrete Materials and Technology	Indian Concrete Institute - Karnataka Bangalore Center	2014
Technical talk	Talk on tendering and contract managements	Mr. ArivarasanPandian, M/s Pashmina Developers as DGM Contracts & QS	2014
Deminar	Quality Assurance and Innovations in Ready-mix Concrete	Indian Concrete Institute - Karnataka Bangalore Center	2015
Technical talk	Alternative Building Materials & Technologies (ABMT 2016)	Mr. Yogananda & Mr. A V Pramod, Mrinmayai Consultants	2016

Special Lectures have been arranged.

- Dr. K.R. Suresh, Professor, Department of Civil Engineering, B. M. S.C.E, Bangalore
- Dr. V. Ramachandra ,Functional Head-Technical, Ultratech cements Ltd, Bangalore
- Dr. M.N. Hegde, Professor, Dr. Ambedkar Institution of Technology, Bangalore
- Dr. R.V.Ranganath , Professor, Department of Civil Engineering, B.M.S.C.E, Bangalore
- Dr. S. Raghunath, Professor, Department of Civil Engineering, B. M. S. College of Engineering, Bangalore.

33 Teaching methods adopted to improve student learning :

- Tutorials are being conducted every week
- At the end of the semester, Additional classes were taken to solve Exam question Paper

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- During the regular semester , Additional classes were taken for Lateral entry students(students coming from Diploma Background)

34 Participation in Institutional Social Responsibility (ISR) and Extension activities

- 8th Semester Project was on Filling up of Pot hole Filling in Kumaraswamy Layout (October-November 2014). Students of Department of Construction Technology Management at Dayananda Sagar College of Engineering took up an initiative to fill up the Potholes in Kumaraswamy Layout and ISRO Layout locality. These pothole mixes are prepared using Bituminous Emulsions and is called Cold-Mix. Design and Evaluation of these mixes were taken as a project for their Final year. To know the performance of these mixes, close to 30 Potholes (not more than 3 ft in dia) were filled as a COMMUNITY ENGAGEMENT EXERCISE. Students were guided by Mr. Suhas R, Assistant Professor, Department of CTM, DSCE.
- Blood donation camp was organized on the last Saturday of April month. Department of CTM had organized the camp in collaboration Lions Club Bangalore and Sagar Hospitals on 28/03/15 from 9am onwards. Lamp lighting ceremony was presided by HOD, CTM staff, alongside the technical supervisor at Lions Club Mr. Deepak Suman and Mr. Kumar from Sagar Hospitals and their respective staff. The programme was well planned in advance and resulted in a huge turnout of students and parents that included for 217 members of which 174 had successfully donated. Volunteers from CTM Department ensured a well organized programme that included for registration desks, zoning and helping out donors to the recuperation room. The Department is in high regard and very thankful to the humble and sincere efforts of all participation and especially from the student community of Dayananda Sagar College of Engineering.

35 SWOC analysis of the department and Future plans

Strength-

- All the faculties of the department are Post graduate and higher qualified.
- 50% of them are pursuing their Doctoral program.
- The passing out students in the final year is 100% and every academic year department use to secure minimum 5 ranks at university level.
- The Department has excellent infrastructure.

Weakness-

- The program attracts students with very low CET and COMED-K ranking.
- Enrollment to the program has to be increased.
- Academy –Industry relationship should strengthened.

SELF STUDY REPORT

- Students should be encouraged to participate in extracurricular activities.

Opportunities-

- Faculty pursuing Doctoral program will give the research environment in the department and will help the students.
- Final year projects would be published in good journals
- As construction industry is booming scope for this subject is predominant.

Challenges-

To train the students in taking up competitive examinations such as NEET, SLET, GATE, Civil services, Defense services.

LIST OF RANK HOLDERS FROM DEPARTMENT OF CTM & HT

UG Rank list

VTU - Toppers – 2009 - 2013 Batch

Sl. No.	USN	Names	Rank
1	1DS09CT022	PRIYALI L SEQUEIRA	1
2	1DS09CT024	SATISH VANKA	2
3	1DS09CT007	DEEPTHI.S	3
4	1DS09CT019	PAVITHRA A R	4
5	1DS09CT032	VIJAY KUMAR G	5

VTU - Toppers – 2010 - 2014 Batch

Sl. No.	USN	Names	Rank
1	1DS10CT041	SOURAV SINGH	1
2	1DS10CT055	VINEET RAITANI	2
3	1DS10CT058	YATIN M W	3
4	1DS10CT034	PRIYANKA HEGDE	4
5	1DS10CT049	SONIA R BETALA	5

VTU - Toppers – 2011 - 2015 Batch

Sl. No.	USN	Names	Rank
1	1DS11CT028	POLA ABHISHEK	1

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2	1DS11CT004	AMULYA M	3
3	1DS11CT036	PRAVEEN KUMAR S	4
4	1DS11CT016	JAYASHREE K	5
5	1DS11CT026	NITHIN THANKACHEN	6
6	1DS11CT018	KEERTHAN BETTA	7

PG-HT Rank list VTU - Toppers – 2013 - 2015 Batch

Sl. No.	USN	Names	Rank
1	1DS13CHT15	VIDYADHAR N	1

1. **Name of the department:** Electronics and Communication

2. **Year of Establishment:** 1979

3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated**

4. **Masters; Integrated Ph.D., etc.):** UG-E&CE, PG-DIGITAL ELECTRONICS & COMMUNICATION, VLSI & EMBEDDED SYSTEMS, Ph.D.

5. **Names of Interdisciplinary courses and the departments/units involved**

M.Tech

SEMESTER	COURSES	DEPARTMENT
I Semester	APPLIED MATHEMATICS	Mathematics Department

6. **Annual/ semester/choice based credit system (programme wise):** Semester

7. **Participation of the department in the courses offered by other departments**

Sl.	Department	Courses offered
1	<u>Chemistry Cycle</u> • Computer Science & Engineering • Telecommunication Engineering • Civil Engineering • Information Science & Engineering • Aeronautical Engineering • Construction Technology & Management • Automobile Engineering • Medical Electronics Engineering <u>Physics Cycle</u>	• Basic Electronics classes

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	• <u>Electronics & Communication Engineering</u> • <u>Electrical & Electronics Engineering</u> • <u>Industrial Engineering & Management</u> • <u>Electronics & Instrumentation Engineering</u> • <u>Mechanical Engineering</u> • <u>Bachelor of Architecture</u> • <u>Biotechnology</u> • <u>Chemical Engineering</u>	

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8. Courses in collaboration with other universities, industries, foreign institutions, etc. - Nil

9. Details of courses/programmes discontinued (if any) with reasons – NA

10. Number of Teaching posts

TEACHING POSTS	SANCTIONED (As per VTU)	FILLED
Professors	6	6
Associate Professors	14	10*
Asst. Professors	34	38*

*Instead of 4 Associate professor's as of now additional 4 Assistant Professor Recruited-
Filling up of Associate Professor's is in process.(under CAS)

**11 Faculty profile with name, qualification, designation, specialization,
(D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)**

Sl. No	Name	Qualification	Designation	Specialization	No of years of experience	No of Ph.D students guided last 4 Years
1	Dr. Hariprasad S.A	B.E, M.E, Ph.D. D.sc	Professor & Head	Embedded/RF	25	8
2	Dr. Sudha K.L	BE, ME, Ph.D.	Professor	Wireless Communication	19	7 under VTU+1 in Jain
3	Dr. P. Dinesha	BE, ME, Ph.D.	Professor	Nanotechnology, VLSI design	23.5	Nil
4	Dr. Manjunath H.V	BE, ME, Ph.D.	Professor	Power Electronics and Drives	33	Nil
5	Dr. Kiran Gupta	BE, M.Tech, Ph.D.	Professor	Nano devices and VLSI Low Power Design	23.5	Nil
6	Dr. V. Anitha	BE,ME, Ph.D.	Professor	Applied Electronics	15.5	Nil
8	Mrs. M. Roopa	BE, M.Tech, (Ph.D.)	Associate Professor	Power systems and Software systems	25	Nil
9	Mrs. K.P. Shashikala	BE,M.Tech (Ph.D.)	Associate Professor	Image Processing	22	Nil
10	Mrs. Jamuna S	BE,M.Tech (Ph.D.)	Associate Professor	VLSI	17.9	Nil
11	Mrs. K.N. Pushpalatha	BE,MS (Ph.D.)	Associate Professor	Electronics & Control	23	Nil
12	Mr. Nagachandra M.K	BE, M.Tech	Associate Professor	Digital Electronics & communication system	30	Nil
13	Mrs. S. Thenmozhi	BE,ME (Ph.D.)	Associate Professor	Information security	18	Nil
14	Mr. Chandrashekara N	BE, M.Tech	Associate	Communication	39	Nil

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			Professor	Systems		
15	Dr. Sayed Abdulhayan	BE, M.Tech, Ph.D.	Associate Professor	Digital communication and Networking	10.5	Nil
16	Dr. P. Vimala	BE, ME, Ph.D.	Associate Professor	VLSI Design	4.5	Nil
17	Mrs. Sapna P.J	BE, M.Tech (Ph.D.)	Assistant Professor	Digital Electronics and Communication	18	Nil
18	Mrs. Shahla Sohail	BE, M.Tech (Ph.D.)	Assistant Professor	Computer and communication	18	Nil
19	Mr. A. Rajagopal	BE, M.Tech (Ph.D.)	Assistant Professor	VLSI design & embedded systems	6	Nil
20	Ms. Deepa N.P	BE, M.Tech (Ph.D.)	Assistant Professor	Digital Communication	13	Nil
21	Mr. M.N. Pradeep	BE, M.Tech	Assistant Professor	Computer network Engineering	9	Nil
22	Mr. Ramgopal Segu	B.Tech, M.Tech (Ph.D.)	Assistant Professor	Digital Electronics and Communication	8	Nil
23	Mr. Sandeep S Chapalkar	BE, M.Tech(Ph.D.)	Assistant Professor	Digital Electronics and Communication	7	Nil
24	Mrs. Krutthika H K	BE, M.Tech(Ph.D.)	Assistant Professor	Communication Networks	6	Nil
25	Mrs. Vibha T.G	BE, M.Tech	Assistant Professor	Digital Electronics and Communication	5.5	Nil
26	Mr. Ravindra S	BE, M.Tech(Ph.D.)	Assistant Professor	VLSI design & embedded systems	10.5	Nil
27	Mrs. Anuradha K	BE, M.Tech	Assistant Professor	Digital Electronics	9.5	Nil
28	Mr. Druva Kumar S	BE, M.Tech	Assistant Professor	Digital Electronics and Communication	4	Nil
29	Mr. Shashi Raj K	BE, M.Tech (Ph.D)	Assistant Professor	VLSI Design & Embedded Systems	4	Nil
30	Mr. Mahesh Kumar N	BE,ME (Ph.D.)	Assistant Professor	Computer Network Engineering	8	Nil
31	Mrs. Trupti Shripad Tagore	BE, M.Tech	Assistant Professor	Digital Electronics	6	Nil
32	Mrs. Aruna Rao B.P	BE, M.Tech (Ph.D.)	Assistant Professor	VLSI Design & Embedded Systems	4	Nil
33	Mrs. Srividya L	BE, M.Tech (Ph.D.)	Assistant Professor	Information And Communication Technology	8	Nil
34	Mrs. Madhura R	BE, M.Tech	Assistant Professor	VLSI Design & Embedded Systems	3	Nil
35	Mr. Rajanish N	BE, M.Tech (Ph.D.)	Assistant Professor	Digital Electronics	11	Nil
36	Mrs. Kavita Guddad	BE, M.Tech	Assistant	Digital	9	Nil

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			Professor	communication and Networking		
37	Mrs. Usha C	BE, M.Tech	Assistant Professor	Computer Networking	8.5	Nil
38	Mrs. Naveena M	BE, M.Tech	Assistant Professor	Digital Communication	4	Nil
39	Mr. Kajal Mukhopadhyay	BE, M.Tech	Assistant Professor	Communication	31	Nil
40	Mrs. Hazel Alwin Philbert	BE, M.Tech	Assistant Professor	Digital Electronics	7	Nil
41	Mr. Anand Y.R	BE, M.Tech	Assistant Professor	VLSI Design & Embedded Systems	1.5	Nil
42	Mrs. Arpitha H.N	BE, M.Tech	Assistant Professor	VLSI Design & Embedded Systems	1	Nil
43	Ms. Nithya V	BE, ME	Assistant Professor	Applied Electronics	5	Nil
44	Mr. Krishnananda	B.E., M. Tech (Ph.D.)	Assistant Professor	EBG Antenna	10+12	Nil
45	Mr. Santhosh K	BE,ME	Assistant Professor	VLSI design and Embedded Systems	02	Nil
46	Mr. Shashidhar R	BE,ME	Assistant Professor	VLSI design and Embedded Systems	3	Nil
47	Mrs. Shobha. A. S.	BE, M.Tech	Assistant Professor	Wireless Communication & Networking	04	Nil
48	Ms. Chaitra A	BE, M.Tech	Assistant Professor	VLSI and Embedded System	02	Nil
49	Mr. Vivekananda A R	B.E , MS	Assistant Professor	Embedded Systems	02	Nil
50	Mrs. Yamuna B	B.E., M.Tech	Assistant Professor	Communication Systems	4.4	Nil
51	Mr. Kumar P	B.E., M.Tech	Assistant Professor	Communication Systems	04	Nil
52	Mr. M Naresh Kumar	B.E., M.E., (Ph.D.)	Assistant Professor	Wireless Communication	11	Nil
53	Mr. Karthikeya G. S	B.E., M.Tech	Assistant Professor	Microwave Engineering	03	Nil
54	Mr. T.S Jayadeva	B.E., M.Tech	Assistant Professor	RF and Microwave	16	Nil
55	Dr. R.Michaelraj Kingston	B.E., M.E., Ph.D.	Assistant Professor	Communication Systems	4.10	Nil
56	Mrs. Navya Holla K	B.E., M.Tech	Assistant Professor	Communication	02	Nil
57	Mrs.Vidyashree K N	B.E., M.Tech	Assistant Professor	Communication	01	Nil

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58	Dr. Rukmini T S	M.Sc Ph.D.	Professor Emeritus	Communication		
59	Ms.Priyanka N	B.E., M.Tech	Assistant Professor	Communication	0.5	Nil
60	Mrs. Mahima U	B.E., M.Tech	Assistant Professor	Communication	01	Nil
61	Mrs. Manasa R	B.E., M.Tech	Assistant Professor	Communication	03	Nil

11. List of senior visiting faculty (Adjunct/Professor Emeritus):

Sl. No.	Name / Qualification	Year
1	1.Prof. S K Raman B.E, M.S	2011-2016
2	1. Dr. Rukmini T S M.Sc, PhD 2. Prof. Rajan V.C B.E, M.Tech	2015-16

12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty: NIL

13. Student -Teacher Ratio (programme wise):

Year	Total students	Total faculty	Staff Student Ratio
2011-12	800	33	1:24
2012-13	1040	32	1:32
2013-14	1040	41	1:25
2014-15	1040	58	1:18
2015-16	1040	61	1:17

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Technical Staff	12	12
Administrative Staff(Clerk)	01	01

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

a) List of Teaching Faculty with Ph.D.

Sl.No	Name	Experience	Qualification/ Specialization
1	Dr. HARIPRASAD S A	25	B.E, M.E, Ph.D, D.Sc Embedded/RF
2.	Dr. SUDHA K.L	20	BE,ME,Ph.D Wireless Communication

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3.	Dr. P. DINESHA	23.5	BE,ME,Ph.D Nano Technology(VLSI)
4.	Dr. MANJUNATH H.V	33	BE,ME,Ph.D Power Electronics and Drives
5.	Dr. KIRAN GUPTA	24	BE,M.Tech Ph.D Nano devices and Low Power VLSI design
6.	Dr. A SREENIVASAN	43	BE,M.Tech, Ph.D, AIEEE Electronics
7.	Dr. ANITHA	16.5	BE,M.Tech, Ph.D
8.	Dr. SAYED ABDULHAYAN	11	BE, M.Tech, Ph.D Digital Communication and Networking
9.	Dr. P. VIMALA	4.5	BE,ME,Ph.D VLSI DESIGN
10.	Dr. R.MICHAELRAJ KINGSTON	4.10	B.E., M.E., Ph.D Communication Systems
11.	Dr. RUKMINI T S		M.Sc, PhD

Note: Six more Faculty members are going to complete Doctorate degree Shortly

b) List of teaching faculty with Post Graduation (PG)

Sl.No	Name	Experience	Qualification/ Specialization
1.	Mr. S.K. RAMAN	32+13	BE,MS Communication System
2.	Mrs. M. ROOPA	26	BE,M.E,MS(Ph.D) Power systems and Software systems
3.	Mrs. K.P. SHASHIKALA	26	BE,M.Tech(Ph.D) Image Processing
4.	Mrs. JAMUNA S	17.9	BE,M.Tech(Ph.D) VLSI Design & Embedded Systems
5.	Mrs. K.N. PUSHPALATHA	23	BE,MS(Ph.D) Electronics & Control
6.	Mr. NAGACHANDRA M.K	30	BE,M.Tech Digital Electronics & communication system
7.	Mrs. S. THENMOZHI	19	BE,ME(Ph.D) Information security
8.	Mr. CHANDRASHEKARA N	35+3	BE,M.Tech Communication Systems
9.	Mrs. SAPNA P.J	17	BE,M.Tech(Ph.D) Digital Electronics and

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			Communication
10.	Mrs. SHAHLA SOHAIL	19	BE,M.Tech(Ph.D) Computer and Communication
11.	Mr. M.N. PRADEEP	8	BE,M.Tech Computer network Engineering
12.	Ms. DEEPA N.P	13	BE,M.Tech(Ph.D) Digital Communication
13.	Mr. A. RAJAGOPAL	15	BE,M.Tech(Ph.D) VLSI Design & Embedded Systems
14.	Mr. RAMGOPAL SEGU	8	B.Tech,M.Tech(Ph.D) Digital Electronics And Communication
15.	Mr. SANDEEP S CHAPALKAR	7	BE,M.Tech(Ph.D) Digital Electronics And Communication
16.	Mrs.KRUTTHIKA H K	6	BE,M.Tech Digital Electronics And Networking
17.	Mr. RAVINDRA S	10	BE,M.Tech(Ph.D) VLSI Design & Embedded Systems
18.	Mrs. VIBHA T.G	5	BE,M.Tech Digital Electronics And Communication
19.	Mrs. ANURADHA K	9	BE,M.Tech Digital Electronics
20.	Mr. SHASHI RAJ K	4	BE,M.Tech,(Ph.D) VLSI Design & Embedded systems
21.	Mr. DRUVA KUMAR S	3	BE,M.Tech Digital Electronics and Communication
22.	Mr. MAHESH KUMAR N	8	BE,ME(Ph.D) Computer Network Engineering
23.	Mrs. TRUPTI SHRIPAD TAGARE	5	BE,M.Tech Digital Electronics
24.	Mrs. ARUNA RAO B.P	6	BE,M.Tech(Ph.D) VLSI Design & Embedded Systems
25.	Mrs. SRIVIDYA L	7	BE,M.Tech(Ph.D) Information And Communication Technology
26.	Mrs. MADHURA R	4	BE,M.Tech VLSI Design &

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			Embedded Systems
27.	Mr. RAJANISH N	10	BE,M.Tech(Ph.D) Digital Electronics
28.	Mrs. KAVITA GUDDAD	10	BE,M.Tech Digital communication and Networking
29.	Mrs. USHA C	10	BE,M.Tech Computer Networking
30.	Mrs. NAVEENA M	5	BE,M.Tech Digital Communication
31.	Mr. KAJAL MUKHOPADHYAY	30+2	BE,M.Tech Communication
32.	Mrs. HAZEL ALWIN PHILBERT	7	BE,M.Tech Digital Electronics
33.	Mr. ANANDA Y.R	2	BE,M.Tech VLSI Design & Embedded Systems
34.	Mrs. ARPITHA H.N	2	BE,M.Tech
35.	Ms. NITHYA V	5	BE,ME Applied Electronics
36.	Mr. KRISHNANANDA	10+12	B.E., M. Tech (Ph. D) EBG Antenna
37.	Mr. SANTHOSH KUMAR R	2.3	BE,ME VLSI design and Embedded Systems
38.	Mr. SHASHIDHAR R	3	BE,ME VLSI design and Embedded Systems
39.	Mrs. SHOBHA. A. S.	4	BE, M.Tech Wireless Communication & Networking
40.	Ms. CHAITRA A	2	BE, M.Tech VLSI and Embedded System
41.	Mr. VIVEKANANDA A R	2	B.E , MS Embedded Systems
42.	Mrs. YAMUNA B J	4.4	B.E., M.Tech Communication Systems
43.	Mr. KUMAR P	4	B.E., M.Tech Communication Systems
44.	Mr. M NARESH KUMAR	11	B.E., M.E., (Ph.D) Wireless Communication
45.	Mr. KARTHIKEYA G. S	3	B.E., M.Tech Microwave Engineering
46.	Mr. T.S JAYADEVA	16	B.E., M.Tech RF and Microwave

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47.	Mrs. NAVYA HOLLA K	2	B.E., M.Tech
48.	Mrs.VIDYASHREE K N	1	B.E., M.Tech
49.	Ms.PRIYANKA N	0.5	B.E., M.Tech
50.	Mrs. MAHIMA U	1	B.E., M.Tech
51.	Mrs. MANASA R	3	B.E., M.Tech

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Sl.	Year	Name Of Principle Investigator	Funding Agency	Title of project	Grant received
1	2011-12	Dr. K.L. Sudha	ISRO	Study of Chaos and its applications in communication: Implementation using DSP Processor	4,42,000/-
2	2012-13	No ongoing projects			
3	2013-14	Dr. K.L. Sudha	ISRO	Study of different types PN sequence for space communication application and implementation of these sequence generators using FPGA	12,40,000/-
4	2014-15				
5	2015-16				

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Sl.	Name Of Principle Investigator	Funding Agency	Title of project	Grant received	Year
1	Prof. Satish S B	DST-IEDC	Low power multiplier using reversible logic	1,00,000/-	
2	Dr. Girish V A	DST-IEDC	Walk Smart	1,00,000/-	
3	Prof. Rajgopal A	DST-IEDC	Cocoon-charger	1,00,000/-	2013-14

DST and Starcom Information Technology limited. A total of around twenty lakhs.

18. Research Centre /facility recognized by the University

Research Centre Recognition Date 21/08/2013 , For the academic year 2013-14, and 2014-15

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Research Facilities

-VTU recognized center for Ph.D programmers.
(Hardware and software facilities made available)

19. Publications:

* Publication per faculty

Sl No	Faculty Name	Designation	DOJ	No. of Publications in the last 3 year				Total No of Publications
				International Journal	National Journal	International Conference	National Conference	
1	Dr.Girish V. Attimarad	Professor	8/24/2009	12	0	2	5	19
2	Dr.Sudha	Professor	13/8/2009	14	0	13	5	32
3	Dr. Dinesha P	Professor	8/12/2014	2	0	1	3	6
4	Dr. Kiran Gupta	Professor	16/08/2007	6	1	3	7	17
5	Dr. Manjunath H V	Professor	12.11.2015	1	0	0	1	2
6	Roopa M	Associate Professor	10/3/1995	10	2	5	9	25
7	KP Shashikala	Associate Professor	15/3/2004	7	0	3	4	14
8	Jamuna S	Associate Professor	24.09.2008	5	0	5	7	17
9	K N Pushpalatha	Associate Professor	26/03/2007	8	0	3	5	16
10	Anitha.V	Associate Professor	1/8/2008	3	1	1	2	7
11	S.Thenmozhi	Associate Professor	2/2/2008	6	NIL	3	NIL	9
12	Dr. Sayed Abdulhayan	Professor	22/07/2010	6	0	0	2	8
13	Sapna P.J	Asst. Professor	4/8/2004	2	0	0	2	4
14	Deepa N P	Assistant Professor	8/16/2008	2	0	0	1	3
15	A Rajagopal	Asst. Professor	6/10/2009	4	0	5	1	9
16	RAMGOPAL SEGU	Asst.Prof	28/01/2010	1	0	0	0	1
17	Mr. Sandeep S C	Assistant Professor	28/01/2010	1	0	0	0	1

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18	SHASHI RAJ K	Assistant Professor	7/13/2012	8	0	0	0	8
19	Dr.P.Vimala	Assistant Professor	21.07.2014	4	0	2	3	9
20	Mr. Kajal Mukhopadhyay	Asst. Professor	4/8/2014	0	0	0	1	1
21	Nagachandra M.K.	Associate Professor	01.02.2010	2	0	0	2	4
22	Pradeep.M.N	Assistant Professor	4/21/2008	1	0	1	0	2
23	Mrs.SHAHLA SOHAIL	Assistant Professor	11/6/2007	0	0	0	3	3
24	Mrs.ANURADHA K	Assistant Professor	14/07/2012	0	0	1	4	5
25	Mrs.MADHURAR	Assistant Professor	16s/08/2013	0	0	1		1
26	Mrs.HAZEL ALWIN PHILBERT	Assistant Professor	15/06/2014	1	0	0	0	1
27	Ms.V NITHYA	Assistant Professor	6/1/2015	1	0	1	4	6
28	Mr.R.SANTHOSH KUMAR	Assistant Professor	20/07/15	0	0	0	2	2
29	Mr.SHASHIDHAR.R	Assistant Professor	2/10/1962	2	0	0	2	4
30	Mr.M.NARES HKUMAR	Assistant Professor	27/07/2015	2	3	0	7	12

National Conference or Journal (C)

Year	No : of faculty publications	No: of student publication
2011-2012	7	
2012-2013	10	2
2013-2014	8	
2014-2015	0	
2015-2016	9	8

International Conference or Journal (J/C)

Year	No : of faculty publications	No: of student publication
2011-2012	14/10	3
2012-2013	20/9	10

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2013-2014	28/13	6
2014-2015	6/3	6
2015-2016	28	10

Book chapter published

Year	No : of faculty publications
2011-2012	-
2012-2013	-
2013-2014	-
2014-2015	-
2015-2016	6

*** Chapter in Books**

Sl	Faculty Name	Title	Publication
1.	Prof. S.K.Raman	Fundamentals of Satellite Communication-2011	Pearson
2.	Dr. Kiran Gupta	Comparative Study and Analysis of Short Channel Effects for 180nm and 45nm Transistors-2013	Springer-Verlag Berlin H (AISC)
		An Overview of Communication at RF Frequency and challenges for RFIC	DSI
3	Prof. K.P Shashikala	Biometric Palmprint Identification	DSI
		An Overview of Communication at RF Frequency and challenges for RFIC	
4	Dr. Girish V. Attimarad	Mobile Adhoc Network – An Art of Networking	DSI
5	Dr. P Vimala	The Future of CMOS Technology – A Survey on Nano Electronics	DSI
6	Dr. Girish V Attimarad	Error Control Techniques in Wireless Communication	DSI
7	Dr. Sayed Abdulhayan	Scheduling Strategies in LTE- Advanced	DSI
8	Dr. P. Dinesha	PTC of Resistance and EMI Shielding	DSI

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		Effectiveness of HDPE and PP Nanocomposites	

* **Books Edited**

Computer Networks, Oxford Press

Data Communication and Networks. Oxford Press

* **Books with ISBN/ISSN numbers with details of publishers**

* **Citation Index**

doi:10.1155/2014/452362

* **SNIP**

* **SJR**

* **Impact factor : 1.22**

* **h-index**

20. **Areas of consultancy and income generated** : As of now, No consultancy work taken by the Department.

21. **Faculty as members in**

a) National committees b) International Committees c) Editorial Boards - Nil

22. **Student projects**

a) Percentage of students who have done in-house projects including inter departmental/programme: 100%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 10%

Year	Total No. of Students	Total No. of Students placed	Percentage
2011-12	144	100	69.44%
2012-13	136	45	33.08%
2013-14	138	50	32.60%
2014-15	169	105	62.13%
2015-16	Ongoing		

23. **Awards / Recognitions received by faculty and students**

Sl	Faculty Name	Award	Organised by	Year
1	Dr. Kiran Gupta	BEST IEEE student Branch Award	Bangalore Section IEEE	2010
2	Dr. Kiran Gupta	Senior member IEEE award	IEEE-US	2013
3	UG students guided by Prof. Rajgopal	Best paper awrd-2 nd prize	National Conference (RNSIT)	2014

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4	Mtech student guided by Prof. Roopa M	Best paper award-1st Prize	DSAT-National Conference	2015
5	Final year UG students guided by Dr Kiran Gupta	Best Project Award-consolation Prize at State Level	ABVP “Srishti 2015”	2015

24. List of eminent academicians and scientists / visitors to the department

1. Mr. S.K. RAMAN.
2. Dr. RUKMINI T.S

25. Seminars/ Conferences/Workshops organized & the source of funding

Details maintained as Annexure

Sl.	Particulars	Funding Agency
1.	National Conference NCEVENT-2015	DRDO
2.	ICSCE-13	ICAR and CSIR

26. Student profile program/course wise:

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
E&CE (2014-2015)		174	116	58	84.85
1					
2		201	138	63	72.9
3		203	150	83	73.32
4		169	123	46	92.43
E&CE (2013-2014)		163	115	42	87.78
1					
2		218	158	60	75.22
3		166	119	47	74
4		134	93	41	87.22
E&CE (2012-2013)		174	125	49	91
1					
2		169	121	48	70
3		140	100	40	77.47
4		136	89	47	94.46
E&CE (2011-2012)		133	95	48	
1					
2		159	116	43	

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3		141	96	45	
4		144	117	27	
E&CE (2014-2015)(2ndShift) 1		56	42	14	71.16
2		67	54	13	48.58
3		48	36	12	
E&CE (2013-2014)(2ndShift) 1		56	44	12	74.55
2		56	44	12	
E&CE (2012-2013)(2ndShift) 1		48	39	09	

*M = Male *F = Female

27. Diversity of Students

Name of the Course	Percentage of students from the same state	Percentage of students from other States	Percentage of Students from abroad from abroad
E&CE(2010-11)	59	40.7	0
2011-12	61.3	38.7	0
2012-13	59.8	40.2	0
2013-14	73.4	26.6	0
2014-15	75	24.2	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Item	CAY (2011-14)	CAYm1 (2010-12)	CAYm2 (2009-12)
Total No. of Final Year Students (N)	169	136	136
No. of students placed in companies or Government Sector (x)	105	45	45
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.) (y)	04	02	04

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29. Student progression

Student progression	Against % enrolled	
UG to PG	00	
PG to M.Phil.	00	
PG to Ph.D	03	
Ph.D to Post-Doctoral	00	
Employed	Academic year	Against % enrolled
Campus selection	2010-11	55.62
	2011-12	60.14
	2012-13	77.27
	2013-14	81.01
	2014-15	74.07
Other than campus recruitment	Academic year	Against % enrolled
	2010-11	-
	2011-12	3.623
	2012-13	2.597
	2013-14	6.329
	2014-15	-
Entrepreneurship/Self-employment	NIL	

30. Details of Infrastructural facilities

a. Library

Department Library Details:

Department Name	Particulars	Details
Electronics & communication	Total area of the library	34 sq. mts
	Total seating capacity	20 persons
	Working hours (on working days)	9am to 5pm(on week days) 9am to 1.30pm (on Saturday)

Library holdings	Number
Total Number of Copies	1034
Total Number of Titles	559

Central Library Details (E&C):

Library holdings	2015-16		2014-15		2013-14		2012-13		2011-12	
	Num bers	Total Cost (in RS.)	Num bers	Total Cost (in RS.)	Num bers	Total Cost (in RS.)	Num bers	Total Cost (in RS.)	Num bers	Total Cost (in RS.)
Journals/ Periodicals	204	6,00,000	204	5,00,000	204	4,80,000	214	4,60,000	204	4,20,000
Text Books	7947	23,84,100	7700	23,10,000	7380	22,14,000	6180	18,54,000	5700	17,10,000

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Reference Books	2500	7,50,000	2200	6,60,000	2100	6,30,000	1800	5,40,000	1350	4,05,000
Technical Magazines	22	11,000	20	10,000	18	8,500	18	8,000	15	6,000
e-resources	7	48,00,000	06	14,50,000	06	14,50,000	12	20,00,000	12	18,00,000

Sl.No.	BRANCH	No. of Available Titles	No. of Available volumes	National Journals	Intl. Journal (Online Copy)
1	Electronics and Communication Engineering (U.G+P.G)	2719	10447	14	125

Subscribed E-resource through (VTU Consortium)
1. IEEE 2. ASCE 3. SPRINGER 4. Science Direct 5. Taylor & Francis 6. Knimbus

List of Journals for E&C Department

Sl. No.	Title of the Journal	Periodicity
1	Power line	Monthly
2	IEEMA Journal	Monthly
3	Indian Journal of Advance in Electronic & Electrical Engg.	Half Yearly
4	Electrical India	Monthly
5	Lighting India	Bio-Monthly
6	Ind. Jnl. Of power and River Valley Development	Tri-Annual
7	Communication Today	Monthly
8	Ind. Jnl. Of Electro & Communication Engg.	Half yearly
9	Journal of Energy Heat and Mass Transfer	Quarterly
10	Electronic For you	Monthly
11	Journal of Communication	Half yearly
12	CSI Communication	Monthly

b. Internet facilities for Staff & Students

Good Internet facility for the students and staff for 24/7

b) Internet facilities for staff and students

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(i) Staff

Faculty Room No.	Area (Sq.m)	Computer availability (Yes/ No) (If yes provide Nos.)	Internet availability (Yes/ No)
17101	101	50	YES
17102	101	50	YES
17201	68	05	NO
17203	28	03	YES
17204	28	03	YES
17205	10	01	YES
17206	10	--	YES
17207	68	11	YES
17208	28	02	YES
17209	101	08	YES
17210	28	02	YES
17213	28	01	YES
17214	101	05	NO
17216	68	09	YES
17217	10	01	YES
17218	18	01	YES
17219	68	37	YES
17220	33	09	YES
17304	28	01	YES
17305	18	01	YES
17307	28	02	YES
17311	68	03	YES
17404	20	01	NO
Antenna Lab	18	01	YES

(ii) Students

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c. Class rooms with ICT facility

Department Name	Particulars	ICT Details	Description of ICT facilities
Electronics and communications	Class rooms	LCD Projector	4 class Rooms
	Laboratories	Computer with Internet facility	4 Labs
	Staff rooms	Computer with Internet facility	8 Staff Rooms

d. Laboratories : Details maintained as Annexure

31. Number of students receiving financial assistance from college, university, government or other agencies:

No. of Scholarship given to students S.No	Scholarship	2014-2015	2013-2014	2012-2013	2011-2012
1	SC/ST	YET TO BE SANCTIONED	44/66 = 66.7%	34/61 = 55.74%	30/63 = 47.62%

Scholarship amount disbursed S.No	Scholarship	2014-2015	2013-2014	2012-2013	2011-2012
1	SC/ST	YET TO BE SANCTIONED	1080853.00	1271550.00	981840.00

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts - Details maintained as Annexure

Feb-June 2012

S. No	Seminars / workshop/ Guest lecture	Topic	Speakers	Date
1.	2 day State level FDP Conducted on sponsored by IMAPS, Techlabs, DSI For EC/ML/IT/TC staff from all Bangalore colleges	Virtual Instrumentation	Dr.MHKori, Dr.BALIGA,Dr.B Narayanappa, Mr.Vishveshvaran and others from NI Tech labs	7,8 Feb-2012
2.	Annual event of IEEE DSCE student branch,	12 events: mock placement, Ckt breaker, coding &	Judges were invited from	28-29 March

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	XPLORE For All Semester students	decoding, paper presentation, project demo, digital collage, Robotics, Treasure hunt, Soduko, Ad making, Technory-a Quiz programme	various Departments	2012
3.	Guest Lecture on for 8th Semester Students	Hardware design as applicable to Avionics, embedded systems”	by Raj Narayan,CEO,Ra del	16.3.2012
4.	Guest Lecture by IEEE Branch conducted on	a Gate Exam Importance & Placement at Corporates by Infosys by IISC	Prof.Srinivas T	28/3/2012 to 29 /3/2012
5.	Guest Lecture by IEEE Branch	Avenues in Infosys and IT industries	by Director Infosys Mr.Srikanta	29/3/2012

Jul-Dec 2012

S.No	Seminars / workshop/ Guest lecture	Topic	Speakers	date
1.	Training For staff and students	Labview virtual simulation tool	faculty of M/S Trident Tech Labs.	1/10/2012 to 8 /10/2012,
2.	Training for communication lab staff	Labview virtual simulation tool	faculty of M/S Trident Tech Labs.	16/10/2012 to 18/10/2012

FEB-June2013

S.No	Seminars / workshop/ Guest lecture	Topic	Speakers	date
1.	Guest Lecture for 8 th and 6 th Sem Students.	Computer Vision and Image processing	Mr. Sudanshu and Mr. Mehul Duvacha from Tele Bramh	16/2/2013 10.30Am-12.00Pm
2.	seminar for 8 th and 6 th Sem Students	Career options around the world for ECE Stream	Mr.Sanjeeb from Career Launcher	16/2/2013
3.	Workshop on Advanced Roboticsfor 4 th and 6 th Sem Students.	Speech Processing in Robots (using TI MSP430 Microcontroller)	Mr.Arun and MR.Ashrith Triambak, Li2 Innovations Pvt Ltd	25/3/2013 & 26/3/2013
4	Seminar.	Interactive session on career placement and higher studies	Anurag Priyadarshi Ex-Student	2/3/13
5	Expert Talk For staff and 8 th Sem selected	Robotics, Man - machine interface and Automation and current	Mr.C.Nataraj,Director,Me chanical Dept,Villinova University	6/3/2013

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	students	research		
6	Expert Talk For staff and selected 8 th Sem students Conducted by TC dept.	Intelligent networking Future All IP Networks, Smart packets, Elastic Video Traffic	Dr.Javed.I.Khan Professor and chair of Network & Media Communications Lab, CSC dept, Kent University	7/3/2013
7	Seminar.	Career Options for budding electronic engineers	Faculty from VistaMind	13/3/13

Jul-Dec2013

S.No	Workshop	Topic	Speakers	date
1	NI Labview training for staff(DRS,RS,SRK) Totally 10 including EC,TC,ML,IT	Ni Labview (Core 1 and Core2)	Faculty from Trident Tech labs	22/7/2013 to 26/7/13
2	NI Labview training for students (37)	Ni Labview (Core 1 and Core2)	Faculty from Trident Tech labs	20/8/2013 to 24/8/13
3	Demo of Mtech Lab Programs using VXworks	Using VXworks	Faculty from Corel Technologies Mr.Srujan Babu	23/8/2013
3	Demo of Mtech Lab Programs using VXworks	Lab Programs using VXworks	Faculty from Mapusoft Mr.Vishwakiran	18/9/2013 19/9/2013
4	Entrepreneurs Program (10 top students from 7 th sem)	Relating to Entrepreneurs	Conducted by MBA Dept of dsce	17/9/2013
5	Seminar by Tindal University, Ireland (HOR,JS,AR)	Research opportunities	by Tindal University, Ireland	23/12/2013

33. Teaching methods adopted to improve student learning:

- ❖ Subject mentoring –senior faculty member guides junior faculty members in the process of TLP (notes preparation, class room delivery, Evaluation proctoring etc)
- ❖ Bridge courses for difficult subject
- ❖ Tutorials for problematic and program subject
- ❖ Remedial classes for slow learners
- ❖ Video lectures and Video Lab instruction for better understanding of the subject at the students individual pace.
- ❖ Paper presentation, Debugging and poster presentations to encourage creative and analytical thinking
- ❖ Partial delivery by industry people to give industry perspective of the subject.
- ❖ Mini projects and open ended experiments to improve practical thinking.
- ❖ Internship programmes for students
- ❖ Active learning technique like Cooperative and collaborative learning.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities.

Blood Donation Camp: 90 members have donated blood to Sagar blood bank

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35. SWOC analysis of the department and Future plans

STRENGTH:

- Quality Teaching Learning and evaluation process
- Highly Qualified Teaching and Non teaching Faculty Members
- IEEE student chapter

WEAKNESS:

- Syllabus is not oriented with Industry

OPPORTUNITIES:

- Since Department is now autonomous - Industry oriented syllabus can be designed to enhance employability and to meet global standards

CHALLENGES:

- To compete with other top private and Autonomous Universities.

Evaluative Report of the Department

1. **Name:** ELECTRICAL AND ELECTRONICS ENGINEERING
2. **Year of establishment:** 1979
3. **Names of Programmes / Courses offered**
(UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.): UG, PG, Ph.D
4. **Interdisciplinary courses and departments involved:** NA

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5. Annual/ semester/choice based credit system: Semester

6. Participation of the department in the courses offered by other departments:

Name	Department	Subject
Prof. K Rajaram	Architecture	Building Services-II

7. Course in collaboration with other universities, industries, foreign institutions, etc.: NA

8. Details of courses/ programmes discontinued (if any) with reasons: NIL

9. Number of teaching posts as per AICTE:

Sl. No.	Cadre	Sanctioned (UG+PG)	Filled (UG+PG)
1	Professors	2+1 =3	4+1=5
2	Associate Professors	6 +1=7	2+1=3
3	Asst. Professors	16+1+ 6(I-yr)=23	20+1=21

10. Faculty profile with name, qualification, designation, specialisation (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)

Sl.No	Name	Designation	Qualification	Specialization	No. of Years of Experience	No. of Ph.D. students guiding
1.	Dr.K. Shanmukha Sundar	Prof.& HOD	M.Tech,Ph.D	Power & Energy Systems/ Faculty in Electrical Engg.	24	3
2.	Dr.P. Usha	Professor	M.Tech,Ph.D	HV/Faculty in Electrical Engg.	22	2
3.	Dr.H.Vasantha Kumar Shetty	Professor	Ph.D	Power system dynamics	44	NIL
4.	Dr.Dhanalakshmi R	Professor	Ph.D	Power System	22	1
5.	Dr.Balaji.N	Assoc. Professor	Ph.D	Faculty in Electrical Engg.	34	1
6.	A.M. Nagaraj	Assoc. Professor	M.Tech,MBA	Power System	19	NIL
7.	Harsha S Anantwar	Assoc. Professor	M.Tech	Electrical control system	19.6	NIL
8.	T.N. Venkataraman	Asst. Professor	MS [USA]	Control System	22.6	NIL
9.	K. Rajaram	Asst. Professor	B.E.	Electrical	9	NIL
10.	Shubha Kulkarni	Asst. Professor	M.Tech	Applied Electronics	11.6	NIL
11.	Suchana Mishra	Asst. Professor	M.Tech	Electronics & Communication	9	NIL
12.	Sharath Kumar Y N	Asst. Professor	M .Tech in Industrial Electronics	Industrial Electronics	6.6	NIL
13.	Balaji Ramakrishna	Asst.	M.Tech	VLSI Design	7	NIL

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	S	Professor				
14	Kavana Salimath	Asst. Professor	M.Tech	Digital Electronics	6	NIL
15	Madhura S	Asst. Professor	M.Tech	Computer application in Industrial drives	5.6	NIL
16	Tanuja H	Asst. Professor	M.Tech	Power Electronics	4	NIL
17	Nandan N	Asst. Professor	M.Tech	Industrial Automation & Robotics	5.6	NIL
18	Vidya M	Asst. Professor	M.Tech	Power electronics	5	NIL
19	Yogesh M	Asst. Professor	M.Tech	Computer application in Industrial drives	5.6	NIL
20	Nagarja B S	Asst. Professor	M.Tech	Computer application in Industrial drives	5.6	NIL
21	Jyothi D R(on leave)	Asst.Professor	M.Tech	Power Electronics	3	NIL
22	M. Sathiya	Asst.Professor	M.Tech	Power Electronics	7.6	NIL
23	Sreevidya T.R	Asst.Professor	M.Tech	CAID	6.6	NIL
24	Sumana S	Asst.Professor	M.Tech	Power Electronics	6.6	NIL
25	Satish B A	Asst.Professor	M S (MIT)	Embedded System	6	NIL
26	Rachana M Hullamani	Asst.Professor	M.Tech	Master of Engg. Management	2	NIL
27	Raghavendra .H.S	Asst.Professor	M.Tech	Power Electronics	1	NIL
28	Anjali R.N	Asst.Professor	M.Tech	Power Electronics	3	NIL
29	Ganesh G C	Asst.Professor	M.Tech		2	NIL
30	Raghunath Reddy	Asst.Professor	M.Tech	Electrical Power Systems	4	NIL

11. List of senior visiting faculty : Dr.Kartik Sitapati, Professor (from Industry)

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty : NA

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13. Student Teacher Ratio (Programme-wise)- as per AICTE

Sl. No.	Programme	Sanctioned	Filled
1	UG	1:15	1:16
2	PG	1:12	1:12

14. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Name	Designation	Qualification	Total Experience
1	Gargi Lepanna	Instructor	B.E.	14
2	Sathish K.L.	Instructor	Diploma [E&E]	8
3	Vibha R	Instructor	Diploma [E&C]	5
4	Girish H B	Instructor	Diploma [E&C]	5
5	Kiran Singh	Asst. Instructor	ITI Electrician	7
6	Manju M R	Asst. Instructor	ITI Electrician	7
7	Nanjundaiah L	Office Asst	B.A., PGDPM	40

15. Qualification of teaching faculty with DSc/D.Litt/Ph.D/PG:

Same as Sl.No.10 (Please refer Sl No. 10)

16. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.

Sl. No.	Name	Project Name	National funding agency	Grant received	Remarks
1.	Dr. Parimala R V	Study of speed control of AC series Motor using AC chopper voltage control	CPRI	Rs. 9.5 lakhs	Completed (2012)

17. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Sl. No.	Name	National funding agency	Grant received
1	Dr. R.V.Parimala	CPRI, Ministry of Power	Rs. 9.5 lacs (Completed)
2	Dr. P. Usha	DST- IEDC (2014-15)	Rs. 60,000/-
3	Dr. P. Usha	DST- IEDC (2015-16)	Rs. 60,000/-
4	Mr. Satish .B.A	DST- IEDC (2015-16)	Rs. 60,000/-

18. Research Centre / facility recognized by the University

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- i) The Department of EEE of DSCE is recognized as R & D Centre by VTU which offers Doctoral programme i.e Ph.D/M.Sc (Engg.) by research programme (approved during 2012).
- ii) Registrations of Ph.D/M.Sc (Engg) by research:

Registrations of Ph.D/M.Sc (Engg) by research (EEE dept R & D centre): 04

Candidate Name	Programme	Full/Part time	Research centre	College/ Institute	Supervisor	Research Topic
V Suresh Babu 12-dec-2014 (External Candidate from PSTI)	Ph.D	Part Time	EEE	DSCE	Dr.K Shanmukha Sundar	Performance analysis of synchronization techniques and Coordination of renewable energy systems
Satish B A 12-dec-2014 (DSCE Faculty)	Ph.D	Part Time	EEE	DSCE	Dr.P.Usha	Intelligent hybrid micro grid for low power applications
Sangeeta Modi 12-dec-2014 (External Candidate)	Ph.D	Part Time	EEE	DSCE	Dr.P.Usha	Design of smart controller for hybrid microgrid
Gayathri.C 10-Dec-2015 (External Candidate)	Ph.D	Part Time	EEE	DSCE	Dr.R.Dhanalakshmi	Performance analysis and control of hybrid Micro grid with energy storage devices.

Faculty registered for Ph.D/M.Sc (Engg) by research (Other R & D centers/ Universities): 07

Sl No	Name of the Faculty (Prof)	Designation	Registration Date	R & D Centre /University	Guide Name	Remarks
1	A.M.Nagaraj	Associate Professor	April-2007	Kuvempu University	Dr. B.R.Ramachandra, PESCE,Mandya	Pursuing
2	Smt. Harsha	Associate	Dec 2012	VTU RRC/	Dr. B.R.	Course

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	Anantwar	Professor		VTU	Lakshmikantha & Dr.K.Shanmukha Sundar EEE Dept, DSCE	work completed
3	Smt. Suchana Mishra	Asst. Professor	May-2011	Siksha O Anusandhan (SOA), Bhubaneswar	Dr. S. Pattanaik, SOA, Bhubaneswar	Pursuing
4	Mr.Y.N. Sharath Kumar	Asst. Professor	May 2012	ECE, R.VCE/VTU	Dr. Deepali Koppad, Asso. Professor, PESIT	Course work completed
5	Mr. Balaji Ramakrishna	Asst. Professor	May 2012	ECE, DSCE/VTU	Dr. A.R.Aswataha, TC Dept, DSCE	Pre Ph.D comprehensive viva completed
6	Smt. Madhura .S	Asst. Professor	Dec 2012	IT Dept., DSCE /VTU	Dr.K.Suresh , IT Dept, DSCE	Pre Ph.D comprehensive viva completed
7	Smt. Vidya M	Asst. Professor	Dec 2014	EEE/BIT/VTU	Dr.P.Pramila Prof.& HOD EEE Dept,,BIT.,Bangalore	Pursuing

19. Publications

a) Publications per faculty :

Name of faculty	Total no of Publications
Dr.Shanmukha Sundar	35
Dr. P.Usha	22
Dr.Dhanalakshmi.R	22
Mr A.M.Nagaraj	6
Smt. Harsha S Anantwar	3
Shubha Kulkarni	2
Balaji Ramakrishna S	2
Madhura	3

b) Number of papers published in peer reviewed journals (National / international) by the faculty and students: 46

c) Number of publications listed in international database: 23

(For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Sciences Directory, EBSCO host, etc.)

d) Monographs : NIL

e) Chapter in Books : NIL

f) Books with ISBN/ISSN numbers with details of Publishers: 02

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(i) Computer aided electrical drawing, Mr Yogesh, Mr. Nagaraj B.S and Mr.Nandan.N ISBN--- 978-81-203-4953-7, Publisher----PHI

(ii) Advanced control systems, by Dr.B.N.Sarkar ISBN----978-81-203-4710-6, Publisher---PHI

20. Areas of consultancy and income generated: NIL

21. Faculty as members in a) National committees b) International Committees c)

Editorial Boards: 01

22. Students projects:

a) Percentage of students who have done in-house projects including inter departmental / programme

Year	Total no of Projects	In- House Projects	% Projects carried out in the college
2011	31	20	64
2012	33	31	94
2013	32	21	66
2014	34	30	89
2015	33	28	85
2016	36	33	92

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies

Year	Total no of Projects	Outside Institution	% of projects carried out in The Industry
2011	31	11	36
2012	33	02	6
2013	32	11	34
2014	34	04	11
2015	33	5	15
2016	36	3	8

23. Awards / Recognitions received by faculty and students:

The department is well respected, recognized and accredited twice by AICTE, NBA- New Delhi and permanently affiliated by Visvesvaraya Technological University (VTU). Further, the EEE department is recognised as research centre by V.T.U and offers Research / Doctoral Programme i.e. PhD/M.Sc (Engg.) by research. In last 3 decades the department has transformed in terms of expertise, infrastructure and capacity

(ii) The following students of V-Sem EEE branch have secured first place in Innovation category at “SUSTAINABLE ENERGY CHALLENGE-2012”, organized by SELCO foundation at IIMB Campus, Bangalore.

1.M.R.SUKEERTH KUMAR (1DS10EE049)

2.PADMAJAS (1DS10EE070)

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3.SUNIL.B.K (1DS09EE413)
 4.ARJUN.B.K (1DS11EE400)
 5.SHUHAIB.A (1DS11EE417)

- (i) Mr. Manoj Sharma presented paper titled "Finite element method and analysis in electrical and electronics engineering "in National conference on Emerging trends in Engineering technology (ETET-2013)- 15th and 16th march 2013 and has won first prize.

24. List of eminent academicians and scientist / visited to the department:

Sl.No	Speaker and affiliation	Topic	Date
1.	Mr. Ilangovan Project Engineer-IISc	Energy economics and environment	05-03-2016
2.	Dr. KLS Sharma, Advisor, Automation Education and Training, (Senior Member ISA)	Modern Industrial Automation	27-01-2015
3.	Girish Ayya,Managing Partner, Avadhoot Automation,(Member)	PLC Based Automation Systems	29-01-2015
4.	Shri Ram Kerur, Student chair, ISA-B	n Automation	31-01-2015
5.	Arun Menon, MD, Strategic Automation Bangalore	AC-DC Drives	31-01-2015
6.	Mr.Venkatasubbaiah B, Dy.Director, PSTI (Ministry of Power), Bangalore	An approach to Energy Audit & Building Management	26-3-2014
7.	Mr.M.N.Murthy, Principal Director, PSTI (Ministry of Power),Bangalore	Trends in Power System Protection	28-2-2014
8.	Mr. Subhash K U, CEO, Mindsculptor Systems Pvt. Ltd., Bangalore	Pre-Placement Training Skills for VII Sem. Students & How to crack C++ programming	15-9-2013
9.	Mr. Venkat Sunkara,Founder and CEO of chip Edge Technology Pvt Ltd.,Bangalore	VLSI Technology Trends and Evolution	06-09-2013
10.	Dr.K.L.S.Sharma,	International Society of Automation Industrial Automation & Control	08-11-2012
11.	Mr. R.K.Hegde Director, Energy Consultants, Bangalore	Energy Audit & Conservation-Importance and a Case Study	08-10-2012

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12.	Smt. Alka Yadav, Asst. Director, Power System Training Institute, (NPTI, Ministry of Power), Bangalore	Power Scenario & Job Opportunities in the Power Sector	27-09-2012
13.	SWISSNEX, India Power the sun	"project: a mobile solar powered sound system"	16-03-2012
14.	Dr. Stephen Smith, Senior Lecturer, Dept. of Electronics, York University, U.K	Latest Developments in the field of Image processing related to advanced research methods in Electrical & Electronics Engineering	07-02-2012
15.	Mr.M.N.Murthy Director ,Power System Training Institute, Bengaluru	Challenges in System operation & Control	29-10-2011
16.	Dr. B.R.Lakshmikantha, Principal	DSATM Need for Renewable Energy Sources	03-10-2011
17.	Shri V.Arunachalam Additional Director, UARC, CPRI , Bengaluru	Challenges in Smart Grid Technology	03-10-2011
18.	Dr Naganna Gowda, Director (Project group), KREDL	Advancement in and challenges in Solar Energy	24-09-2011
19.	Mr. Prsannakumar, IAS, Managing Director, Karnataka Renewable Energy Development Ltd., Bangalore	Renewable Energy Sources	24-09-2011
20.	Mr.Mallikarjun, Proprietor, Sunshubh Renewables & Research center, Hubli	Energy Conservation	23-09-2011
21.	Mr. Ravindra .H. Kori, Asst. Technical Officer	Technology advancement in Solar power inverters	23-09-2011
22.	Mr. C.R. Srinivasa, General Manger, M/s ENERCON [India] Limited, Bangalore.	Wind Power operation & Control	27-04-2011
23.	Dr. Manoj Nagaraj	Higher Dimensions of Intelligence	21-03-2011
24.	Mr. Er. Santosh Kumar, M/s Vt Transformer, Bangalore	"Manufacturing and Design Process of Transformers	26-02-2011

25. Seminars/ Conferences/Workshops organized & the source of funding :

Sl No	Name of the Conference/ workshop /seminar	Date	Source of funding
1	National Conference on-" Sustainable Emerging Intelligent Technologies"	22 nd & 23 rd Feb., 2016	DSCE
2	National Conference on-" Role of Innovative Engineering Solutions for Medical Sciences"	10 th & 11 th Sept., 2015	DSCE

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3	One week FDP on Emerging trends in PLC & SCADA based Industrial Automation	27 th to 31 st Jan 2015	DSCE
4	PCB Design Workshop using Eagle Software for First Semester M.Tech students. (by our Alumnus Mr.Manish Anand & Mr. Adithya Rajeev)	7-12-2013	Self
5	AICTE Sponsored National Workshop on “Scope and Challenges in Sustainable Technologies - A present day Scenario ”	22-08-2013 to 23-08-2013	AICTE
6	Faculty Development Programme on Industrial Automation with PLC and SCADA Systems” in association with International Society of Automation, Bangalore.	07-02-2013 to 08-02-2013	DSCE
7	Three day workshop on “Swarm Robotics” by INTROBOTS- in association with IITK team	20-10-2012 to 22-10-2012	Self
8	International Conference on “Emerging Intelligent Sustainable Technologies” (EISTCON2012) by EEE Dept. in association with IRNet, Bhubaneswar, India	03-05-2012 & 04-05-2012	DSCE
9	National workshop on “Challenges & Opportunities in Smart Grid Technology and Distribution Automation”	02-03-2012	CPRI
10	EEETA Seminar on “Smart Grid Technology”	03-10-2011	Self
11	Exhibition cum Workshop on “Renewable Energy Sources” held at Dr.C.D.Sagar Auditorium, DSI Campus in association with KREDL, Bangalore	23-09-2011 & 24-09-2011	DSCE

26. Student profile programme/course wise:

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
Electrical and Electronics Engineering-2009	117	117	92	25	96%
Electrical and Electronics Engineering-2010	120	120	100	20	97%
Electrical and Electronics Engineering-2011	126	126	96	30	81%
Electrical and Electronics Engineering-2012	124	124	97	27	YET TO PASS
Electrical and Electronics Engineering-2013	110	110	79	31	YET TO PASS
Electrical and Electronics Engineering-2014	106	106	81	25	YET TO PASS

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Electrical and Electronics Engineering-2015	101	101	64	37	YET TO PASS

*M = Male *F = Female

27. Diversity of Students:

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
Electrical and Electronics Engineering-2014(UG)	54.16%	34.16%	0
Electrical and Electronics Engineering-Power Electronics -2014 (PG)	83.34%	0	0
Electrical and Electronics Engineering-2015(UG)	47.5%	52.5%	0
Electrical and Electronics Engineering-Power Electronics -2015 (PG)	72%	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Name of the Competitive Exam	Year	Number of students
GRE	2011	2
	2012	1
	2013	7
	2014	4
PG-CET	2011	1
	2012	2
	2013	1
	2014	5
M.S	2015	2

29. Student Progression

Providing the percentage of students progressing to higher education or employment (for the last four batches).

Student progression	%
UG to PG	10
PG to M.Phil.	---
PG to Ph.D.	02
Employed • Campus selection	2014-15: 76% 2013-14: 43% 2012-13: 41% 2011-12: 38% 2010-11: 78%

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-Other than campus recruitment	15 % (average of four years)

30.Details of Infrastructural facilities

Library: The department library consists of the following facilities:

Sl no	Infrastructure	Quantity
1	Chairs	6
2	Tables	2
3	Computer	1
4	Printer and Scanner	1
5	Books /Titles	602

Internet facilities for Staff & Students

- **Name of the Internet provider :** M/s Spectranet
- **Available bandwidth:** 1:1
- **Access speed:** 100MBps
- **Availability of internet in an exclusive lab:** YES
- **Availability in most computing labs:** YES
- **Availability in departments and other units:** YES
- **Availability in faculty rooms:** YES
- **Institute's own e-mail facility to faculty/students:** YES
- **Security/privacy to e-mail/internet users:**
 - 24x7 WI fi connectivity for campus.
 - Fiber optic links for all campus buildings 2500 meters

(b) Faculty Rooms:

Name	Location	Numbers	Facility
No. of Faculty rooms	NEB DSI 207 = HOD	01	PC, internet, book rack, meeting space
	NEB DSI 209 A = Professor	01	
	NEB DSI 209 B = Professor	01	
	NEB DSI 107=Professors & Assistant Professors	03	
	EE004 = Professors , Associate & Assistant Professors	05	
	EE002 = Assistant Professors	05	
	NEB DSI 210 = Assistant Professors	4	
	NEB DSI 209 = Assistant Professors	2	

Class rooms with ICT facility

Room Description	Usage	Capacity	Rooms Equipped with PC, Internet, Book rack, meeting space, etc.

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No. of Class Rooms	Class room for M-Tech 1 st & 3 rd sem =DSI EEE LH 202	20	Projector, PC with internet
	DSI EEE LH 205 = 'A' DSI EEE LH 206 = 'B' Class room for 4 th year	72 72	Projector, PC with internet
	EEE-SH-304 = 'A' EEE-LH-301 = 'B' Class room for 3 rd year	75 75	Projector
	EEE LH 203(AUTO Block)-'A' EEE-LH-303= 'B' (EEEE Block) Class room for 2 nd year	72 75	---
	BB304 BB301 Class room for 1 st year	80 80	Projector, PC with internet
No. of Tutorial rooms	EE302	90	Projector, PC
No. of Seminar Rooms	Dr.P.C.Sagar Auditorium	250	Projector, PC with internet
	CD Sagar Hall	100	
	AV Hall	100	
	Heritage Seminar – 1	100	
	Heritage Seminar – 2	100	

Laboratories : Provided as per AICTE Requirments

31. Number of students receiving financial assistance from college, university, government or other agencies Scholarship Details(SC/ST)

ELECTRICAL & ELECTRONICS ENGINEERING					
SL.NO.	FINANCIAL YEAR	ACADEMIC YEAR	NO. OF STUDENTS	TOTAL AMOUNT SANCTIONED	
1	2011-12	I YEAR	6	2,44,760.00	SC/ST SCHOLARSHIP
		II YEAR	9	3,34,040.00	
		III YEAR	9	2,43,390.00	
		IV YEAR	8	2,55,280.00	
2	2012-13	I YEAR	3	1,28,130.00	
		II YEAR	7	2,77,600.00	
		III YEAR	3	98,160.00	
		IV YEAR	8	2,10,660.00	
3	2013-14	I YEAR	6	2,67,260.00	
		II YEAR	5	1,62,250.00	
		III YEAR	11	3,82,320.00	
		IV YEAR	6	2,20,840.00	
4	2014-15	I YEAR	8	3,15,080	

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	II YEAR	16	6,39,120.00
	III YEAR	7	2,73,060.00
	IV YEAR	8	2,82,200.00
	M.TECH	4	2,77,070.00

PG stipend (GATE qualified):

Academic Year 2012-2013			
Name	Percentile/year	Year of Admission	Student ID
SANTHOSH RAO	311/2012	03-09-2013	1-1422147032
RAGHAVENDRA H S	185/2012	04-09-2013	1-1422146994
S. GOWRI MANI SHANKAR	335/2012	30/08/2013	1-1422147040
CHETHAN S J	305/2012	30-08/2013	1-1422147034
PRADEEP S VIBHUTI	185/2012	03-09-2013	1-1422147038
Academic Year 2013-2014			
SUSHMA H R	260/2013	23-09-2013	1-2006669192
DHARANI M	331/2013	10-09-2013	1-2006767042
SHIVARAJ SANGAPUR	360/2013	20-09-2013	1-2006083522
ARVIND L	209/2012	06-09-2013	1-2006767022
SANGAMESH B H	324/2013	23-09-2013	1-2006579612
NETHRAVATHI S G	324/2013	26-09-2013	1-2006766992

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Same as Sl No. 24 & 25

33. Teaching methods adopted to improve student learning

- The staff have obtained training under Mission 10X training by wipro to help them deliver their classes more effectively
- The student performance is continuously monitored through the proctor system.
- Students are encouraged to implement their theoretical knowledge in projects by organizing project exhibition every year.
- Regular industrial visits are organized to expose students to the current developments in the industry
- Regular Invited talks from Industry experts are organized.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

(i) The EEE Dept. organized Community Service programme at Government Higher primary

School, Medamaranahally village, Harohalli (PO), Kanakapura,

Ramanagaram Dist.,

KARNATAKA on 1st April 2013.

- An initiative to empower Science & Technology among rural school students.
- A Science Laboratory has been setup in the name of our beloved founder Shri. R. Dayananda Sagar at school campus..

(ii) The department students participated in blood donation camps organized by the other departments.

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(iii) The EEE department students and staff celebrated the Independence Day with HIV/AIDS affected orphanage children on 15-08-2015. The students of EEE have distributed sweets, fruits, books, and other stationary items to the kids as a part of celebration.

35. SWOC analysis of the department and Future plans

Strengths:

- Qualified and efficient faculty
- Effective Teaching-learning process
- Community oriented activities
- Value added training programmes

Weakness:

- Less number of placements in core industries/organisations
- Lack of Funded projects

- Lack of consultancy works and patents

Opportunities:

- To pursue higher studies
- To become Entrepreneur
- Situated in the IT business hub India Bangalore has huge potential for employment of our graduates and Post graduates lucratively. Further opportunities exist in the manufacturing with the fillip given by government to the industries.
- A good alumni network is available in the department and always the alumni meets have been a good interacting forum for the young engineers. Enormous opportunities/ placement assistance can be tapped from alumnus.
- Presence of multinational companies in Bangalore has been a boon for our engineers to be placed. This is considered a great opportunity for close interaction with them.
- There is a great opportunity existing in the area of international student exchange programmes.
- To get funded projects and consultancy

Challenges:

- To attract core industries for placement
- To maximize ICT enabled theory and practices of education
- To inspire and encourage faculty towards research
- To recruit qualified faculty for appropriate positions
- To attract top rank students into the department
- To guide and motivate faculty members in getting funded research projects, publishing papers and claiming patents

Future Plans:

- To get Funded projects
- To organize more hands on training programmes for faculty and students

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- To promote research culture among faculty and students
- To make the department centre of excellence.

1. Name of the Department : **Electronics and Instrumentation Engineering**

2. Year of Establishment : 1992

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., and Integrated Masters; Integrated Ph.D., etc.)

Program	Duration	Year of Establishment	Intake	AICTE Ref. No.
B.E. in Under Graduates(UG)				
Instrumentation Technology, Nomenclature has changed to Electronics & Instrumentation	4 Years	1992	30 Increased to 60 from 2007	F.No.770-53-212(E)/RC/94 Dated: July 15, 2009

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Engineering in the year 2014 -15 with Ref No. VTU/Aca/ A6/ 2014-15/2249 Dt. 17 June 2014				
M Tech in Post Graduates(PG)				
Micro Electronics and Control Systems	2 Years	2009	18	F.No.770-53-212(E)/RC/94 Dated: July 15, 2009

Program	Year of Establishment	No of research Scholars	VTU Ref. No.
PhD	2014-2015	02	VTU/Aca-Res-Cen/2014-15/2982 Dated 09 July 2014

4. Names of Interdisciplinary courses and the Departments/units involved : **NIL**

5. Annual/ semester/choice based credit system (programme wise)

Sl. No.	Name of the Program	Scheme of study	Semester
1	UG: Electronics and Instrumentation Engineering	VTU guidelines and follow the semester scheme.	Yes
2	PG: Micro Electronics and Control Systems	VTU guidelines and follow the semester scheme.	Yes
3	Research Programme	VTU guidelines	-

6. Participation of the Department in the courses offered by other departments - Nil-

7. Courses in collaboration with other universities, industries, foreign Institutions, etc.

Name of the Program	Industries	Training Institute
- UG: Electronics and Instrumentation Engineering - PG: Micro Electronics and Control Systems	Advanced Electronics Systems, Bangalore	Prolific Systems & Technology
	Yokogawa India Ltd, Bangalore	
	HED-X, Bangalore	
Research Programme	----	----

8. Details of courses/programmes discontinued (if any) with reasons - --NIL--

9. Number of teaching posts:

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Teaching posts	Sanctioned	Filled
Professors	2 (1UG+1PG)	3 (2UG +1PG)
Associate Professors	4 (3UG+1PG)	5 (4UG+1PG)
Asst. Professors	10 (9UG+1PG)	8 (7UG+1PG)

10. Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

UG: Electronics and Instrumentation Engineering

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr.V.G.Sangam	M.Tech Ph.D	Professor and HOD	Sensors & Instrumentation	25	3
Dr.G.M.Patil	M.Tech Ph.D	Professor	Instrumentation & Biomedical Engineering	31	05
Rajashekar J S	M.Tech (Ph.D) Thesis Submitted	Associate Professor	Process Instrumentation & Control	29	-
Dr. Satheesh Kumar	M.Tech., Ph.D	Associate Professor	Process Control	13	-
Dr.V.S.Krushnasamy	M.Tech ,Ph.D	Associate Professor	Sensor Design	13	-
Sandhya Dass	M.Tech (Ph.D)	Associate Professor	Bio Medical Instrumentation	12	-
Meharunnisa Begum SP	M.E(PhD)	Asst. Prof	Power Electronics	11	-
Gopalaiah	M.Tech(PhD)	Asst. Prof	Digital Electronics & Comm.	07	-
Krishna Mohan	M.Tech	Asst. Prof	Instrumentation & Control	08	-

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Nikhila S	M.Tech	Asst. Prof	Digital Electronics Communication	06	-
Silpa Ajith kumar	M.E	Asst. Prof	Instrumentation Applied	06	-
Ekta Maini	M.E	Asst. Prof	Instrumentation And Control	06	-
T Sushma	M.Tech	Asst. Prof	Bio Medical Instrumentation	03	-

PG : Micro Electronics and Control Systems

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students
Dr.A.Sreenivasan	M.E. PhD	Professor	Electronics & Communication,	42	3
Dr.Aniket Wadajkar	M.S ,Ph.D	Associate Professor	Bio Medical Instrumentation	7	-
Anjana Joshi	M.Tech	Asst. Prof	Bio Medical Signal Processing & Instrumentation	06	-

11. List of senior visiting faculty:

-Nil-

12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty

-Nil-

All classes are held by regular faculty members

13. Student -Teacher Ratio (Programme wise)

UG: B.E. Electronics & Instrumentation Engineering: **1:15**

PG: Microelectronics & Control systems: **1:6**

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Teaching posts	Sanctioned	Filled
Lab Instructors/ Assistants	5	3

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Administrative staff	1	1
Attender	1	1

15. Qualifications of teaching faculty with DSc/ D.Litt/ PhD/ MPhil / PG.

UG: Electronics and Instrumentation Engineering

Name	Qualification	Designation	Specialization
Dr.V.G.Sangam	M.Tech Ph.D	Professor and HOD	Sensors & Instrumentation
Dr.G.M.Patil	M.Tech Ph.D	Professor	Instrumentation & Biomedical
Rajashekar J S	M.Tech (Ph.D)	Associate Professor	Process Instrumentation & Control
Dr. Satheesh Kumar	M.Tech., Ph.D	Associate Professor	Process Control
Dr.V.S.Krushnasamy	M.Tech ,Ph.D	Associate Professor	Sensor Design
Sandhya Dass	M.Tech (Ph.D)	Associate Professor	Bio Medical Instrumentation
Meharunnisa Begum SP	M.E(PhD)	Asst. Prof	Power Electronics
Gopalaiah	M.Tech(PhD)	Asst. Prof	Digital Electronics & Comm.
Krishna Mohan	M.Tech	Asst. Prof	Instrumentation & Control
Nikhila S	M.Tech	Asst. Prof	Digital Electronics Communication
Silpa Ajith kumar	M.E	Asst. Prof	Instrumentation Applied Electronics
Ekta Maini	M.E	Asst. Prof	Instrumentation And Control
T Sushma	M.Tech	Asst. Prof	Bio Medical Instrumentation

PG: Microelectronics and Control Systems

Sl.No	Name	Qualification	Designation	Specialization
1	Dr.A.Sreenivasan	M.E. PhD	Professor	Electronics & Communication
2	Dr.Aniket Wadajkar	M.S .,Ph.D	Associate Professor	Bio Medical Instrumentation

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3	Anjana Joshi	M.E(PhD)	Asst. Prof	Bio Medical Signal Processing& Instrumentation

16. Number of faculty with ongoing projects from a) National b) International
Funding agencies and grants received

Ongoing projects during the year 2010-15:

Sl. No.	Academic Year	No of Sanctioned Project	National	International	Total grants in Rs
1	2014-15	1	IEDC	-	Rs 80,000/- (Completed)
2	2014-15	1	Texas Instruments	-	Rs 10,000/- (Completed)

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Sl. No	Name of PI	Project Title	Year of sanction & duration	National	Total grants received (lakhs)
1	Meharunnisa S.P	Perturb and Observe maximum Power Tracking System with Parallel Connection for PV stand alone application	2013-2014	KSCST, Bangalore	6,500/-
2	Rajashekar J.S	Upgradation of Process Control Instrumentation Laboratory with Distributed Control System(DCS)	2011-2012	MODROB AICTE New Delhi	10.00 Lakhs
3	Santhosh K.V	Intelligent Straight Light	2010-2011	KSCST (Bangalore)	5,000/-

18. Research Centre /facility recognized by the University

Research Centre

Research Centre	State Recognition	National Recognition
Instrumentation Technology	Visvesvaraya Technological University,(1) Ref No VTU/ Aca-Res-Cen/ 2014-15/2982 dated 09 July 2014 (2)) Ref No VTU/ Aca-Res-Cen/ 2015-16/6726(aak) dated 02 Nov	All Indian Council of Technical Education Board, New Delhi.

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	2015	

Research Facility

Sl. No.	Research Facility / Instrument	Purpose
1	Honeywell HC900 C-30 DCS System	Computer based Process controller, calibrating & transmitting equipment, Data analysis of Process Instrumentation Systems.
2	Wonderware InTouch SCADA software	Design and Development of SCADA Systems
3	DSP TMS 320C67XX Development Kit	Design and Development of Signal Processing Applications
4	Spartan 3 Kit	Design and Development of VHDL module
5	Texas Instruments Data Acquisition Card NI USB 6009 and NI USB 5132	Acquisition of Signals
6	LabView software	Automation and Analysis Tool
7	NI ELVIS Module	Automation ,Acquisition and Analysis of Electronic and Instrumentation Circuits
8	DDC Modules: Temperature , FLOW ,Pressure and Level Modules	Development of PID Systems

State Recognition

Recognized by Visvesvaraya Technological University

(1) Ref No VTU/ Aca-Res-Cen/ 2014-15/2982 dated 09 July 2014

(2)) Ref No VTU/ Aca-Res-Cen/ 2015-16/6726(aak) dated 02 Nov 2015.

National Recognition

Recognized by All Indian Council of Technical Education Board, New Delhi.

19.Publications:

a) Publication Per Faculty

Number of papers published in peer reviewed journals (National / International) By Faculty

Name	International Journal	National Journal	International Conference	National Conference
Dr.Sangam	10	01	05	06

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Dr.A.Sreenivasan	02	-	-	04
Dr.G.M.Patil	07	05	13	07
Rajashekar J. S.	15	02	07	25
Dr.Sateesh Kumar	06	02	05	01
Dr.V.S.Krushnasamy	05	01	01	03
Dr.Sandhya Dass	04	-	02	-
Meharunisa Begum SP	09	01	08	16
Gopalaiah	04	04	10	10
Krishna Mohan	--	-	-	05
Nikhila S	2	-	1	1
Silpa Ajith Kumar	01	-	03	04
Anjana Joshi	01	-	04	
Ekta Maini	05	-	04	02
T Sushma	-	-	-	01

Publications year wise: Faculty

Sl No	No. of papers published in International Journals	No. of papers published in National Journals	No. of papers published in International Conference	No. of papers published in National Conference	Year
1	02	-	05	05	2011-2012
2	04	1	10	1	2012-2013
3	03	-	03	01	2013-2014
4	02	-	-	05	2014-2015
5	02	-	-	10	2015-2016

Publications: Students

Sl No	No. of papers published in International Journals	No. of papers published in National Journals	No. of papers published in International Conference	No. of papers published in National Conference	Year
1	-	-	02	04	2011-2012

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2	-	1	06	01	2012-2013
3	01	-			2013-2014
4	-	-	-	03	2014-2015
5	11	-	-	11	2015-2016

Sl. No.	Content	Number
a	Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	32
b	Monographs	NIL
c	Chapter(s) in Books	02

20. Areas of consultancy and income generated:

--Nil---

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards

Faculty Name	National	International
Dr.V.G.Sangam	-Governing Council member for Instrument Society of India(ISOI) - Member BSI Biosensor Society of India - Member of the Indian Society for Technical Education(ISTE) - Member of the Instrument Society of India(ISOI)	
Dr.G.M.Patil	Member (Life) of The Institution of Engineers (India), Calcutta -Life Member, Instrument Society of India, Bangalore - Governing Council Member, Instrument Society of India, Bangalore - Life Member, Indian Society for Technical Education, New Delhi -Life Member, Biomedical Engineering Society of India, MIT, Manipal	Member International Association of Engineers, Honkong, (BMESI))
Mr .J.S. Rajashekar	-Life Member of the Instrument Society of India(ISOI) -Life Member of the Indian Society for Technical Education(ISTE)	-Senior Member ISA International -Member in

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		GAINT International
Mrs S.P.Meharunnisa	-Life Member of the Indian Society for Technical Education (ISTE)	

Editorial Boards:

Faculty Name	Faculty Members in Editorial board
Dr.G.M.Patil	Reviewer ➤ Reviewer of the International Journal “American Journal of Biomedical Science and Engineering” ➤ Reviewer of the “International Journal of Cardiology and Cardiovascular Research” ➤ Editorial Board Member of “International Review of Applied Engineering Research (IRAER)” ➤ Editorial Board Member of “International Journal of Engineering Research and Technology (IJERT)”
Dr.V.S.Krusnasamy	Reviewer • Journal of Information Sciences and Computing Technologies (JISCT) • International Journal of Engineering Research & Technology (IJERT) • American Journal of Mechanical Engineering and Automation (Open science Journals) • Canadian Center of Science and Education (CCSE) • International Journal of Advances in Engineering Technology (IJAET)

22. Student projects

a) Percentage of students who have done in-house projects including inter-Departmental/ Programme

Sl.No	Year	UG In-house Projects in %	PG In-house Projects in %
1	2015-2016	100	69
2	2014-2015	80	75
3	2013-2014	97	17
4	2012-2013	95	88
5	2011-2012	100	73
6	2010-2011	100	14

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- b) Percentage of students Placed for Projects in Organizations outside the institution i.e in Research laboratories / industry/other agencies

Sl.No	Year	UG industry/other agencies %	PG industry/other agencies %
1	2015-2016	0	31
2	2014-2015	20	25
3	2013-2014	3	83
4	2012-2013	5	12
5	2011-2012	0	27
6	2010-2011	0	86

23. Awards / Recognitions received by faculty and students

Faculty:

Sl.No.	Name of the Faculty	Award Name/Recognition	Date of Award	Place of Award /Recognition
1	J.S Rajashekhar	Best Paper Award	2011	MIT, Manipal
		External Expert DRDO Recruitment Process	2012	DRDO ,Bangalore
2	Dr K Suresh	BOE for IT/ML/BM Board	2011-12	VTU, Belgaum
		Visiting Faculty	2011-12	VTU Region Center and RLJIT, Kolar
3	Meharunnisa Begum S.P	Six Sigma Plus (Software Six Sigma Green Belt-Phase I)	2005	Honewell Technolgy Solutions Lab, Bangalore.
4	Silpa Ajith Kumar	Best Paper Award	2013	Guru Nanak Institute of Technology. Nanded.

Students: Annexure is Maintained as the list is big.

24. List of eminent academicians and scientists / visitors to the Department

Annexure is Maintained as the list is big.

25. Seminars/ Conferences/Workshops organized & the source of funding

- a) National
- b) International
- a) National

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Workshop, Seminars & Training Programmes	Date	Title of the Program	Speakers	source of funding
Faculty Development Program	One week 09th to 13th February 2015	Virtual Instrumentation In Technical Education	Mr. Sunil Kumar MD VI Solutions Lab Authorized academic reseller of National Instruments	DSCE
WORKSHOP	Two Day 29th & 30th September 2014	“Haptic Arm Using Arduino Workshop”	Mr.Surya, Head Roboversity Mr. Vijay, Team Lead Sales	DSCE
	Two days 8th & 9th Feb 2014	Renewable Energy & Energy Conservation for Sustainable Development	Dr.H.Naganagouda, Director, NTIST Udupi Srinivas, IISc, Bangalore Mr.Siddharth Bhat, CPRI	DSCE
	Three Day 26th to 28th March 2014	Certificate Program PLC , SCADA & DCS	Mr. N.S. Shiv Shankar Mr. Prateesh & Team Prolific Systems & Technologies PVT LTD	DSCE
Seminar on Control & Automation	13/04/ 2012	An Insight World Of Industrial Control & Automation”	Mr. Sachin Kumar & Team, M/s YOKOGAWA India Pvt Ltd	DSCE
Training Program	Three day 20th, 21st, 22nd March 2014	Lab View CORE1 & CORE2,Labveiw Academy, DSCE, in Association National Instruments and TECH LABS 2014	Mr. Yogesh Mr. Raghunathan & Mr.Sunil VI Solutions Pvt Ltd	DSCE

b) International Conference

Conferences	Date	Title of the Program	Speakers	source of funding
ICSE-2010	21-23 Apr 2010	Convergence of Science and Engineering in Education and Research	Dr. C. H. Bhosale Professor, Department of Physics, Shivaji University, Kolhapur Dr.Shridhar, PES College of Engineering, Mandya. Prof.S.Sujatha, Prof. & Head ADHCE,Hosur	DSCE

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ICCSEM-2013	26-27 Sep 2013	Convergence of Science ,Engineering and Management in Education and Research	Dr.Guruprasad Instrumentation&Applied Physics Department, Indian Institute of Science (IISc.) Bangalore. Dr. Meenakshi, Prof & Head, Department of Instrumentation, Dr A.I.T Bangalore Dr. Rajanna R, ADGM, Aircraft R & D Center, HAL, Bangalore. Dr.Jayadevappa, Prof & Head IT Dept.JSSATE JSSATE	DSCE

National Conference

Conferences	Date	Title of the Program	Speakers	source of funding
RIESMS-2015	10th & 11th September 2015	"Role of Innovative Engineering Solutions for Medical Sciences"	-Mr. Bhanuprashanth HOD, BNMIT, Bangalore -Dr.H.V.Manjunath Professor , Dept of E&C, DSCE	DSCE
SEITCON-2016	22nd & 23rd February – 2016	Sustainable Emerging Intelligent Technologies	Session chair persons - Mr. H P Anil Kumar, Manager, AGRAJ Automation, Bangalore -Mr. G M Patil, Prof of Dept of EI DSCE.	DSCE

26. Student profile Programme/Course wise: UG

Name of the Course/programme (refer question no. 4)	Academic Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
B.E in Electronics & Instrumentation Engineering	2015	CET , COMED-K	56	32	24	
	2014	CET , COMED-K	54	23	31	
B.E in Instrumentation Technology	2013		50	30	20	
	2012		49	33	16	
	2011		55	32	23	
	2010		60	41	19	

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PG

Name of the Course/programme (refer question no. 4)	Academic Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
M.Tech in Microelectronics & Control Systems	2015	PGCET	15	09	06	
	2014		13	07	06	
	2013		16	08	08	
	2012		18	09	09	
	2011		18	16	02	
	2010		13	04	09	

27. Diversity of Students

Name of the Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
B.E in Electronics & Instrumentation Engineering	2015	64.28	34	1.78
	2014	80	20	00
B.E in Instrumentation Technology	2013	68	32	00
	2012	57	43	00
	2011	62	38	00
	2010	57	42	01

Name of the Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
M.Tech in Microelectronics & Control Systems	2015	100	00	00
	2014	100	00	00
	2013	100	00	00
	2012	89	11	00
	2011	95	04	01
	2010	93	07	00

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

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GATE: 06 students, Year: 2015

29. Student progression

Student progression	Against % enrolled
UG to PG	2-3
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil
Employed	60-70
• Campus selection	20-30
• Other than campus recruitment	
Entrepreneurship/Self-employment	10

30. Details of Infrastructural facilities

a) Central Library and Departmental Library

Central library information is available with chief librarian of the institute. Chief librarian sent to the information to the instrumentation department. The following books and Journals are available in central library are:

1.	No. of Available Titles	:	2436
2.	No. of Available volumes	:	6545
3.	National Journals	:	07
4.	International Journals (Online Copy)	:	30

List of Journals

Title of the Journal	National/International	Periodicity
International Journal of Instrumentation Sc. & Engineering.	I	Half Yearly
Journal of the Instrument Society of India	N	Quarterly
International. Journal of Material Science & Electronics Engineering.	I	Half Yearly
International Journal of Nano Sciences, Nano Engineering & Nano Technology.	I	Half Yearly
International Journal of Nano materials & Technology	I	Half Yearly
Journal of Energy Storage & Conversion	N	Half Yearly
Journal of Mathematical Control Science and Applications.	N	Half Yearly

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Details of Departmental Library

The Electronics and Instrumentation Engineering department having separate library in the ground floor (IT- 22001) of the department. This Library contains Text Books, Student project Reports of both UG and PG and seminar reports of both UG and PG branches.

Both students and faculty can access the above information.

SNo	INFORMATION	NUMBER
1.	TEXT BOOKS (Both UG and PG)	317
2.	PROJECT REPORTS) (Both UG and PG)	87

b) Internet facilities for Staff & Students

Name of the Internet provider : **Spectra net**

Available bandwidth : **30 Mbps**

Access speed : **1:1**

Availability of internet in an exclusive lab : **YES**

Availability in most computing labs : **YES**

Availability in departments and other units : **YES**

Availability in faculty rooms : **YES**

Institute's own e-mail facility to faculty/students: Available as Respective user
@Dayanandasagar.Edu Which Can House 10000 Users With 30GB Space

Security/privacy to e-mail/internet users : **Secured Network with Fortigate Firewall**

c) Class rooms with ICT facility

Sl. No.	Particulars	Facility
1	Room No. IT-104	PC with LCD Projector
2	Room No. IT-105	PC with LCD Projector
3	Room No. IT-106	PC with LCD Projector
4	Room No. IT-404	PC with LCD Projector
5	Room No. IT-102	PC with LCD Projector

d) Laboratories: Lab details-with facility

Room Description	Curriculum Lab Description	Area(Sq.mt)
UG(Instrumentation Technology)		
Lab1- No. IT-01	Research Lab	40

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Lab 2-No. IT-02	Microcontroller Lab/ Microprocessor Lab	78
Lab 3-No IT-03	HDL Lab/ DSP Lab	78
Lab 4-No IT-04	Instrumentation Lab/ Control Lab	78
Lab 5-No IT-05	Analog Electronics Lab/_Data Converters and Control Systems	78
Lab 6-No IT-06	AIC Lab/ Logic Design Lab	78
PG(Microelectronics & Control Systems)		
Lab 7-No IT 404	PG Lab & Project Lab	78

31. Number of students receiving financial assistance from college, university, government or other agencies

Instrumentation Technology					
SL.NO.	FINANCIAL YEAR	ACADEMIC YEAR	NO. OF STUDENTS	TOTAL AMOUNT SANCTIONED	
1	2011-12	I YEAR	4	152,470.00	SC/ST SCHOLARSHIP
		II YEAR	4	152,870.00	
		III YEAR	4	122,570.00	
		IV YEAR	1	32,720.00	
2	2012-13	I YEAR	NIL	NIL	
		II YEAR	5	190,570.00	
		III YEAR	1	31,620.00	
		IV YEAR	3	100,960.00	
3	2013-14	I YEAR	4	164,470.00	
		II YEAR	2	88,830.00	
		III YEAR	4	150,880.00	
		IV YEAR	2	73,240.00	
4	2014-15	I YEAR	2	115,390.00	
		II YEAR	6	238,520.00	
		III YEAR	3	118,080.00	
		IV YEAR	4	146,480.00	
		M.TECH	1	67,620.00	

32. Details on student enrichment programmes (special lectures/ workshops/ Seminar) with external experts:

SL No	Name of the Speaker with Designation & organization	Name of the event organized	Date/Period
1	Mr. SYED AFZAL ZONAL ADMISSION HEAD MANYA PRINCETON REVIEW	"GLOBAL EDUCATION AWARENESS PROGRAM 2016"	9/3/2016
2	Mr. K Jayaprakash General Manger C&I Tata Consultancy Engineers Ltd	"Power Plant Instrumentation-Present & Future trends"	5/3/2016

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3	Mrs. Padma from Yokogawa and Mr. Ananth M.S., from Accenture, Bangalore	Seminar on "Emerging Trendson Process Automation with DCS with Case study"	31/10/2015
4	Dr. Giridhar Havaladar Counselor & Psycho Therapist, Help& Heal Counseling	Personality Development Program Personality Development Program	21/09/2015
5	Cmde RL Brahmaprakash chief Quality Assurance officer CQAE (WE) Jalahalli Bengaluru	"Career opportunities in the Navy for engineers"	16/03/2015
6	Mr. Sunil Kumar V & Team .MD, VI Solutions Bangalore	Workshop on Virtual Instrumentation In Technical Education	09/02/2015 to 11/02/2015
7	Mr. Chandrakanth Sing, Swoop Vijn and Team HEDEX, Bangalore	Talk on Embedded Projects	12/2/2015
8	Mr. Vishnuvardhan J MD, Trend Instr. And Automation, Chennai.	Talk on " Role of Instrumentation Engineers in Core Industries"	23/02/2015
9	Mr. Mansoor Ali Khan Vasundara Automation, Bangalore	Expert Talk on Industrial Automation	24/02/2015
10	Mr. Ramakrishna M S Mr. Sharlond'silva SS Planner, Bangalore	Talk on Financial Planning	25/02/2015
11	Mr. Armugam Mr. Vijay Roboversity, Bangalore	Workshop "Haptic Arm Using Arduino Workshop"	29/09/2014 to 3/09/2014
12	Mr. Yogesh , Tech Labs Mr. Munimaaran, VI Solutions, Bangalore	Workshop on Lab View CORE1 & CORE2, Labveiw Academy, DSCE, in Association National Instruments and TECH LABS 2014	20/03/2014 to 22/03/2014
13	Mr. Ravi & Mr. Prateesh Prolific Systems, Chennai	Workshop on PLC & SCADA	26/03/2014 to 28/03/2014
14	Mr. Prateesh Prolific Systems, Chennai	Seminar on "Technology Related PLC, SCADA,VFD,Industrial Process management & DCS	21st Feb 2014
15	Mr. SunilKumar V MD, VI solutions,Bangalore	Expert Talk on "LABVEIW Graphical Programming"	22-Feb-14
16	Mr. Harsha Silicon Education World Pvt. Ltd, Bangalore	Talk on Silicon Innovation & Robotics	25-Feb-14
17	Mr. Armugam, Roboversity	Talk on Introduction to Audino board and its applications in industry	13/08/2014
18	Mr. Vigneshan Scientist , ISRO,	Talk on Modern Trend in Applied Mathematics	26-Sep-14

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	Bangalore		
19	Dr. Aniketh, DSCE	Seminar on Nano Technology	27-Nov-14
20	Mr. Venkatesh K, Asst. Professor, BNMIT, Bangalore	Talk on Modern Power Electronics and its Industrial Applications	25-03-2013
21	Mr. Jagdeesh Rao K Head, Metrology power one data software ltd. Bangalore	Talk on “Advanced Metering: Security threats, Challenges and Counter measures”	31 Sept 2013
22	Mr. Anil Kumar, Vipin Thomas and Priyanka Yokogawa Pvt. Ltd. Bangalore	Talk on PLC SCADA and Drives application In Industries	20-Oct-13
23	Mr. Laith Giridhar SEBI Bangalore	Financial Planning For Young Investors	13/02/2012
24	Mr Rajeshwar, Cortera Software Pvt. Ltd, Bangalore	Talk on Problem Analysis in Software Development Process	10/3/2012
25	Mr. Sachin Kumar and Team Yokogawa Pvt. Ltd. Bangalore	Talk on “An Insight In To The World Of Industrial Control & Automation”	13/04/12
26	Mr. Ajay Asst. Prof. BMSCE, Bangalore	Talk on “VLSI Technology”	08/09/12
27	Mr. Purushottam Asst. Professor, PESIT, Bangalore	Talk on “Multirate Systems and its Applications”	13/11/2012
28	Mr. Sandeep HTSL, Pune	Talk on DCS Controller	15th December 2012
29	Mr. K Padmanaban MSRSAS , Bangalore	Talk on Applications and Basics Of VHDL And VERILOG	8/3/2011
30	Mr. Mahotsava Chaitanya ISKCON, Bangalore	Talk on Higher Dimensions Of Intelligence	18/03/ 2011
31	Mr. Bhanuprashanth HOD, BNMIT, Bangalore	Talk on “Applications And Basics Of Operational Amplifiers”	9/9/2011
32	Mr. Santhosh K.V Research Schollar NIT , Assam	Talk on Linear Integrated Circuits And Applications	23/09/ 2011

33. Teaching methods adopted to improve student learning

The college has introduced a focus on fundamentals, interdisciplinary nature of engineering education and experiential learning to ensure that the students practice what they learn and also can leverage the same for R&D and innovation.

✓ Duration of each semester is 16 **Weeks**.

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- ✓ Frequency of Revision of Syllabi – 04 years(as per VTU)
- ✓ Subject allotment for a Semester is done at the end of the previous Semester.
- ✓ Class and individual Time Tables will be ready one week prior to the commencement of the classes.
- ✓ All staff members maintain course file containing lesson plan, notes, question bank etc.
- ✓ Three Internal Tests are conducted and the average of the best two tests is given as the final Internal marks.
- ✓ Giving choice to the students to select their electives.
- ✓ Feedback is collected from students and action plan will be prepared to improve wherever necessary.
- ✓ An Academic assessment committee of the college interacts regularly with the students and faculties.
- ✓ Proctor system provides guidance and counseling to the students.
- ✓ Assignments will be given to the students, based on previous question papers
- ✓ Monitoring of Attendance on regular basis.
- ✓ Manual for each lab is prepared and made available for studying.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Students are participating in blood donation camps organized by college & departments
- All faculty members and students of the department have participated in extension activities such as :
 - Industrial visits
 - Technical fests
 - Mini Projects
 - VTU fests

35. SWOC (Strength Weakness Opportunity and Challenges) analysis of the department and Future plans

STRENGTHS

- Qualified and experienced staff members.
- More emphasis on holistic learning for students, with participating in co & extra-curricular activities and Industry Internships.
- Good Lab infrastructure with Industry based Prototype equipments.

WEAKNESS

- Consultancy and R&D Activities to be enhanced by staff.
- On campus placement opportunities for students in core domain.

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- Funded project from Government industry & Corporate sector.

OPPORTUNITIES

- Students have opportunities to participate in national & international exhibitions for exposing their skills related to their ideas & projects.
- Utilization of existing facilities of the college to make students entrepreneur
- Opportunities for participating in the interdisciplinary R&D and consultancy activities.

CHALLENGES

- Expectations from various stake holders including industries and society is increasing.
- Adapting to dynamic changes in compliance agency norms.
- Campus placement by core companies.

Future Plans

- Value Addition programs in the area of Sensorics & measurements
- To develop process control & automation lab as centre of Excellence
- To take more funded Research work.

Evaluative Report of the Department

1. **Name of the department:** Industrial Engineering and Management
2. **Year of Establishment:** 1984
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 - **UG:** Industrial Engineering and Management
 - **PG:** Master of Engineering Management
 - **Ph.D**
4. **Names of Interdisciplinary courses and the departments/units involved**

There are no Interdisciplinary programmes in the department. However, the first year subjects are common to all the Engineering Departments at the Undergraduate level. These courses are taught by faculty members from Physics, Chemistry, Mathematics, Humanities, Mechanical Engineering, Civil Engineering, Electrical and Electronics Engineering,

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Electronics and Communication Engineering, and Computer Science Engineering Departments.

5. **Annual/ semester/choice based credit system (programme wise)** - Semester system
6. **Participation of the department in the courses offered by other departments** - NIL-
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.**

Certificate courses offered by MSME - Govt of India.

8. **Details of courses/programmes discontinued (if any) with reasons**
---NIL--

9. Number of Teaching posts

	Sanctioned	Filled
Professor	02	03
Associate professor	04	02
Assistant Professor	08	10

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Sl. No	Name	Qualification	Designation	Specialization	No. of years of experience	No. Of Ph.D students guided for the last 4 years
1.	Dr. H. Ramakrishna	B.E, M.Tech, Ph.D	Prof. & HOD	Quality engineering-six sigma	29	3 (In progress)
2.	Dr. S.A. Vasantha Kumara	B.E, M.Tech, M.Phil, Ph.D	Prof.	Engineering management, Entrepreneurship	28	2 (In progress)
3.	Dr. Chayapathy. B.K	B.E, M.Tech, Ph.D	Prof.	Thermal Sciences	30	-----
4.	Reena. Y.A	B.E, M.Tech	Asso.Prof.	Engineering management	10	-----
5.	Radha Halagani	B.E, M.Tech	Asso.Prof.	Production Engineering and system Technology	09	-----
6.	Rajesh. S.M	B.E, M.Tech	Asst. Prof.	Product design and Manufacturing	10	-----
7.	Archana. R	B.E, M.Tech	Asst. Prof.	Manufacturing science	03	-----
8.	G.K. Vinay Kumar	B.E, M.Tech	Asst. Prof.	Thermal power engineering	03	-----
9.	Chetan. T.G	B.E, M.Tech	Asst. Prof.	Product design and Manufacturing	03	-----
10.	Manjunatha	B.E, M.Tech	Asst. Prof	Thermal	01	-----

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				sciences		
11.	Prasad Kabade	B.E, M.Tech	Asst. Prof.	Design engineering	03	-----
12.	Gourav Kumar	B.E, M.Tech	Asst. Prof.	Adavnced material technology	03	-----
13.	Vinayashree	B.E, M.Tech	Asst. Prof.	Production technology	02	-----
14.	Vinay. K.S	B.E, M.Tech	Asst. Prof.	Engineering management	02	-----
15.	Vinay Kumar. R	B.E, M.Tech	Asst. Prof.	Computer integrated manufacturing	03	-----

11. List of senior visiting faculty

-NIL-

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

-NIL-

13. Student -Teacher Ratio (programme wise)

11 :1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Administrative staff	01	01
Technical staff	03	03
Assistants	01	01

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Number of faculty with Ph.D	Number of faculty with BE , M.Tech
03	12

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

-NIL-

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

-NIL-

18. Research Centre /facility recognized by the University
VTU R&D Centre

19. Publications:

*** a) Publication per faculty**

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***Number of papers published in peer reviewed journals (national / international) by faculty and students**

Sl. No.	Name of the faculty	No. of papers published in International Journals	No. of papers published in National Journals	No. of papers published in International Conference	No. of papers published in National Conference
1.	Dr. H. Ramakrishna	37	10	65	86
2.	Dr. S.A. Vasantha Kumara	29	4	53	79
3.	Reena. Y.A	2	0	1	9
4.	Radha Halagani	2	1	0	11
5.	Rajesh. S.M	3	0	0	4
6.	Archana. R	3	1	0	5
7.	G.K. Vinay Kumar	--	2	1	--
8.	Prasad Kabade	1	--	2	1
9.	Gourav Kumar			1	
10.	Vinayashree	1	--	1	1
11.	Vinay. K.S	5	0	6	2
12.	Vinay Kumar. R	--	--	1	1

- Monographs**

--NIL--

- Chapter in Books**

--NIL--

Books Edited --NIL--

Books with ISBN/ISSN numbers with details of publishers

Dr. H. Ramakrishna and Dr. S.A. Vasantha Kumara were the chief editors for the Book of Abstracts, published as Conference proceedings for the Following conferences

Year	Title	Date	ISBN
2012	National Conference on Challenges in Entrepreneurship and Business Process in Emerging Technologies	27 – 29 September 2012	978-93-81583-64-7
2014	National Conference on Challenges in Entrepreneurship and Business process in Emerging Technologies	18- 20 September 2014	978-93-83083-95-4
2015	National Conference on Innovation and Sustainability	11 - 12 September 2014	978-93-5254-128-7

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	in Management: Challenges and Opportunities		
2016	National Conference on Innovation in Logistics and Supply Chain Management	15- 16 February 2016	978-93-84935-72-6

- Citation Index**

Citation indices	All
Citations	37
h-index	10
i10-index	0

S.No	Name of the faculty	Citations	h-index	i10-index
1.	Dr. H. Ramakrishna	21	6	0
2.	Dr. S.A. Vasantha Kumara	16	4	0
3.	Reena. Y.A	0	0	0
4.	RadhaHalagani	0	0	0
5.	Rajesh. S.M	0	0	0
6.	Archana. R	0	0	0
7.	G.K. Vinay Kumar	0	0	0
8.	Prasad Kabade	0	0	0
9.	Gourav Kumar	0	0	0
10.	Vinayashree	0	0	0
11.	Vinay. K.S	0	0	0
12.	Vinay Kumar. R	0	0	0

- SNIP**

--NIL--

- SJR**

----NIL---

- Impact factor**

1 and above

- h-index**

Citation indices	All
Citations	37
h-index	10
i10-index	0

20 Areas of consultancy and income generated

-NIL-

21 Faculty as members in

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i. National committees b) International Committees

c) Editorial Boards....

Name of the faculty	Name of the Editorial Board
Dr. H. Ramakrishna	International Journal of Research in Applied Sciences & Engineering
Dr. S.A. Vasantha Kumara	International Journal of Research in Applied Sciences & Engineering

22 Student projects

- Percentage of students who have done in-house projects including inter departmental/programme – 31%
- Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies – 69%

23 Awards / Recognitions received by faculty and students

➤ Faculty:

- Dr. H. Ramakrishna was awarded “Rajiv Gandhi Excellence Award” for outstanding Achievements in the field of Education on 3rd October 2013 at New Delhi.
- Dr. R.V. Praveena Gowda was awarded “Young scientist Gold Medal Award 2010” in appreciation of the Research contributions for Advancement of scientific knowledge on 13th December 2010 through 3rd ICBRD and NRMCU-10 at Ranchi, Jharkand.
- Dr. S.A. Vasantha Kumara was awarded “Outstanding Scholar & Educator award” by National Foundation for Entrepreneurship Development, Coimbatore on the eve of Teacher’s Day, 5th September 2014
- Miss Reena. Y. A was awarded 2nd Best Paper titled “Effect of technology and human resources in Sericulture” at BMSCE

➤ Student:

- Vidya.K was awarded as best student for the year 2013 for “Overall performance” as a student by ISTE.

VTU Rank List is maintained as Annexure as the list is big.

Awards In Inter-Institute Events By Students - Annexure maintained

24 List of eminent academicians and scientists / visitors to the department

Sl. No	Name of the invited Scholar with full address
1.	Ajinkya Kulkarni,

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	IOTA tech, Pune
2.	Shankar Kalyana Sundaram, Senior delivery manager, Wipro Technologies
3.	Dr. Thomas Pinto, Prof. & HOD SSIT, Tumkur
4.	Amithab Saxena, CEO Anexas
5.	Mrs. Lalitha, SEBI
6.	Xavier, Director, Wisdom Institute of Management
7.	Mr. sandeep Sharma, Director, Infrastructure division, Kalpataru Energy Ventures Pvt. Ltd
8.	Mr. Prasad, ICUBZ
9.	E. Johanan Daniel, MD & Principal consultant, Juran
10.	K.C. Harsha, Deputy director- E-learning, IIMM Subbakrishna, National president, IIMM
11.	Manjunath Jois, IIMM
12.	Ajinkya Kulkarni, IOTA tech, Pune
13.	Mr. V. Dwarakanath, IIIE
14.	V. Prashanth Rao, Executive director, Institute of Intuitive Innovation
15.	Vigneshwar Shankar, PGDM student, Shanti Business school
16.	K.C. Harsha, IIMM C.S. Venakatesh, IIMM
17.	Mr. D.K.S.N. Murthy, SAVE
18.	Dr. Pranesh.B. Aswath, Ass. Dean of Engineering, University of Texas

25 Seminars/ Conferences/Workshops organized & the source of funding

a. National Conference:

Sl. No.	Date	Events Organized	Source of funding
1.	15 th to 16 th September 2015	National Conference on “Innovation in logistics and supply chain Management”	Self
2.	11 th to 12 th September 2015	National Conference on “Innovation and sustainability in Management” held on.	Self

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3.	18 th & 19 th September 2014	National Conference On “Challenges in Entrepreneurship & Business Process in Emerging Technologies”	Self
4.	27 th & 29 th September 2012	National Conference on “Challenges in Entrepreneurship & Business Process in Emerging Technologies”	Self
5.	20 th -21 st October 2011	National Conference On “Recent trends in Industrial Engineering as applied to Manufacturing, Service & allied sectors”	Self

b. International Conference:

Sl. No.	Date	Events Organized	Source of funding
1	21 st – 23 rd April 2010	ICSE- 2010	Self
2	18 th -19 th September – 2013	International Conference On “Convergence of Science, Engineering & Management in Education & Research – A Global Perspective.	Self

26 Student profile programme /course wise:

Name of the course	Academic year	Applications received		Selected		Enrolled		Pass percentage
		CET	Dip.	CET	Dip.	Male	Female	
UG- Industrial Engineering & Management	2009-10	60	10	60	10	56	14	62.95%
	2010-11	60	10	60	10	57	13	59.64%
	2011-12	62	4	62	4	54	12	55.72%
	2012-13	54	12	54	12	52	14	56.12%
	2013-14	56	11	56	11	53	14	65.45%
	2014-15	49	11	49	11	41	8	-----
	2015-16	53	10	53	10	35	18	----

Name of the course	Academic year	Selected	Enrolled		Pass percentage
		PGCET	Male	Female	
PG- Master of Engineering Management	2009-10	18	8	10	97%
	2010-11	10	5	5	94.4%
	2011-12	13	4	9	100%
	2012-13	17	10	7	91.17%
	2013-14	12	8	4	87.5%
	2014-15	10	9	1	-
	2015-16	5	5	0	-

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27. Diversity of Students

Name of the course	Academic year	% students from the same state	% students from other states	% students from abroad
UG- Industrial Engineering & Management	2009-10	74.2	25.7	--
	2010-11	70	30	--
	2011-12	68.1	31.8	--
	2012-13	77.2	22.7	--
	2013-14	71.6	28.3	--
	2014-15	78	22	--
	2015-16	88	12	--
PG- Master of Engineering Management	2009-10	100	--	--
	2010-11	100	--	--
	2011-12	100	--	--
	2012-13	82.3	17.6	--
	2013-14	100	--	--
	2014-15	100	--	--
	2015-16	100	--	---

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Competitive exam	No. of students
PGCET	11
TOEFL	21
GRE	21
GATE	01
CAT	03

29. Student progression

Student progression	Against % enrolled					
UG to PG	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
	1 %	15.68 %	25.86 %	16.66 %	1%	NA
PG to M.Phil.	NIL					
PG to Ph.D.	NIL					
Ph.D. to Post-Doctoral	NIL					
Employed	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
• Campus selection	25.4%	47%	12%	30%	34%	37%

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• Other than campus recruitment	3.4%	17.6%	25.86%	20%	1%	NA
Entrepreneurship/Self-employment	5%					---

30. Details of Infrastructural facilities

a. Library: Department library is made available for all the faculties and students with the following details:

- Number of books: 387
- Project reports (UG & PG students)

b. Internet facilities for Staff & Students

- Faculties are provided with computers with high speed internet and printer facility
- Computers for the students with internet are made available in the lab and classrooms.

c. Class rooms with ICT facility

- All class rooms are provided with LCD projectors and computer.
- Audio visual aids are arranged in conference hall for a gathering of about 150 students.

d. Laboratories

1. Mechanical measurements and metrology
2. Advanced computer lab
3. Work study and ergonomics lab
4. Quality engineering lab

Number of students receiving financial assistance from college, university, government or other agencies

INDUSTRIAL ENGINEERING & MANAGEMENT					
SL.NO.	FINANCIAL YEAR	ACADEMIC YEAR	NO. OF STUDENTS	TOTAL AMOUNT SANCTIONED	
1	2011-12	I YEAR	1	39,710.00	SC/ST SCHOLARSHIP
		II YEAR	1	37,720.00	
		III YEAR	2	48,960.00	
		IV YEAR	NIL	NIL	
2	2012-13	I YEAR	1	42,710.00	
		II YEAR	NIL	NIL	
		III YEAR	NIL	NIL	

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		IV YEAR	NIL	NIL	
3	2013-14	I YEAR	2	85,420.00	
		II YEAR	1	36,620.00	
		III YEAR	NIL	NIL	
		IV YEAR	1	36,620.00	
4	2014-15	I YEAR	2	85,420.00	
		II YEAR	5	198,900.00	
		III YEAR	1	39,620.00	
		IV YEAR	2	67,860.00	
		M.TECH	3	203,960.00	

31. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts – Maintained as Annexure

Workshops:

Module description	Any other Contributory institute/industry	Developed/organized by	Duration	Resource persons	Target audience	Usage and citation, etc.
Miles day	SAVE- Society of Value Engineers	DSCE-IEM	1 Day (26/04/2014)	Mr. D.K.S.N. Murthy, Raghavendra Rao. H Daniel Arockiam, Chandrashekar SAVE members	UG & PG students	SAVE International Newsletter
Youth for Business	AIESEC	DSCE-IEM	1 Day (17/10/2014)	Afsal Salu, Delyver, Gaurav Dahake, Buyhatke, Amith Singh, Headstart Networks	UG & PG students	--

33 Teaching methods adopted to improve student learning

Faculty members adopt various teaching methods to cater to the needs of the entire spectrum of students in a particular class. The following are the frequently used teaching methods by the faculty:

➤ **UG:**

- Classroom teaching using Chalk-Board
- ICT
- Demonstration using models and charts

➤ **PG:**

- Classroom teaching using Chalk-Board

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- ICT
 - Case Studies
 - Seminars
 - Group Discussions
- Extended lectures are arranged for better and enhanced knowledge imparting
- Real time projects, industrial visits are a few ways to worth mention in this regard
- Faculties are provided with an opportunity to attend education programs/ faculty development programs conducted by reputed organizations which enhances their knowledge to current trend.

34 Participation in Institutional Social Responsibility (ISR) and Extension activities

Activity	Organization	Expenditure (Rs.)
Financial Support	SMILE Foundations	Rs. 4800 PA

35 SWOC analysis of the department and Future plans

S- Strength

- ✓ Strong Teaching Expertise
- ✓ Excellent infrastructure facilities
- ✓ Recognized R & D Centre
- ✓ Active and supportive alumni
- ✓ Excellent placement record
- ✓ Qualified and experienced faculty
- ✓ Rich co-curricular activities for students
- ✓ Consistently getting VTU Ranks

W- Weakness

- ✓ Lack of industry Consultancy
- ✓ Funded proposals
- ✓ Insufficient Industry Institute interaction
- ✓ Meager participation in Social responsibility

O- Opportunities

- ✓ Collaboration with renowned universities / Industry.
- ✓ Enhancement of funds from potential funding agencies like DST, UGC, AICTE, VTU etc
- ✓ Enhanced student placement

C- Challenges

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- ✓ Improving the performance of lateral entry students to the level of regular students
- ✓ 100% placement
- ✓ Placement in core companies

Future plans:

Target Area	Parameters	Current Status	Target 2020	Action Plan
Ph. D	Registered Research Scholars	05	08	New areas of research
Faculty Development	FDP's	NIL	02	Organizing sponsored Innovative Training programs
Funds	DST, UGC etc	None	02	Increasing the awareness on research

Evaluative Report of the Department

- Name of the department :** Information Science & Engineering
- Year of Establishment:** 1992
- Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
UG in Information Science and Engineering (BE)
PG in Computer Science and Engineering (M.Tech)
- Names of Interdisciplinary courses and the departments/units involved:**
The interdisciplinary courses are CIPE, CIV and MATDIP-301, 401.
- Annual/ semester/choice based credit system (programme wise):**
Follows VTU regulation which is semester wise.
- Participation of the department in the courses offered by other departments**
The department has handled Computer Concepts and C Programming [06CCP13] for the first year students of the college.
- Courses in collaboration with other universities, industries, foreign institutions, etc.**
Program strictly follows the VTU scheme curriculum.
- Details of courses/programmes discontinued (if any) with reasons**
No programme has been discontinued.
- Number of Teaching posts**

	Sanctioned	Filled
Professors	03	03

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Associate Professors	05	05
Asst. Professors	19	18

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D Students guided for the last 4 years
Dr. N. C. Naveen	M. E. Ph.D.	Prof. & Head	CSE	21	03
Prof. B.I. Khodanpur	M.Tech.	Professor	SE	45	-
Dr. Suma V.	M.S. Ph.D.	Professor	CSE	18	04
Dr. Sunanda Dixit	M. Tech. Ph.D.	Associate Professor	CSE	13.5	02
Dr.Rajesh Eswarawaka	M. Tech. Ph.D.	Associate Professor	CSE	5.5	Nil
Dr.Rajasekhar	M. Tech. Ph.D.	Associate Professor	CSE	10	Nil
Dr.Nirmala	M. Tech. Ph.D	Associate Professor	CSE		
Mrs. Rajeshwari J.	M. Tech (Ph.D)	Associate Professor	CNE	12.5	Nil
Mr. Muzameel Ahmed	M. Tech (Ph.D)	Asst. Professor	CE	15	Nil
Mrs. Vaidehi M	M. E. (Ph.D)	Asst. Professor	Information Technology	9	Nil
Mrs. Chandrakala B M	M.Tech (Ph.D)	Asst. Professor	CSE	12.5	Nil
Mr. Sureshkumar M.	M. Tech	Asst. Professor	CSE	8	Nil
Mrs. Bhavani K	M. Tech	Asst. Professor	CSE	6.5	Nil
Mrs. Latha A.P.	M. Tech (Ph.D)	Asst. Professor	CSE	7.6	Nil
Mrs. Vani K.A.	M. Tech (Ph.D)	Asst. Professor	CSE	6.5	Nil
Mrs. Prathima Mabel J.	M. Tech (Ph.D)	Asst. Professor	CSE	5.5	Nil
Mrs. Seema S Bhat	M. Tech	Asst. Professor	CNE	6.5	Nil
Mrs. Rekha Jayaram	M. Tech	Asst. Professor	Network & Internet Engg.	4	Nil
Mrs. Radhika T. V.	M. Tech (Ph.D)	Asst. Professor	CE	3.7	Nil
Mrs. Sharon Christa	M. Tech (Ph.D)	Asst. Professor	CSE	2.8	Nil

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Mrs. Krupashankari	M. Tech	Asst. Professor	CSE	1.6	Nil
Ms. Bindu Bhargavi	M.Tech.	Asst. Professor	CSE	1.3	Nil
Mrs. Shalini	M. Tech	Asst. Professor	CSE	09 months	Nil
Mrs. Madhura J	M. Tech	Asst. Professor	CSE	09 months	Nil
Mrs. Shilpa Shree.S	M. Tech	Asst. Professor	CSE	3.4	Nil
Mr. Dheemanth Urs	M. Tech	Asst. Professor	CST	09 months	Nil

11. List of senior visiting faculty : NIL

12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty : NIL

13. Student -Teacher Ratio (programme wise) : 15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Designation	Sanctioned	Filled
Technical Staff	08	07
Administrative Staff	01	01

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

- Teaching Faculty with Ph.D - 06
- Teaching Faculty with M.Tech - 20

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : NIL

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Name of the project	Sponsoring agency	Amount Sanctioned (Rs. Lacs)	Amount Released (Rs. Lacs)
Development of Bio-lingual Handwritten Character Recognition	AICTE	3.45	3.45
Development of Handwritten Kannada Recognition System	DST	4.92	4.92
Track kit Laptop [Student Project]	IEDC	01 Lakh	01 Lakh
E Car [Student Project]	IEDC	01 Lakh	01 Lakh
Ambulance Signal Tracker [Student Project]	IEDC	01 Lakh	01 Lakh
Solar Mobile Charger [Student Project]	IEDC	01 Lakh	01 Lakh

18. Research Centre /facility recognized by the University - Yes (VTU)

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19. Publications:

a) Publication per faculty

Year :2014-2015								
Sl no	Author Name	No. of Publications	International Journal	National journal	International conference	National conference	Citation	h-index
1	Dr. Naveen N C	21	11	-	05	05	01	
2	Dr.Suma . V	7	6	-	1	-	168	7
3	Dr. Sunanda Dixit	6	2	-	1	3	-	-
4	Mr.Muzameel	2	1		1	-	-	-
5	Mrs. Vaidehi M	3	1	-	2	-	40	4
6	Mrs. Latha AP	1	-	-	1	-	-	-
Year 2013-2014								
Sl no	Author Name	No. of Publications	International journal	National journal	International conference	National conference	Citation	h-index
1	Dr.M. Ravishankar	9	2	-	7	-	-	-
2	Dr.Suma . V	9	1	-	8	-	168	7
3	Dr. K.N.RamaMohan babu	8	3	-	5	-	-	-
4	Dr. Sunanda Dixit	9	3	-	3	3	-	-
4	Mr. M.S Patel	6	-	-	2	4	-	-
5	Mr .Kiran Y.C	21	2	-	11	8	-	-
6	Mrs.Rajeshwari	5	2	-	3	-	2	2
7	Mr.Muzameel	4	-	-	3	1	-	-
8	Mrs. Vaidehi M	2	-		2		40	4
9	Mrs. Chandrakala B.M	2	-	-	2	-	-	-
10	Mrs. Madhura S M	2	-	-	2	-	-	-
11	Mrs. Latha A.P	1	1				-	-
13	Mrs.Radhika	4	1	-	3	-	19	1
14	Mrs. Varalatchmy M	4	1	-	3	-	-	-
Year 2012-2013								
Sl no	Author Name	No. of Publications	International journal	National journal	International conference	National conference	Citation	h-index
1	Dr.M. Ravishankar	31	7	-	17	5	-	-
2	Dr. V.N.Manjunath Aradhya	7	1	-	6	-	-	-
3	Dr.RamaMohanBabu K.N	4	1	-	3	-	-	-
4	Dr.Suma . V	6	3	-	20	-	168	7
6	Mr .M.T. Gopala Krishna	12	2	-	9	1	-	-
7	Mr.Hanumantha Raju M.C	20	6	-	14	-	-	-
8	Mr.Kiran Y.C	9	3	-	3	3	-	-
9	Mr.Muzameel Ahemed	3	-	-	3	-	-	-
1	Mrs.Sunanda Dixit	4	1	-	3	-	-	-

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0								
1 1	Mrs. Vaidehi M	6	-		6		40	4

Number of papers published in peer reviewed journals (national / international) by faculty and students

Year	Number of Student Publications	Number of Faculty Publications
2015-2016	5	16
2014-2015	7	21
2013-2014	18	120
2012-2013	22	94

*** Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 235**

- * **Monographs:** Nil
- * **Chapter in Books:** Nil
- * **Books Edited:** Nil
- * **Books with ISBN/ISSN numbers with details of publishers:** 1
- * **Citation Index:** 767.
- * **SNIP:** Nil
- * **SJR:** Nil
- * **Impact factor:** Nil.
- * **h-index:** 19 in 2014-15.

20. Areas of consultancy and income generated : NIL

21. Faculty as members in

National committees b) International Committees c) Editorial Boards....

1. Dr. Naveen N C
 - BOE member at Visvesvaraya Technological University for CS/IS Board during 2014 - 2015
 - Served as a LIC member for VTU during 2014 - 2015
 - Nodal officer at KSIT for implementation and monitoring of CBCS scheme at college level as per VTU guidelines
- BOS and BOE member at RVCE
- Member to IEEE (#92951932 – Bangalore Section)
- Fellow member at IEI (F-119360-7)
- Life time member to Indian Society for Technical Education (LM 38112)
- Advisory Council member for Dr. C V Raman College of Administration and Network Sciences, Davangere
- Editorial Board member for International Journal of Research in Electronics and Computer Engineering
(<http://www.i2or.ijrece.com/editorial-board.html>)
- Reviewer to international Journals and national/international conferences.
- Reviewer for International Journal of Engineering Research (ISSN : 2319-6890) www.ijer.in
- Mentor for AIRNET Advance International Research Network
- <http://research.1stopconsultants.com/mentors.php>

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2. Dr.Krishnan R

- Part of the program Committee for IWCT 2015 (International Workshop on Combinatorial Testing), 13 April, 2015, Graz, Austria.
- Part of the program Committee for ICAC3 , Nov 2014

3. Dr .Suma .V

- Member IEEE
- Life Member Computer Society of India
- Member Institute of Engineers
- Member ACM
- E-Mentor www.mentornet.com (State Mississippi University, USA)
- President, IRNet, Bangalore, Chapter
- Adviser, Executive Board Member & Consultant (Training & Research) at National Foundation for Entrepreneurship Development (NFED)
- Academic Advisory Board member in Acharya Institutes, Bangalore
- Member, Board of Studies, Karunya University, Coimbatore
- Guest Editor for Microsystem Technologies, Springer Journal
- Technical Advisory Board Member, Knowledge Engineering and Technology, ISSRD.

4. Dr. Sunanda Dixit

- Member of The Indian Society for Technical Education (ISTE)
- Reviewer to international Journals and National/International conferences.

22. Student projects

Percentage of students who have done in-house projects including inter departmental/programme

Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Academic Year	UG		PG	
	In-house	Industry	In-house	Industry
2010 - 11	100 %	NIL	75 %	25 %
2011 - 12	95 %	5 %	100 %	NIL
2012 - 13	95 %	5 %	65 %	35 %
2013 - 14	100 %	NIL	80 %	20 %
2014 - 15	100 %	NIL	90 %	10 %

23. Awards / Recognitions received by faculty and students

Ph.d degrees awarded:

- Dr. Suma V.
- Dr. K.N. Ramamohan Babu
- Dr. Hanumantha Raju M.C.
- Dr. M.T. Gopalakrishna
- Dr. Sunanda Dixit

Recognitions:

Dr. Suma V

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- Listed in 2000 Outstanding Intellectuals of the 21st Century, 8th Edition by International Biographical Centre, Cambridge, England, 2014
- Listed in Marquis Who's Who in the World 31st Edition and 32nd Edition, as Distinguished Scientist, USA, 2013, 2014, bearing the VIP Number: 36693831
- Academic Research Award of Excellence 2013 by Additive Manufacturing Society of India during International Conference & Exhibition on Additive Manufacturing Technologies - AM 2013
- Distinguished Academician Award by Pentagram Research Centre Private Limited – February, 2014
- Senior Woman Educator & Scholar Award on Women's Day Awards '2014 (8th March 2014) by National Foundation for Entrepreneurship Development (NFED)
- Distinguished Educator & Scholar Award on 5th September 2014 by National Foundation for Entrepreneurship Development (NFED)
- Best Research Awards – 6
- Responsible for SIRO (DST) Recognition to MGVP Trust (DSI)

Best Papers Awarded:

- **Sunanda Dixit**: Best Paper Award for “Text line Segmentation using Covariant Methods” paper at National Conference, T. John Institute of Technology – 2014

Mentor Award:

- **Madhura S. Mulimani**- IBM TGMC Mentor Award – 2014

Faculty Award:

- **Mrs. Sunanda Dixit**- Best Faculty Award from Cognizant Technology Solutions

Student Rank:

- **Reshma S. Ravi** – PG- VTU-I Rank- Gold Medal
- **Sahana T.S.** – UG - VTU- 5th Rank
- **Abhishek C.V** –UG –VTU- 4th Rank
- **Amrin Bhanu** –UG-VTU- (Gold Medal 2014-15)

Funded Projects

Name of the project	Sponsoring agency	Amount Sanctioned (Rs. Lacs)	Amount Released (Rs. Lacs)
Track kit Laptop [Student Project]	IEDC	01 Lakh	01 Lakh
E Car [Student Project]	IEDC	01 Lakh	01 Lakh
Ambulance Signal Tracker [Student Project]	IEDC	01 Lakh	01 Lakh
Solar Mobile Charger [Student Project]	IEDC	01 Lakh	01 Lakh

24. List of eminent academicians and scientists / visitors to the department

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- Mr. Ravindra Nuguri, Vice President, HCL TECHNOLOGIES, BANGALORE visited the department for SEMINAR ON "INDUSTRY PERSPECTIVE TOWARDS CAMPUS"

25. Seminars/ Conferences/Workshops organized & the source of funding

National

- National Conference on Information and Communication Technology NCICT-16
- National Conference on Information and Communication Technology NCICT-15
- Faculty Development Program on Python -2016
- Faculty Development Program on Big Data Analytics and IOT from 29.01.2015 to 31.01.2015 –funded by Dayananda Sagar College of Engineering.

International – NIL

26. Student profile programme/course wise

Name of the Course / Programme	Applications Received	Selected	Enrolled		Pass %
			Male	Female	
BE(2010-11)	144	149	98	51	109/144 = 75.69
BE(2009-10)	144	132	84	48	120/132 = 90.90
BE(2008-09)	144	143	90	53	121/144 = 84.02

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from the other state	% of students from abroad
BE (2014-15)	61%	39%	-
BE(2013-14)	75%	25%	-
BE(2012-13)	70%	29.5%	0.5%
BE(2011-12)	76%	24%	-
BE(2010-11)	63%	36.5%	0.5%

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Sl. No	Year	No. of Students Qualified in GATE, GRE
1	2014-15	9
2	2013-14	5
3	2012-13	7
4	2011-12	5

29. Student progression

Student Progression											
Year	Total No. of students	UG to P.G.	%	PG to M.Phil.	%	PG to Ph.D	%	Placement			Entrepreneurship / Self employment
								Campus Selection	Other than Campus recruitment	%	
2014-15	147	-	-	-	-	-	-	63	-	42	-

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2013-14	150	06	4	-	-	-	-	74	4	52	-
2012-13	134	06	4	-	-	-	-	71	4	55	-
2011-12	143	05	3	-	-	2	11	93	1	65	-

Placement Details:

Year	Total no. of students	Campus selection	Other than campus recruitment	% of students placed
2014-15	147	63	-	42
2013-14	150	74	4	52
2012-13	134	71	4	55
2011-12	143	93	1	65

30.Details of Infrastructural facilities

Library

Details of the department Library:

- Total area of the library 10 sq. m.
- Total seating capacity 10
- Working hour 9am to 5pm on week days and 9am to 1:15 pm on Saturdays.

Library holdings	2015-2016	2014-2015	2013-2014	2012-2013	2011-2012
Text books/ Reference Books	1444	1435	1412	1228	1200

Internet facilities for Staff & Students

- a) **Class rooms with ICT facility**
 - All the class rooms with projector and white/black board.
 - Some class rooms having uninterrupted power supply and Internet facility to demonstrate the project and technical seminars
- b) **Laboratories : No. of Lab=7 lab**
- c) **Number of computers with Configuration (provide actual number with exact configuration of each available system)**
 - Desktops: 232
- d) **Computer-student ratio**
 - The computer-student ratio in the department is 0.58 (232 computers to 400 students).
 - More than 80% of the students have their own laptops as well.
- e) **Stand alone facility**
 - Desktops: 232
- f) **LAN facility**
- g) Department has got a state of the art LAN facility with wired backbone, giving connectivity to computers with higher bandwidth.
- h) **Wi fi facility:** Good Wi-Fi facility for the students and staff.
- i) **Licensed Software :** Windows, Turbo C
- j) **Number of nodes/ computers with Internet facility**

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- 232 Systems having Internet facility

k) **Any other**

- All the faculty members having Internet facility desktop systems

31. Number of students receiving financial assistance from college, university, government or other agencies:

- Students belonging to SC/ST category receive scholarships from government. Details of scholarship for the last four years are given below.

SC/ST SCHOLARSHIP DETAILS OF INFORMATION SCIENCE ENGINEERING					
SL.NO.	FINANCIAL YEAR	ACADEMIC YEAR	NO. OF STUDENTS	TOTAL AMOUNT SANCTIONED	
1	2011-12	I YEAR	3	119,130.00	SC/ST SCHOLARSHIP
		II YEAR	9	343,070.00	
		III YEAR	8	261,760.00	
		IV YEAR	6	179,720.00	
2	2012-13	I YEAR	3	119,630.00	
		II YEAR	6	230,300.00	
		III YEAR	4	129,780.00	
		IV YEAR	10	313,020.00	
3	2013-14	I YEAR	5	213,550.00	
		II YEAR	6	232,980.00	
		III YEAR	5	187,500.00	
		IV YEAR	5	184,650.00	
4	2014-15	I YEAR	YET TO BE SANCTIONED		
		II YEAR			
		III YEAR			
		IV YEAR			

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts – Annexure Maintained.

33. Teaching methods adopted to improve student learning

Sl. No.	Teaching Methods
1	Chalk and Talk Lectures
2	Group Discussion

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3	Tutorials
4	Demonstration
5	Practice Exercises
6	Presentation
7	Role play by student Groups
8	Project Based Learning
9	Quiz
10	Online Training

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Extracurricular activities:
 - Information Science & Engineering Department has a team by name Parivarthan which is actively involved in social activities. Parivarthan team visits neighboring schools and conducts blood donation camps, visits under privilege children in slums and old age homes.
 - Parivartan team has conducted Joy of fest for week in the month of October 2011-12. Blood donation camp organized. Under privileged students are invited and distributed books, pencils.

35. SWOC analysis of the department and Future plans

The strengths, Weakness, Opportunities and challenges of the ISE department were identified through multiple brainstorming sessions. The identified strengths, weakness, opportunities and challenges are as follows:

Strengths:

- Vibrant – students. Very active student groups (Genesis, Glug, Parivarthan, iCoders, Arise)
- Faculty with good qualifications, Experience, dedication and research focus.
- Industry orientation in the teaching learning process with good placement record.
- Good team work & Management

Weakness:

- Lack of Academic Flexibility
- No external collaborations with other reputed universities

Opportunities:

- Improve gender ratio of faculty especially at Asst Professor level
- Getting more University Ranks at UG and PG level
- Students qualifying for regional rounds of programming competitions like ACM
- Improving the student intake quality – improving the opening and closing ranks in CET, COMEDK etc.
- Encouraging faculty to be progressive and achievement oriented

Challenges:

- Balancing the focus on academic, industry oriented, co-curricular and extracurricular activities at the right level so that the results (student success, student and faculty development) are maximized.
- Initiating interdisciplinary research projects.

Future Plans:

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- Sustain and increase industry orientation to improve the employability and career prospects of the students.
- To improve the research focus in the department.
- To make this department as one of the best in the university.

Evaluative Report of the Department

1. **Name of the department :** Mathematics
2. **Year of Establishment :** 1979
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) :** UG/PG/Ph. D
4. **Names of Interdisciplinary courses and the departments/units involved :** NA
5. **Annual/ semester/choice based credit system (programme wise) :** Semester System
6. **Participation of the department in the courses offered by other departments:** Engineering Mathematics – I ,II, III, IV, Post Graduation Courses – Applied Mathematics, Advanced Mathematics, Linear Algebra and its applications.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA.
8. **Details of courses/programmes discontinued (if any) with reasons :** NA

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9. Number of teaching posts

	Sanctioned	Filled
Professors	3	3
Associate Professors	1	1
Assistant Professors	13	13

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. Of Years of Experience	No. Of Ph.D students guided for the last 4 years
Dr. H. Narasimha Murthy	M.Sc, Ph.D	Professor	Solid Mechanics	49 years	
Dr. N.V. Vighnesam	M.Sc, Ph.D	Professor	Fluid Mechanics	2 years (33years Industry)	02(From 2015 onwards)
Dr Radha Gupta	M.Sc, M.Phil, Ph.D	Professor	Operation Research	18 years	
Dr. Srinivasa G	M.Sc, Ph.D	Associate Prof. and HOD	Graph Theory	18 years	02(From 2015 onwards)
Dr.K.T. Shivaram	M.Sc, M.Phil, M.Tech , Ph.D	Assistant Professor	Finite Elements	16 years	02(From 2015 onwards)
Dr. Sanjay Oli	M.Sc, Ph.D	Assistant Professor	Cosmology	12 years	
Dr Chaitra V.	M.Sc, M.Phil, Ph.D	Assistant Professor	Graph Theory	12 years	
V. Selva Sharmila	M.Sc, M.Phil	Assistant Professor	Fluid Mechanics	17 years	
C.S. Komala	M.Sc, B.Ed	Assistant Professor	Fluid Mechanics	11 years	
Suma N Manjunath	M.Sc	Assistant Professor	Fluid Mechanics	8 years	
Padmaja .C	M.Sc, M.Phil	Assistant Professor	Graph Theory	15 years	
D.R. Sasirekha	M.Sc, M.Phil, MBA	Assistant Professor	Fluid Mechanics	14 years	
Sowmya .K	M.Sc	Assistant Professor	Graph Theory	7 years	
Umesha .V	M.Sc	Assistant Professor	Linear Inequality	5 years	
Savithri .H	M.Sc	Assistant Professor		12 years	

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Rohini Sathish	M.Sc, B.Ed	Assistant Professor	Graph Theory	4 years	
Soumya .A	M.Sc	Assistant Professor		4 years	

11. **List of senior visiting faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** Nil
13. **Student -Teacher Ratio (programme wise)** 15:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:** Nil
15. **Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.**

Name	Qualification
Dr. H. Narasimha Murthy	M.Sc, Ph.D
Dr. N.V. Vighnesam	M.Sc, Ph.D
Dr Ragha Gupta	M.Sc, M.Phil, Ph.D
Dr. Srinivasa G	M.Sc, Ph.D
Dr.K.T. Shivaram	M.Sc, M.Phil, M.Tech , Ph.D
Dr. Sanjay Oli	M.Sc, Ph.D
Dr Chaitra V.	M.Sc, M.Phil, Ph.D
V. Selva Sharmila	M.Sc, M.Phil
C.S. Komala	M.Sc, B.Ed
Suma N Manjunath	M.Sc
Padmaja .C	M.Sc, M.Phil
D.R. Sasirekha	M.Sc, M.Phil, MBA
Sowmya .K	M.Sc
Umesha .V	M.Sc
Savithri .H	M.Sc
Rohini Sathish	M.Sc, B.Ed
Soumya .A	M.Sc

16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received-** NIL
17. **Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received** NIL
18. **Research Centre /facility recognized by the University**
YES. Research Center affiliated to VTU
19. **Publications:**
a) Publication per faculty

Sl no	Author Name	No. of Publications	International Journal	National journal	International conference	National conference	Citation	h-index
1	Dr. N. V. Vighnesam	04	-	-	04	-		
2	Dr. Radha Gupta	10	06	01	02	01	18	02
3	Dr. Srinivasa G.	09	07	01	---	01	07	02
4	Dr K. T. Shivaram	20	15	---	02	03	---	---

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5	Dr. Sanjay Oli	02	02	---	---	---	01	04
6	Dr. Chaitra V	04	04					
7	Suma N Manjunath	01			01			
8	Umesha V.	01	01					

- * **Number of papers published in peer reviewed journals (national /International) by faculty and students:** 37
- * **Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)-** 37
- * **Monographs** – nil
- * **Chapter in Books** – 18
- * **Books Edited** – Four
- * **Books with ISBN/ISSN numbers with details of publishers:**
- * Advanced Mathematics by Dr Srinivasa G. with ISBN: 978-93-84007-48-5, Published by Scientific International (Pvt.) Ltd. New Delhi-110002.
- * Modern trends in Aerodynamic Systems and Mathematical Models by Srinivasa G. with ISBN : 978-93-85682-13-1(Two Chapters), DSI.
- * Quadrilateral Mesh Generation by Dr K.T.Shivaram with ISBN: 978-81-931454-0-1, Published by Atman Publications, Gujarat.
- * Business Mathematics and Statistics by Srinivasa G. with ISBN : 978-81-224-1433-2, Published by New age International Private Limited, New Delhi-110002.
- * **Citation Index**-26
- * **SNIP** – nil
- * **SJR** – nil
- * **Impact factor**- 2.9475
- * **h-index**- 08

20. **Areas of consultancy and income generated** – NIL

21. **Faculty as members in**

a) **National committees** b) **International Committees**

c) **Editorial Boards:**

- a. Dr.N. Vighnesam- Member of International Journal of Fluid Mechanics
- b. Dr Srinivasa G.- Managing Editor, International Journal of Graph Theory

22. **Student projects**

- a) Percentage of students who have done in-house projects including inter departmental/programme- NA
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies NA

23. **Awards / Recognitions received by faculty and students:** 41 Students have scored centum in VTU examination

CENTUM REPORT

ACADEMIC YEAR	NO OF CENTUMS
2015-2016	02
2014-2015	05
2013-2014	16

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2012-2013

18

24. List of eminent academicians and scientists / visitors to the Department

Name of Faculty	Designation, Affiliation
Prof N Rudraiah	Ex Vice chancellor, Gulbarga University, Gulbarga Emeritus Professor, Bangalore University, Bangalore
Prof Dr. R. Vittal Rao	Indian Institute of Science, CEDT, Bangalore
Dr. G D Veerappa Gowda	professor, Department of Mathematics, TIFR, Bangalore
Dr. N.K Indira	Sr. Principal Scientist, CSIR Centre for Mathematical Modelling and Computer Simulation (C-MMACS) NAL Belur Campus, Bangalore.
Dr Pradeep G Siddeshwar	Prof. & Chairman of Mathematics Bangalore University, Bangalore
Dr I S Shivakumara	Prof Dept of Mathematics Bangalore University, Bangalore
Dr. Pranesh	Prof Dept of Mathematics Christ University, Bangalore
Dr Malashetty	Prof Dept of Mathematics Gulbarga University, Gulbarga
Dr.Lokesh Boregowda	Principal Engineer Research and Development, Samsung

25. Seminars/ Conferences/Workshops organized & the source of funding

- a. National NCAME-2015, NWL-2015, AMEAS-2016.
- b. International - ICCSEM 2010 and 2013

26. Student profile programme/course wise: NA

27. Diversity of Students - NA

28. How many students have cleared national and state competitive examinations

Such as NET, SLET, GATE, Civil services, Defense services, etc. ? NA

29. Student progression -NA

30. Details of Infrastructural facilities -NA

31. Number of students receiving financial assistance from college, university, government or other agencies - NA

32. Details on student enrichment programmes (special lectures / workshops / Seminar) with external experts

Name of the Resource Persons	Topic of the Talk
Dr N Rudraiah Professor, Emeritus, Department of	Nano Technology

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Mathematics, Bangalore University, Bangalore.	
Dr R Vittal Rao Indian Institute of Science, CETD, Bangalore	Marriage between Mathematics and Engineering
Dr Veerappa Gowda, TIRF, Bangalore	Finite volume methods for Conservation Law
Dr Pradeep G Siddeshwar Professor and Chairman, Department of Mathematics, Bangalore University, Bangalore	Mathematics and what all it's about
Dr. Pranesh, Christ University, Bangalore	Rotational modulation of single and two component convection in a Newtonian fluid saturated porous medium
Dr I S Shivakumara, Bangalore University, Bangalore.	Thermal instability in a layer of nanofluid saturated porous medium
Dr. Lokesh Boregowda, Principal Engineer, Samsung.	Importance of Mathematics in Engineering
Dr N V Vighnesam, Professor, Department of Mathematics, DSCE, Bangalore.	Precise position of Determination of India's first Moon (Chandrayaan-1) and Mars (MOM) Mission
Dr. Chandra Vaidyanathan, Chairman, DSU, Mathematics.	Mathematics behind online shopping
Through VTPC	Innovation Management and Intellectual Property Rights

Workshop

Sl. No.	Name of the Trainee	Name of the work shop	Place	Date	No of participants
1	Dr Sushan Bairy and Mr Venu K.	NWL-2015	DSCE	28 th Dec. 2015	72
2	FACE	QUANTITATIVE APTITUDE TRAINING	BANGALORE	2 nd MAY,2015	150

33. Teaching methods adopted to improve student learning

- I) Teaching through application of real problems.
- II) Tutorial Classes.
- III) Revisions are being done after the completion of each module.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

1. Sardar Vallabhai Patel's birthday celebration –National Unity day
2. Blood Donation Camp

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35. SWOC analysis of the department and Future plans

Strength : Experienced and Qualified Faculty.

Weakness : Less number of publications.

Opportunity : Need based formation of syllabi for respective branches.

Challenge : To motivate the students to learn the subject beyond classroom teaching.

Future plans

- Individual attention is given on each student from respective staff member in each class.
- More concern on First ten and last twenty students including lateral entry students to achieve successful result.
- Strict monitoring on Class notes, Assignments and Proctor System.
- Clear Counseling to average students to shine in our education system.

Evaluative Report of the Department

1. **Name of the department** : DEPARTMENT OF MANAGEMENT STUDIES
2. **Year of Establishment** : 2006
3. **Names of Programmes / Courses offered** (UG, PG, M.Phil., Ph.D., Integrated

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Masters; Integrated Ph.D., etc.) : PG – MBA and Ph.D. in Management

4. **Names of Interdisciplinary courses and the departments/units involved :** NA
5. **Annual/ semester/choice based credit system (programme wise) :** Semester
6. **Participation of the department in the courses offered by other departments:**
Few of our faculty participating in quality inputs to BBM students.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc. :** NIL
8. **Details of courses/programmes discontinued (if any) with reasons :** NIL
9. **Number of Teaching posts**

Particulars	Sanctioned	Filled
Professors	2	3
Associate Professors	4	0
Asst. Professors	10	13

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D Students guided for the last 4 Years
Dr.K GHemalatha	Ph.D, M.Phil, MBA, B.Pharm	Professor and HOD	Marketing	18 years and 7 Months	03
Dr. Lakshmi Jagannathan	Ph.D, MBA, BE	Professor	Quality Management	23 Years	03
Dr. Sripathi Rao M R	Ph.D, MBA, B.Com,CAIIB,MIM. MPB	Professor	Finance	35 Years	00
Dr. Suma Rao .K	B.A., PGPM, PhD	Assistant Professor	Marketing & supply chain	32 Years	00
Dr. Krishna Kishore SV	BBM, DNIIT, MBA, PhD	Assistant Professor	Marketing	7 Years	00
Dr Eti Khatri	B. Sc MBA, PhD	Assistant Professor	Finance	6 years	00
Mr. Brijesh Singh	B. Com, MBA, M Phil, (PhD)	Assistant Professor	Finance & Marketing	10 Years	00
Mrs. PurnimaThampi	BTech, PGDM, MHRM, UGC-NET, (Ph.D)	Assistant Professor	Marketing and HR	09 Years	00
Ms. Akshatha Jain	BBM,MBA	Assistant Professor	Finance	06 Years	00
Ms. Kaveri Jabshetty	B.E., MBA	Assistant Professor	Marketing and Operations and IT	02 Years	00

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Mr. Sudhir	B.E., MBA	Assistant Professor	Marketing	10Years	00
Ms. Ramya H.P	BBM., MBA	Assistant Professor	Finance	6 years	00
Mrs. Roopa U	B.Sc, M.Sc, M.Phil (MBA)	Assistant Professor	Statistics	11 Years	00
Ms. Sowmya	B.Com, MBA	Assistant Professor	Finance	07 Years	00
Mr. Ganesha K S	BBM , MBA	Assistant Professor	Marketing and HR	06 Years	00
Mr.SuplbKanti Poddar	BBM, MBA,(PhD)	Assistant Professor	Marketing and HR	06 Years	00
Mr. Nandisha H D	B.com, MBA, (PhD)	Assistant Professor	Finance	06 Years	00
Mrs. Nayana T	B.Com, MBA	Assistant Professor	Finance and HR	02 Years	00

List of Present Faculty:

Name	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D Students guided for the last 4 Years
Dr.K GHemalatha	Ph.D, M.Phil, MBA, B.Pharm	Professor and HOD	Marketing	18 years and 7 Months	03
Dr. Lakshmi Jagannathan	Ph.D, MBA, BE	Professor	Quality Management	23 Years	03
Dr. Sripathi Rao M R	Ph.D, MBA, B.Com,CAIIB,MIM. MPB	Professor	Finance	35 Years	00
Dr. Suma Rao .K	B.A., PGPM, PhD	Assistant Professor	Marketing & supply chain	32 Years	00
Dr. Krishna Kishore SV	BBM, DNIIT, MBA, PhD	Assistant Professor	Marketing	7 Years	00
Dr Eti Khatri	B. Sc MBA, PhD	Assistant Professor	Finance	6 years	00
Mr. Brijesh Singh	B. Com, MBA, M Phil, (PhD)	Assistant Professor	Finance & Marketing	10 Years	00
Ms. Ramya H.P	BBM., MBA	Assistant Professor	Finance	6 years	00
Mrs. Roopa U	B.Sc, M.Sc, M.Phil (MBA)	Assistant Professor	Statistics	11 Years	00
Ms. Sowmya	B.Com, MBA	Assistant Professor	Finance	07 Years	00
Mr. Ganesha K	BBM , MBA	Assistant	Marketing	06 Years	00

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S		Professor	and HR		
Mr.SuplbKanti Poddar	BBM, MBA,(PhD)	Assistant Professor	Marketing and HR	06 Years	00
Mr. Nandisha H D	B.com, MBA, (PhD)	Assistant Professor	Finance	06 Years	00
Mrs. Nayana T	B.Com, MBA	Assistant Professor	Finance and HR	02 Years	00
Mr. Sudhir	B,E., MBA	Assistant Professor	Marketing	10 Years	00
Mr. Shrisha	B,E., MBA	Assistant Professor	Marketing	2 Years	00

List of senior visiting faculty :

Subject	Year	Semester	Name of the faculty
Financial Management	2011	IIInd	Dr. SripathiRao DSBA
International Human Resource Management	2011	IVth	Prof.Venkatesh Prasad DSATM
Tax Management	2011	IVth	Mrs. PratimaBhat BMS
Supply Chain Management	2011	IVth	Prof. Rajeev Visiting Faculty
Consumer Behaviour	2011	IIIrd	Prof.Rajeev Visiting Faculty
Operations Management	2012	IIIrd	Mr.Gopal Krishna,BHEL
Project Appraisal , Planning and Control	2012	IVth	Mrs. Sandhya Visiting Faculty
Sales and Retail Management	2012	IIIrd	Mr. Anand, Senoir Manager-HR, AVP.
Supply Chain Management	2012	IVth	Mrs. Deepalakshmi Visiting Faculty
International Marketing Management	2012	IVth	Mrs. AnuradhaKaul Visiting Faculty
Operations Management	2012	IIIrd	Mr.Gopal Krishna BHEL.
Supply Chain Management	2012	IVth	Mr.N. Jagannath,Head-Manufacturing & SCM, Titan Industries.

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Quantitative Techniques for Managers	2012	I st	Mrs. Deepalakshmi Visiting Faculty
International Human Resource Management and Public Relations	2016	IVth	Mrs Meera Uday Visiting Faculty
E- Marketing	2016	IVth	Mr Raju Visiting Faculty

12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty : NA

13. Student -Teacher Ratio (programme wise) : 16 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Administrative Staff	01
Lab staff	01

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

PhD	06
PG	16
MPhil	03

16. Faculty with ongoing projects from a) National b) International funding agencies and grants received :

Name of the Faculty – Dr. Lakshmi Jagannathan

Funding Agencies – Department of Science and Technology, MSME, National Science and Technology Entrepreneurship Development Board.

Nature of the Project	Duration Year From To	Title of the project	Name of the funding Agency	Total Grant (Rs)		Total Grant received till date
				Sanctioned	Received	
Major Projects	2012-2017	Innovation and Entrepreneurship Development Center Students Project	Department of Science and Technology Govt. of India	48,00,000	21,30,000	21,30,000
	2014	MSME Business Incubator	Ministry of Micro, Small and Medium Enterprises, Govt. of India	64,00,000	38,88,000	38,88,000
	January 2015 to January 2019	Technology Business Incubator	National Science & Technology Entrepreneurship Development Board Govt. of India	4.85 Crores	Work in Progress	Work in Progress

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17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Nature of the Project	Duration Year From To	Title of the project	Name of the funding Agency	Total Grant (Rs)		Total Grant received till date
				Sanctioned	Received	
Minor project	10 th to 11 th October 2013	Technology Commercialization Workshop	Karnataka Science and Technology Academy	20,000,	20,000	20,000
	9 th to 27 th February 2012	Training of Trainers in Entrepreneurship Development	National Institute for Micro, Small and Medium Enterprises, Hyderabad	65,000	65,000	65,000
	7 th to 28 th March 2012	Training of Trainers in Entrepreneurship Development	National Institute for Micro, Small and Medium Enterprises, Hyderabad	65,000	65,000	65,000
	17 th to 29 th November 2014	Training of Trainers in Entrepreneurship Development	National Institute for Micro, Small and Medium Enterprises, Hyderabad	67,000	67,000	67,000
	7 th to 9 th January 2015	Entrepreneurship Awareness Camp	National Science & Technology Entrepreneurship Development Board Govt. of India	20,000	14,000	14,000
Major Projects	2012-2017	Innovation and Entrepreneurship Development Center Students Project	Department of Science and Technology Govt. of India	48,00,000	21,30,000	21,30,000
	2014	MSME Business Incubator	Ministry of Micro, Small and Medium Enterprises, Govt. of India	64,00,000	38,88,000	38,88,000
	January 2015 to January 2019	Technology Business Incubator	National Science & Technology Entrepreneurship Development Board Govt. of India	4.85 Crores	Work in Progress	Work in Progress
TOTAL				59937000	6249000	6249000

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18. Research Centre /facility recognized by the University :

VTU Recognized Research Centre for Ph.D and EIGHT Scholars are pursuing their PhD.

19. Publications:

Year	2010	2011	2012	2013	2014	2015	2016
Publications by MBA Faculty	03	09	13	07	05	07	03

Number of papers published in peer reviewed journals (national / international) by faculty and students:

National – 50

International – 15

Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : 6

* Monographs: NIL

* Chapter in Books: NIL

* Books Edited: NIL

* Books with ISBN/ISSN numbers with details of publishers:

- Mrs. PurnimaThampi ,Organizational Behaviour – II Semester BBM, Bangalore University , United Publications, ISBN 978-93-81195-36-7, Jan-2013
- Dr. B.K. Arun & Suplab Kanto Podder (2015), Human Resources Management, Himalayas publishers.

* Citation Index: 190

* SNIP: NIL

* SJR: NIL

* Impact factor: 0.6 to 2.3

* h-index: NIL

20. Areas of consultancy and income generated : NIL

21. Faculty as members in

i. National committees b) International Committees c) Editorial Boards....

- Dr.Lakshmi Jagannathan – Board of Examiner 2011.
- Prof. Arun B K – Member of Board of Examinations for MBA programme at Devi-Ahilya Vishnidyalya, Indore Madhya Pradesh – 2014.
- Prof. Arun B K – Member of Doctorial Committee (DC) of Bharathiar University, Coimbatore for Category –B PhD Programme in Management

22. Student projects

- i. Percentage of students who have done in-house projects including inter departmental/programme: NIL
- ii. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies : 100%

23. Awards / Recognitions received by faculty and students:

Dr. Arun B K

- BEST RESEARCH PAPER AWARD in 10th NIRMA International Conference on Management for the research work on “Challenges in

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Incorporating Strategic Mind-Set”.

- Best PhD Award for PhD thesis on “Organizational Values and Role-Efficacy” at PIMR International Conference at Indore, Madhya Pradesh.

24. List of eminent academicians and scientists / visitors to the department

Name	Designation	Company	Date
S. Balasubramanyam	Vice President	Peenya Industries Association and Chairperson for IMAC & CEE of PICUP.	18-04-2011
Mr. Deepak Justin	Chief Executive Officer	Inner Circle, the Training & Development Specialists.	19-04-2011
Dr. Harish Hande	Managing Director	SELCO	09-11-2011
Mr. Sudarshan V	Finance Head	Aricent Technologies Limited	18-04-2011
Mr. Rajendra Bhat	Chief Mentor	NEN	22-6-2013 to 23-6-2013
Mr. Vamsi	Cloud Manager	IBM	22-6-2013 to 23-6-2013
Mr. Nitin	Tool Kit Expert	SME	22-6-2013 to 23-6-2013
Ms. Katherin Schoenke	Senior Technical Consultant	Titan Industries Limited.	28-03-2014
Mr Dwarakanath	Corporate Advisor & Technical Consultant	Titan Company Ltd.	13-5-2015
Mr. Ramesh Kamath	Ex CFO.	The Minacs group	29-8-2015
Mr. SVL Narayan	Founder & CEO	ConsultingueSamaga	14-09-2015
Mr. Madhusudan S Mokashi	Vice president – Marketing	HIL Limited	19-09-2015
Mr. Basudev	Sr. Data Scientist	General Electric	10-10-2015
Mr. Jairam	Program Management Consultant	MITRE Corporation	27-2-2016
Mr. BS Prakash	Group Manager	Titan Industries	26-3-2015
Mr. Raghunath	Professor	IIMB	12-5-2015
Dr MH Balasubrahmanya	Chairman	Indian Institute of Science	12-5-2015

25.Seminars/ Conferences/Workshops organized & the source of funding

- a. National Seminars / Conferences– Funded by Institution
 - Panel Discussion on “The challenges of the professional” by Subroto Bagchi, Vice-Chairman, Mind Tree Ltd.

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- E-Week Celebrations," Theme- Opportunities within", with the main motto to embrace innovation, engage communities to inspire support for entrepreneurship. The Activities like Quiz, Debate and People's poll were conducted.
 - A seminar on "opportunities & its proper utilization", Chair-person was Prof. Geetha Suresh, Mount Carmel College, Bangalore.
 - E-talk, seminar given by Mr Arjun Bala, Chief IP Strategy Consultant & Patent agent about entrepreneurship.
 - An Industrial Visit organized to L & T Komatsu Ltd, Karnataka Soaps & Detergents Ltd.
 - An expert workshop series was organized on (i) "Evolution of a brand", Lizbeth James, Mudra Advertising (ii) Challenges in managing Foreign Exchange in International Business, S.D. Manjunath, Head, Treasury & Forex, Axis Bank Ltd, (iii) Importance of Change Management, Dr. Joy Mukhopadhyay, Management Consultant, (iv) Overview of Derivatives Market, Mr. Prabhakar, Asst. Manager, Bangalore Stock Exchange, (v) Organisational Leadership, Mr Anand Hanagal, Head, HR, Café Coffee Day, (vi) Quantitative Techniques for management, Mr Arase Gowda, Asst Manager, Inventory, Toyota Kirloskar Motors Pvt Ltd.
 - Knowledge Series Lectures on (i) Mission Quality- The new Corporate Mantra, Mr. Jagadish Ramaswamy, Chief Quality Officer, Wipro Limited, (ii) Customer Driven Quality by Mr. Satya Gopal Kalluri, Head, Global assurance, 24/7 Customer.
 - International Journal released-"Sagrahana".
 - A Management Fest – "Moanrquia" was conducted. Inaugurated by Mr B G Dwarakanath, Senior Advisor, Titan Industries Ltd.
 - Conducted a business Plan competition – "Nirmaan"
 - E-Week celebrations
 - CEO Connect with Mr Sandeep Dhar, Tesco Ltd.
 - Management Student Fest- "Shatranj"- The game of Masterminds
 - "Coffee with CEO" with Mr. Suhas Gopinath, CEO & President, Globals Inc.
 - A panel discussion on Employee Engagement by various HR Heads from various MNCs and educational institutions.
- Cultural Expression of students on the campus is coordinated by various Forums and Clubs.

Clubs have been formed to promote social extension activities of the students.

b. International- NIL

26. **Student profile programme/course wise: NA**

27 **Diversity of Students for MBA Programme**

Year	% of students from the same state	% of students from other States	% of Students From Abroad
2010	79.62	18.52	1.86
2011	71.18	25.43	3.39
2012	91.20	6.59	2.19

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2013	96.20	3.80	-
2014	92.45	7.55	-
2015	96.19	4.71	-

28 How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

NIL

29. Student progression

Student progression	Against % enrolled						
UG to PG	NA						
PG to M.Phil.	NIL						
PG to Ph.D.	NIL						
Ph.D. to Post-Doctoral	NIL						
Employed	2010	2011	2012	2013	2014	2015	2016*
• Campus selection	47.17	51.72	35.55	26.92	21.6	62	16
• Other than campus recruitment	47.17	41.3	60	67.3	73.5	22	NA
Entrepreneurship/Self-employment	5.66	6.89	4.45	5.76	4.71	7	NA

*On Going Placement Process

30. Details of Infrastructural facilities – Provided as per AICTE Requirements

Department Library:

Dept Library	Particulars	Area/ Quantity/ Category
1	Built up area	10Sq.M
2	Books	450
3	Journals	60
4	Bound Volumes	-
5	E-Resource	-
6	Technology	-
7	Printer	05 Nos.
8	Furniture	1 Semi circle desk
		6 Revolving stools
		4 Wooden Almirah
9	Others Photocopier	- 01 No.

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- a. **Internet facilities for Staff & Students** : The class rooms in the department is equipped with computer and audio video accessories which helps the faculty in using management videos and other e learning sources in class.
- b. **Class rooms with ICT facility**: All the class rooms are equipped with Computers and projectors .
- c. **Laboratories** :

MBA LAB	No.of Computers	Other facilities
Internet Facility	60	NSE/IT Software,Newswire18,printers

31. Number of students receiving financial assistance from college, university, government or other agencies

MASTER OF BUSINESS ADMINISTRATION					
SL.NO.	FINANCIAL YEAR	ACADEMIC YEAR	NO. OF STUDENTS	% of students received financial assistance	
1	2010-11	I YEAR	2	4	SC/ST SCHOLARSHIP
		II YEAR	4	8	
2	2011-12	I YEAR	2	3	
		II YEAR	1	2	
3	2012-13	I YEAR	9	10	
		II YEAR	2	4	
4	2013-14	I YEAR	5	5	
		II YEAR	6	7	
5	2014-15	I YEAR	9	13.8	
		II YEAR	6	7	
		II YEAR			

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts: Lot of events has been conducted in the department.

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Sl. No	Particulars	2010	2011	2012	2013	2014	2015	*2016
1	Industrial Visit	02	05	03	01	07	04	02
2	Guest Lectures	02	07	08	09	13	04	05
3	Seminar/Workshop/Panel Discussion/Entrepreneurship Cell Activities	12	39	07	02	04	07	11
4	Competition	01	04	02	--	04	03	03
5	Social Project	01	--	--	--	02	--	--
6	Alumni Meet	--	01	--	--	01	03	02

*2016 activities in progress

To name a few....

- CEO Connect with Dr. Harish Hande – November 2011
- Workshop on Entrepreneurial Development by Mr. V Sudharshan, Mrs. Kalyani, Mr. S Balasubramanyam, Mr. Deepak Justin – April 2011
- Workshop for Aspiring Entrepreneurs: “ Building Technology Ventures “ – October 2012
- Intellectual Property Workshop (IPR) – May 2013
- Patent Search Workshop for students and Faculty – August 2013
- Technology Commercialization Workshop – October 2013
- Entrepreneurial Awareness Camp – January 2015.

33. Teaching methods adopted to improve student learning :

Role Play, Case Study, Business Quiz, Industrial Visit, Workshop, Seminars, Audio- Visual aids, Debate etc.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities :

- Conducting Seminar and Colloquiums on Environmental Awareness.
- Eco friendly lifestyle.
- Social Awareness.
- Inculcating Social Awareness among Management graduates.
- Corporate Social Responsibility as a part of their Study.
- UN-PRME signatory membership.
- KVK MOU.

35. SWOC of Department

Strengths:

- Enriched Faculty Members with a perfect blend of teaching, research and industry experiences.
- Latest pedagogical practices in the teaching with more emphasis on value based education
- Innovation and entrepreneurship Development centre (IEDC) supported by DST & MSME – to inculcate & strengthen entrepreneurial skills of the students.
- Regular Industry academia interaction for the benefit of the students who are hailed from different parts of the country.
- Proctor system which helps to monitor each and every student's progress.

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Weakness:

- Insufficient participation from students in research activity
- Constraints in finishing the portions when you have more number of events, so need to restrict with number of events.

Opportunities:

- Alliance with top global universities can make students and course more up to date based on global requirements.
- Collaborations with the top research organizations.
- Department can cater to the need of industry by conducting specialized courses like business analytics, financial modeling, Banking, retail certification, security market certification, digital marketing, creative communication, etc.
- Department can collaborate with various industries from MSME sector so that faculty can extend their expertise to those industries for consultancy also students also will be benefitted.
- Interdisciplinary research gives meaningful solution to the various management problems of startups.

Challenges:

- Competition with the premier management institutes.
- Quality of students day by day declining, so equipping them for their career and life skill is really challenging.
- Motivating the faculty regarding updating themselves with expected standards.

Future Plans of the Department

- 100 percent placement for the department.
- Accreditation by AACSB (*Association to Advance Collegiate Schools of Business*).
- Focus more on skill development and expertise in specialized field of interest of the students.
- Focusing more on center for excellence- Marketing, HR & leadership, Finance & financial Modeling, Operations & quality, etc.
- Focusing more towards research& consultancy.
- Socially relevant projects and real time projects will be focused more both by faculty & students.
- To provide premier institute & international exposure to faculty.
- More CSR activities so leads to value education.
- Motivating the rest of the faculty to pursue their PhD in the forthcoming semester.

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Evaluative Report of the Departments

1. Name of the department – [MCA \(VTU\)](#)
2. Year of Establishment -[2006](#)
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) [MCA, MSc \(research\) and Ph.D](#)
4. Names of Interdisciplinary courses and the departments/units involved [NA](#)
5. Annual/ semester/choice based credit system (programme wise) : [semester-wise](#)
6. Participation of the department in the courses offered by other departments [NIL](#)
7. Courses in collaboration with other universities, industries, foreign institutions, etc. [NIL](#)
8. Details of courses/programmes discontinued (if any) with reasons
9. Number of Teaching posts

	Sanctioned	Filled
Professors	1	1
Associate Professors	3	2
Asst. Professors	8	7

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt.

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/Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No of Years of Experience	No of Ph.D students guided for last 4 years
Dr.Poornima Nataraja	MCA,M.Phil Ph.D	Professor & Head	Web Applications	19	-
Dr.Samitha K	MCA,M.Phil. PhD	Associate Professor	Embedded Systems	11	-
Suma S	MCA,M.Phil(PhD)	Associate Professor	Parallel Computing	12	-
Vibha M B	MCA,M.Phil(PhD)	Assistant Professor	Cloud Computing	9	-
Devaraj Verma C	B.E, MTech, (PhD)	Assistant Professor	Artificial Intelligence	11	-
Suchitha S	MCA M.Phil.(PhD)	Assistant Pro	Networking	13	-
Mahendra Kumar	MCA,M.Tech, (PhD)	Assistant Professor	Remote Sensing	7	-
Vinod Kumar	MCA	Assistant Professor	-	3	-
Rakshitha Kiran	BE, MTech	Assistant Professor	-	0.6	-

11. List of senior visiting faculty [NIL](#)

12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty [NIL](#)

13. Student -Teacher Ratio (programme wise) [15:1](#)

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled [1:1](#)

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

[Ph.D - 2](#)

[MPhil - 6](#)

[PG - 10](#)

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : [NIL](#)

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: [NIL](#)

18. Research Centre /facility recognized by the University - VTU [AFFILIATED](#)

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Research Centre : SANCTIONED IN OCT' 2010

19. Publications:

- * a) Publication per faculty
Average Publication Per faculty/Year (in last 5 years) = 12.4
- * Number of papers published in peer reviewed journals (national / international) by faculty and students Average/year (based on 5 year data) : 5
- Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : 30
- * Monographs
- * Chapter in Books - 01
- * Books Edited
- * Books with ISBN/ISSN numbers with details of publishers
- * Citation Index
- * SNIP
- * SJR
- * Impact factor
- * h-index

20. Areas of consultancy and income generated NIL

21. Faculty as members in

- i. National committees b) International Committees c) Editorial Boards....

NOT APPLICABLE

22. Student projects

- i. Percentage of students who have done in-house projects including inter departmental/programme
4.76%
- ii. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies
95%

23. Awards / Recognitions received by faculty and students

NIL

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24. List of eminent academicians and scientists / visitors to the department

Dr.S. Ramani, Project Director, ISRO, Bangalore

Dr. Akki, Wipro Technologies, Bangalore

Dr. S N. Omkar, Aeronautics Department, IISc

Dr. K C Gouda, Scientist, CMMAC, NAL

25. Seminars/ Conferences/Workshops organized & the source of funding

- a. National

VTU-VGST Sponsored Workshop on “Application of Cloud Computing and Virtualization” during 10-12 Jan 2011

- b. International

26. Student profile programme/course wise:

Name of the Course/programme MCA (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
2010-11	60	51	42	9	80%
2011-12	60	59	47	12	78%
2012-13	60	51	42	09	68%
2013-14	60	50	40	10	67%
2014-15	60	41	22	19	63%
2015-16	60	53	22	31	88%

*M = Male *F = Female

27. Diversity of Students

	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2009-10	MCA	73.33	26.67	0
2010-11		58.33	41.67	0

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2011-12		71.67	26.67	1.67
2012-13		59.26	40.74	0
2013-14		82.97	17.024	0
2014-15		85.7	11.4	2.8
2015-16		83.33	16.67	

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? - NIL

29. Student progression

Student progression	Against % enrolled
UG to PG	NOT APPLICABLE
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed	
☐ Campus selection	60%
☐ Other than campus recruitment	35%
Entrepreneurship/Self-employment	2%

30. Details of Infrastructural facilities

- a. Library - Department maintains a library
- b. Internet facilities for Staff & Students - Wifi enabled campus with digital library available
- c. Class rooms with ICT facility - Smart boards and projectors are available
- d. Laboratories - Well equipped laboratory as per the AICTE norm

31. Number of students receiving financial assistance from college, university, government or other agencies

SC/ST Scholarship Details of MCA

Sl No	Financial Year	Academic Year	# of Students	Total amt sanctioned	SC.ST Scholarship
1	2010-11	I Year	3	161700	

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		II year	4	229720	
		III year	4	196090	
2	2011-12	I Year	2	114840	
		II year	3	175860	
		III year	4	233920	
3	2012-13	I Year	6	345720	
		II year	2	117440	
		III year	3	183960	
4	2013-14	I Year	5	303100	
		II year	4	230840	
		III year	3	172860	
5	2014-15	I Year	NA	NA	
		II year	NA	NA	
		III year	NA	NA	

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Guest lectures organized on the following topics:

1. Ruby on Rails,
2. Mobile Communication
3. Networking
4. System Programming
5. Cloud computing
6. Aptitude improvement classes
7. Communication skill
8. Web Technology
9. Drupal on CMS workshop
10. Workshop on Software Designing
11. Guest lecture on SMAC
12. Adobe Presenter training
13. Internet of Things
14. Introduction to Python

33. Teaching methods adopted to improve student learning

Case Studies, Group discussion, Seminar, Projects, Industrial visits, Guest Lectures, student presentations, Assignments.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities
Visit to Orphanage during 2011 (October) to donate clothes and books. (anatha shishuvihara, Bull temple road, Bangalore)

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Visit to orphanage on 30th April 2016 to Sampathu. Donated books, cash and sports item

35. SWOC analysis of the department and Future plans

Strength:

- Well qualified faculty with good teaching experience
- Research work by faculty in the area of : Web Application, Software Engineering, Data Mining, Networks, Cloud computing, Web Technology, Artificial Intelligence, Parallel computing
- Interactive approach to learning programming concepts
- Most of the faculty are pursuing research
- Access to computer to all students with internet facilities

Weakness:

- Require common room for boys and girls
- Insufficient recreation facilities for faculty

Opportunities:

- Many openings for students who have completed MCA in development/testing/banking/teaching/research work, etc
- Possibility to become entrepreneur
- Pursue higher education like M.Phil, PhD
- Possibility to have industry collaboration and research funding and patents

Challenges:

- Decreasing intake due to lateral entry in MCA due to Lateral entry for graduates into BE course
- The curriculum needs to add hardware oriented courses.
- Electives to be included as per industrial requirement.
- Attracting good quality students

Future Plans

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- Provide opportunity for students to intern with industry during summer vacations
- Conduct more industry institute interaction
- Increase MoU with industries
- Get proposal/research grants from agencies like DST/AICTE/VGST

Evaluative Report of the Department

1. **Name of the department :** Mechanical Engineering
2. **Year of Establishment:.** 1979
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) :**

UG: B.E. Mechanical
P.G: M.Tech. in Design Engineering
M.Tech. in Computer Integrated Manufacturing
4. **Names of Interdisciplinary courses and the departments/units involved:** Nil.
5. **Annual/ semester/choice based credit system (programme wise):** Semester based.
6. **Participation of the department in the courses offered by other departments:** Nil.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil.
8. **Details of courses/programmes discontinued (if any) with reasons:** None.
9. **Number of teaching posts**

	Sanctioned	Filled
Professors	5	6
Associate Professors	11	09
Assistant Professors	38	36
10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./Ph.D. / M. Phil. etc.,)**

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Sl. No.	Names	Qualification	Designation	Specialization	No. of Years Experienced	No. of Ph.D Students guided for last 4 years
1	Dr. S.C.Sharma	Ph.D	Director, DSCE & Provost, DSU			
2	Dr. C.P.S.Prakash	Ph.D	Principal	Production Engg.	27.3	5
3	Dr. Keshavamurthy	Ph.D	Professor & Head	Manufacturing	8.8	4
4	Dr. H. V. Lakshminarayana	Ph.D	Professor	Design engineering	48.4	
5	Dr. Nepal Adhikary	Ph.D	Professor	CAD	20.5	1
6	Dr. Kailash Chandra Panda	Ph.D	Professor	Roto Dynamics & Noise and Vibrations	17.4	
7	Dr. Narasimhe Gowda	Ph.D	Professor	Thermal Engineering / Machine Design	24.7	1
8	Dr. Shanmuganathan	Ph.D	Associate Professor	Metal Forming	11.2	1
9	Dr. Challa Jayaramulu	Ph.D	Associate Professor	Mechanical Vibrations	27	
10	Dr. Mallikarjun Biradar	Ph.D	Associate Professor	Manufacturing Science and Engineering	20.7	
11	Dr. Seetharama. K. S	Ph.D	Associate Professor	Machine Design	30.7	
12	Prof.K.Prabhakar	M.E	Associate Professor	Material Science & Engineering	47.3	
13	A. Shantharam	M.E	Associate Professor	Metallurgy	44.9	
14	G.S.Mahesh	M.Tech	Associate Professor	Maintenance Engineering	22.5	
15	Dr. Aruna Devi. M	Ph.D	Associate Professor	Industrial Management	8.6	
16	Venkatesh. K. P	ME	Associate Professor	MEMS	14.7	
17	Dr. M.K.Venkatesh	M.Tech	Assistant Professor	Maintenance Engineering	15.6	
18	H.Rajashekar	M.Tech	Assistant Professor	Production Technology	17.6	
19	M.R.Kamesh	M.E	Assistant Professor	Thermal Engineering	13.4	
20	M.D.Mahendra	M.Tech	Assistant Professor	Production Technology	16.1	

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21	M. Madhavamurthy	M.Tech	Assistant Professor	Product Design & Manufacturing	23.3	
22	V. R Srinivasan	M.E	Assistant Professor	Manufacturing Engineering	13.8	
23	Manjunath. N. D	M.Tech	Assistant Professor	Thermal Power Engineering	10.2	
24	Jacob John	M.Tech	Assistant Professor	Energy & Environmental Engineering	13.8	
25	Vijayakumar N Patil	M.Tech	Assistant Professor	Product Design & Manufacturing	12	
26	Vivek Bhandarkar V N	M.Tech	Assistant Professor	Product Design & Manufacturing	12.4	
27	Haseebuddin. M. R	M.Tech	Assistant Professor	Production Engg. & Systems Technology	15.4	
28	Ramesha. H	M.Tech	Assistant Professor	Design Engineering	8.3	
29	Govindaraju. H	M.Tech	Assistant Professor	Thermal Power Engineering	8.9	
30	KranthikumarKshaurad	M.Tech	Assistant Professor	Computer Integrated Manufacturing	5.9	
31	Manjunath. S. B	M.Tech	Assistant Professor	Design Engineering	4.9	
32	Shivashankar. R	M.Tech	Assistant Professor	Design Engineering	3.5	
33	Ayyappa. T	M.Tech	Assistant Professor	Design Engineering	1.6	
34	Madhusudhan. M	M.Tech	Assistant Professor	Tool Engineering	4.5	
35	Thejeswini. M	M.Tech	Assistant Professor	Computer Aided Engineering	3.0	
36	Praveen D Jadav	M.Tech	Assistant Professor	Industrial Automation & Robotics	3.0	
37	Munawar Ulla Shariff	M.Tech	Assistant Professor	Computer Integrated Manufacturing	2.0	
38	Chitra. S	M.Tech	Assistant Professor	Thermal	4.8	
39	Vinayaka. H. L	M.Tech	Assistant Professor	Design Engineering	1.2	
40	Padmavathi. G	M.Tech	Assistant Professor	Computer Integrated	1.2	

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				Manufacturing		
41	Anand Badiger	M.Tech	Assistant Professor	Machine Design	1	
42	Mohan Das A. N	M.Tech	Assistant Professor	Thermal Power Engineering	3.8	
43	Ajay Krishna. V. S	M.Tech	Assistant Professor	Design Engineering	1.5	
44	Suman Das. D	M.Tech	Assistant Professor	Design Engineering	1.5	
45	Pavan KumarDeshmukh	M.Tech	Assistant Professor	Thermal Power Engineering	3.4	
46	Madhusudhan. J	M.Tech	Assistant Professor	Manufacturing Science & Engg.	6	
47	Nithesh Bhaskar. N	M.Tech	Assistant Professor	Design Engineering	2	
48	Manoj. I. V	M.Tech	Assistant Professor	Product Design & Development	1.6	
49	Rajesh Chandra. C	M.Tech	Assistant Professor	Machine Design	8	
50	Karthik. M. A	M.Tech	Assistant Professor	Manufacturing Science & Engg.	1.9	
51	Arun Arogyaswamy	M.Tech	Assistant Professor	Thermal Engineering	1.3	
	Kishore Kumar. R	M.Tech	Assistant Professor	Thermal Engineering	5.3	

11. List of senior visiting faculty : Nil.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil.

13. Student -Teacher Ratio (programme wise) :1:17

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Academic support staff (Technical)	26	27
Administrative staff	3	2

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Sl. No.	Names	Qualification	Designation	Specialization	No. of Years Experienced
1	Dr. S.C.Sharma	Ph.D	Director, DSCE & Provost,		

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			DSU		
2	Dr. C.P.S.Prakash	Ph.D	Principal	Production Engg.	27.3
3	Dr. Keshavamurthy	Ph.D	Professor	Manufacturing	8.8
4	Dr. H. V. Lakshminarayana	Ph.D	Professor	Design engineering	48.4
5	Dr. Nepal Adhikary	Ph.D	Professor	CAD	20.5
6	Dr. Kailash Chandra Panda	Ph.D	Professor	Roto Dynamics & Noise and Vibrations	17.4
7	Dr. Narasimhe Gowda	Ph.D	Professor	Thermal Engineering / Machine Design	24.7
8	Dr. Shanmuganathan	Ph.D	Associate Professor	Metal Forming	11.2
9	Dr. Challa Jayaramulu	Ph.D	Associate Professor	Mechanical Vibrations	27
10	Dr. Mallikarjun Biradar	Ph.D	Associate Professor	Manufacturing Science and Engineering	20.7
11	Dr. Seetharama. K. S	Ph.D	Associate Professor	Machine Design	30.7
12	Prof.K.Prabhakar	M.E	Associate Professor	Material Science & Engineering	47.3
13	A. Shantharam	M.E	Associate Professor	Metallurgy	44.9
14	G.S.Mahesh	M.Tech	Associate Professor	Maintenance Engineering	22.5
15	Dr. Aruna Devi. M	Ph.D	Associate Professor	Industrial Management	8.6
16	Venkatesh. K. P	ME	Associate Professor	MEMS	14.7
17	M.K.Venkatesh	M.Tech	Assistant Professor	Maintenance Engineering	15.6
18	H.Rajashekar	M.Tech	Assistant Professor	Production Technology	17.6
19	M.R.Kamesh	M.E	Assistant Professor	Thermal Engineering	13.4
20	M.D.Mahendra	M.Tech	Assistant Professor	Production Technology	16.1
21	M. Madhavamurthy	M.Tech	Assistant Professor	Product Design & Manufacturing	23.3
22	V. R Srinivasan	M.E	Assistant Professor	Manufacturing Engineering	13.8
23	Manjunath. N. D	M.Tech	Assistant Professor	Thermal Power Engineering	10.2
24	Jacob John	M.Tech	Assistant Professor	Energy & Environmental Engineering	13.8

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25	Vijayakumar N Patil	M.Tech	Assistant Professor	Product Design & Manufacturing	12
26	Vivek Bhandarkar V N	M.Tech	Assistant Professor	Product Design & Manufacturing	12.4
27	Haseebuddin. M. R	M.Tech	Assistant Professor	Production Engg. & Systems Technology	15.4
28	Ramesha. H	M.Tech	Assistant Professor	Design Engineering	8.3
29	Govindaraju. H	M.Tech	Assistant Professor	Thermal Power Engineering	8.9
30	KranthikumarKshaurad	M.Tech	Assistant Professor	Computer Integrated Manufacturing	5.9
31	Manjunath. S. B	M.Tech	Assistant Professor	Design Engineering	4.9
32	Shivashankar. R	M.Tech	Assistant Professor	Design Engineering	3.5
33	Ayyappa. T	M.Tech	Assistant Professor	Design Engineering	1.6
34	Madhusudhan. M	M.Tech	Assistant Professor	Tool Engineering	4.5
35	Thejeswini. M	M.Tech	Assistant Professor	Computer Aided Engineering	3.0
36	Praveen D Jadav	M.Tech	Assistant Professor	Industrial Automation & Robotics	3.0
37	Munawar Ulla Shariff	M.Tech	Assistant Professor	Computer Integrated Manufacturing	2.0
38	Chitra. S	M.Tech	Assistant Professor	Thermal	4.8
39	Vinayaka. H. L	M.Tech	Assistant Professor	Design Engineering	1.2
40	Padmavathi. G	M.Tech	Assistant Professor	Computer Integrated Manufacturing	1.2
41	Anand Badiger	M.Tech	Assistant Professor	Machine Design	1
42	Mohan Das A. N	M.Tech	Assistant Professor	Thermal Power Engineering	3.8
43	Ajay Krishna. V. S	M.Tech	Assistant Professor	Design Engineering	1.5
44	Suman Das. D	M.Tech	Assistant Professor	Design Engineering	1.5
45	Pavan KumarDeshmukh	M.Tech	Assistant Professor	Thermal Power Engineering	3.4
46	Madhusudhan. J	M.Tech	Assistant Professor	Manufacturing Science & Engg.	6
47	Nithesh Bhaskar. N	M.Tech	Assistant Professor	Design Engineering	2
48	Manoj. I. V	M.Tech	Assistant Professor	Product Design & Development	1.6
49	Rajesh Chandra. C	M.Tech	Assistant	Machine Design	8

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			Professor		
50	Karthik. M. A	M.Tech	Assistant Professor	Manufacturing Science & Engg.	1.9
51	Arun Arogyaswamy	M.Tech	Assistant Professor	Thermal Engineering	1.3
52	Kishore Kumar. R	M.Tech	Assistant Professor	Thermal Engineering	5.3

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Sl. No.	Name of the Teacher / Principal Investigator	Project Title	Year of Sanction	Funding Agency	Total Amount Sanctioned
1	Prof. Haseebuddin M. R	The Multi – Tasking Wheel Chair	August 2015	IEDC	1,00,000/-
2	Dr. R. Keshavamurthy	Utilization of Industrial waste for the development of protective coating on aluminum components	2016	KSCST	6,000/-
3	Prof. Praveen D Jadav	Design and Fabrication of a Robot for Agriculture applications	2016	KSCST	6,000/-
4.	Dr. S.C.Sharma	Development of waste paper and plastic filled polymer based composites: waste to wealth approach	2016	VGST	60,00,000/-

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

SL. No.	Name of the Teacher / Principal Investigator	Project Title	Year of sanction	Funding Agencies	Total Amount Sanctioned	Status
1	Dr. H. V. Lakshminarayana Prof., DSCE Prof. Shivashankar Srivatsa	“Investigation of Impact Damage Tolerance of Composites for Naval Structures / Components”	2009	Naval Research Board	9.95 Lakhs	Completed
2	Dr. C. P. S. Prakash Prof. & HOD,DSCE	Structural Optimization Studies on Unmanned Air Vehicles for Developing Air Frames with High Strength to weight ratio characteristics required for Surveillance purpose	2011	Institute of Engineers (India)	1,10,000/-	Completed
3	Dr. C. P. S. Prakash Prof. & HOD,DSCE	Modernization of Energy Conversion Laboratory	2012	AICTE Project	7,00,000/-	Completed

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4	Dr. C. P. S. Prakash Prof. & HOD, DSCE	Design, Analysis and Fabrication of a radio Controlled Bi-Plane mini air Vehicle	2012	VTU Grant Sanctioned by Institute of Engineers (India)	50,000/-	Completed
5	Dr. C. P. S. Prakash Prof. & HOD, DSCE	Design, Analysis and Fabrication of a Bi-Plane Mini Air Vehicle	2012	Grant for R & D Project from the Aeronautical Society of India	35,000/-	Completed
6	Dr. M. B. Kiran & D. M. Shivanna Asst. Prof., DSCE	In Process Evaluation of Surface Roughness of Components in Computer Integrated Manufacturing	2012	AICTE Project	10,65,000/-	Completed
7	Mr. Haseebuddin. M. R Asst. Prof.	'Stair Climber for Disabled'	2013	KSCST Project-	5,000/-	Completed
8	Dr. R. Keshavamurthy Asso. Prof., DSCE	Development and Characterization of Industrial Waste Reinforced Metal Matrix Composite	2014	KSCST Project	7,500/-	Completed
9	Prof. Narasimhe Gowda Asso. Prof., DSCE	Study of Parabolic Trough Collector for Tapping Solar Energy	2014	KSCST Project	8,000/-	Completed
10	Dr. C. P. S. Prakash Prof. & HOD, DSCE	Analysis & Fabrication of Condylar in a Articulator	2015	Institute of Engineers (India) R & D Grand In Aid	30,000/-	Completed
11	Prof. M. Madhavamoorthy	Design And Fabrication Of A Walking Chair Using Linkage Mechanism	2015	KSCST Project	7,000.00	Completed
12	Prof. Haseebuddin M R	Design And Fabrication Of Power Handle Wheel Chair For The Disabled	2015	KSCST Project	7,000.00	Completed
13	Dr. R. Keshavamurthy	Development Of Solar Absorber Coatings To Improve The Performance Of Parabolic Trough Collector	2015	KSCST Project	7,000.00	Completed
14	Prof. Kartikumar Kshaurad	Multi-Purpose Unmanned Aerial Vehicle (Drone) With Load Bearing Capacity	2015	KSCST Project	8,000.00	Completed
15	Prof. Narasimhe Gowda	Performance Study Of Polymer Solar Flat Plate Collector	2015	KSCST Project	8,000.00	Completed

18. Research Centre /facility recognized by the University : Yes. Recognized by VTU.

19. Publications:

- * 80 National journal/Conference papers during last four years.
- * 120 International journal/Conference papers during last four years.
- * Book on FEM by Dr. H.V Lakshminarayana.

20. Areas of consultancy and income generated: Nil.

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards....

Dr. H.V Lakshminarayana - Chairman, Education and Training Working Groups India, NAFEMS: International Association of the Engineering Analysis Community.

22. Student projects

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- a) Percentage of students who have done in-house projects including inter departmental/ programme: 100%
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies : Nil.

23. Awards / Recognitions received by faculty and students :

Projects guided by Dr. R. Keshava Murthy and Dr. Narasimhe Gowda got SKCST funding in 2014 and was awarded for best project in state level selection.

Abhishek NandanBakshi – Best Student award: ISTE Karnataka state.20/11/2014 KSIT College, Bangalore.

University Rank List

UG. Rank Holders List				
Sl.No.	Year	Student Name	Branch	University Rank
1	2012	JEEVAN C. R (1DS08MR036)	BE- Mechanical	8 TH Rank
2	2016	ANOOP RAM RAO KULKARNI (1DS11ME020)	BE- Mechanical	8 TH Rank
PG. Rank Holders List				
1	2011	PARIKH YASH BHARAT BHUSHAN (1DS08MCM02)	MTech-CIM	1 st Rank
2	2012	AKBAR HUSSAIN (1DS09MDE01)	MTech-Design	2 nd Rank
3	2012	SRINIVASA RAO. K (1DS09MCM16)	MTech-CIM	3 rd Rank
4	2013	PRAVEEN B.A (1DS10MCM06)	MTech-CIM	1 st Rank
5	2013	NAVEEN KUMAR S (1DS10MCM09)	MTech-CIM	2 nd Rank
6	2014	MUNAWAR ULLA SHARIFF (1DS11MCM06)	MTech-CIM	1 st Rank
7	2015	PADMAVATHI (1DS12MCM10)	MTech-CIM	1 st Rank
8	2015	SWAPNIL S MORE (1DS12MDE17)	MTech-Design	2 nd Rank
9	2016	MOHD RAYYAN	MTech-CIM	1 st Rank

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		KHALEEFA (1DS13MCM06)		
10	2016	ARJUNKUMAR M BETAGERI (1DS13MCM01)	MTech-CIM	2 nd Rank

24. List of eminent academicians and scientists / visitors to the department

Annexure is maintained as the list if big.

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National : 2.

“ICCSEM 2013”

National Conference on Role of Mechanical Engineering and Computational Science for a sustainable Future

b) International: 2

International Conference on Convergence of Science and Engineering in Education and Research-A Global Perspective in the New Millennium. 2010.

ICCSEM-2013 International Conference – 26, 27 September 2013.

26. Student profile programme/course wise:

Name of the course/programme	Applications received	Selected	Enrolled		Pass percentage
			Male	Female	
B.E. Mechanical					
2015-16	180	172	170	2	
2014-15	180	180	178	2	
2013-14	180	170	165	5	
2012-13	180	188	185	3	
2011-12	120	127	127	0	
2010-11	120	120	118	2	

27. Diversity of Students

Mechanical Engineering

Year	% of students from the same state	% of students from other states	% of students from abroad
2015-16	74	26	-
2014-15	68	31	1
2013-14	64	33	3
2012-13	56	42	2
2011-12	54	44	2
2010-11	58	40	2

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

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Twenty students in GATE

29. Student progression

Student progression	Against % enrolled
UG to PG	10%
PG to M.Phil.	
PG to Ph.D.	6%
Ph.D. to Post-Doctoral	
Employed - Campus selection - Other than campus selection	2010-11 : 37% 2011-12 : 43% 2012-13 : 29% 2013-14 : 27% 2014-15 : 79% 2015-16: 74%(Till May 2016)
Entrepreneurship/ Self employment	

30. Details of Infrastructure facilities:

- Library: 2560 titles, 11189 volumes, 13 national journals, 64 online international journals.
- Internet facilities for Staff & Students : Internet facility for all staff is provided and students can make use of central digital library.
- Class rooms with ICT facility : All class rooms are provided with LCD facility.
- Laboratories : 13 laboratories/workshops with state of art equipment and machinery.

31. Number of students receiving financial assistance from college, university, government or other agencies

Students receiving financial assistance

SL.NO.	FINANCIAL YEAR	ACADEMIC YEAR	NO. OF STUDENTS	TOTAL AMOUNT SANCTIONED	
1	2011-12	I YEAR	6	251,260.00	ARSHIP SCHOL SC/ST
		II YEAR	9	338,850.00	
		III YEAR	4	111,390.00	

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		IV YEAR	8	264,740.00	
2	2012-13	I YEAR	9	378,890.00	
		II YEAR	11	435,280.00	
		III YEAR	1	22,720.00	
		IV YEAR	3	78,160.00	
3	2013-14	I YEAR	11	470,810.00	
		II YEAR	20	690,470.00	
		III YEAR	7	262,940.00	
		IV YEAR	9	331,580.00	
4	2014-15	I YEAR	13	525,120.00	
		II YEAR	19	751,760.00	
		III YEAR	23	875,880.00	
		IV YEAR	13	450,350.00	
5	2015-16	I YEAR	YET TO BE SANCTIONED		
		II YEAR			
		III YEAR			
		IV YEAR			

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Annexure is maintained as the list if big

33. Teaching methods adopted to improve student learning:

Each class room of the department is provided with LCD facility. The department has a good collection of educational CD's. CD's on various topics and video demonstrations are shown to the students periodically. The University provides EDUSAT Program through which lecture sessions for selected subjects are beamed; special arrangements are made for the students to make use of this facility. NPTEL course materials for the respective subjects are used by the staff members to augment classroom teaching.

Wherever it is possible staff members try to bring in miniature models available in the department to explain various concepts. Students are taken to labs/workshops to demonstrate various concepts and processes, video demonstrations are used to bring in proper understanding of the subject. Students are given objective oriented tests to bring in complete understanding of the concept of a subject. This has helped the students to improve their performance.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

On 25th February, 2013, alive demonstration in association with KREDEL was arranged by the department for the benefit of primary school students to create awareness on non-conventional energy sources.

Students of our department organized an activity "Joy of Sharing" and collected items to be given to orphanage "Tejaswi Seva Trust" on 30/10/2014.

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Students of mechanical engineering department organized a blood donation camp on 22/9/2014 in association with Rotary Club, Bangalore.

35. SWOC analysis of the department and Future plans SWOC analysis

Strength:

1. The main strength of the department is its faculties who have rich Industrial/ R & D and Academic experience with National and International exposure.
2. There are Twelve Professors with PhD and 22 staff members are working for their PhD.
3. Good infrastructure and R & D facilities .

Weakness:

1. We have not yet made our presence felt in Consultancy area.
2. Number of R & D Projects needs to be increased
3. Staff development initiative should be improved

Opportunity: There is a great opportunity for attracting good ranking students from now on as we have established our self as a department with good infrastructure, faculty, Research and Placements.

Challenges: Achieve placements in Core Mechanical field. Retain experienced and qualified faculty.

Future plan:

1. To enhance R&D culture among students.
2. To improve results and strive to get more number of University ranks.
3. To increase research funding in thrust areas.
4. To increase the number of quality publications in National /International journals and conferences.
5. To arrange FDPs, conferences and Workshops in advanced engineering fields.

Evaluative Report of the Department

1. **Name of the Department :** Medical Electronics Department
2. **Year of Establishment :** 1996
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

SL	Name of the Program	Year
01	BE-Medical Electronics Department	1996
02	M.Tech –Biomedical Signal Processing and Instrumentation	2009
03	Biomedical Research Centre	2012

4. **Names of Interdisciplinary courses and the departments/units involved :** Nil
5. **Annual/ semester/choice based credit system (programme wise)**
BE-Medical Electronics - Semester System
6. **Participation of the department in the courses offered by other departments**

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NIL

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.** Communicating with i) ASU
8. **Details of courses/programmes discontinued (if any) with reasons :** NIL
9. **Number of Teaching posts**

	Sanctioned	Filled
Professors	02	03
Associate Professors	03	03
Asst. Professors	10	11

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. Etc.,)

Name	Qualification	Designation	Specialization	No. of Years of experience	No. of Ph.D. students guided for the last 4 years
Dr. M.S.Nagananda	M.Tech	Professor & HOD	Signal Processing	17	-
Dr. Kishore Mohan	Ph.D	Professor	Medical Image segmentation	16	01
Dr. Sairam Geethanath	Ph.D	Associate Professor	Medical Imaging	03	09
Dr. Narayana Dutt	Ph.D	Professor	Biomedical Signal Processing	25	02
Narasimhalu G.	M.Tech	Associate Professor	Biomedical Engineering	31	-
Srinivas Halvi	M.Tech	Associate Professor	Power Electronics	24	-
Padma C.R	M.Tech	Assistant Professor	Biomedical Signal Processing & Instrumentation	11	-
Hema Priyadarshin S.	M.Tech	Assistant Professor	Biomedical Signal Processing & Instrumentation	5	-
Pushpalatha B.G	MS	Assistant Professor	Medical Software	7.5	-
Sushrutha Bharadwaj M.	M.Tech	Assistant Professor	Biomedical Signal Processing & Instrumentation	5	-

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Murugendrayya Hiremath	M.Tech	Assistant Professor	VLSI & Embedded system	5	-
Prof.Shruthi B	M.Tech	Assistant Professor	Biomedical Signal Processing & Instrumentation	3	-
Prof.Pavan Poojar	M.Tech	Assistant Professor	Biomedical Signal Processing & Instrumentation	2	-
Prof.Madhu Sudan P	M.Tech	Assistant Professor	Biomedical Signal Processing & Instrumentation	1	-
Prof.Sahana M.Kulkarni	M.Tech	Assistant Professor	VLSI & Embedded system	6	-
Prof.Sridevi S	M.Tech	Assistant Professor	Biomedical Signal Processing & Instrumentation	3	-

11. List of senior visiting faculty : NIL

12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty : NIL

13. Student -Teacher Ratio (programme wise) : 1:7

BE-Medical Electronics

No.of Students is 105(Excluding 1st Year)

No.of Teachers is 17 (2 Faculty on Maternity Leave & 1 Faculty on study leave)

1:7

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

SL	Sanctioned	Filled	Remarks
01	06	05	-

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification	Designation
Dr..M.S.Nagananda	Ph.D	Professor & Head
Dr.Kishore Mohan	Ph.D	Professor
Dr.Sairam Geethanath	Ph.D	Associate Professor
Narayana Dutt	Ph.D	Professor
Narasimhalu G	M.Tech	Associate

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		Professor
Srinivas Halvi	M.Tech	Associate Professor
Padma C.R	M.Tech	Assistant Professor
Hema Priyadarshin S	M.Tech	Assistant Professor
Pushpalatha B.G	MS	Assistant Professor
Sushrutha Bharadwaj M	M.Tech	Assistant Professor
Murugendrayya Hiremath	M.Tech	Assistant Professor
Shruthi B	M.Tech	Assistant Professor
Pavan Poojar	M.Tech	Assistant Professor
Madhu Sudan P	M.Tech	Assistant Professor
Sahana M.Kulkarni	M.Tech	Assistant Professor
Sridevi S	M.Tech	Assistant Professor

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Sl	Project title	Project guide	No	Amount (Rs)
01	NARAMICS	Dr. Sairam		96 Lakhs
02	K-FIST	Dr. Sairam		40 Lakhs
03	MR India	Dr. Sairam		103 Lakhs

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Nature of the Project	Duration Year From To	Title of the project	Name of the funding agency	Received
Minor projects	10/05/2013 10/11/2013	Crysalysis	Innovation and Entrepreneurship Development Center (IEDC)/ DST	0.26 lakhs
	10/05/2013 10/11/2013	Vati	IEDC/ DST	0.35 lakhs
	10/05/2013 10/11/2013	Emptovio	IEDC/ DST	0.22
	10/05/2013 10/11/2013	Innova Loo	IEDC/ DST	0.27

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	01/11/2013 01/04/2014	Auvigals	IEDC/ DST	0.60
	01/11/2013 01/04/2014	SASARA TOSKEB MAPVERSE	VGST	0.60
		Application of ROICS to MRA	VGST(Part of DST) Technology related innovation project	0.34
	01/01/2013 to 01/06/2013	Medical Healthcare assistant toolkit	Visual Group of Science and Technology (VGST)/ (Part of Department of Science And Technology (DST)),	0.40
Major projects	03 Years	NARAMICS	DST	96 Lakhs
	02 Years	K-FIST	VGST	40 Lakhs
	02 Years		VGST	5 Lakhs
	03 Years	MR India	Ministry of Communication and IT, Government of India	103 Lakhs
Minor projects	01/01/2015	UNI-Resq	IEDC	0.60
	01/01/2015	PROGNO-POD	IEDC	0.60
Minor projects	2015 - 2016	UTERO	IEDC	1.0
Minor projects	01/02/2016	Design, simulation and Development of Acquisition of MRI	TIFAC MSME	2.33
	01/07/2016	Design, simulation and Development of Reconstruction of MRI		2.34

18. Research Centre /facility recognized by the University : Yes by *Visvesvaraya Technological University*

19. Publications:

Publication per faculty

- * Number of papers published in peer reviewed journals (national / international) by faculty and students
- * Number of publications listed in International Database (For Eg: Web of Science,

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Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

- * Monographs
- * Chapter in Books
- * Books Edited
- * Books with ISBN/ISSN numbers with details of publishers
- * Citation Index
- * SNIP
- * SJR
- * Impact factor
- * h-index

20. Publications:

Sl. No.	Name of the Teacher (s)	Title of Paper	Publication citation	National or International Journal
A	Prof. SairamGeethanath	Compressed Sensing to Accelerate Magnetic Resonance Spectroscopic Imaging: evaluation and application to ²³ Na-Imaging of Mouse Hearts"	IF: 5.11	International Journal
		Graphene Oxide-Fe ₃ O ₄ Nanoparticle Composite with High Proton Relaxivity Value"	IF: 2.185	International Journal
		Graphene oxide-gadolinium (III) oxide nanoparticle composite: A novel MR contrast agent with high longitudinal and transverse relaxivity"	MRX-100872.R1	International Journal
		High Value of Proton Relaxivity Achieved by Graphene Oxide-Cobalt Ferrite Nanoparticle Composite: A Potential Contrast Agent in Magnetic Resonance Imaging	IISc Journal 2014	International Journal
		Region of Interest Compressed Sensing MRI", Journal of Indian Institute of Science (IISc),	94:4, 407-414, Oct.–Dec. 2014	International Journal
		Acceleration of conventional data acquisition in Dynamic Contrast Enhancement comparing Keyhole approaches with Compressive Sensing"	Citation per document 2.18	International Journal
		A review on compressed sensing	2.18	International Journal
B	Prof. Srinivas Halvi	An Efficient Image Fusion Algorithm using Lifting DWT	3.12	International

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		Technique.		Journal
		An efficient segmentation algorithm using lifting DWT and modified Haar technique.	5.442	International Journal
		Efficient Implementation of Modified HaarDenoising Algorithm Using Laplacian Pyramid and Adaptive Thresholding.	0.314	International Journal
		Efficient Iris Recognition by Fusion of Matching Scores obtained by Lifting DWT and Log-Gabor methods of Feature Extraction.	3.12	International Journal
C	Prof. Narayan Dutt	Study of Wrist Pulse Signals Using Time Domain Spatial Features	1.01	International Journal
D	Prof. Kishore Mohan K B	Justification of Anthropometry Empirical indicator (AEI) by Digital Chest and Pelvic extract	1.9	International Journal
		Communitly specific BMI cut off points for South Indian Females	0.86	International Journal
		Multiparametire body composition analysis and anthropometric empirical indicator	1.9	International Journal
		Obesity research and clinical practice	2.2	International Journal
E	Prof. Nagananda	Mental Stress and its Implications on Reaction time	Nil	International Journal
		Quantization of mental stress using various physiological marker	Nil	International Journal
		Identifying Prospective biomarkers for cognitive Impairment during pregnancy	0.54	International Journal
		Psycho -somatic and cognitive competence of engineering students		International Journal
F	Prof. Narasimhalu	Diffuse optical System for monitoring Oxygen pathways in Biological Tissues	1.85	International Journal
		Artificial implant design using DOTNET technology	Nil	International Journal
G	Prof. PavanPoojar	Graphene Oxide-Fe ₃ O ₄ Nanoparticle Composite with High Proton Relaxivity Value	Nil	International Journal

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	Graphene oxide-gadolinium (III) oxide nanoparticle composite: A novel MR contrast agent with high longitudinal and transverse relaxivity	Nil	International Journal
	High Value of Proton Relaxivity Achieved by Graphene Oxide-Cobalt Ferrite Nanoparticle Composite: A Potential Contrast Agent in Magnetic Resonance Imaging	Nil	National Journal(IISc)

20. Areas of consultancy and income generated

Consultancy work- MOUs with GE Health Care

21. Faculty as members in

- c) National committees b) International Committees c) Editorial Boards....
 Prof. Sairam Geethanath – National Committees, ISMRM Indian Chapter Secretary
 Prof. Sairam Geethanath – BOE Committee member Government of India - Expert review committee member

22. Student projects

- d) Percentage of students who have done in-house projects including inter departmental/programme : In-house projects is 100% (UG), 83% (PG)
 e) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies : 17%(PG)

23. Awards / Recognitions received by faculty and students

Invited to editorial board of begall house publication 08/2013
 Board of studies, Member of science 05/2013

24. List of eminent academicians and scientists / visitors to the department

SL.NO	Guest Speakers	Date	Title
1	Dr. Barjor Gimi Director, Biomedical NMR Research Centre, Dartmouth,USA	7 TH and 8 th January 2013 ISP Conclave	Biomedical Imaging
2	Dr. Ramesh Venkatesan Principal Engineer,Wipro GE Healthcare	7 TH and 8 th January 2013 ISP Conclave	
3	Mr. Vasudeva Rao General Manager, HCL Technologies ltd	7 TH and 8 th January 2013 ISP Conclave	
4	Dr. Balachandra Keni Medical Director Sagar Hospital Banashankari	7 TH and 8 th January 2013 ISP Conclave	
5	Mr. Rajan Sundaresan GE Healthcare	8 th March 2013	Motion priors in compressed sensing
6	Mr. Kumara Rajamani	8 th March 2013	Biomedical

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	GE, Global Research		Engineering trends
7	Mr. Sandeep Kumar Ganji	14 th March 2013	MR Spectroscopy
8	Prof. K.V Ramanathan Dept of NMR,IISC Bangalore	23 rd March 2013	Synergy between Science and technology NMR and MRI
9	Dr. Amit Kale,Siemens	8 th May 2013	Application opportunities and challenges at Siemens corporate Research in Medical Imaging
10	Ms. Sushravya, Ph.D Scholar	May 2013	Image processing
11	Mr. Abhinav Bhindra	29 th ,30 th and 31 st October 2013	Cardea Lab Workshop on MATLAB
12	Mr. Ramakrishna Pappu, Mr. Nitesh Jangir Mr. Nachiketh Deval	19 th and 20 th September 2014	Hackathon MED PROTOTYPING

25. Seminars/ Conferences/Workshops organized & the source of funding : Dayamamda Sagar College of Engineering , Department of Medical Electronics

- a. National
- b. International

SEMINAR / INVITED TALK ORGANIZED 2015-16

SL.NO	Guest Speakers	Date	Title
1	Amit Sengupta, Fortis-Hiranandani, Divine Hospital, Mumbai	3/10/2015	Development of affordable technology for quality health care"
2	Pro. N. K. Jayasimhan	16/03/2016	"Joy of Mathematics"
3	Pro. Sandeep Chapalkar	24/03/2016	MSP430 – Microcontroller

Annexure maintained for last 3 Years.

SEMINAR / INVITED TALK ORGANIZED 2011-12

SL NO	Speaker Name	SEMINAR	DATE	ORGANIZED AT
	Dr. Sanjeev Kubukaddi	Cardiology	30/08/2011	C.D. SAGAR AUDITORIUM
1	Dr. Edwin Ravi Kumar Sagar Hospital	Cardiology	30-8-2011	C.D. SAGAR AUDITORIUM,DSCE
2	Dr. Sujeet Kumar Sagar Hospital	Neurology	30-8-2011	C.D.SAGAR AUDITORIUM,DSCE

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3	Mr. Gurjeet Singh Gill Instruments	Low power embedded system	15-09-2011	Seminar Hall, Heritage Building, DSCE
4	Mr. Gurjeet Singh, Gill Instruments, Bangalore	Augmentation program on "Workshop on MSP 430 processor"	17 th to 19 th Sept. 2011	Computer Lab, DSCE

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Application s received	Selected	Enrolled		Pass percentag e
			*M	*F	
BE-Medical Electronics 2008 - 2012	70	60	25	35	54.16
BE Medical Electronics 2009-2013	65	62	24	13	69.35
BE Medical Electronics (2010-2014)	60	49	17	32	44

*M = Male *F = Female

27. Diversity of Students

Name of the Course	% of Students from the same state	% of students from other States	% of students From abroad
2011 Medical Electronics	79.17	20.83	NIL
2012 Medical Electronics	72.34	27.66	NIL
2013 Medical Electronics	90.9	6.8	2.2
2014 Medical Electronics	92.1	5.2	2.63

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

GRE - NO.OF.STUDENTS ATTENDED - 04

29. Student progression

Student progression	Against % enrolled
UG to PG	22
PG to M.Phil.	Nil
PG to Ph.D.	02

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Ph.D. to Post-Doctoral	Nil
Employed	
• Campus selection	32
• Other than campus recruitment	16
Entrepreneurship/Self-employment	Nil

30. Details of Infrastructural facilities

- a. Library - 345 Books
- b. Internet facilities for Staff & Students -Yes
- c. Class rooms with ICT facility - Yes
- d. Laboratories – Yes

31. Number of students receiving financial assistance from college, university, government or other agencies : Nil

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Special Lecture - 02

Work Shop - 01

33. Teaching methods adopted to improve student learning

- a. Lecture Method
- b. Seminars
- c. Guest Lecture

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Nil

35. SWOC analysis of the department and Future plans

Strengths Significant improvement in Results IV.VI, VIII BE-Medical Electronics

STRENGTHS

- Significant improvement in Results of VI, VIII
- University ranks (consecutively 5 ranks for the last four years).
- Good placement.
- Highly Qualified, Experienced and Efficient Faculty.
- Societal responsible activities.
- Value Added Course
- Providing Guidance for Competitive and Entrance Exams.
- Enhanced Research output in terms of high impact factor publications in Thompson Reuters Indexed Journals
- Research Grants to the tune of 5 cr

WEAKNESSES

- Lack of expected results in the lower semesters
- Lack of placement in the core companies

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OPPORTUNITIES

Availability of well qualified doctoral faculty members

CHALLENGES

Continual tutoring and Mentoring

- Faculty Evolution
- Branding and Networking with relevant job providers

Future plan of the Department

1. To accomplish the technical endeavor through rigorous training and skill based strategies such as Portfolio Learning through Mini Project, Self-Study Component, Subject quiz, Internship programmes, Seminars, Remedial Classes, Ranks, Improvement of Results.
2. To actualize the potentials of students and faculty within the framework of innovative research as well as academic oriented assignments to establish eminent industry – Institution relationships through Mou's
3. Collaboration with PU colleges to attract meritorious students
4. Identifying Bio-Medical Engineering Thrust Areas of Research (Centre of Excellence) in Medical Imaging, Signal Processing, Instrumentation, Rehabilitation Engineering, Body Mass Index sectors of Bio-medical Engineering.
5. To develop Medical Device Design Lab, Clinical Instrumentation Lab, and Reverse Engineering lab
6. To encourage Entrepreneurial activities among students.
7. Revamped Proctor System Individual Attention

Evaluative Report of the Department

1. **Name of the department** : Physics department
2. **Year of Establishment** : 1979
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)** : Only PhD programme under VTU
4. **Names of Interdisciplinary courses and the departments/units involved** : Not applicable
5. **Annual/ semester/choice based credit system (programme wise)** : Semester system
6. **Participation of the department in the courses offered by other departments:**
UG: Handling first year Engineering physics and lab.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc** : Not applicable
8. **Details of courses/programmes discontinued (if any) with reasons** : Not

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applicable

9. Number of Teaching posts

Designation	Sanctioned	Filled
Professors	2	2
Associate Professors	1	1
Assistant Professors	9	9

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. Etc.,)

Name	Qualification	Designation	Specialization	No. of years of experience	No. of students guided for last 4 years
Dr. C.M. Joseph	MSc, PhD Postdoc (Japan)	Prof & HOD	Thin film Technology	22	5
Dr. R. Chandramani	MSc, PhD, DSc	Professor	Materials Science	37	5
Dr. T. M. Rajkumar	MSc, PhD	Assoc. Professor	Thin film Technology	28	0
Dr. M. N. Ravishankar	MSc, PhD	Asst. Professor	Crystal growth	27	0
Dr. Priya A H	MSc, PhD	Asst. Professor	Thin film Technology	11	1
Rafi M	MSc, Blib, Bed.	Asst. Professor	Physics	26	0
M A Pasha	MSc	Asst. Professor	Physics	27	0
Vidya C	MSc	Asst. Professor	Physics	8	0
Aruna P	MSc	Asst. Professor	Physics	12	0
Meera R Gumasthe	MSc	Asst. Professor	Physics	10	0
Dr.Naveen S M	MSc, PhD	Asst. Professor	Electronics	1	0

11. List of senior visiting faculty:

Dr. K. Srinivasan: Visiting Professor

12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** 10%
13. **Student -Teacher Ratio (programme wise):** 15:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:** Technical staffs: 3 nos.

Designation	Sanctioned	Filled
Lab Supervisor	1	1
Instructor	2	2
Lab Assistant	1	1

Sl No	Name	Designation
1	Kannan S	Supervisor
2	Rekha P	Instructor

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3	Vivekananda B S	Instructor
4	Pallavi	Lab Assistant

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

DSc: 1 no.

PhD: 6 nos.

PG: 5 nos.

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Two faculties: Principal Investigator

Dr. C. M. Joseph Rs. 45.22 Lakhs (National),

Vidya C (Co-PI) – Rs. 15.22 Lakhs (National)

17. Departmental projects funded by DST – FIST; UGC, DBT, ICSSR, etc. and total grants received

Rs. 45.22 Lakhs (VTU and VGST)

18. Research Centre /facility recognized by the University

Yes

19. Publications:

Year	Conference Nos.	Journal Nos.
2015-16	21	6
2014-15	4	7
2013-14	0	1
2012-13	3	3
2011-12	2	1
2010-11	4	2

- * Number of papers published in peer reviewed journals (national / international) by faculty and students: 20
- * Student Projects published in journals: 2 nos.
- * Manual for Self-study Report
- * Affiliated/Constituent Colleges
- * Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 20
- * Number of publications listed in International Database: 20 nos.
- * Monographs: NIL
- * Chapter in Books: NIL
- * Books Edited: NIL
- * Books with ISBN/ISSN numbers with details of publishers: NIL
- * Citation Index: 370
- * SNIP: NIL
- * SJR: NIL
- * Impact factor: 1 to 3.5
- * H-index: 17

20. LIST OF PUBLICATIONS: with impact factor

LIST OF PUBLICATIONS - March 2016

International (Journal)

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2015: 6 Nos.

1. P Aruna, K Suresh and C M Joseph, Effect of fullerene doping on the electrical properties of P₃HT/PCBM layers, Materials Science in Semiconductor Processing, **Elsevier** 36 (2015) 7–12 **IF: 1.8**.
2. P Aruna and C M Joseph, Photoelectrical properties of fullerene doped P3HT blends for photo sensing applications, Materials Today Proceedings: Elsevier 2 (2015) 1309-1315.
3. C Vidya and C M Joseph, Electrical bistability studies on vacuum evaporated copper phthalocyanine (CuPc)/ fullerene (C₆₀) bilayers, Dyes and Pigments Journal, Elsevier 117 (2015) 24-27 **IF: 3.46**.
4. B G Sangeetha, M R Rahman, A Akash, S Govind, K S Santosh, S Sumana, K Shanmukha Sundar, K Suresh and C M Joseph, Preparation and switching studies on binary compound GeTe for memory applications, Materials Today Proceedings: Elsevier 2 (2015) 1435-1440.
5. A G Gayatri and C M Joseph, Effect of deposition rates on vacuum deposited pentacene thin films for memory device applications, Materials Today Proceedings: Elsevier 2 (2015) 3666-3673.
6. C Vidya, Priya A H and C M Joseph, Structural and optical properties of vacuum coated and annealed copper phthalocyanine (CuPc) thin films, Materials Today Proceedings: Elsevier 2 (2015) 1770-1775.

Annexure maintained with 4 years data

Conferences

International: 2015: 6 Nos.

1. P Aruna and C M Joseph, Photoelectrical properties of fullerene doped P3HT blends for photo sensing applications, 4th International conference on Materials Processing and characterization (14-15 March 2015, Hyderabad).
2. B G Sangeetha, M R Rahman, A Akash, S Govind, K S Santosh, S Sumana, K Shanmukha Sundar, K Suresh and C M Joseph, Preparation and switching studies on binary compound GeTe for memory applications, oral presentation at 4th International conference on Materials Processing and characterization (14-15 March 2015, Hyderabad).

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3. A G Gayatri and C M Joseph, Effect of deposition rates on vacuum deposited pentacene thin films for memory device applications, 4th International conference on Materials Processing and characterization (14-15 March 2015, Hyderabad).
4. C Vidya, Priya A H and C M Joseph, Structural and optical properties of vacuum coated and annealed copper phthalocyanine (CuPc) thin films, 4th International conference on Materials Processing and characterization (14-15 March 2015, Hyderabad).
5. B G Sangeetha, K Suresh and C M Joseph, Performance studies on GST thin film devices (2015, 1-4 November) TENCON 2015 IEEE Region 10 Conference, Macau (oral presentation).
6. B G Sangeetha, V G Sangam, C M Joseph and K Suresh, Dynamic response studies of GeTe devices for memory applications, oral presentation at 2th International conference on emerging research on electronics, computer science and technology(ICRECT 2015), published in IEEE Explore (17-19 Dec 2015, Mandya).

National:

2016: 5 Nos.

1. P Aruna and C M Joseph, Effect of Thickness on Electrical Switching of P3HT thin films, National Conference on Sustainable Emerging Intelligent Technologies (**SEITCON 2016**), ISBN: 978-93-84935-79-5.
2. B.G. Sangeetha, V. G. Sangam, C.M. Joseph, Electrical Switching Studies of GeTe thin Film Devices National Conference on Sustainable Emerging Intelligent Technologies (**SEITCON 2016**), ISBN: 978-93-84935-79-5.
3. Dr. R Chandramani Structural and optical characterization of an inorganic nano composite $\text{Cd}_{0.99}\text{Cr}_{0.01}\text{SiO}_3$ / polyvinylidene fluoride nano composite flexible films Nanoscience – A multidisciplinary approach (10th & 11th Feb 2016).
4. Dr. R Chandramani Nano indentation investigations on MnCl_2 doped PVA/PVP polymer blend composites Nanoscience – A multidisciplinary approach (10th & 11th Feb 2016).
5. Dr. R Chandramani Comparative study of dielectric properties of ternary alkali halide crystals Nanoscience – A multidisciplinary approach (10th & 11th Feb 2016).

2015: 10 Nos.

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6. P Aruna and C M Joseph, Effects of annealing on structural and optical properties of poly(3-Hexylthiophene) (P3HT) and its blend with Phenyl C₆₁ Butyric Acid Methyl Ester (PCBM) Thin films, National conference on Role of Innovative Engineering Solutions for Medical Sciences (**RIESMS-2015**) ISBN: 978-93-5254-017-4.
7. P Aruna and C M Joseph, Preparation and characterization of Organic Memory Devices of P3HT thin films for Memory Applications, proceedings of National Conference on Advanced Functional Materials (**AFM 2015**) (AFM 2015), ISBN: 978-93-85682-04-9.
8. Meera R Gumaste and G A Kulkarni, Role of Nanoscience & Nanotechnology in Biological Applications- A Brief Review, National conference on Role of Innovative Engineering Solutions for Medical Sciences (**RIESMS-2015**) ISBN: 978-93-5254-017-4.
9. R Chandramani, Empirical relation for lattice parameter determination of solution grown ternary alkali halide single crystals, AFM 2015 (4th & 5th Dec 2015).
10. R Chandramani, SHG efficiency of the solution grown single crystals of NLO materials, AFM 2015 (4th & 5th Dec 2015).
11. R Chandramani, Studies on pure and Ni²⁺ ions doped PVA films, AFM 2015 (4th & 5th Dec 2015).
12. R Chandramani, Photoluminescence studies of ternary chalcogenide films deposited by thermal evaporation and electron beam evaporation, AFM 2015 (4th & 5th Dec 2015).
13. R Chandramani, Influence of MnSO₄ and MnCl₂ dopants on PVA/PVP polymer blend A comprehensive study based on electrical investigations, AFM 2015 (4th & 5th Dec 2015).
14. R Chandramani, Structural studies of FeCl₃ doped poly vinyl alcohol films, Nano & Material Sciences (Dec 21, 2015).
15. R Chandramani, Structural and optical characterization of Cd_{0.99} Cr_{0.01} SiO₃/polyvinylidene fluoride nano composite flexible films, Nano & Material Sciences (Dec 21, 2015).

LIST OF PUBLICATIONS: UG STUDENTS

Journals

2015: 1 Nos.

1. B G Sangeetha, M R Rahman, A Akash, S Govind, K S Santosh, S Sumana, K Shanmukha Sundar, K Suresh and C M Joseph, Preparation and switching studies on binary compound GeTe for memory applications, Materials Today Proceedings: Elsevier 2 (2015) 1435-1440.

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2012: 1 Nos.

2. Anubhav Gupta, Praveen S, Abhishek Kumar, Priyanka shree, Suchana Mishra and C.M.Joseph: "Preparation and characterization of P3HT:PCBM organic solar cells"
International Journal of Electrical and Electronics Engineering (IJEET) 1 (4) 2012.

Conferences

2015: 1 Nos.

1. B G Sangeetha, M R Rahman, A Akash, S Govind, K S Santosh, S Sumana, K Shanmukha Sundar, K Suresh and C M Joseph, Preparation and switching studies on binary compound GeTe for memory applications, oral presentation at 4th International conference on Materials Processing and characterization (14-15 March 2015, Hyderabad).

20. Areas of consultancy and income generated

Not applicable

21. Faculty as members in

National committees b) International Committees c) Editorial Boards....

- Dr. C. M. Joseph, BOE member (VTU Physics) 2013-14.
- Referee for Elsevier Journals

22. Student projects

Percentage of students who have done in-house projects including inter departmental/programme

1 PhD project from Electronics and 2 UG Inter-departmental from EEE department.

Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

NA

23. Awards / Recognitions received by faculty and students:NA

24. List of eminent academicians and scientists / visitors to the department

Sl No	Researcher visited	Affiliation	Date of visit
1	Dr. M. Prithviraj	Ministry of Sci. Tech., Govt. of India	1/10/2015
2	S N Rangaprasad	MSME, Govt. of India	1/10/2015
3	Dr. Justice Jawed Rahim	Justice, Karnataka	9/8/2015
4			
5	Dr. K. N. Unni	CSIR, TVM	21/9/2014
6	Dr. M. Nayak	ISRO	28/02/2014
7	Dr. Praveen C Ramamurthy	IISc	3/3/2013
8	Dr. S. Ananthraj	VGST	28/2/2012

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25.Seminars/ Conferences/Workshops organized & the source of funding

National : 2

International: ICSE 2010 and ICCSEM 2013, by DSI

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
BE first year	2015	1891	1543	1048	495	Theory: 91% Lab: 97%

*M = Male *F = Female

27.Diversity of Students

Name of the Course	Year	% of students from the same state	% of students from other States	% of students from abroad
BE first year all branches	2015	71.35	28.64	0.01

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? NA

29. Student progression: NA

30.Details of Infrastructural facilities

Library:

Sl.No.	Subject	Titles	Volumes	E-resource Subscribed
01	Mathematics	1611	4330	IEEE Springer J-Gate ASCE KNIMBUS EBSCO Cloud based remote access solutions
02	Physics	970	2584	
03	Chemistry	1013	2973	
04	Kannada	60	99	

Internet facilities for Staff & Students: Not applicable

Class rooms with ICT facility: Not applicable

Laboratories: 3 UG Labs and 1 Research Lab

31. Number of students receiving financial assistance from college, university, government or other agencies: NA

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

Sl	Researcher	Affiliation	Topic of lecture	Date

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No	visited			
1	Dr. M. Prithviraj	Ministry of Sci. Tech., Govt. of India	Project submission	1/10/2015
2	S N Rangaprasad	MSME, Govt. of India	MSME	1/10/2015
	Dr B. Wilson	Pharmacy department, DSI	Nano particles in drug delivery	4/3/2014
3	Dr.K.N.N.Unni	CSIR, TVM	OLEDs	21/9/2014
4	Dr. M. Nayak	ISRO	MEMS	28/02/2014
5	Dr.Gurumurthy Hegde	Liquid crystals in displays	University of Malaysia, Pahang	23/8/2013
6	Dr. Praveen C Ramamurthy	IISc	Organic films	3/3/2013
7	Dr. S. Ananthraj	VGST	Project submission to VGST	28/2/2012
8	Dr M Nayak	MEMS And applications	ISRO	28/2/2012
9	Dr. Manikantha	Satellite communication	ISRO	28/2/2012

33. Teaching methods adopted to improve student learning

- Using calendar of events provided by the university which clearly tells the dates of events for the entire semester all staff members prepare a lesson plan accordingly.
- Every individual teacher will prepare a lesson plan as per the time table and scheme of work allotted by the department.
- Prior to every internal test students are provided with the assignments which help them to get an idea about the questions that are important with respect to the internal exams as well as final exams of the university.
- Students are evaluated by conducting internal assessments as per the university norms, which will be mentioned in the academic calendar provided by the department.
- A well defined scheme of valuation is given to the all the staff members to maintain uniformity in awarding marks.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Faculty and students participate in conducting an open day for the nearby school children in X standards. Students are given a live demo of the basic experiments and the experiments conducted in the research lab. Students are exposed to the basic phenomena in light, LASERS, electronics and thin film fabrication. Some components related to physics and semiconductors are also explained using power point presentations by the faculty to create an enthusiasm in advanced technologies.

35. SWOC analysis of the department and Future plans:

- **Strength:** A well trained and experienced faculties and full set of equipments for teaching and research in the field of thin film technology.
- **Weakness:** A slow pace in implementing newer ideas and practices in the field of research.
- **Opportunity and Challenges:** Department is equipped with equipments for

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UG experiments as per the syllabus. To revise the syllabus for UG lab and update with advance technologies to provide the basic working principle to the students.

- **Future plans:** To be a supporting department for nanotechnology courses which is to be initiated in the near future. Many equipments are to be procured for research in the field of low cost energy conversions and to initiate commercialization.

Evaluative Report of the Departments

1. Name of the department

Telecommunication Engineering

2. Year of Establishment : Established in the year 1991

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

UG – Telecommunication Engineering, Affiliated to VTU, 4 years full time

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PG – Digital Communication and Networking, Affiliated to VTU, 2 years full time
Ph.D – Research center, affiliated to VTU, Part time/full time

4. Names of Interdisciplinary courses and the departments/units involved

Department of Mathematics
Department of Civil
Department of Physics
Department of Chemistry

5. Annual/ semester/choice based credit system (programme wise)

Semester, percentage based

a. Participation of the department in the courses offered by other departments

7. Courses in collaboration with other universities, industries, foreign institutions, tc.

8. Details of courses/programmes discontinued (if any) with reasons : Nil

9. Number of Teaching posts

Year	Total No of Faculty	Professor	Associate Professor	Assistant Professor
2010-11	29	03	07	19
2011-12	27	04	07	16
2012-13	28	03	07	18
2013-14	28	03	06	19
2014-15	24	03	06	15
2015-16	24	02	05	17

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name of the Faculty	Qualification, University and year of graduation	Designation and Date of Joining the Institution	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. A.R Aswatha	Ph.D 2010 Dr. M. G. R University Chennai	Professor and H.O.D 17.07.1995	VLSI Circuit Design	21	05

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Dr. H C Srinivasaiah	Ph.D-2004 Indian Institute of Science, Bangalore	Professor 24.1.2009	Modeling of sub 100nm (DSM) VLSI Technolo gy	07	05
Dr. Devaraju	Ph.D-2016 VTU, Belgaum	Associate Professor 06.04.2016	Wireless Networks	10	nil
Mrs. Manjula Devi T H	M.E.-2001 Bangalore University,	Associate Profes sor 02.04 2001	Electronics and Communi cation	15	
Mrs. Priti S Pavale	M.Tech-2008 VTU Belgaum	Associate Profes sor 28.12. 2008	Digital Communi cation and networkin g	08	
Mrs. Rajeswari P	M.E-2006 Anna University	Associate Profes sor 24.7.2 006	VLSI Design And Embedde d System	10	
Mr. Vinod B Durdi	M.Tech-2003 VTU Belgaum	Associate Profes sor 16.7.2 010	Digital Communi cation	06	
Mrs. Nagarathna	M.Tech-2008 VTU Belgaum	Assistant Profes sor 3.8.20 09	VLSI Design And Embedde d System	07	
Mrs. Sri Vidya B V	M.Tech-2009 VTU Belgaum	Assistant Profes sor 19.7.2 010	VLSI Design And Embedde d System	06	
Mr. Saravana Kumar	M.Tech-2005 SRM University	Assistant Profes sor 25.7.2 006	VLSI Design And Embedde d System	10	
Mr. Jayanth C	M.Tech-2007 VTU Belgaum	Assistant Profes sor 11.3.2 008	Digital Communi cation	08	
Mrs. Anitha Suresh	M.Tech-2008 VTU Belgaum	Assistant Profes sor 2.8.20 06	Digital Communi cation and Networki ng	05	

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Mr. Basavaraj S M	M.Tech-2008 VTU Belgaum	Assistant Profes sor 10.11. 2008	VLSI Design And Embedde d System	08	
Mr. Santhosh B	M.Tech-2008 IIT Kharagpur	Assistant Profes sor 10.11. 2008	Visual Informati on and Embedde d Systems	08	
Ms. Shashikala	M.Tech-2008 VTU Belgaum	Assistant Profes sor 26.2.2 010	VLSI Design And Embedde d System	06	
Mrs. Smitha Sasi	M.Tech-2010 VTU Belgaum	Assistant Profes sor 15.7.2 010	Digital Communi cation and networkin g	06	
Mr. Kiran Kumar T	M.Tech-2009 VTU Belgaum	Assistant Profes sor 1.7.20 10	VLSI Design And Embedde d System	06	
Mrs. Pushpa B R	M.Tech-2010 Belgaum VTU	Assistant Profes sor 12.8.2 010	Digital Communi cation	06	
Mr. Mahesh Dali	M.Tech-2010 Belgaum VTU	Assistant Profes sor 25.10. 2006	Digital Communi cation	10	
Mrs. Deepthi	M.Tech- Belgaum VTU	Assistant Profes sor 14/07/ 2012	Electronics	04	
Mr Sandeep K V	M.Tech- Belgaum VTU	Assistant Profes sor 14/07/ 2012	Computer Applicati ons in Industrial drives	04	
Mr. Chetan Umadi	M.Tech- Belgaum VTU	Assistant Professor 20.07.2015	VLSI Design and Embedde d Systems	10 months	
Mr. Vivek Raj	M.Tech- Belgaum VTU	Assistant Professor 20.07.2015	VLSI Design and Embedde d Systems	10 months	

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Mr. Vinod Kumar H	M.Tech- Belgaum VTU	Assistant Professor 21.07.2015	Digital Electronics and Communication Systems	10 months	

11. List of senior visiting faculty : Nil

12. Percentage of lectures delivered and practical classes handled(programme wise)
by temporary faculty : Nil

13. Student -Teacher Ratio (programme wise)

Year	<i>Total students (2nd year to 4th year)</i>	<i>Number of Faculties</i>	STR
2010-11	374	29	12.89
2011-12	359	27	13.29
2012-13	396	28	14.14
2013-14	383	28	13.67
2014-15	358	24	14.91
2015-16	348	24	14.5

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sl. No.	Name	Designation	Qualification	Date of Joining
1	Harsha L	Instructor	Diploma in E & C	10.05.2005
2	Naveen VR	Instructor	BSC IT	14.10.2008
3	Priya P	Instructor	BSC IT	14.05.2008
4	Santhosh B	Asst. Instructor	ITI	

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5	Krishnaveni Patil	Programmer	MSC (Engg)	09.01.2009
6	Santhosh Kumar B C	Instructor	Dipolma inE & C	23.08.2013
7	Pramodh H J	Instructor	Diploma inE & C	24.02.2014

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name of the Faculty	Qualification, University and year of graduation
Dr. A.R Aswatha	Ph.D 2010 Dr. M. G. R University Chennai
Dr. H C Srinivasaiah	Ph.D-2004 Indian Institute of Science, Bangalore
Dr. Devaraju	Ph.D-2016 VTU, Belgaum
Mrs. Manjula Devi T H	M.E.-2001 Bangalore University,
Mrs. Priti S Pavale	M.Tech-2008 VTU Belgaum
Mrs. Rajeswari P	M.E-2006 Anna University
Mrs. Nagarathna	M.Tech-2008 VTU Belgaum
Mrs. Sri Vidya B V	M.Tech-2009 VTU Belgaum
Mr. Vinod B Durdi	M.Tech-2003 VTU Belgaum
Mr. Saravana Kumar	M.Tech-2005 SRM University
Mr. Jayanth C	M.Tech-2007 VTU Belgaum
Mrs. Anitha Suresh	M.Tech-2008 VTU Belgaum
Mr. Basavaraj S M	M.Tech-2008 VTU Belgaum
Mr. Santhosh B	M.Tech-2008 IIT Kharagpur
Ms. Shashikala	M.Tech-2008 VTU Belgaum
Mrs. Smitha Sasi	M.Tech-2010 VTU Belgaum
Mr. Kiran Kumar T	M.Tech-2009

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	VTU Belgaum
Mrs. Pushpa B R	M.Tech-2010 Belgaum VTU
Mr. Mahesh Dali	M.Tech-2010 Belgaum VTU
Mrs. Deepthi R	M.Tech-2010 Belgaum VTU
Mr Sandeep K V	M.Tech-2012 Belgaum VTU
Mr. Chetan Umadi	M.Tech-2014 Belgaum VTU
Mr. Vivek Raj	M.Tech-2014 Belgaum VTU
Mr. Vinod Kumar H	M.Tech-2014 Belgaum VTU

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Name of the project	Sponsoring agency	Amount Sanctioned (Rs. Lakhs)	Amount Released (Rs. Lakhs)	Sanctioning year and duration
Investigation of speed and power in sub 100nm memory circuits	VTU	10.18	10.18	Feb/Mar – 2010 3 years duration 6 months extension requested (3.5 years)

18. Research Centre /facility recognized by the University : Ph.D – Research center, Affiliated to VTU, Part time/full time

19. Publications:

* a) Publication per faculty

* Number of papers published in peer reviewed journals (national / international) by faculty and students

Name of the Faculty	Year					
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Dr. A. R Ashwath	02	06	17	05	-	
Dr. H C Srinivasaiah	01	07	08	05	-	

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Dr. Devraju						2
Mr. H C Sateesh Kumar	03	06	08	03	01	
Mrs. Manjula Devi T H	-	02	06	04	-	
Mrs. Priti S Pavale	-	04	21	05	-	
Mrs. Anitha V	-	01	01	01	-	
Mr. Dattathreya G	-	04	06	09	-	
Mr. Manjunatha Prasad	-	01	-	-	-	
Mrs. Rajeswari P	01	01	05	08	-	
Mrs. Nagarathna R	-	-	04	01	3	3
Mrs. Sri Vidya B V		03	05	08	-	2
Mr. Vinod B Durdi	01	02	05	04	01	3
Mr. Jayanth C	-	-	04	-	-	
Mrs. Anitha Suresh	-	-	-	01	-	1
Mr. Santhosh B	-	-	-	03	-	
Dr. Sayed Abdulhayan	-	-	02	04	-	
Mrs. Smitha Sasi	-	-	02	03	-	
Mr. Kiran Kumar T	-	-	02	01	-	
Mrs. Pushpa B R	-	-	-	02	-	
Mr. Mahesh D	-	-	01	03	-	1
Mr Sandeep K V	-	-	02	02	-	
Mrs. Deepthi Raj	-	-	03	-	-	
Mr. Chetan Umadi						1
Mr. Vivek Raj						1
Mr. Vinod Kumar H						1

* Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

* Monographs

* Chapter in Books

* Books Edited

* Books with ISBN/ISSN numbers with details of publishers

* Citation Index

* SNIP

* SJR

* Impact factor

* h-index

20. Areas of consultancy and income generated

21. Faculty as members in

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- i. National committees b) International Committees c) Editorial Boards....

Faculty Name	Board Member
Dr A R Aswatha	BOE VTU Belgaum
Dr. Srinivasaiah H C	BOS VTU belgaum

22. Student projects

- i. Percentage of students who have done in-house projects including inter departmental/programme

Year	Total batches	No Inhouse Projects	Percentage of in house projects
2015-16	27	22	82
2014-15	34	30	88
2013-14	38	32	84
2012-13	37	31	84
2011-12	28	20	71

- ii. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Year	Total batches	No Outside Projects	Percentage of outside projects
2015-16	27	5	8
2014-15	34	04	12
2013-14	38	06	16
2012-13	37	06	16
2011-12	28	08	29

23. Awards / Recognitions received by faculty and students

24. List of eminent academicians and scientists / visitors to the department

Sl No	20. List of eminent academicians and scientists / visitors to the department
1	Mrs. Nandini Harinath, Scientist 'F', ISRO
2	Mr Sandeep Rao, Cisco Systems
3	Mr. JohnD' Cruz from Confluence Educational Services Pvt.

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	Ltd.,
4	Dr.Ravi kumar Reddy, SrApplication Engineer, National Instruments
5	Mr. Sharma, Nokia Siemens
6	Mr.Raghavendra Acharya, Dooradarshan Kendra Bangalore
7	Mr.Manjunath,Synopsis
8	By Dr Sibichen K Mathew ,Advisor Telecom Regulatory Authority of India
9	Mr.RohithKN –Director, Product innovation group, “OnMobile Global Limited
10	Dr.Mahotsaha Chaitanya Dasa
11	Mr.RaghavendraMagi–Li2innovationsPvt. Limited
12	Dr P Radha Krishna and Debasis Deb of DRDO
13	Pradeep K U
14	Mr. Ragavendra Technical Director AMSAT India. Shri B A Subramani Director education Outreach Program AMSAT India
15	Lt Col Manish Raghav, Joint Advisor, TRAI Regional office Bangalore

Seminars/ Conferences/Workshops organized & the source of funding

National conferences

1	National conference on SEITCON 2016	Organized by college and coordinated by TCE department	National Conference on Sustainable Emerging Intelligent Technologies conducted on 22 nd and 23 rd February 2016
2	National conference on Role of Engineering on Medical Sciences 2015	Organized by college and coordinated by TCE department	National conference on Role of Engineering on Medical Sciences Conducted on September 10 th and 11 th 2015

International conferences

1	International conference ICCSEM - 2013	Organized by college and coordinated by TCE department	International conference Organized by college and coordinated by TCE department on September 26 th and 27 th 2013

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25. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)		Applications Received	Selected	Enrolled		Pass percentage
				*M	*F	
Telecommunication (UG)	2010-11	120	120	80	40	
	2011-12	105	105	59	46	
	2012-13	105	105	62	43	
	2013-14	104	104	56	48	
	2014-15	120	120	58	62	
	2015-16	114	114	60	54	
Digital Communication and Networking(PG)	2010-11	18	17	06	11	
	2011-12	19	19	09	10	
	2012-13	18	18	12	06	
	2013-14	18	18	10	08	
	2014-15	18	14	04	10	
	2015-16	14	13	04	09	

*M = Male *F = Female

26. Diversity of Students

Name of the course	Year	% of students from same state	% of students from other states	% of students from Abroad
Telecommunication Engineering	2010-11	60	40	Nil
	2011-12	66	34	Nil
	2012-13	69	31	Nil
	2013-14	60	40	Nil
	2014-15	78	22	Nil
	2015-16	75	25	Nil

27. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

National and state competitive examinations	No of students cleared 2010 to 2015
NET, SLET, GATE, Civil services, Defense services, etc	21

28. Student progression

Student progression	%				
	2010-11	2011-12	2012-13	2013-14	2014-2015

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UG to PG	2	2	9	6	nil
PG to M.Phil.	N.A	N.A	N.A	N.A	nil
PG to Ph.D.	Nil	Nil	1	Nil	nil
Employed through Campus selection	55	55	52	54	55
Other than campus recruitment	15	20	20	21	15

29. Details of Infrastructural facilities

a. Library

Both International/National journals, online journals, CD ROM, Online classes are available for students, Faculty and researchers

BRANCH	No. of Available Titles	No. of Available volumes	National Journals	Intl. Journal (Online Copy)
Telecommunication Engineering (U.G+P.G)	2723	7510	12	36

TELECOMMUNICATION

Title of the Journal	Natl.	Periodicity
Telecom Live	N	Monthly
Tele.Net Magazine	N	Monthly
My Mobile	N	Monthly
Satellite@Internet India	N	Monthly
Cable Quest	N	Monthly
Satellite & Cable TV	N	Monthly
Broadcast & Cable Satellite	N	Monthly
Advances in Wireless & Mobile Commn.	N	Tri-Annual
Intl. Jnl. of Information & Commun. Techn	N	Half Yearly

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Intl. Jnl. of Network & Mobile Technology	N	Half Yearly
Intl. Jnl. of Electronic & Commn. Research	N	Half Yearly

b. Internet facilities for Staff & Students

Faculty and students are using central library (e- library) computers and internet facility in the campus. In department also associate professors and many faculties are provided with computer and internet facilities.

c. Class rooms with ICT facility

Class rooms are equipped with projectors to provide Information and Communication in Teaching. Classrooms and Corridors are installed with CCTV cameras.

d. Laboratories

30. Number of students receiving financial assistance from college, university, government or other agencies

No. of Scholarship given to students S.No	Scholarship	2014-2015	2013-2014	2012-2013	2011-2012
1	SC/ST	YET TO BE SANCTIONED	44	34	30
Scholarship amount disbursed S.No	Scholarship	2014-2015	2013-2014	2012-2013	2011-2012
1	SC/ST	YET TO BE SANCTIONED	1080853.00	1271550.00	981840.00

31. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sl. No.	Seminar/ Workshop	Date	Topic	Resource person
1	Seminar	16.09.2015	Consumer Outreach Programme	Lt Col Manish Raghav, Joint Advisor, TRAI Regional office Bangalore
2	Seminar	31.10.15	Personality Development and Entrepreneurship by Pradeep K U	Pradeep K U

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3	Seminar	20.02.2016	"HAM Radio in Present Communication Technologies And Disaster Management	Mr. Satyapal, Director - IIH (Indian Institute of HAMS)
4	Seminar	18.04.2016	Recent Trends in Multimedia Communication, GSM, Optical Networking and its security issues	
5	Seminar	28.04.2016	Selffys	Shruthi Achut

Annexure Maintained with 4 years data

32. Teaching methods adopted to improve student learning

- The college prepares a Strategic Plan regarding overall development which covers also teaching-learning and presents the same to the management
- At the beginning of every semester, an academic calendar is prepared which typically includes: Course commencement and closing dates, schedule of internal tests, university exam dates, tentative dates for Cultural fest etc are indicated.
- A time table is constructed for teaching of all courses and Teachers prepare Lesson Plan based on this time table.
- The classes are engaged by faculty according to their lesson plans and the same is recorded in their individual work dairies.
- HODs review the curriculum delivery and syllabus implementation status periodically which in turn is reviewed by the Principal or Vice-Principal.
- Remedial classes for weak students, Tutorial classes for difficult subjects etc are conducted as and when required.

Based on the academic calendar, each department conducts tests. These are evaluated for internal assessment marks based on the policy of affiliating university

33. Participation in Institutional Social Responsibility (ISR) and Extension activities

Students participated in "Best Bangalore BBMP Vijayanvani Abhiyaan" on 2nd October 2015.

The students are exposed to community developmental work, Blood donation camp etc. Faculty have attended various Marathon programs conducted by the college.

AIDS awareness programs like bike rally and created awareness at prime locations in Bangalore like Bangalore Railway station, cantonment Railway

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station for passengers.

Active Participation in Red ribbon express to create AIDS awareness.

Voluntary blood donation camps and awareness programs for public by signature campaign, Bike rally, marathon.

Environmental friendly plastic free campaign at Talakadu, Karnataka,

Education related programs for rural students at Bagepalli, Karnataka

Personality development programs for under privileged students.

34. SWOC analysis of the department and Future plans

The following are the future plans of the department.

- To get funded research projects by intensifying the social relevant research through Ph.D. guidance in the Research Centre, Department of Telecommunication.
- To convert the UG and PG project towards real-time applications, in line with developing the product portfolio or applicable sub-systems in standard Telecommunication products.
- To Launch academic satellite in collaboration with ISRO in view of E-learning from the department of TCE
- To undertake industry incubation and entrepreneurial activities pertinent to Telecommunication Engineering

Strengths

- Qualified and Committed Faculty.
- Continuously getting University Ranks.
- Good Practice of Teaching Learning Processes.

Weaknesses

- Few Companies are not considering TCE in par with ECE,EEE for placement.
- TCE is not a 1st, 2nd or 3rd Chosen branch of Engg..
- Revision of syllabus is once in four years (VTU).