

# **Pune Institute of Computer Technology**

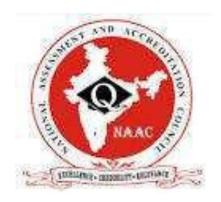
# SELF STUDY REPORT Submitted to National Assessment and Accreditation Council, Bangalore



SOCIETY FOR COMPUTER TECHNOLOGY & RESEARCH'S PUNE INSTITUTE OF COMPUTER TECHNOLOGY DHANKAWADI, PUNE-411043

# Self Study Report (SSR)

# Submitted to



# National Assessment and Accreditation Council, Bangalore



# SCTR'S Pune Institute of Computer Technology,

Dhankawadi, Pune - 411043

Phone No.: 020-24371101, 24378063, Fax: 020-24364741 E-mail-principal@pict.edu; Website: www.pict.edu

# **CONTENTS**

Sr. No.	Title	Page No.		
1	Covering letter from Head of the Institution	i		
2	NAAC Steering Committee	ii		
3	SWOC Analysis of the Institute	iii		
4	List of Abbreviations	v		
5	Preface	viii		
6	Executive Summary	ix		
7	Section B : Profile of the Institute	1		
	Criteria-wise Inputs			
8	Criteria I: Curricular Aspects	14		
9	Criterion II: Teaching-Learning and Evaluation	37		
10	Criteria III: Research, Consultancy and Extension	92		
11	Criteria IV: Infrastructure and Learning Resources	143		
12	Criteria V: Student Support and Progression	187		
13	Criteria VI: Governance, Leadership and Management	210		
14	Criteria VII: Innovation and Best Practices	241		
Evaluative Reports of the Department				
15	I. Computer Engineering	268		
16	II. Electronics & Telecommunication Engineering	298		
17	III. Information Technology	335		
18	IV. Applied Science	383		
19	Post-Accreditation Initiatives	397		

20	Declaration by the Head of the Institution	402
21	Certificate of Compliance	403
	Annexure	
Annexure – 1	Certificate of Recognition by UGC	404
Annexure – 2	Letters of Approval by AICTE	405
Annexure – 3	Letters of Affiliation by University	408
Annexure – 4	Research Centre Recognition Letters by University	413
Annexure – 5	Certificate of NBA Accreditation	414
Annexure – 6	NAAC Approval letters	416
Annexure – 7	Certificate of ISO 9001 - 2015	418
Annexure – 8	Master Plan of the Institute	419





# PUNE INSTITUTE OF COMPUTER TECHNOLOGY

(Affiliated to the Savitribai Phule Pune University & Accredited by NBA [All UG Programs]) SR. NO. 27, PUNE-SATARA ROAD, DHANKAWADI, PUNE - 411 043. (INDIA)

ID No.: PU/PN/Engg./054 (1983)

Tel.: +91 20 24371101/8063

Fax No: +91 20 24364741

Website: www.pict.edu

E-mail: principal@pict.edu

Ref: PICT DSK ASG | NAAC | 327 | 2017

Date: 02/05/2017

To,

Dr. Jagannath Patil,

National Assessment & Accreditation Council, P.O.Box.No.1075, Opp: NLSIU, Nagabhavi, Bangalore-5600072.

Subject: - Submission of Final Self Study Report of SCTR's Pune Institute of Computer Technology, Pune-411043. Institution Track ID - MHCOGN10957.

Respected Sir,

With reference to the above, we are submitting herewith the **Final Self Study Report** [05 hard copies + 01 CD softcopy] in prescribed format in respect of our institute "SCTR's Pune Institute of Computer Technology (PICT)" along with Assessment & Accreditation fee of Rs. 3,45,000/- vide D. D. No. 063358, Dt. 29-4-2017. P.I.C.T. established in 1983, is a self-financing college. The college is approved by All India Council for Technical Education (A.I.C.T.E.) and is affiliated to the Savitribai Phule Pune University (S.P.P.U.).

The college has been accredited by N.A.A.C in the years 2004 and 2010. All U.G. courses have been accredited by the National Board of Accreditation (N.B.A.) in the years 2000, 2004, 2008, 2013, & 2016. The college has also received recognition under section 2(f) & 12(B) of the UGC Act, 1956.

The Self Study Report is uploaded on the college website: www.pict.edu

We request you to kindly consider this report for further action.

Thanking You.

Encl: As above.

PUNE-43

Yours sincerely.

Principal

Dr. Prahlad T. Kulkarni

PRINCIPAL

SCTR's Pune Institute of Computer Technology

S No 27 Pune-Satara Road, Dhankawadi Pune-411043

# NAAC STREERING COMMITTEE

Chairperson	Dr. P.T. Kulkarni		
Coordinator	Dr. (Mrs) A. S. Ghotkar		
Co-coordinator	Prof. (Mrs) S. S. Sonawane		
	Members		
Dr. R. B. Ingle	Dean (2nd Shift) and Head, Dept. of Computer Engineering		
Dr. Y. Ravindar	Head, Dept. of Electronics and Telecommunication Engineering		
Dr. S. C. Dharmadhikari	Head, Dept. of Information Technology		
Prof. E. M. Reddy	Head, Dept. of Applied Science		
Prof. K. C. Waghmare	Dept. of Computer Engineering		
Prof. M. S. Wakode	Dept. of Computer Engineering		
Prof. D. T. Mane	Dept. of Computer Engineering		
Dr. S. K. Moon	Dept. of Electronics and Telecommunication Engineering		
Prof. M. P. Turuk	Dept. of Electronics and Telecommunication Engineering		
Prof. K. Y. Digholkar	Dept. of Information Technology		
Prof. M. R. Khodaskar	Dept. of Information Technology		
Prof. A. M. Kulkarmi	Dept. of Applied Science		
Mr. K. B. Kale	Library		
Mrs. U. S. Bhosale	In charge, Registrar		
Mr. S. B. Chondhe	Office		
Mr. S. A. Takawane	Dept. of Computer Engineering		

#### SWOC ANALYSIS OF THE INSITIUTE

# **Strengths:**

- Well-equipped/organized/maintained laboratories, Classrooms, Seminar Halls, Auditorium, etc
- Student-centric teaching and learning environment
- Most sought after institution with 100 % Admissions
- Ranked #8 among private engineering institutes in India for excellence in education and research (EDU-RAND, 2015)
- Many proactive measures initiated to attract & retain staff with higher potential
- Excellent student Projects
- Amazing academic ambience with highest level of motivation
- Visionary & supportive management
- Well placed Student support systems
- Good penetration of Linux
- Well qualified and highly motivated faculty/staff with good retention ratio
- Well placed Measures/strategies to attract and retain gifted individuals of significant potential
- Excellent student centric industry interaction
- A state-of-the-art central library with access of e-material beyond working hours
- 24×7 reading room at central library facility during examination period
- MoUs signed with industry covering: Student Internship, Scholarship, Academic/ Collaborative Projects/Research, Training, Curriculum design, Industry Supported Laboratories/Center of Excellence.
- Excellent academic results with significant numbers of university Ranks
- Excellent placement for eligible students with highest annual package 36 lakhs
- Conduction of various workshops, seminars, webinars and expert lecture, covering all domains
- Student's achievement and participation in all fields such as co-curricular, extracurricular and community services
- Eco-friendly environment
- Sponsoring faculty on sabattical leave to work in industry for a period of 3-6 months to understand industry practices and product development.
- Sponsoring faculty on paid study leave to persue higher studies (Ph.D.) in premier educational institutions like IITs and NITs
- Good research environment by fetching grants from various funding agencies such as DRDO, DST, AICTE, and BCUD
- Effective Entrepreneurship Development Cell (with well- established Incubation facility)

- Well-guarded and safe environment for students on campus
- Medical and counselor service to the students
- Excellent Internet bandwidth (155Mbps, 1:1) and campus Wi-Fi facility
- Conducive work environment for faculty and staff
- Strong Alumni association/network/database.
- Salary advance.
- Free seat to children of PICT staff.
- Free education to economically weaker meritorious students.
- Maternity leave, Gratuty, Group insurance.

#### Weakness:

- Consultancy & IPR
- Faculty cadre ratio

# **Opportunity**

- Centre of excellence in different domain
- Industry on campus
- Collaboration with other universities/organizations in India and abroad
- Development of e-learning / self-learning material in different subjects
- Quality publications
- Autonomous status
- Branding/Ranking
- ABET accreditation

# **Challenges**

- Enhancing employability skills/opportunities of students in fast changing technology and employment scenario
- Adaptability to globally changing industrial scenario
- New entrants
- Changing norms of regulatory authority
- Pending fees (scholarship/freeship reimbursement) with government

# LIST OF ABBREVIATIONS

AAC	Academic Audit Committee
ABET	Accreditation Board for Engineering and Technology
ACM	Association for Computing Machinery
ADB	Advisory Board
AICTE	All India Council for Technical Education
AMC	Academic Monitoring Committee
BCUD	Board of College and University Development
BE	Bachelor of Engineering
BOS	Board of Studies
CAP	Centralized Admission Process
CBCS	Choice Based Credit System
CC	Class Coordinator
CEO	College Examination Officer
CSI	Computer Society of India
DST	Department of Science and Technology
DTE	Directorate of Technical Education
DNV-GL	Det Norske Veritas and Germanischer Lloyd
E&TC	Electronics and Telecommunication
EDC	Entrepreneurship Development Cell
EPF	Employees' Provident Fund
ERP	<b>Enterprise Resource Planning</b>
FDP	Faculty Development Program
FE	First Year Engineering
GATE	Graduate Aptitude Test in Engineering
GB	Governing Body

GMAT	Graduate Management Admission Test
GPU	Graphics Processing Unit
GRE	Graduate Record Examination
HoD	Head of the Department
HPC	<b>High Performance Computing</b>
ICT	Information and Communication Technology
IEEE	Institute of Electrical and Electronics Engineers
IET	The Institution of Engineering and technology
IIT	Indian Institute of Technology
IQAC	Internal Quality Assurance Committee
ISO	International Organization for Standardization
ISRO	Indian Space Research Organization
IT	Information Technology
INC	Impetus and Concepts
IPR	Intellectual Property Rights
JEE	Joint Entrance Examination
LAN	Local Area Network
LMC	Local Management Committee
LMC	Local Managing Committee
LPA	Lakhs Per Annum
MCQ	Multiple Choice Questions
ME	Master of Engineering
MIS	Management Information System
MODROB	Modernization and Removal of Obsolescence
MoU	Memorandum of Understanding
MR	Management Representative
NA	Not Applicable
NBA	National Board of Accreditation
NPTEL	National Programme on Technology Enhanced learning
L	

NSS	National Service Scheme
OBE	Outcome Based Education
OBC	Other Backword Class
OHP	Over Head Projector
PAA	PICT Alumni Association
PASC	PICT ACM Student Chapter
PEO	Program Educational Objectives
PG	Post Graduate
PhD	Doctor of Philosophy
PICT	Pune Institute of Computer Technology
PISB	PICT IEEE Student Branch
PIO	Person of Indian Origin
PO	Program Outcomes
PSC	PICT IET Student Chapter
SWOC	Strengths, Weaknesses, Opportunities, and Challenges
QIP	Quality Improvement Program
QMS	Quality Management System
R & D	Research and Development
SCTR	Society for Computer Technology & Research
SPPU	Savitribai Phule Pune University
SC	Scheduled Cast
ST	Scheduled Tribe
STTP	Short Term Training Programs
STP	Staff Training Program
TG	Teacher Guardian
TM	Teacher Mentor
UG	Under Graduate
UGC	University Grants Commission
UoP	University of Pune

UPS	<b>Uninterrupted Power Supply</b>
URL	Uniform Resource Locator
Wi-Fi	Wireless Fidelity

# **PREFACE**

**Pune Institute of Computer Technology (PICT)** was established in 1983 by a group of enterprising professionals and has come a long way and marched ahead with quality education imbibed with professional and ethical values. Our mission is to be the most sought-after institute in engineering education and research, that provides relevant knowledge, creates challenging opportunities, and inculcate values and social responsibilities.

Today, PICT offers three under-graduate and post graduate programs in Computer Engineering, Electronics & Telecommunication Engineering, and Information Technology; it is also a Savitribai Phule Pune University (SPPU) recognized research center in Computer Engineering and Electronics & Telecommunication Engineering. It has a total under-graduate and post-graduate annual intake of 660 and 85 students respectively. There are 13 students registered for Ph.D., with this research center.

The academic results of PICT are the best among all the colleges affiliated to SPPU. The Placement record is excellent with highest annual package of 36 Lacs. The faculty members have undertaken research projects funded by DST, AICTE, DRDO, SPPU, etc. The state of the art library houses 157 international journals along with the latest books of the respective disciplines and is open for extended hours to the students. PICT has R&D and Entrepreneurship Development Cell to inculcate research culture and enterprising skills among the students and faculty. The PICT incubation cell has supported many start-ups, which are now a successful organizatio.

Life at PICT is much more than the regular academic activities. PICT campus is technically vibrant with lot of activities throughout the year supported by professional societies like IEEE, ACM, IETE, and CSI. The PICT art circle is one of the top cultural groups known for its talents & achievements. PICT has been awarded (EDU-RAND) RANK #8 among private engineering institutes in India for excellence in education and research.

PICT is spread over 5 acres of beautiful landscape with good infrastructure with rejuvenating facilities like basketball court / Gym / TT. 24 hours medical facility is also available.

### **EXECUTIVE SUMMARY**

Pune Institute of Computer Technology (PICT) has been one of the leading institutes in information technology education and research. The institute is self-financing it's affiliated to Savitribai Phule Pune University (SPPU). PICT is focused on creating versatile engineers who can apply their knowledge and skills anywhere in the world for the welfare of the society.

# **Criteria I: Curricular Aspects**

The institute follows the curriculum provided by the SPPU in consultation with various stakeholders and industrialists. The institute has its well-defined process to plan and execute activities for effective implementation of the curriculum delivery. This process is called as Programme Education Objectives (PEOs) and Course Outcomes (COs) and are prepared by respective faculty, for effective delivery of the courses. The institute also motivate the faculty to identity the syllabus gap and cover this gap through various activities.

The institute encourages every faculty to actively participate in the syllabus preparation/discussion, meetings conducted by Board of Studies (BoS) at SPPU level. This helps to improve the faculty knowledge and to get an insight of the subject as per the BoS vision and also helps to interact with various senior subject experts from different institutions. The faculty members participate and organize various workshops, Faculty Development Programs (FDPs) and Short Term Training Programs (STTPs) to understand the breadth and depth of the subject for effective delivery of the curriculum.

Every student is encouraged to take up academic projects in collaboration with industries. The student feedback is taken twice in the every semester to assess the quality of teaching-learning and corrective measures are taken by the faculty based on the feedback.

Various staff members from each department have represented either in BoS, Academic Council or Senate of SPPU. Many faculty members are Subject Chairman for UG and PG courses. The institute promotes effective industry-institute interaction through Industry Institute Interaction Cell (IIIC).

The institute has well equipped central library and state of the art digital library for online access to various international/national journals like IEEE, ACM, Springer, Science Direct as well as several online academic E-learning resources. Every department of the institute offers several courses to serve the purpose of 'value addition' for students in their academics apart from the programs offered by SPPU.

# **Criterion II: Teaching-Learning and Evaluation**

The admission of students to the institute is as per the norms of SPPU, Maharashtra State Government and AICTE. Every student is admitted through Centralized Admission Process (CAP) of the Directorate of Technical Education Mumbai or through JEE. The centralized admission process ensures the diversity of student admissions to the institute.

Every department has well qualified faculty with good retention ratio. It always tries to achieve excellence in teaching – learning by introducing new innovative techniques to provide students with rich learning experience which in turn increases the employability and academic results.

The staff and student issues/grievences are addressed by committees like Antiragging, Women Grievance Cell for Sexual Harassment, student counselling/orientation, Guardian Teacher (Mentor) Scheme, etc; and are closely monitored.

All the departments of the institute prepare the academic calendar in tune with the Institues acadmic clander, for the entire semester to ensure well planned academic activities and there by improving the quality of teaching-learning. The faculty members prepare their teaching plan based on the feedback from stakeholders. Institute has well defined process for identification of slow learners and bright students. Faculty takes efforts to empower them to perform better, by means of various measures.

The Heads of all the department and Academic Monitoring Committee (AMC) monitor the effective implementation of teaching plan and adherence to academic calendar. The innovative teaching methodologies like role play, quiz, crossword and animation, working models, and video lecture are used for conceptual understanding.

Faculty members are motivated and encouraged for their higher education, inservice training, research and development activity, and consultancy.

### Criteria III: Research, Consultancy and Extension

The institute always encourages and supports various activities related to research. Institute has appointed Dean R&D to coordinate overall R&D activities.

Institute has SPPU recognized research centre in Computer engineering and E&TC engineering. Research center has 6 guides and total 13 students are registered currently. Institute has setup research laboratories to facilitate research work.

Institute has signed 17 MoUs with leading industries for creating and providing facilities to accelerate R&D activities for staff and students.

To inculcate research culture among staff and students, institute encourages them to publish papers/articles in national and international conferences/journals. 5 patents are filed/registered in last four years.

Institute has organized International conference last year, to provide platform to share and present innovations/ideas in multiple emerging research areas. Similarly, National conference/workshops/events are also conducted.

Institute always supports and encourages organizing workshops, seminars, expert sessions, guest lectures and many more similar activities, which help the faculty and students to upgrade their knowledge and skill set.

To ensure holistic development of students and faculty, institute conducts social events such as visits to rural areas, orphanage, old-age homes, blood donation camps, tree plantation, career guidance programs for students from under-privileged sections of society. The institute has full-fledged NSS unit and PICTOSOCIAL group for creating the awareness about social activities among the students and staff and to ensure their participation in these programs.

# **Criteria IV: Infrastructure and Learning Resources**

PICT is a friendly, informal, vibrant, community of learners. PICT has around 50 well-equipped laboratories with high-end configuration machines to cater the needs of academic and research activity, in addition to multi-media amenities, modern equipment, software, to cultivate the research attitude among the students. PICT campus is connected with high-speed Internet (wired and wireless).

PICT Central Library is known for its rich source of information and is one of the best libraries in the region. It has a colossal collection of printed and e-books. PICT Digital Library allows 24x7 access to e-journals, e-books, Video Lectures and other digital content and to support these, there is a 12 TB SAN. PICT Entrepreneurship Development Cell is an endeavour to generate opportunities for the students of PICT to realize their dreams of starting up their own firms and industry. PICT Business incubation centre provides the required infrastructure and technical support to incubate a start-up company.

24-hour medical facility is available for boys and girls separately on the campus. PICT ensures barrier free environment for differently abled students and staff. Two electricity

generators are provided for uninterrupted power supply to the entire campus round the clock. In addition, almost all computers have online UPS support. For safe drinking water supply, water purifiers with coolers are provided in all most all the places in the institution. Outdoor and indoor sports facilities are available for volleyball, basketball, chess, carom, table-tennis, etc. PICT possesses a well-equipped multi-gym and aerobic equipment- including a modern treadmill.

PICT campus is housing all other facilities like Hostel for both boys and girls with Internet connection in each room; Canteen provides hygienic food, Guest house and an Auditorium for various technical and cultural events. Also, the institute has the proud distinction of maintaining fully equipped seminar halls for each department with video conferencing facility, interactive boards along with modern audio-visual aids. PICT workshop takes care of campus maintenance work, in-house manufacturing and consultancy, in addition to the regular academic work

# **Criteria V: Student Support and Progression**

PICT is committed to provide every possible support to the students for their technical education and overall development. This is addressed through a large number of high-quality co-curricular programs like, Seminars, Workshops, and Industrial Visits; organized all through the year that complements class-room activity. Through these programs the students are exposed to new skills & possibilities. Their potential for creativity is developed through participation in cultural & technical programs. To name few, the events like Purshottam, Firodiya, and Abhivyakti come under cultural activities, and the events like INC, Pulzone, IETE, and Credenze come under technical activities.

The student chapters of professional bodies like IEEE, ACM, CSI, and IET give exposure to the students with cutting edge technologies and help them to realize the industrial requirement/practices.

The institute facilitates all the scholarships offered by both the State and Central Government. The needy students are helped through Earn & Learn scheme of SPPU. All the eligible students admitted in reserved category are receiving financial assistance from State Government. Economically backward students are facilitated by EBC scheme. Special preference is given for differently abled students for on- campus hostel accommodation.

The institute has active Entrepreneurship Development Cell (EDC), which organizes expert lectures by experts from industry and research organizations to promote entrepreneurial skills among the students. Some of the students of this institute have already made progress in starting their own startup companies after their graduation.

Training & placement cell plays a big role in grooming the students for campus placement. The institute motivates the students to go for higher studies and research premiere educational institutes in India and abroad by providing material/training for admission tests such as GATE, GRE, CAT, GMAT, TOEFL. The institute has a Student Grievance Redressel Cell comprising of the Principal, Faculty members and student representatives. The students' personal and academic grievances are taken care of by the guardian teacher, Class Teacher, and the higher authorities, if needed. It also has antiragging committee and anti-ragging squad comprising of Principal, senior faculty members and student representatives. The Alumni association contributes actively to the growth of the institution through registered alumni association.

# Criteria VI: Governance, Leadership, and Management

The mission of the Institute is to be the leading and most sought after institute of education & research in emerging engineering and technology. The focus is on universal development of students and teachers. Research and Development culture is developed among faculty members and students. The students are encouraged and motivated to participate in extra-curricular and co-curricular activities. The concrete efforts are taken for strengthening the Industry-Institute interaction and for gaining the knowledge in the field of recent trends and technologies, along with entrepreneurship domain.

The faculty members are involved in decision making processes for generating academic and administrative leaders. Periodic interaction is made with all stakeholders for preparation and execution of perspective plans, policies, and strategies of the institute. The Institute offers various Welfare schemes to Teaching and Non-teaching staff members. Up gradation of skills of teaching and non-teaching members is ensured by conducting different FDP/STTP and workshops. The Feedback system is deployed to ensure the quality of education.

Institute has adequate provisions for academic and administrative budgets. Optimum utilization of the available resources and funds has been taken care for efficient functioning of institute. The management is constantly supporting and guiding the Principal and other authorities in administration, admission, finance, academic, etc. for the overall growth of the Institute. The management conducts meetings of the Standing Committee where the Principal represents the college. The College Development Committee that comprises of the Principal, heads of department and senior faculty, prepare the action plan/road map for the progress of the Institute.

#### Criteria VII: Innovation and Best Practices

Institute has taken initiative to make the campus eco-friendly via energy conservation, plantation, e-waste management, etc. PICT has practiced innovations, which provide a progressive impact on students and hence is the key for overall development and success

of the institute. Institute promotes innovations in academics, administration, EDC cell and library.

The Institute has many best practices out of which we have mentioned quality management system through ISO 9001: 2015, for better administration and functioning. The Institute has a strong industry institute interaction, which includes industry supported laboratories, ICT based learning through IUCEE and CIL.

# **SECTION B: PROFILE OF THE INSTITUTE**

# 1. Profile of the Affiliated/Constituent College

2. Name and Address of the College:

Name:	SCTR's Pune Institute of Computer Technology			
Address:	S. No. 27, Pune Satara Road, Dhankawadi, Pune			
City:	Pune - 411043	State: Maharashtra		
Website:	www.pict.edu			

3. For Communication:

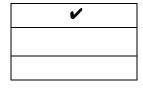
Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. Prahlad T. Kulkarni	O:020- 24371101 R:020- 24204571	9923446356	020- 2436474 1	principal@pict.edu
Vice Principal	None				
Steering Committee Co- ordinator	Dr. Archana Ghotkar	O: 020- 24371101	942235777	020- 2436474 1	aaghotkar@pict.ed u

4.	Status	of	the	Institution:
----	--------	----	-----	--------------

Affiliated College

Constituent College

Any other (specify)



# 4. Type of Institution:

# a. By Gender

i.	For Men	
ii.	For Women	
iii.	Co-education	~

# b. By Shift

i.	Regular	>
ii.	Day	
iii.	Evening	

5. It is a recognized minority institution?

Yes	
No	<

6. Sources of funding:

Government	
Grant-in-aid	
Self-financing	<b>'</b>
Anyother	

- 7. a. Date of establishment of the college: 29/08/1983
  - b. University to which the college is affiliated / or which governs the college (If it is a constituent college)

Savitribai Phule Pune University, Pune

c. Details of UGC recognition:

Under Section	Date, Month &Year (dd-mm-yyyy)	Remarks (Ifany)
i.2(f)	18-07-2016	F.No.8-556/2015(CPP/IC) Dt.18-7-2016
ii.12(B)	18-07-2016	F.No.8-556/2015(CPP/IC) Dt.18-7-2016

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

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

Under Section/ clause	Recognition/Approval details Institution/Department Programme	Day, Month andYear (dd-mm- yyyy)	Validity	Remarks
All India Council for Technical Education (A.I.C.T.E.) (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F.No.37-3/Legal/ 2012 dated 27/09/2012	UG-Computer Engineering  UG-Electronics & Telecommunication Engineering  UG-Information Technology  PG-Computer Engineering  PG-Electronics & Telecommunication Engineering  PG-Information Technology	25-04-2016 F.No. Western/1 - 28096372 77/2016/E OA	For the Academic Year 2016-17	A.I.C.T.E. issues Extension of Approval every year on submission of required application/ documents by the Institute

recognized by the UGC), on its affili	ated colleges?
Yes 🗸	No
If yes, has the College applied for av	vailing the autonomous status?
Yes	No 🗸

a.	by UGC as a	College with	Potential for	Excellence (	(CPE)?
----	-------------	--------------	---------------	--------------	--------

	_	
Yes	No	~

b. for its performance by any other	governmental agency?
Yes 🗸	No
If yes, Name of the agency -Directorate of Te	echnical Education, Maharashtra State.
Date of recognition: 16/06/2003	
10. Location of the campus and area in sq. mt	es:
Location*	Urban
Campus area in sq. mts.	20,240.00 sq. mts.
Built up area in sq. mts.	20,291.12 sq. mts.
(*Urban, Semi-urban, Rural, Tribal, Hil	ly Area, Any others specify)
11. Facilities available on the campus	(Tick the available facility and provide
numbers or other details at appropria	te places) or in case the institute has an sing any of the listed facilities provide
<ul> <li>Auditorium/seminar complex with in</li> </ul>	nfrastructural facilities
<ul> <li>Sports facilities</li> </ul>	
* play ground	
* swimming pool	
* gymnasium	
<ul> <li>Hostel</li> </ul>	
Boys' hostel	
i. Number of hostels: 01	
<ul><li>ii. Number of inmates: 128</li><li>iii. Facilities (mention available faci</li></ul>	lities)
iii. Tuelikies (mention uvuluole luel	nues)
Internet & Wi-Fi, Un-interrupted pow	ver supply, solar water heaters (18 KW),

parking space, Mess, Medical Facility, CCTV, 24x7 Security & Caretaker

(Warden), TV, Gym, Sports facility, News paper/Magazine, Purified drinking water.

Girls'hostel



i. Number of hostels: 01

ii. Number of inmates: 154

iii. Facilities (mention available facilities)

Internet & Wi-Fi, Un-interrupted power supply, solar water heaters (27 KW), parking space, Mess, Medical Facility, CCTV, 24x7 Security & Caretaker (Warden), TV, Gym, Sports facility, News paper/Magazine, Purified drinking water, Lift, Pantry.

- Working women's hostel : Not Applicable
  - Number of inmates
  - Facilities (mention available facilities)
- Residential facilities for teaching and non-teaching staff (give numbers available cadre wise)
   Principal Quarter available 150 Sq.m.
- Cafeteria—
- Health centre
- Firstaid, Inpatient, Outpatient, Emergency care facility, Ambulance, Health centre staff

Qualified doctor	Fulltime	Part-time 🗸
Qualified Nurse	Fulltime	Part-time

- Facilities like banking, post office, book shops
   Many ATMs and Book shops are available just near the main gate of the campus
   A stationery shop is available witin campus.
- Transport facilities to cater to the needs of students and staff
   Adjacent to the campus there is a PMPML Bus Stop and the buses ply frequently covering major areas of the Pune City
- Animal house: Not Applicable.
- Biological waste disposal: Not Applicable.
- Generator or other facility for management/regulation of electricity and voltage

There are 02 Generators of 160 KVA & 125 KVA to provide un-interrupted power supply to the Institute, Hostel, Canteen, Guest House, Incubation Cell, etc.

Solar Power Generation (155 KW) and Online UPS (12 units of total 250 KVA capacity) for all the Computers, is available in the campus. All lighting is being replaced in a phased manner by LED & Sensors. Care is also taken to improve power factor and harmonics.

• Solid waste management facility: Yes

The Solid waste management is implemented in the campus into effect the storage, collection, transport, processing, and recycling or final disposal in nuisance free manner (Outsourced).

• Waste water management: Yes

A process is in place to process the waste water and use it gardening, washing, etc.

Water harvesting: Yes

A provision is made to collect and store the rain water subsequently improving the ground water level, which in turn help the bore wells.

12. Details of programmes offered by the college (Give data for current academic year)

Sr. No.	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student strength	No. of students admitted
		Computer Engineering	04 Years	12th pass, MHT-CET, JEE	English	180+60(2 <sup>nd</sup> shift)	270
1	Under- Graduate	Electronics & Telecommunication Engineering	04 Years	12th pass, MHT-CET, JEE	English	180+60(2 <sup>nd</sup> shift)	239
		Information Technology	04 Years	12th pass, MHT-CET,	English	120	131

	1	-					
				JEE			
		Computer Engineering	02 Years	B.E./B.Tech., GATE	English	25+24 (2 <sup>nd</sup> shift)	31
2	Post- Graduate	Electronics & Telecommunication Engineering		B.E./B.Tech., GATE	English	18	17
		Information Technology	02 Years	B.E./B.Tech., GATE	English	18	13
2		Computer Engineering	N.A.	M.E./M.Tech.	English	As per Availability	10
3	Ph.D.	Electronics & Telecommunication Engineering	N.A.	M.E./M.Tech.	English	of vacancy with the Guide	03

<sup>\*</sup> In addition to sanctioned intake, students are admitted under PIO/FN/CIWGC, J&K, GoI, TFWS quota.

13. Does the college offer self-financed Programmes?

Yes 🗸	1	No	
If yes, how many?	3 – UG, PG, Ph.D.		

14. New programmes introduced in the college during the last five years if any?

Yes	<b>/</b>	No	Number	1 (Ph.DCE and E&TC)
	·			

List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Departments  (eg. Physics, Botany, History etc.)	UG	PG	Research
Engineering	Computer Engineering	~	~	<b>~</b>
	Electronics & Telecommunication Engineering	<b>V</b>	<b>V</b>	~
	Information Technology	<b>V</b>	<b>'</b>	

16. Number of Programmes offered under (Programme means a degree course like BA, B.Sc., MA, M.Com ...)

a.	Annual	1. Ph.D.
b.	Semester System	2. B.E. & M.E.
c.	Trimester	Nil

17.	Number	of Programmes	with
-----	--------	---------------	------

b. Inter/Multidisciplinary Approach

a.	Choice Based Credit System	
	·	

c.	Any other (specify andprovidedetails): We are following the syllabi of affiliated
	university (SPPU). SPPU has mixed system with Semester Based Credit System
	for PG programmes and percentage based system for the UG programmes
	wherein the examination scheme includes Theory (paper), Theory (online), term-
	work, practical, and oral. It also accommodates grade based audit courses.

18.	Does the college	offer UG and/or P	G programmes	in Teacher	Education?
			- F8		

Yes		No	~
-----	--	----	---

19. Does the college offer UG or PG programme in Physical Education?

Yes		No	<b>'</b>
-----	--	----	----------

# 20. Number of teaching and non-teaching positions in the Institution (as on 26-3-2017)

	Teaching faculty									
Positions	Professo		Associat e		Assistant Professo		Non- teaching		Technical staff	
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the University Recruited	9#	0	7	5	92	54	N.A.	N.A.	N.A.	N.A.
Yet to	Nil	– Alr	eady r	ecruite	ed the	faculty	y as per	requiren	nent / n	orms
Sanctioned by the Management/ society or other authorized bodies Recruited	0	0	0	0	3	6	11	8	43	11
Yet to recruit	Nil –	Alrea	dy rec	ruited	the sta	aff mo	re than	the requi	rement	

<sup>\*</sup>M-Male \*F-Female

#Including Principal

# 21. Qualifications of the teaching staff: As on 26-3-2017

Highest qualification	Professor		Assoc Profe		Assistant Professor/ Lecturer		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.	9	0	7	4	2	0	22
M.Phil.					0	1	01

PG		0	1	36	28	65
UG				0	1	01
Temporary teachers						
Ph.D.		2				02
M.Phil.						
PG				55	30	85
Part-time teachers						
Ph.D.						
M.Phil.						
PG						

22. Number of Visiting Faculty/Guest Faculty engaged with the College. 4

23. Furnish the number of the students admitted to the college during the last four academic years.

	2012-13		2013-14		2014-15		2015-16	
Categories	Male	Femal e	Male	Female	Male	Female	Male	Femal e
SC	89	61	128	76	146	95	162	107
ST	39	24	27	33	39	38	37	42
OBC	178	121	187	142	290	203	301	159
General	783	506	914	535	971	591	1080	719
Others	107	66	124	123	165	144	192	131

24. Details on students enrolment in the college during the current academic year:

Type of students	UG	PG	Ph.D.	Total
Students from the same	2629	106	13	2748
State where the college is located				
Students from other states of India	180	8	00	188
NRI students ( No Quota )	00	00	00	00
PIO/OCI/CWGC	24	00	00	24
Foreign students	01	00	00	01
Total	2834	114	13	2961

25.	Drop out rate	in UG and PG	(average of the	last two batches)
			(*** **********************************	

UG 0.40%

PG 0.86%

26. Unit Cost of Education (2016-17)

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

(a)Including the salary component

Rs.73224

(b)Excluding the salary component

Rs.14816

27. Does the college offer any programme/s in distance education mode (DEP)?

Yes 🗸

No

MOOCs courses of various universities are offered

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

Course	UG	PG
Computer Engineering	1:15	1:12
Electronics & Telecommunication Engineering	1:15	1:12

	Information Technology 1:15 1:12
29.	Is the college applying for
	Accreditation: Cycle1 Cycle2 Cycle3 Cycle4
	Re-Assessment:
	(Cycle1 refers to first accreditation and Cycle2, Cycle3 and Cycle4 refers to re-accreditation)
30.	Date of accreditation * (applicable for Cycle2, Cycle3, Cycle4 and re-assessment only)
	Cycle1:16/02/2004 Accreditation Outcome / Result :B+ Grade (Institutional score between 75-80%)
	Cycle2: 04/09/2010 Accreditation Outcome / Result: CGPA of 2.88 on four point scale at 'B' Grade
	*Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.
31.	Number of working days during the last academic year.
	293 Days
32.	Number of teaching days during the last academic year
	(Teaching days means days on which lectures were engaged excluding the examination days)
	189 Days

33. Date of establishment of Internal Quality Assurance Cell (IQAC)

IQAC 11/7/2009(dd/mm/yyyy)

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.

AQAR (i) 30/3/2017

AQAR (ii) 30/3/2017

AQAR (iii) 30/3/2017

AQAR (iv) 30/3/2017

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

NIL

# CRITERIA I: CURRICULAR ASPECTS

# 1.1 Curriculum Planning and implementation:

1.1.1. State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teacher, staff and others take holders.

### **Vision of the Institution**

Pune Institute of Computer Technology aspires to be the leader in higher technical education and research of international repute.

# **Mission of the Institution**

To be leading and most sought after Institute of education and research in emerging engineering and technology disciplines that attracts, retains and sustains gifted individuals of significant potential

# Objectives of the institution

- To ensure all round development of the student by developing their academic, cocurricular and extra-curricular skills.
- To build a student personality equipped with exquisite technical and nontechnical skills, which are globally at par.
- To give the instruction and training to the students in the direction to create awareness and understand the technological and socio-economic needs of the society.
- To promote interaction between industry and institute to enrich teaching learning process and enhance career opportunities for the students.
- To explore opportunities of research taking into account local, regional, national and global requirements.
- To motivate the faculty to achieve excellence in their areas of interest and prepare them to face challenges of ensuring future of the student community. To provide qualitative technical education as per need of the industry along with co- curricular and extracurricular activities for enhancement of society and thus become a center of excellence in engineering.
- To establish healthy atmosphere for students and teachers by encouraging exchange of thoughts and discussion leading to their holistic development.

- To craft research center by means of innovative and unique idea to serve a Vivacious society.
- To gather cognition across the globe by strengthening the academics and Professional skills.
- To provide opportunities for students to work with reputed industries through Collaborative activities.

### **Communication to Stakeholders**

The vision, mission and objectives of the institution are communicated to the students, teacher, staff and other stakeholders by various ways.

- The vision and mission statements are displayed on institute website and at various locations of college such as Principal's office, Head of Department Cabins, Department offices, Faculty Rooms, Library, Training and Placement Cell, Seminar Halls and Laboratories.
- These are communicated to the students through Notice Boards of all departments, PICT digital portal, Journal file and First lecture of every semester.
- Communicated through college Brochure/Prospectus and different awareness programs. For the newly admitted students of UG and PG, it is communicated through the Induction Program.

# 1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific examples.

The institution has a mechanism to develop and deploy the action plan for effective implementation of the curriculum.

# Development of action plan for effective implementation of curriculum Subject allocation and time table preparation:

The curriculum is prescribed by affiliating university, Savitribai Phule Pune University (SPPU). The institution makes the planning of every semester well in advance, at the end of the previous semester through the departmental meeting by circuilating the curriculum to the faculty. Every faculty is given the choice of selecting 2to 3 subjects in every semester. In every semester, subject allocation is done on the basis of the priority of the faculty from the choice given, area of specialization, qualification, number of times the subject is taught, and experience. For the final year, the students are permitted to choose the elective subjects listed in the university curriculum and accordingly departments allocate the expert faculty for teaching the elective subject. The individual faculty time

tables and class time tables are prepared by the department time table coordinator with the approval from HOD and Principal.

# • Department committees:

For smooth functioning of each activity related to effective implementation of curriculum each department will be having various committees such as Time table, Feedback, Unit test coordination, Seminar coordination, Project coordination, subject coordination, etc., headed by senior member of the department. Each committee sets the process for every activity for smooth implementation.

#### Academic calendar:

At the beginning of every new academic year, academic calendar is prepared by institute and various departments based on academic calendar circulated by SPPU. All major activities such as Unit tests, class tests, mock online tests, project/seminar activities, workshop/seminar/guest lectures, University examinations, Semester commencement/conclusion, remedial classes, are included in the academic calendar. The students are also informed in advance about curriculum and academic calendar.

# **Laboratory and Teaching learning preparation:**

Every faculty is expected to prepare the teaching plan for the theory and practical subjects allocated to them by considering the academic calendar. Every faculty prepares detailed course file which includes teaching plan, class notes, question banks, previous question papers with solution, SPPU syllabus, study material beyond curriculum, PPTs, NPTEL videos. The Laboratory manual is prepared as per the guidelines given by SPPU syllabus. The Time table is prepared considering resource availability, remedial classes, training programmes, guest lecturers/workshops/industry interaction, etc.

# Feedback Analysis:

• Student feedback of every faculty is taken twice every semester, in the second and the last month. The department head assesses the feedback and conveys it to respective faculty for corrective measures, if any. The academic monitoring committee of the department counsels the faculty concerned and reports the action taken to the Principal.

# • Infrastructure testing and maintenance:

All the checking/testing of equipment in class room and labs such as projectors and computer is to be done and maintained in working condition before semester begins. Quotations for instruments, software, and hardware are submitted if needed. Book requirement is given to the Central Library

# • Project monitoring and execution for B.E. students:

We have well defined process for project work and it is monitored by Project coordinator and his team. Project group formation and Guide allocation activity starts from third year (6<sup>th</sup> semester) to save the time of student in the final year and utilize final year time. Project guide allocation has been done as per the area of interest of student and expert faculty available in the department. Project progress is periodically monitored and recorded in project log books. Project evaluation process is followed as per the set process and governed by internal guide and two more subject experts. Marks are given based on multiple parameters based on individual and team performance.

# • Seminar monitoring and execution for T.E. students:

In case of seminar allocation for TE students, faculty is assigned as a guide as per area of interest. To give the awareness of each technical domain, expert lecture series arranged in third year (5<sup>th</sup>semester) on various domains such as Big data, Cloud computing, Networking, Image processing, machine learning, IoT, VLSI & Embedded systems. Industry persons are invited to talk about the trends and application of particular domain. Seminar evaluation process is followed as per the set process and monitored by internal guide and a subject expert. Marks are given based on multiple parameters including presentation and written communication skills. Industrial visits are planned and executed depending on the need of the curriculum.

# • Deployment of action curriculum plan for effective implementation.

The academic calendar of the institute is strictly followed by every faculty. The AAC committee under ISO which work and act as IQAC committee of the institute monitors regularity in the conduction of lectures, progressive syllabus coverage, students' academic progress and their grievances. The feedback of the committee is conveyed to HOD for corrective measures.

• In the process of monitoring the attendance of the student, faculty maintains a daily attendance of theory and practical in the PICT MIS software. Weekly attendance is collected by the Class coordinator of the respective batch. The

students whose attendance/performance is poor are identified by the mentors and the same is informed to the parents through telephonic conversation, MIS/email/SMS alert or if required, by post.

- The academic progress of student is also monitored by Class coordinator /Guardian Teachers/Mentor by keeping a record of Unit test 1, Unit test 2, mock test for practical, online tests, etc. and it is conveyed to all the students The corrective measures such as remedial lectures, mock examinations of theory and practical, personal counselling are taken for academically weak students.
- Student feedback of every faculty is taken twice every semester, in the second and the last month. The department head assesses the feedback and conveys it to respective faculty for corrective measures, if any. The academic monitoring committee of the department counsels the faculty concerned and reports the action taken to the Principal.
- The planning for student project and seminar work is done at the beginning of every semester wherein the students are allocated to guides who are specialized in the areas selected by the students based on the core subject of interest. In addition to in-house projects, students are also encouraged to take up projects in collaboration with industries. Furthermore, if there are ongoing research projects sanctioned by various organizations, the students are encouraged to pursue research as part of their projects.

# 1.1.3 What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?

- The institute is affiliated to SPPU and follows the prescribed curriculum. The faculty attends the syllabus revision workshops conducted by university from time to time. The institute not only encourages but also supports financially to the faculty to attend the Faculty Development Programme (FDP), Short Term Training Programme (STTP), Quality Improvement Programme (QIP), National and International Conferences during summer and winter vacations to enrich their knowledge and help them to acquire new technical skills.
- The university evaluates the students through online and offline examinations for which the duties are assigned to university approved and experienced faculty of the institute as College Examination Officer,(CEO) Paper setter, Moderator and Examiner

- The central library of college is enriched by large number of books (print/digital) as per the requirement/norms. The Library subscribes to large number of national/international journals/magzines such as IEEE, Springer, science direct.
- All the classrooms are well equipped with modern teaching aids like LCD projectors, PC, broadband Internet facilities, in order to ensure simple and effective teaching-learning process through audio-visuals.

### **Support to faculty from University:**

Faculty receives grants from SPPU under BCUD- QIP schemes for research projects. Faculty attends Quality Improvement programs.

University organizes Faculty Development Programs (FDPs), conferences and also provides funding to organize events at institutes.

University conducts syllabus discussions and revision meetings by Board of Studies (BOS), for the faculty.

### **Support to faculty from Institution:**

- Faculty is encouraged to participate in syllabus discussions and revision meetings conducted by Board of Studies (BOS).
- Faculty is encouraged to participate in Faculty Development Programs (FDPs), conference and workshops carried out in the institutes/industries. Support is given to the faculty in the form of financial and on duty leave. Even institute also give support to the faculty those who are going outside as resource person to conduct seminar/workshop by giving duty leave.
- The institute also conducts FDPs/workshops/expert lectures for faculty.
- Faculty have full access to the Central library which has collection of reference as well as text books needed for curriculum delivery and they can also demand the new books required for teaching/research work.
- Faculty has uninterrupted access to internet in their cabins, laboratories and class rooms. This facilitates them to prepare study material, prepare PPTs / videos, study research papers, etc.
- Faculty of same subject are encouraged to conduct meetings to discuss course objectives, outcomes, course delivery method, question paper setting, etc.
- Every classroom is equipped with a projector, intranet and Internet connection and a PC; facilitating smooth and effective lecture delivery. Other resources needed for ICT education are readily available for lecture/practical delivery.
- Faculty is encouraged and supported to do research projects; acquire higher

- qualifications; publish research papers in reputed journals and conferences.
- Faculty have encouraged to file patents, do consultancy work, develop centre of excellence lab.
- 1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.
  - The Institute has well qualified and skilled human resources. The faculty adheres to the Academic Calendar, Time Table and Teaching Plan.
  - Full syllabus coverage is ensured for all subjects (theory as well as practical).
  - Teacher Mentor (TM) scheme is in place. There is a TM for batch of 20 students. The TM interacts with these students to solve their problems, guide them and motivate them for overall development.
  - Feedback is taken from the students on the teaching learning process. Academic Monitoring Committee under ISO and concerned HODs monitors this feedback and takes corrective action.
  - Central library has rich collection of reference books needed by all departments.
  - Every classroom is equipped with a projector, intranet and Internet connection and a PC; facilitating smooth and effective lecture delivery. Other resources needed for lecture/practical delivery are ready available.
  - Theory and practical performance is monitored on regular basis and is communicated to the students. Corrective actions are taken accordingly.
  - Additional assistance is provided to slow learners.
- 1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalization of the curriculum?
  - The institute has developed a wide network involving industries, alumni, research organization and the university. It promotes effective industry-institute interaction through Industry Institute Interaction Cell (IIIC) as well as Centre of Innovative Learning committee (CIL). The experts from industry are invited as guest faculty(Physically / online) to discuss the state of art practices followed by industry. This motivates the students to develop their thought process and become acquainted with industrial culture. The students are encouraged to undergo internship programs of 15–30 days at industry during summer / winter

vacation (BE projects are sponsored by companies). The Institute takes efforts in providing internship to the students in India and abroad.

BE projects sponsored by companies.

Year	2016- 17	2015- 16	2014-15	2013- 14	2012-13	
	BE Sponsored Projects					
E&TC	01	01	03	05	01	
COMP.	55	58	36	32	29	
IT	07	09	05	04	05	

- The faculty members are sent to industries for 3-6 months on sabattical leave. The faculty is writing joint reserch projects with premiere research bodies/Industries/educational Institutes in India and abroad.
- The departments of the institute promote a number of student projects in collaboration with industry. This provides the students a platform to understand industry requirements and effective time management to complete the specific tasks.
- The institute has signed a good number of Memorandum of Understanding (MoUs) with various industries. This provides an ample opportunity to faculty and students to deal with industry specific challenges. These MoUs are backbone of research oriented projects and problem based learning as given in table 2. (MoUs signed by the institute).
- The faculty from the institute is actively involved in curriculum development for several subjects including open electives in collaboration with industry and research bodies.
- The institute boasts of a strong alumni network channelized through alumni
  association. The communication between present students and the alumni is made
  possible through annual meets at institute level. A feedback from alumni is taken
  during the annual meet. The contents of the feedback form are relevant to know
  alumni's viewpoint on technical skills up gradation, problem solving ability,

entrepreneurship, personality development and extracurricular activities, for the students of the institution.

#### MoUs signed by the institute:

Sr.	Department	Count
1	Electronics and Telecommunication Engineering	03
2	Computer Engineering	12
3	Information Technology	02
	<b>Total Count</b>	17

- Institute encourages faculty/students to interact with industry and organize/conductvarious activities.
- The institute has a very well established Training and Placement cell. This cell looks after placement as well as industry interaction. It provides feedback from industry.
- The institute has an Entrepreneurship Development Cell (EDC). This cell encourages and support young entrepreneurs. Many industry interaction programs are organized under EDC.
- 1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University?(number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.
  - The institute has developed a strong rapport with University and provides every
    possible support in framing the curriculum and its implementation. A number of
    syllabus revision workshops of University are conducted by the institution thus
    providing guidelines for framing curriculum through deliberations by faculty and
    industry representatives.
  - The institute has representatives in the form of seven faculty members from different departments working as a Member-Board of Studies (BoS), Academic Council and Senate of SPPU. They act as a link between the institution and University for any type of communication related to academics and administration. In addition, many faculty members are holding the portfolio of

- Subject Chairman for UG and PG courses. They are responsible for paper setting, preparation of online examination question bank, assessment of papers, etc.
- Institute has advisory board committee (ADB) per department which includes our internal and external stake holders which functions as a IQAC to see the effectiveness of the syllabus as per the industry needs. The feedback collected from all stake holders such as students, alumni, industry experts and faculty about the existing curriculum is helpful in taking corrective measures in future curriculum development.
- Faculty members attend BOS meetings and FDP for syllabus setting and discussion. Faculty also works as paper setter and chairman of course as given in table 3. (University FDP for new course in curriculum).
- Institute has a strong alumni association which is in constant touch with the alumni. Alumni feedback is taken on curriculum modifications and communicated to the BoS.
- Faculty also has written letters to BOS from finding curriculum gap and requested them to add or remove some course or some point from course.
- Institute has a Teacher Guardian/Mentor Scheme, in which faculty periodically takes teacher guardian meetings. In these meetings, faculty understands student difficulties, their expectations etc., which is then conveyed to the concerned faculty after due consultation with the HOD. In teacher guardian meetings, students also request for value added courses.
- Our Institute faculty members have attended BOS meeting and FDP for syllabus setting and discussion of new course included by SPPU. Our faculty also worked as paper setter and chairman of different course. Faculty

ROLE	Numl	ber of Faculties in	volved
Department	E&TC	COMP	IT
BOS Members	02	05	0
Subject Chairman	20	70	20
Paper Setter	35	74	20
University FDP Attendee	50	33	25

has also attended University FDP for introducing new course in curriculum.

• Feedback on curriculum is taken from students, alumni, parents, industry, faculty and efforts are made in implementing those.

Following table shows the number of faculty involved in curriculum development.

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process (Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.

**NO,** Institute follow the curriculum developed by SPPU where our faculty contributed in designing the contents. But university has given liberty to the institute to design the syllabus for open elective. In M.E. Computer Engineering, we designed and executed syllabus for open elective subject in collaboration with industry (SAS Pvt. Ltd).

Following are the steps for executing the open elective subjects:

- 1. Framing the syllabus of the structure with industry experts
- 2. Sending it to BoS chairman
- 3. After comments from the BoS chairman, forward it to university
- **4.** University approves / disapproves and shows it on university website if approved.
- 1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?
  - The Programme Education Objectives (PEOs) and Programme Outcomes (POs) are initially defined for each program run by the institution. For every course, Course Education Objectives (CEOs) and Course Outcomes (COs) are prepared for effective delivery of the respective course. The content beyond syllabus is planned in advance and is covered through different activities like guest lectures, industrial visits and student training programs. The feedback on course taught in a semester and for a particular program is taken from students and the analysis is made to ensure whether the stated objectives of curriculum are achieved or not.
  - The HOD conducts a meeting with the Domain Heads to start the process of Course Outcome finalization.
  - The Domain Heads conducts meeting with the subject in charge to finalize the Course Outcomes. The Course Outcome mapping with Program Outcome is

also done. This consists of Direct as well as Indirect Assessment. The average attainment levels are calculated.

The Program Outcomes (PO) are as follows:- Engineering Graduates will be able to:

- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- The engineer and society: Apply reasoning in formed by the contextual knowledge to assess societal, health, safety legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.
- Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to

comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

- Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change Course Outcomes (CO) and Program Outcomes (PO) mapping along with Course Outcomes attainment.

Direct attainment level of a PO is determined by taking average across all courses addressing that PO. Indirect attainment level of a PO is determined based on the student exit surveys and employer surveys.

### Following steps are taken to ensure the CO attainment:-

- Strict adherence to the Academic Calendar and Time Table.
- Strict adherence to the Teaching Plan.
- Smooth conduction and immediate result declaration of unit test examination or preliminary examination.
- Assisting slow learners and encouraging bright students.
- Continuous evaluation of theory/practical assignments and communicating it to the students.
- Arranging Guest Lecture for respective course as per the need of syllabus.
- Covering Contents beyond syllabus through different activities like guest lectures, events, videos, webinars, MOOCs, industrial visits, etc.
- Attainment of COsfor every course.

### 1.2 Academic flexibility:

### 1.2.1. Specifying the goals and objectives give details of the certificate /diploma/ skill development courses etc., offered by the institution.

Apart from the programs affiliated to SPPU, the institute offer courses which basically serve the purpose of value addition. These courses are specifically for third year and final year students in order to enhance the employability skills, equip them with technical skills under industry-academia interactions. These include Short-term training programs, Certificate courses, Aptitude tests, Group discussions and others in relevance to the core subjects of respective departments. In addition, students and faculty are taking MOOCs

offered by well known institutions like Stanford.

### 1.2.2 Does the institution offer programmes that facilitate twinning/dual degree? If 'yes', give details.

No, since we don't have autonomous/deemed status

# 1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond:

• Range of Core/ Elective options offered by the university and those opted by the college to develop generic attributes relevant to a career for the students. The SPPU offers core subjects that are mandatory along with a wide range of electives from which the college opts for selected elective subjects based on the prospects to acquire knowledge and have a potential for benefitting academic development culminating into a career of their choice for the students. Further, in lieu with the market demand, some electives are preferred by the students which are also given due weightage during the selection of electives. This provides the student with the foundation necessary to achieve a competitive advantage in attaining their career goals. The students are assisted to choose proper elective by arranging a brief lecture before hand on content/scope of the elective subject. From the electives prescribed by the university, the option student chooses is further approved by the respective department and finalized.

### Semester based credit system and range of subject options

We are following the syllabi of affiliated university (SPPU). SPPU has mixed system with Semester based Credit System for PG programmes and percentage based system for the UG programmes wherein the examination scheme includes Theory (paper), Theory (online), term-work, practical, and oral. It also accommodates grade based audit courses.

#### • Courses offered in modular form

All the courses are designed in modular form with a definite time limit for teaching of each module. In addition, the institutional modules developed under student training program for enhancing the communication and technical skills are also offered in modular form.

### Credit transfer and accumulation facility

The facility of credit transfer is available in the University wherein a student who has completed a semester can continue with the remaining semesters in same or different branch on requesting for a transfer to another branch of same college or to continue the course in another college under SPPU.

### • Lateral and vertical mobility within and across programmes and courses

Lateral mobility facility is available at second year level, if the student wish to change the program. For academic flexibility, the students are encouraged for inter disciplinary projects across the various courses offered to enhance their curriculum skills in a wider context. The students can avail inter departmental facilities so as to prepare them to understand concepts and apply their knowledge and experience globally. The projects are either in-house or in collaboration with industries as per the interest of the students. The curriculum tries to bridge the professional gap enabling the student to be technically equipped for a career in engineering.

In the PG program, enrichment courses called as non-credit courses like 'Introduction to Human Rights and Duties' and 'Cyber Security' are conducted for all the PG students. The main aim of human rights education is to up hold dignity, tolerance and peace in the society by enlightening the student fraternity to defend and advocate for their rights and also sensitize them about their duties towards a healthy society for social, economic and political sustainability. It focuses on human values, rights and duties of individuals with special emphasis on women, children, minorities, social and economically deprived people and vulnerable people. It mostly deals with issues relating to law, policies framed and enforcement mechanism in the Indian context.

1.2.4 Does the institution offer self-financed programmes? If 'yes', list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.

No

1.2.5 Does the college provide additional skill oriented programmes relevant to regional and global employment markets? If 'yes' provide details of such programme and the beneficiaries.

For preparing the students to compete in a highly demanding market,

- various skill oriented programs are arranged by providing facility for special trainings and advanced certification courses in the college premises. Some of the programs conducted are enlisted below:
- English spoken tutorials are conducted for the weak students to achieve proficiency in English wherein the material is shared through CCA, Soft skills, video conferencing, and report writing tools. The students appear for exam and get certification for the same. This additional training about open source technology is an advanced skill development which is an add-on for employability.
- All departments of the institute offer different Value Addition Programs for final year students through external agencies for enhancing the employability.
   These programs are in line with the requirement of student's interest as well as the industry needs.

The Objectives of the STP program are to:

- Enhance the employability opportunity
- Prepare students for entrepreneurship
- Prepare students for higher education in INDIA as well as abroad.

Details of the STP program are as follows:

- It is divided throughout 5 semesters from second year to final year of engineering.
- It bridges the gap between corporate and educational institutions through its campus connect services. The campus connect feature facilitates effective hiring by end-to-end assessments and evaluations. This provides top-notch services satisfy corporate staffing and their needs and requirements with ease, thus enabling a collaborative approach and strengthening the industry- academic relationship.
- 1.2.6 Does the University provide for the flexibility of combining the conventional face-to- face and Distance Mode of Education for students to choose the courses/combination of their choice" If 'yes', how does the institution take advantage of such provision for the benefit of students?

No, However, the institution encourages students and staff to take courses offered by well known institutions abroad, under MOOC.

### 1.3 Curriculum Enrichment

## 1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programmes and Institution's goals and objectives are integrated?

As our Institute is affiliated to SPPU, it does not have freedom to formulate its own curriculum. But to meet institute objectives, we have set up our own teaching learning process. For each new syllabus revision, advisory board meeting (ADB) which plays the role of a IQAC is held to check the effectiveness of the syllabus. As per the suggestion given by various stake holders such as student, alumni, industry/employer. All these suggestions passed to the faculty. Internal subject faculty meeting also used to take feedback from subject coordinators before commencement of the semester. Subject teachers identify the gap in the syllabus to meet the institute goal and incorporate that contents in the teaching plan and cover that through various activities such as seminar/expert lecture/ class tutorial/home tutorial/ presentation. Even for overall development of the students, various personality development and orientation programs are conducted.

Apart from above, the following activities are taken up by the institute.

- Seminars, conferences, and workshops are conducted to enhance classroom learning and to enhance the range of awareness, concerns and expertise.
- Students are encouraged to participate in innovative projects, under the guidance of faculty members, to have hands-on experiences of reaching the frontiers of knowledge.
- Remedial classes for weaker students
- Tutorials and assignments given to the students.
- Students Training Programme are conducted to improve soft skills
- Various value added programmes for enhanced employability
- Departments are encouraged to integrate complementary material in the courses prescribed, wherever they find it necessary.
- 1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?
- Institute offers open electives to the students
- Organization of various programs through Membership of CSI, IEEE, ACM and IETE

- Students are encouraged to opt sponsored project at their final year (UG, PG)

  This helps the students to understand industry practices/requirements and in probing the contemporary aspects by themselves.
- Domain wise industrial visits are organized.
- Annual competition to showcase the student technical knowledge in a particular domain.
- A well-established industrial network through alumni for the support as and when required.
- Various Value Added Programs give the students a competitive edge over their peers
- The research element is enhanced by encouraging the students to participate in platforms like International and National Conferences, Research workshop.

# 1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?\

As mentioned earlier, the institute is affiliated to SPPU and follows the corriculam provided by the university. However, to create awareness among students and staff about the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., following efforts are being made.

#### **Gender Issues:**

- A students grievance cell exists at institute level to address gender issues. Students are educated about it regularly.
- Organization of different women oriented programs at institute and department level.
- Work force cell against Sexual Harassment exists and conducts review meeting periodically. If required, need based meetings are also conducted to resolve the issues if any.

### Climate change:

- Institute is located at central place of the city, but it maintained a lush green campus inside. Efforts are taken for its maintenance for reducing the adverse climatic changes due to pollution.
- Institute is making efforts for the paperless communication.
- Awareness for electricity, water conservation is created through display boards.

#### **Environmental Education:**

- Waste water recycling plant
- Electronic media like, Email, intercom is used for internal communication.
- Utilization of rough pages for printing
- Saplings are used to felicitate guest and delegates.
- Organization of environment related programs at nearby rural villages through a NSS.

#### **Human Rights:**

- Earn and Learn Scheme is implemented for the selective economically back ward students
- Scholarship schemes from Government of Maharashtra are implemented as per the norms. Other scholarship scheme like BMC is also available.
- Initiation on NSS, Grievance Cell, Anti ragging Activity, Cell against Women sexual harassment

#### **ICT:**

- Class rooms equipped with LCD and Internet.
- Wi-Fi connectivity and Browsing facility in all labs.
- Effective use of audio and video conferencing in seminar halls.
- Use of FTP server at department and institute level.
- 1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?

#### Moral and ethical values

- Students are encouraged to conduct the national & international level activities and events in the Institute
- Teacher Guardians counselling imparts aspect of Moral and ethical values
- Seminars, workshop and competition are arranged on cyber security and ethical hacking
- Compulsory credit course on cyber security.

### Employable and life skills

- Conduction of aptitude tests and technical test.
- Continuous efforts through lecture series and orientation by T&P Cell and faculty coordinators
- Guest lectures, seminars, presentations are encouraged for improving the presentation skills
- Feedback from recruiters and alumni are taken for the improvement.

#### **Better career options**

- Top most companies are called as recruiters.
- Students are offered International internship like NTTDATA.
- Orientation by companies on campus.
- Existence of Entrepreneur Development Cell
- MoUs with companies for improving technical skills of students
- Exploring the opportunities for higher studies with the help of counselors.

### **Community orientation**

- Establishment of NSS.
- Organizing various social activities under audit course.
- Organizing and participating in Blood Donation, Cloth and Rice donation Camps.
- Regular conduction of activities like computer literacy, girl child education etc. for upliftment of villagers, Jana Jagruti Abhiyan: "Street Play for matador yadi awareness"

- Involvement with social associations like Road safety, water conservation.
- Different events are organized for Women Empowerment, Yoga Day, Swach Bharat Abhiyan.

### 1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stake holders in enriching the curriculum?

The college has an active and continual feedback system. On the basis of feedback received, the action points identified are acted upon promptly.

A regular feedback from all stakeholders is taken, based on which revision of content delivery is done. The stakeholders include students, Exit students' survey, parents, Industry and Alumni. The feedback is critically analyzed for inclusion of changes and improvements in teaching learning methodology like inclusion of topics beyond syllabus, delivery of content through Industry person, organizing industrial visit for better understanding of topic etc.

Most importantly feedback from parents is taken on the regular basis, through parents meet.

Alumni feedback is collected every year during alumni meet.

The Institute has a Student's Council (includes students representative) which is another source of feedback for the Institute authorities. The Council meet is conducted in front of Principal.

### 1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?

The feedbacks collected from various sources are analyzed and a report is submitted to the Head of the department. Feedback in terms of inputs to bridge the gap as per the industry's expectations is collected from Industry, Alumni, Exit Students. The quality of the programme is enhanced by organizing and conducting various Value Added programms, Student Training Programms, and Guest Lectures from resource person from industry and academics.

### 1.4 Feedback System

### 1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

Syllabus revision by SPPU is done after 4 years. Faculty members of institute contributed in the curriculum of following programs of SPPU:

- B. E (Computer Engineering)
- B. E (E&TC Engineering)
- B. E (Information Technology)
- o M. E. (Computer Engineering)
- M. E (Information Technology)
- M. E. (E&TC Microwave)
- Expert committee prepares syllabus structure and initial draft, which involves
  department committee experts keeping program objectives and outcomes in
  mind. At this stage, the courses offered by different premier institutions are
  referred. The suggestions from industry professionals are also invited during this
  initial phase of draft preparation.
- BoS and the industry invitees are involved for further suggestions. The final
  draft is prepared after going through the revisions suggested and is circulated to
  all the stake holders involved in the syllabi framing. After the approval from
  BoS, the curriculum is put up before the faculty and academic council of
  University for final approval and circulation by the University.
- Our faculties are involved in all this process.

# 1.4.2 Is there a formal mechanism to obtain feedback from students and stake holders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment introducing changes/new programs?

A well-designed portal is used for collecting feedback from all the stakeholders. The Institute has list of questionnaires to obtain feedback from students and other stakeholders like students (Exit survey), Alumni, Parents and Industry.

The Alumni feedback is taken for revising the contents and including the concepts as per industry requirement. The Exit Student Survey Form is designed to know the fulfilment of their educational goals. The Industry Institute Interaction feedback is used to understand and bridge the gap between the institute and industry. The feedback summary is used for the revision of syllabus at University, Infrastructure development. The Parent Feedback is used to know their opinion about Institute, Infrastructure, Professional expectations.

1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/ programs?

Institute has introduced one Ph.D. programme for Computer Engineering and E&TC Engineering in 2013-14.

Our institute is having good number of Ph.D. faculty as well as SPPU recognized research guides. Institute is also having research lab with latest infrastructure/facility for research work. So, many students are interested for aspiring Ph.D. in our institute. Hence we decided to introduce Ph.D. program to inculcate research culture in the PICT

1.4.4 Any other relevant information regarding curricular aspects which the college would like to include.

Nil

### **CRITERIA 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 College admits the student (UG as well as PG) as per the DTE norms published in Centralized Admission Process Admission Brochure. The advertisement/ notification related to the admission process will be released in leading news papers by the Government of Maharashtra. It is also published on their websites. The DTE also publish other useful information like list of colleges with their sanctioned intake, cut off, seat matrix etc. We also make this information available on our notice board, website, etc. Our Institution gives advertisement/notification in leading newspapers for the Institute level seats and for the seats remaining vacant after the CAP rounds.
- Since, the whole admission process is conducted as per the guidelines given by the DTE/GoM/Admission Regulating Authority; the transparency is expected to be achieved in all levels. We at our Institution strictly adhere to the admission process as per the following guidelines ensuring fairness and transparency in the admission process.
- The Government of Maharashtra (GOM) notifies the rules called "The Maharashtra Unaided Private Professional Educational Institutions Rules, 2016, for Regulating of Admissions to the Full Time Professional Undergraduate Technical Courses.
- This brochure gives information regarding the eligibility and rules of admission for these courses to first year of various technical professional undergraduate degree courses in the State of Maharashtra. This also provides information about invitation of applications for admission, preparation of merit list, distribution of seats, details of reservation, various rounds and stages of Centralized Admission Process (CAP), admissions in Institutional Quota seats and vacant seats after CAP, supernumerary seats, refund of fees, etc.
- 2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

As mentioned in the point No. 2.1.1, the criteria adopted and the process of admission is as per the Admission brochure published by the DTE. Govt. of Maharashtra. However, the details of various processes are given below:

- (i) Merit: For all the candidates meeting the eligibility conditions and requirements for admissions, the merit list will be prepared as per (a) the score in MH-CET (for Maharashtra candidates) (b) the score in JEE main (for all India candidates) (c) The percentage of marks in the subjects Physics, Chemistry and Mathematics added together at Qualifying examination (for PIO/FN/CIWGC).
- (ii) Common admission test conducted by state agencies and national agencies: The common entrance test conducted by the Maharashtra Government is called MHT-CET and the common entrance test conducted by the National agency is known as JEE Main.
- (iii) Combination of merit and entrance test or merit, entrance test and interview: The merit list is totally based on either MHT CET or JEE Main
- (iv) Any other: In the case of PIO/FN/CIWGC, the merit list is based on the percentage of marks in the subjects Physics, Chemistry and Mathematics added together at qualifying examination.
- 3. Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

The minimum and maximum percentage of marks for admission at entry level for the Academic year 2016-17 (UG)

	MHT-CET - 2016					
Branch	OPEN		A	I		
	Max.	Min.	Max.	Min.		
Computer	172 (H823)	165 (H1460)	183 (199)	177 (507)		
	171 (O922)	171 (O923)	103 (177)	177 (307)		
Computer	181 (309)	171 (918)				

(TFWS)				
Computer	161 (H1878)	160 (H2002)		
(II Shift)				
E&TC	148 (H3732)	134 (H6837)	157	155
	149 (O3617)	149 (O3698)	(2461)	(2763)
E&TC	1.62 (1.50.1)	157 (2221)		
(TFWS)	163 (1591)	157 (2321)		
E&TC	133 (H7304)	133 (H7346)		
(II Shift)				
IT	159 (H2107)	156 (H2489)		
IT (TFWS)	169 (1023)	164 (1543)		

The minimum and maximum percentage of marks for admission at entry level for the Academic year 2016-17 (PG)

Branch	GATE SCORE  OPEN				
	Max.	Min.			
Computer	401 (935)	371 (1282)			
Computer (II Shift)	356 (1490)	331 (1761)			
E&TC	361 (1411) (Cap-II)	351 (1590) (Cap-II)			
IT	374 (1256) (NT-C)	263 (2150) (SC)			

2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes', what is the outcome of such an effort and how has it contributed to the improvement of the process?

Yes - There is a mechanism to review the admission process and student profiles annually, through the feedback process, result analysis, mentorship programs, and the corrective measures by using online feedback system and the MIS. The result of the above processes is consolidated and the suitable corrective measures are taken yielding the improvement in the overall process. It is observed that the pass percentage and the numbers of distinctions increased significantly. Since, the whole admission process is the centralized and managed by the Government of Maharashtra, we have no choice on the quality of the students admitted. However, due to the quality of teaching and research, we are in a position to attract the meritorious students.

- 2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate / reflect the National commitment to diversity and inclusion
  - \* SC/ST
  - \* OBC
  - \* Women
  - \* Differently abled
  - \* Economically weaker sections
  - \* Minority community
  - \* Any other
  - We strictly follow the norms and guidelines decided by the Government of Maharashtra. The Government of Maharashtra admission policy and its student admission demonstrate/reflect the National commitment to diversity and inclusion. This is obvious from the following reservation pattern followed by the CAP process.

Sr.	Category of Reservation	Percentage of seats
No		Reserved
01	Scheduled Castes and Schedule Caste	13%
	converts to Buddhism (SC)	
02	Schedule Tribes (ST)	7%
03	Vimukta Jati (VJ)/De Notified	3%
	Tribes(DT) (NT-A)	

	TOTAL	50%
07	Other Backward Classes (OBC)	19%
06	Nomadic Tribes 3 (NT-D)	2%
05	Nomadic Tribes 2 (NT-C)	3.5%
04	Nomadic Tribes 1 (NT-B)	2.5%

In addition to the above reservation, the Government has provided:

- (i) 5% reservation for sons/daughters of Defence service personnel.
- (ii) 3% reservation for Persons / Candidate with Disability.
- (iii) Eligible Maharashtra State Candidates having their parent's annual income less than Rs.6.00 Lakhs from all sources shall only be eligible for maximum 5% of sanctioned intake per course under Tuition Fee Waiver Scheme (TFWS).
- (iv) 30% of the seats available for CAP are reserved for female (woman) candidates. This is applicable for all categories and all courses in the ratio 70% (Home University) and 30% (other than Home University).
- (v) Although there is no seat reservation for Economically Backward class, there is 50% concession in the Tuition fees.

## 2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase/decrease and actions initiated for improvement.

Sr.	Programmes	Year	Number of	Number	Demand Ratio
No.			application	of	
				students	
				admitted	
	Under Graduate				
		2012-2013	The	190	In the absence
	Computer	2013-2014	admission	188	of the
1	Engineering	2014-2015	process is	189	information
	(First Shift)	2015-2016	governed by	196	about the
		2016-2017	Directorate	210	number of
	Computer	2012-2013	of Technical	60	applications
	Engineering	2013-2014	Education	59	received for the
2	(Second Shift)	2014-2015	Therefore	60	sanctioned
		2015-2016	this data is	60	intake of 600,
		2016-2017	not	60	based on the
		2012-2013	available	190	inquiries for
	Electronics &	2013-2014		188	admission and

3	Telecommunicatio	2014-2015	188	the number of
	n Engineering	2015-2016	188	application
	(First Shift)	2016-2017	184	received under
		2012-2013		Institute level
	Electronics &	2013-2014	52	quota and the
4	Telecommunicatio	2014-2015	58	seats remain
	n Engineering	2015-2016	60	vacant after the
	(Second Shift)	2016-2017	55	CAP round, the
		2012-2013	127	demand ratio of
		2013-2014	127	our institute is
5	Information	2014-2015	127	almost 10
	Technology	2015-2016	124	applications per
		2016-2017	131	seat.

Sr.No.	Programmes	Year	Number of	Number of	Demand
			applications	students	Ratio
				admitted	
	Post Graduate				
		2012-2013	The	25	In the absence
	Computer Engineering	2013-2014	admission	25	of the
1	(First Shift)	2014-2015	process is	20	information
		2015-2016	governed by	19	about the
		2016-2017	Directorate	17	number of
		2012-2013	of Technical		applications
		2013-2014	Education	24	received for
2	Computer Engineering	2014-2015	Therefore	15	the sanctioned
	(Second Shift)	2015-2016	this data is	13	intake of 85,
		2016-2017	not available	14	based on the
		2012-2013		18	inquiries for
	Electronics &	2013-2014		18	admission and
3	Telecommunication	2014-2015		15	the number of
	Engineering	2015-2016		15	application
	(Microwave)	2016-2017		17	received
		2012-2013		18	under
		2013-2014		18	Institute level
4	Information	2014-2015		15	quota and the
	Technology	2015-2016		10	seats remain

	2016-2017	13	vacant	after
			the	CAP
			round,	the
			demand	ratio
			of	our
			institute	is
			almost	3
			application	ons
			per seat.	

### 2.2 Catering to Student Diversity

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

The Institute has provided following facilities to cater the needs of differently- abled students

- (i) Ramp ways
- (ii) Lifts with necessary facilities for differently-abled students
- (iii) Wheel Chair
- (iv) Specially designed Toilets

Also Institute has formed a committee to ensure adherence to the government policies in this regard.

# 2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.

• Yes. Before the commencement of the programme, the Institution arranges a programme called "Fresher's Welcome Address" for the freshers and their parents/guardians. During this, the Principal, Heads of the Department, Registrar, Librarian, Placement Officer and other heads welcome the students to the portal of our Institution and tell them about the Institution, Infrastructure facilities, University norms & regulations, the course content, the scope of the course and their outcome. During the orientation and interaction session the needs of the students in terms of knowledge & Skills are assessed and subsequently the corrective measures are taken to overcome the gap. For example, conducting of communication skill sessions, C&C++ courses, applied mathematics classes (particularly for

direct SE students)

# 2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students(Bridge/Remedial/ Addon/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?

The following strategies are adopted by our Institution to bridge the gap between the pre-requisites and the enrolled students profile

- (i) For every subject, an expert from industry / premier research organization / educational institution is invited to deliver talk in the concerned subject emphasizing on the current trends and developments in the said area.
- (ii) Training sessions are conducted in communication skills/aptitude/interview skills/ group discussion etc.
- (iii) Short-term courses and workshops are conducted on various subjects like C,C++,embedded system, VLSI, Big Data, IOT etc.
- (iv) Students are encouraged to take MOOCs from various prestigious Universities from all over the world.
- (v) For the slow learners special remedial classed are conducted.

### 2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?

Our Institution having co-education, all the students and staff are given equal opportunities in an inclusive way irrespective of gender, caste, region, religion, language.

Everyone enjoyes the friendly work environment without any sort of discrimination. However, to take care of any remote possibility of discrimination/ untoward incident, following processes / systems are in place.

- Internal Complaint Committee
- Committee for SC/ST
- Grievance Redressal Cell
- Anti-ragging Committee
- Local Managing Committee
- Student welfare & development
- Feedback system

• NSS (also takes care of environmental issues).

### 2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?

In our Institute, majority of the students fall under the category of advanced learners. This is obvious from the results and placements. To meet the special educational / learning needs of these students, following activities are initiated.

- Advanced courses and workshops.
- Internship abroad.
- Industry sponsored projects.
- Center of innovation / excellence.
- Incubation Cell.
- Industry Visits
- Professional Societies (Like IEEE, ACM, IET, CSI)
- Mini Projects and assignments.
- Guest Lectures
- National / International Conferences, Seminars, Workshops.
- Paper/Project competitions at national and international level.
- Conduction and participation in prestigious cultural and sports events.
- 2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. Who may discontinue their studies if some sort of support is not provided)?

We have the mechanism through Management Information System to collect, analyze and use the data/ information on the academic performance of the students. With this, we are in a position to consolidate all the information and identify the slow learners and the advanced learners. We arrange special / remedial classes to the students who are at the risk of dropout irrespective of students from the disadvantaged sections of society, physically challenged, economically weaker sections etc. A Teacher Mentor is assigned to a group of 20 students for regular guidance regarding academic progress and other issues, if any.

### 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, evaluation blue print, etc.)
  - Teaching, learning and evaluation schedules are planned and organized through the following mechanisms –
  - 1. Academic calendar is prepared for every academic year before the commencement of semester which includes schedule of curriculum, co-curricular and extracurricular activities to be carried out during the semester year. Since the college activities are dependent on University examination programme, the academic calendar of the University is referred for preparing academic calendar of the department.
  - 2. The university curriculum is followed which is designed by the Board of Studies (BoS) of faculty of engg. The BOS involves experienced senior faculty members in curriculum design and also organizes training for all its teachers. Majority of the faculty members of our college are involved in syllabus framing, few being chairman and others contributing as team members. Whenever, the syllabus is revised, training workshops for teachers are organized and our college staff members have worked as resource persons in all these workshops.

### 3. Class room teaching and Laboratory Teaching Plan

Teaching plan is prepared as per the syllabus specified and also includes extra lectures if required. It also includes plan for covering content beyond syllabus / addressing gaps. Both laboratory and teaching plan are made available to the students on department intranet. Schedule of Laboratory experiments is prepared considering the time required for implementing the assignments. The details of experiments are covered in lab manuals.

**4.** Faculty members prepare **detailed course file and laboratory manual** at the beginning of each semester.

Course file includes following details

- Course Objective & Course Outcomes.
- University syllabus structure and copy of university syllabus.
- Teaching plan and lab plan.
- Copy of academic calendar.
- Vision and Mission of the department.
- POs and PSOs.
- The COs and their mapping with POs and PSOs.
- Identified gaps in the syllabus and action plan to bridge the gaps, if any.
- Individual time table.

- Course file also includes mid semester exam question paper and result, university question papers and solutions, university result of the course and its analysis, question bank, class test record with marks obtained, tutorial record.
- List of academically weak and bright students.
- List of additional assignments apart from university syllabus.
- Record of progressive assessment of term work and internal assessment are maintained through MIS and are made available to students on MIS.
- Proof of Collaborative Learning i.e. Students and faculty members participate in different collaborative initiatives like Soft Skill development courses, Online courses Webinars, NPTEL etc.
- Result analysis of previous year.
- **5.** At the end of the course, the **attainment level** of each course is calculated based on the student's performance and feedback.
- 6. The **laboratory courses** are conducted by the faculty members with the support from Laboratory support staff. In the beginning of every semester, the list of experiments is prepared which includes experiments prescribed in the syllabus along with additional experiments to be carried out. Laboratory manual is made available on intranet. The Laboratory equipment is upgraded on regular basis to meet the requirements of curriculum. A maximum batch size is 15 to 20 students so that each student gets sufficient hands on experience. Progressive assessment for the laboratory courses which have term work is implemented so that the students work throughout the semester.
- 7. The faculty **uploads course material** on intranet and the students are encouraged to use it in order to increase student-teacher interaction. The course material on intranet includes teaching plan, lab assignments and schedule of conduction, lecture notes, sample questions, assignments etc. All the classrooms have LCD projectors and internet connectivity. The faculty makes use of these modern ICT tools effectively.
- 8. The evaluation of students is done through the examinations conducted by the University which sets the question papers and does the assessment also. With revised syllabus, the assessment of students is done through two examinations viz. online or in-semester examination conducted in the middle of the semester and end-semester examination. A Practical/Oral examination is conducted by the examiners deputed by university in which an external examiner assesses performance of students along with internal examiner.

Along with university examination following evaluation methods are carried out by the departments.

- **Mid Term and End Term tests**: Regular unit wise midterm and end term class tests are planned and carried out for all the students. It helps the students as mock of end semester university examinations.
- **Mock practical and oral examination**: To train students with real time external examination conducted by University, a mock session is carried out for subjects to improve the performance and hence results.
- **Home assignments**: Regular assignments are given to monitor the understanding of content delivery.
- **Project presentation and evaluation schedule**: Committee is constituted to evaluate the project performance of students in completing their project work time to time and to avoid difficulties if any.
- **Mock on-line examinations**: To enable the students with realistic environment of university web based digital online examination, respective internal online mock examinations are planned and conducted.
- **9.** Students get an opportunity to present and share their technical knowledge in the department in the form of seminars, they are made to refer to quality journal papers and also departments arrange expert talks on domains to select their topic. Students get an opportunity to give power point presentation in front of other students and panel of faculty members.
- **10.** Students are encouraged to **participate in conferences**, various competitions at different level. College is providing financial assistance for these activities. Students are encouraged to explore different mini projects as a part of innovative thinking and research
- 11. Student feedback plays a vital role in improving the quality of teaching learning process. A feedback of each course is taken in the middle of the semester to find the difficulties faced by the students and corrective measures like extra sessions for weak students are taken. A final feedback at the end of semester is taken to assess the learning outcomes of the course
- **12. Teacher mentor** is appointed for a batch of 15 to 20 students and periodic student-mentor interaction takes place once in a month. Mentor addresses all the issues and with the help of head of the department obtains the solutions for different issues raised during the discussion.
- **13. Continuous learning through FDP**, workshops, seminars, guest lectures by the faculty members to enhance and update the knowledge of course to deliver the content more effectively to the students.
- **14. Appreciation of bright students** is done by facilitation, providing book bank facility, scholarships by funding for participation in conference.
- **15. Slow learners** are motivated to perform better by continues guidance by faculty members.

### Processes to improve quality of Laboratory Teaching Learning are depicted in following figure

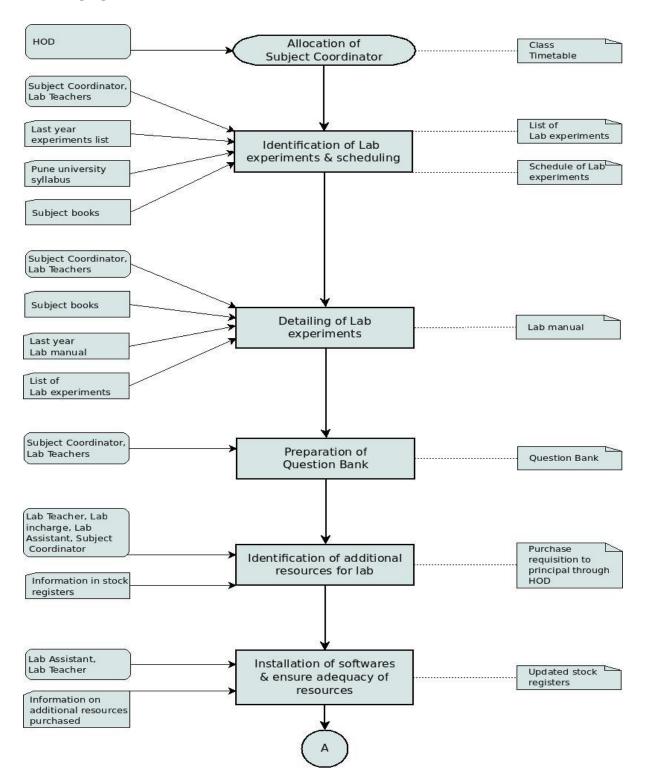


Fig: Processes to improve quality of Laboratory Teaching & Learning

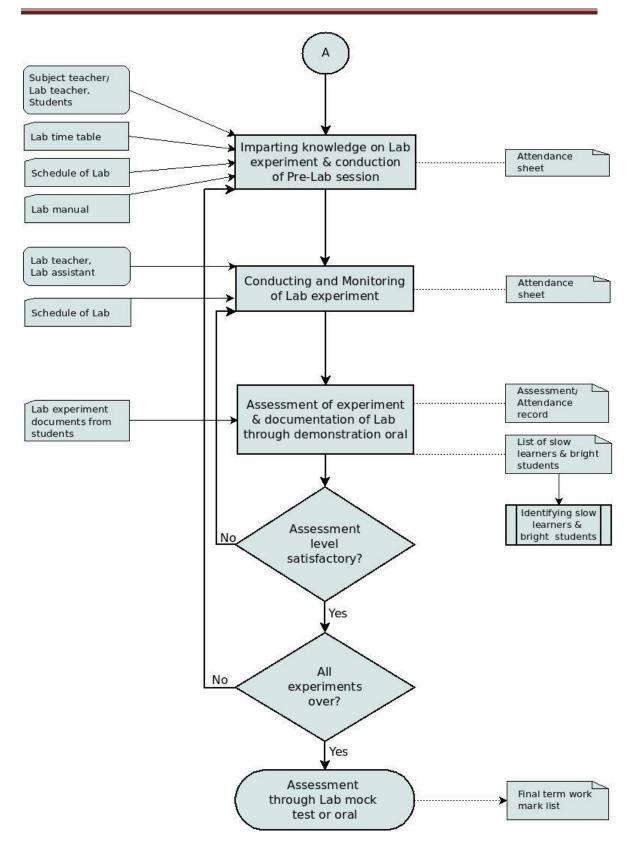


Fig: Processes to improve quality of Laboratory Teaching & Learning

### Processes to improve quality of Classroom Teaching Learning is depicted in following figure

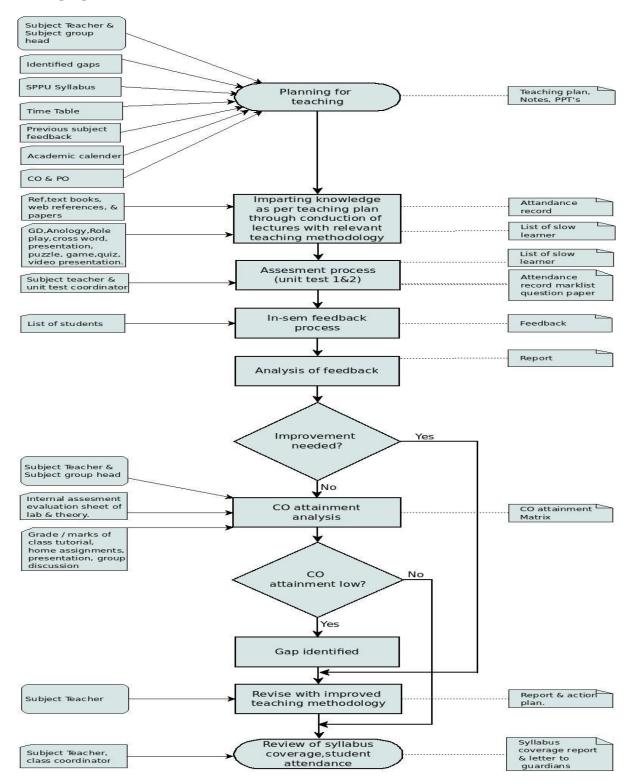


Fig: Quality-improvement-process-of-classroom teaching learning.

### Process for identifying bright & slow learner students is depicted in following figure

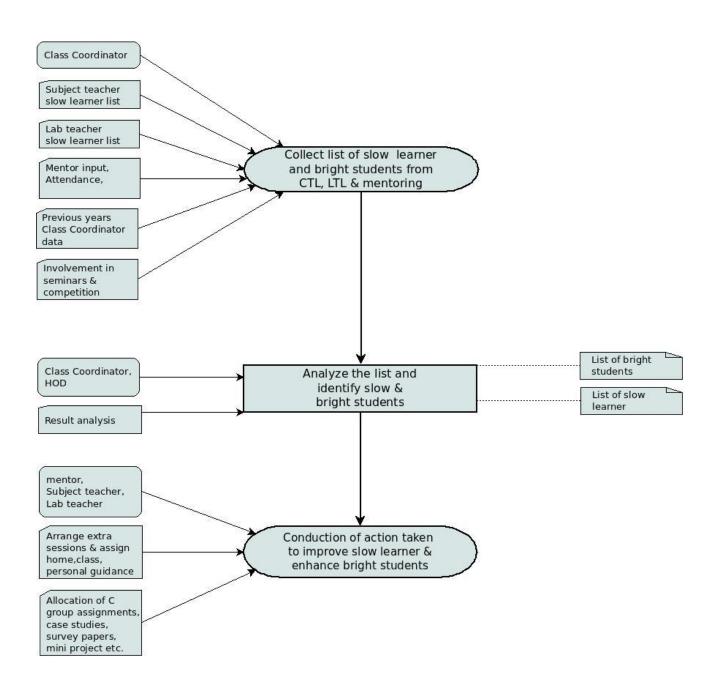


Fig: Process for identifying bright & slow learner students

### Process for quality improvement through feedback is depicted in following figure

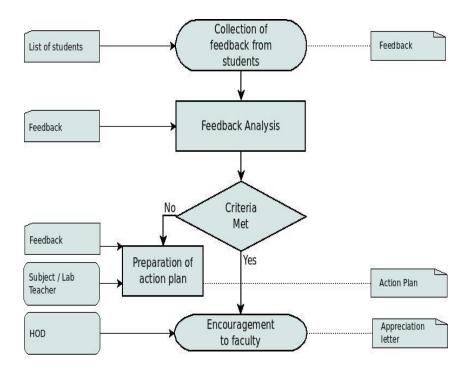


Fig: Feedback process for quality improvement

### 2.3.2 How does IQAC contribute to improve the teaching –learning process?

- The flow chart shown in following demonstrates the contribution of IQAC / Academic Audit Committee (AAC) under ISO in teaching-learning improvement. The college has its own IQAC / AAC committee to monitor the quality of teaching -learning process.
- Teaching learning process improvement took place due to following measures taken by AAC at institutional as well as departmental level,
  - o Critical course planning and course file preparation
  - Student feedback and analysis
  - o Information / conveying feedback to faculty and suggestions for improvement
  - o Verification of improvement in next iteration
  - o Motivation to faculty for skill up gradation, qualification improvements, etc. so that faculty skill-set will get enhance
  - o Comparison of the students' exam results of other institutes under SPPU.

The functioning of AAC pertaining to academic monitoring and execution is shown in figure

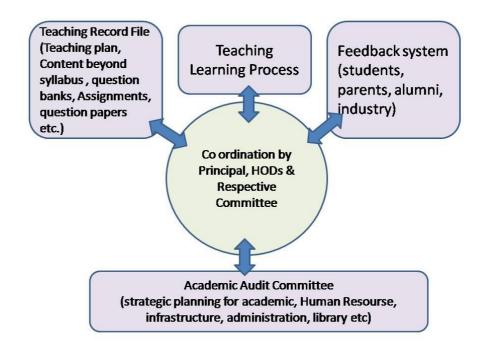


Fig: Functioning of AAC for academic execution and monitoring

The IQAC analyzes the performance of the institute with parameters in terms of:

- **Teaching and learning**: Faculty, students, teaching methodologies used
- Administrative systems: Supporting staff performance, implementation of policies
- **Documentation process with respect to**: Management strategies, budget allocation/utilization and requirement of additional infrastructure
- The IQAC does analysis on these parameters consistently and suggests remedial actions for ensuring timely, efficient and progressive performances in academics, administration and development of facilities in the institute.
- 2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

Faculty and students are motivated through various activities in teaching-learning process. The following measures and remedies are applied to enhance student centric learning—

- Video clips(NPTEL), snap shots, PPTs for practical /theory
- Tutorials
- Home assignments, on-line mock tests etc. for more practices
- Collaboration with industries through MoUs to boost practical hands-on and projects
- Wi-Fi set up, internet to each faculty for fast access
- Well-equipped seminar halls for interactive learning environment
- Floating funded research projects received from AICTE, University to faculty and students to fulfil their demands of funds for good experimentation
- Collaboration with professional bodies like IEEE, ACM,CSI etc. to get students and teachers at esteem global platform
- Collaborative learning of faculty for better student centric learning process through Mission-10x with Wipro
- Organization of seminars, workshops, certification course for interactive and student centric learning.
- Guest lectures by experts from the industry and add-on courses are organized by the respective departments, to cover content beyond syllabus.
- In addition to Teaching Learning Process following activities are helping the students in acquiring state-of-the-art knowledge in engineering education:
- Industrial visits and technical courses are arranged throughout the year to give hands-on experience to students.
- The institute library is well equipped with technical magazines, journals, and NPTEL video lectures.
- MoU are signed with leading industries to bridge the gap in the curriculum.

### 2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

The Institute motivates, nurtures, scientific temper, critical thinking and creativity for the transformation into life-long learning through the following activities -

- Organization of National and International conferences/workshops to share innovative ideas
- Scheduling project, mini project competitions to explore technical skills
- Annual national level technical event "Impetus & Concepts" to encourage new technical and scientific concepts.
- Organization of tool based workshops, hands on training for exposure to latest technologies
- Publication of departmental newsletters to disseminate new ideas and innovations
- Annual Publication of Institute magazine "Pictorial"

- Providing Internship program for students at industries
- Incubation center and industry-sponsorship to the students for projects
- Faculty encourages the students to participate in different technical paper writing and poster competitions organized by various reputed institutes like IITs, COEP etc.
- Awareness seminars are organized in the institute for building entrepreneurship skills among the students.
- Students who are interested in R&D work are continuously motivated and encouraged to present their project/research work in different national/international project competitions/seminars/conferences/workshops and publish their work in national/international journals and conference proceedings.
- Industrial training is imparted to students and they are prepared to undertake industrial problems as a part of their final year projects.
- Impetus and Concepts (INC): Impetus and Concepts popularly known as INC, is co-curricular activity organized by the students. It is a 3-day national level technical fest consisting of six different events namely-Cocepts, Pradnya, Pratibha, Swayantra, Tantra and Cisco-Net.

  Impetus is intra college project competition and concept is intercollegiate national level competition. This event is one of the largest technical events in the country with the prize money of over 7 lakhs, and a footfall of over 30,000+, this event encompasses one and all. There were nearly 2400+ odd student participants from 150+ engineering colleges from inside and outside Maharashtra. Concepts have been attracting corporate giants for not only sponsorship but also in terms of time and guidance to the office bearers. Industries such as S1, Tibco, Calsoft, Persistent, Pubmatic, Campus Components, Pune Diary, IBM, Airtight, Wikipedia, etc were closely associated with this event
- **PICT IEEE Student Branch** (**PISB**):In 1988, IEEE granted membership to PICT and since then various college activities have been conducted under the membership of IEEE. These college activities are organized and volunteered by a group of people with unimaginable gusto and sheer perseverance. Highlights of PISB are:
  - Credenz: Credenz is a national level technical event organized by PISB every year which provides platform to the engineering students to showcase their technical skills and talents. Also a series of seminars on trending topics are arranged from the industrialists.
  - Special Interest Groups (SIG): PISB is using this venture to cultivate
    the habit of having a practical and analytical approach to learning
    various subjects. Here, the students get a hands-on experience of
    coding and electronics.
  - QUIZ: An amalgamation of technical and general knowledge quiz

- presented by the PISB team, it is one that had seasoned quizzers go dumbfound.
- UNRAVEL: Unravel is the campus wide scavenger hunt, conducted within the PICT campus. It is an offline treasure hunt which had students from all classes FE to BE running around searching for clues and trying to crack the codes.
- Network Treasure Hunt (NTH): Network Treasure Hunt, the tagline says 'Decrypt the encrypted', and correctly so. NTH is an online treasure hunt created by the PISB team.
- Ideate: A business event introduced by the PISB team, Ideate is an event to develop a habit of analytical thinking among the students. The students get a perfect platform to try out their entrepreneurship skills and to showcase their talent in front of reputed cognoscenti.
- National Computing Contest (NCC): In keeping up the tradition of bringing the best coders of the city under one roof, PISB organizes National Computing Contest. The competition comprises of several algorithmic problems of varying difficulty, which are to be solved by the participants in C/C<sup>++</sup>.
- XODIA: XODIA, a battle of algorithms, is a unique combat against your fellow mates, where it is your algorithm that competes for triumph.
- IEEE Women in Engineering Affinity Group: Women in engineering, a sister affiliation group was started under PISB with a motive of collaborating all student branches in Pune and work together. A social edge was introduced through PISB through its new activity called "PUNE NERDS" and Personality development Workshop under the WIE chapter of PISB.
- PICT IEEE Newsletter Group (P.I.N.G.): P.I.N.G. is a technical newsletter which is published twice in a year mainly in September and February. PING 12.1 released during Credenz'16 which was scheduled between 9 September and 11 September, 2016.
- All India Computer Society Student Congress (AICSSC): PISB hoisted the 3<sup>rd</sup> All India Computer Society Student Congress collaterally with INDICON- 14, IEEE's most awaited event in India. AICSSC'14 witnessed the participation of four sections, namely the Kerala section, the Bombay section, the Madras section and the Gujarat section
- **PICT IET Student Chapter (PISC):** Since its inception in 2012, the PICT IET Student Chapter has always aimed at preparing students and providing them with that extra edge for success in the professional world they step in to. PISC has now become the largest student chapter in the state and the second largest in India. The various events organized under PISC are:

- a) SCIENTIA: It is a flagship event of PISC. Various competitions, seminars, workshops etc. are organized during this event every academic year.
- b)ePICtomize: It is annual technical magazine launched by PISC. The magazine contains articles on various topics ranging from science, technology and entertainment to sports and video games. PISC has also launched the e-copy of the magazine on various platforms.
- c) Energy Audit: PISC organized an Energy Audit in PICT to help students to use their technical knowledge in practical situations.
- d) Apart from these events, PISC also conducted workshops on GATE, GRE, and Personality Development etc.
- e) PISC also organizes fun trip to give students a break from their daily routine. PISC is a buzz with events held all around the year and is always open to creative and enthusiastic minds.

#### • PICT ACM Student Chapter (PASC):

The PICT ACM Student Chapter was established in March, 2012 with a goal to provide students a better exposure to ideas, knowledge, experience and trends in computing. The chapter aims at creating interest among the students in computer science apart from what they learn during the course of the syllabus. The chapter organizes seminars and workshops on different domains by speakers who are well known in their area, which give students opportunities to learn about advanced research subjects. The chapter activities include events, seminars, competitions, academia-industry initiatives and various ventures to promote knowledge sharing and innovation.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning-resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

The Institute has enough internal facilities for improvement in effective teaching. The prominent technologies and facilities available are –

- NPTEL courses
- Technical videos from YouTube
- Course materials from IIT websites
- Industry supported labs such as NVIDIA ,SAS Lab., Wipro etc
- IUCEE webinar series

Following table describe various technologies/facilities available in the institute

Sr	Facility	Reason(s) for			
No	Name	creating facility	Utilization		
1	GPU Education Center Lab	students can get first-hand experience in areas ranging from High Performance Computing, Scale programming, R programming	Few assignment from TE (PL-III) based on CUDA like,  A) A Parallel quick sort algorithm B) A Parallel odd-even sort algorithm C) N x N matrix parallel multiplication D) Distributed matrix Few group of BE projects are working on CUDA technology.  Total utilization is 40 Hrs.		
2	FTP	To understand OSI model which consist Data, Segment, Transport layer, End-to End connections and Reliability	The purpose of FTP is centralized FOSS, lab Manuals, Assignment list, Lab Schedules and departmental data, is centrally accessible to staff and students during college hours		
3	SAS Centre of excellence	To learn SAS language to implement new ideas in various domains	Useful to test concepts / build proof of concepts which could be extended to projects / dissertation.  Provide hands on experience, to students, of platform being used in industry today.		
4	PSL	Centre of excellence	B.E. Project		
5	Blogs	Innovative teaching	To make available online study material		
6	R&D Centre		Research and development		
7	Lab access beyond working hours	Student can work beyond working hours	ME, PhD		
8	Software Testing Lab	Modern Facilities for Students	Latest Tools for Software testing -Mini-project development with team		

# 2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?

Students and faculties exposed to advanced level of knowledge and skills by various means such as workshops and seminars on advanced topics, alumni interaction, industry interactions, technical paper and poster presentations at conferences, research interactions and project design etc.

The advanced level exposure is achieved by -

- Expert lectures by eminent personnel
- Workshops and seminars conducted
- Skill development programs for faculty and students
- Industrial training to faculty and students
- Faculty Development Program (FDP), Staff Development Program(SDP)
- Industrial visits
- Industry sponsored Research lab
- Events under Professional bodies like IEEE, ACM, IET etc.
- Events under Students welfare
- Industry sponsored/associated student projects
- Funded research projects to faculty

#### **Students:**

- The institute organizes various technical competitions such as project competitions, quiz competitions, paper and poster presentation competitions etc.
- The institute promotes students to participate in National/International competitions.
- Eminent speakers invited from the industry to deliver lectures to expose the students to the current developments in the corporate world.
- The faculty encourages students to undertake projects on advanced technologies, industry sponsored projects and R&D projects.

#### **Faculty:**

- The institute promotes the faculty to participate in different technical conferences/ workshops at State, National, and International levels.
- The institute provides faculty the latest available technical information through memberships of reputed journals like Science Direct, ACM, IEEE.
- The institute organizes different FDPs in collaboration with well-known industry.
- 2.3.7 Detail (process and the number of students benefitted) on the academic, personal and psycho-social support and guidance services

### (professional counselling / mentoring / academic advice) provided to students?

The following processes / schemes are executed to support students in academic, personal and psycho-social way -

- Teacher mentor is appointed for a batch of 15 to 20 students and periodic student-mentor interaction takes place twice in a semester.
   Mentor addresses all the issues and with the help of head of the department obtains the solutions for different issues raised during the discussion.
- Continuous learning through FDP, workshops, seminars, guest lectures by the faculty members to enhance and update the knowledge of course to deliver the content more effectively to the students
- Academic advice and counselling in extra hours/remedial classes
- Mentoring and counselling by faculty
- Remedial and revision classes conducted for academically weak students.
- Resolution of complaints and support by Grievances cell, Woman grievance cell for sexual harassment, anti-ragging cell and community development program
- National Service Scheme (NSS)activities
- Earn and Learn Scheme for the needy and economically disadvantaged students
- Regular visit of doctor for counselling of needy students

# 2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faulty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

• Faculties are provided with financial assistance and motivation to upgrade their skills and state of the art technology. Rewards in terms of appreciation are made by the institution.

Following activities are conducted by the Faculty in Teaching and Learning.

- Presentation
- Animations
- Technical Quiz
- Games
- NPTEL Video Lectures from IIT/IISC Experts
- Wipro Mission 10 X Activities: Teaching learning by VARK tool
- Blogs

Following methods are adopted to improve and maintain learning environment amongst the students-

- For Skill improvement staff is enrolled and certified for online certification courses like NPTEL for Machine Learning., C++, C, Python, etc.
- Continuous evaluation methods:
  - Tests, re-tests and Prelims examinations
  - Continuous evaluation of practical's and mock practical examinations
  - Continuous Projects evaluations by expert committees and maintenance of project workbooks.
- Arranging Seminars, Workshop, Conferences, Students Training Programs (STP), activities and hands on session by eminent personalities from industry and reputed academic organizations
- Training to faculty through workshops, FDP, STP has enriched performance in teaching. This has strengthened the teaching-learning process. Usage of LCD projector, PPT, Animations, Quiz, Video, Realapplication co-relation, Case studies etc. has made the lectures more interesting, interactive, attentive and hence effective.
- Industrial visits to cater real-time applications
- Impacts of innovative practices-
  - Teaching learning process gets strengthened.
  - Increases the visualization power to solve engineering problems.
  - Train them to work in a team to solve given case studies.
  - Hands-on to explore the capabilities to solve real time society problems

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

- Up gradation in books and e-resources are made regularly and faculty are involved in the process.
- Faculty refers the library resources like educational CDs, reference books, text books, Research Journals/Transactions, Various technical magazines, Proceedings for various international/national conferences for development of study material, projects and seminars.
- The Library is housed at the ground floor of the Block B001 of the College Building. The open atmosphere and greenery opposite to library helps to add natural aesthetics. It is well equipped and suitably furnished. This offers comfort and relaxation while using the library. It follows open access system. The Library uses Dewey Decimal Classification scheme, an internationally accepted codes for locating and searching books in the library. Print as well as E-Resources required for under-graduate, post graduate engineering as well as for professionals and scholarly researchers are available in the Library.
- **Digital Library** PICT Digital Library is separately located on the mezzanine

floor of the Central Library. Its contents can be accessed throughout the campus.

#### • Accessibility to students

- Location: Central Library is located centrally on the ground floor which is very convenient to all students as well as faculty
- Timing: Library works for 12 hours since last many years. During examination period it works on weekly off. Also Reading Hall of the library is being kept open for 16 to 18 hours. These timings are very convenient to all students as they can avail the library facilities after the college timing.
- Arrangement of books: Books are arranged subject-wise as per internationally accepted classification system i.e. Dewey Decimal Classification. 'Book Location Chart' has been displayed at the entrance of each row of the book-shelves. This chart includes Classification number, Rack number and the subject. Through this system students can easily & exactly find the location of the book.
- OPAC (Online Public Access Catalogue): Students can easily find the status of the book through OPAC.
- Student participation in book/journal/ newspaper procurement: Any student can give requisition for a book, journal, newspaper, etc. which are not available in the library and required for their study purpose, for paper presentation, for project work, for competitive exams, etc.
- Requisition/Demand Slips: If the required book is issued by someone else, there is a provision to reserve the book. Students can reserve the book by giving the Requisition/Demand Slip to the library.
- New Arrival: Newly arrived books and journals are displayed regularly in the library. Also the list of the same is being sent to all HODs and is available in PICT Digital Campus.
- Toppers: Five extra books of student choice are being issued to first three toppers of each branch and year for a semester.
- Book Bank: This facility is made available through department and Central Library.
- Reading Hall: Easy access to Reading Hall as is very near to Central Library.
- Access to E-resources: Access to E-resources are IP based and it can be
  accessed from anywhere within the campus. But for the convenience of
  the students 12 multimedia computers have been kept in the Digital
  Library. Because of multimedia computers, video lectures e.g. NPTEL
  can be viewed effectively. Students can take the benefit of this facility
  after the library working hours also.
- SAN (Storage Area Network): Video lectures, project reports, question papers, syllabus, etc. are available on SAN which can also be accessed anywhere within the campus

- Wi-Fi connectivity: The facility of Wi-Fi is available in the Reading Hall.
- Effective use of E-Resources: For PG students' hands-on training on effective utilization of e-resources is being arranged every year along with the general orientation program of the library.
- Library Orientation: Library Orientation is being arranged every year for all new comers. The orientation program includes the information regarding various sections of the library, learning resources (Print, Digital, Online, etc.), procedure of finding the book as well as issuing the book, library timings, services and facilities, etc.

Following table makes it clear that procured resources were used effectively by the users.

#### **Books Transaction Usage**

Year	Total Transaction	Average Transaction Per day
April 2015- March 2016	74647	279
April 2014-March 2015	61733	220
April 2013-March 2014	78180	262

#### **E-Journals Usage:**

Sr. No.	E-Journal Package	No. of Journals	Usage Total No. Of Full Text Downloads	
1.	IEEE	174 + 6 lacks Conference Papers	10651 (Jan-Aug 2016)	
2.	Elsevier-Science Direct	276	52521 (Jan-Aug2016)	
3.	Springer	149	730 (Jan-Aug2016)	
4.	McGraw-Hill's Access Engineering	380 eBooks	238 (Jan-Aug2016)	
5 J-Gate		4532	7722 (Jan-Aug2016)	

Support to students for self-learning activities

- Internet Access to E-Journals and E-Books
- Online Access to British Library (E-Journals- 7,000,E-Books-1,20,000)

- NPTEL Video Lectures
- Wi-Fi access
- Separate seating arrangement for Group Study
- Separate seating arrangement PG students.

**Internet:** PICT network connects to a fabric of other national research and education networks with fiber backbone to internet service provider. It consists of more than 20 km of structured cabling. Department level connectivity is on fiber of 1 GB speed. More than 60 manageable switches connect around 1200+ workstation/nodes in campus ensuring local connectivity of each machine at 155 Mb/1GB speed. PICT is having one Central-Administration-Server-Room with backup of 1 hour for its undisturbed campus connectivity.

The ways by which library resources foster teaching learning process are-

- Procurement of library books as per the suggestions and recommendations by faculty
- Subscriptions of hard copy journals
- E-resources
- Provision of book-bank to the needy students
- Availability of library reading room for 24 hours with in the exam period
- Issue and Return of books from 8.00 am to 7.00 pm daily
- Departments have its own departmental library for easy and immediate access of books
- Easy access to existing project reports through departmental library
- Easy books availability status of library through "OPAC" for students and Faculty
- Educational CDs/DVDs
- Books and magazines on recent trends in socio and economic issues and general knowledge

# 2.3.10 Does the institution face any challenges in completing the curriculum within the planned timeframe and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.

- The teaching learning process of University requires the completion of two units before every online / In-Sem examination. To cope up with this time limit, faculty and departments takes a regular review and the steps are taken to complete the syllabi.
- Following special efforts are made for smooth conduction of academics in case of directly admitted SE students.
  - o Help desk is made available for counselling.
  - o Separate dedicated time table is executed to complete the syllabi.
  - Online and mock exams are conducted separately as per university schedule

- While excelling technically, sometimes the conventional number of hours allotted for teaching learning fall short. To cope up with this scenario, all the programs of the institute apply following measures-
- Remedial classes
- Availability of laboratories beyond working hours
- Conducting extra classes / practical on Sundays / holiday if required

### 2.3.11 How does the institute monitor and evaluate the quality of teaching learning?

- The departmental quality assurance committee is responsible to monitor day to day academic calendar. Result analysis of every subject is made and compared with their target value. Measures are taken to minimize the error between actual and targeted results.
- Quality of teaching learning is monitored, evaluated and maintained at department level, institute level as well as society level. Following processes are carried out to ensure the quality—
  - Institute level Academic Audit Committee(AAC)
  - Online feedback in between semester from students
  - Evaluation of feedback and counselling to faculty by Head/Principal/AAC
  - Setting of department result thresholds in correlation with university results.
  - Motivation and appreciation of well performing faculty
  - Analysis and remedies based on class tests, prelim and end semester results
  - Monitoring and corrective measures taken by departmental AAC committee
  - Course file of individual faculty containing study material, assignments, question bank, previous question papers etc. is evaluated by head of department

#### 2.4 Teacher Quality

2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum

Highest	Prof	essor	Asso	ciate	Assis	tant	
qualification			Professor		Professor/		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.	9	0	3	4	2	0	18
M.Phil.					0	1	01
PG			0	1	38	28	67
UG					0	1	01
Temporary teachers	Temporary teachers						
Ph.D.			2				02
M.Phil.							
PG					55	30	85
Part-time teachers							
Ph.D.							
M.Phil.							
PG							
UG							

• Well before the commencement of the term, Principal takes review of all the requirements including human resources. If there is any requirement of staff, necessary measures (like advertisement, Interviews, selection, appointment etc.) are taken immediately to ensure that at any given time the required number staff members (teaching as well as non-teaching) are present on roll as per the roster. Also, we ensure that all the faculty members have approval from the affiliating university. Measure are also taken to retain the staff. The staff members are also encouraged to complete their Ph.D. by deputing them to reputed Research Institute. They are also encouraged to attend faculty development programmes, seminars, workshops, short term courses, conference etc. Above table shows the faculty on roll till March 2017.

# 2.4.2 How does the institution cope with the growing demand / scarcity of Qualified senior faculty to teach new programmes / modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

The growing demand/ scarcity of qualified senior faculty has become a universal problem and our institute is no exception. However, the Institution has taken many pro-active measures to overcome this problem. Many of our faculty members are deputed for Higher Education and they are also encouraged to attend the faculty development programs, short term courses, workshops so that they can teach new programmes/ modern—areas. Our Institute is unique in deputing the teachers to industries on sabbatical leave of 3 to 6 months to learn industry practices and capability to develop products. It

is mandatory for every teacher to arrange guest lecture inviting expert from premier research institution/academia/industry to cover emerging areas related to the subject taught. In last three years 10 faculty members have completed their Ph.D. and 30 faculty members are pursuing their Ph.D.

## 2.4.3. Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.

The following strategies are adopted by the institution in enhancing the teacher quality

- The teachers are encouraged to improve their quality / qualification by sponsoring them to pursue higher studies.
- At the entry level, a rigorous selection process is followed to ensure that the teachers selected have in-depth subject knowledge, good communication skills, good team work.
- The teachers are encouraged to attend faculty development programs, short term courses, workshops by sponsoring registration fees, Leave, T.A./D.A.
- The teachers are provided access to national and international journals and conference papers so that they can update their knowledge on current trends and breakthroughs.
- Through the digital library (supported by storage area network-12TB) the teachers and students are provided access to video lectures (particularly, NPTEL), course materials

# 2.4.4. What policies /systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)

The following policies/systems are in place to recharge teachers:

- Research Grant: In the Institute budget Rs.50 lakhs is allocated for (i) modernization / development of laboratories; (ii) carrying out research activity resulting in product development; (iii) extension of sponsored research projects; (iv)product development, and (v) any other value addition.
- Sabbatical Leave: The teachers are deputed to premier research centers / industries on paid leave of 3 to 6 months.
- Study Leave: The teachers are provided with study leave (paid) to pursue their higher studies.
- Publications: The teachers are encouraged to present/publish their research work in the international conferences by providing financial

- support to the tune of 1 lakh. They are also encouraged to publish their papers in national/international journals.
- The teachers are also encouraged to get learning /research experience in national institutes under national fellowship programme. The efforts are being made to send teachers abroad for PhD.
- Efforts are being made to have joint research projects with institutions in India & abroad.
- 2.4.5 Give the number of faculty who received awards/recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance / achievement of the faculty.
  - The Institute always inculcate the culture of applying for research funds in the technical growth by interaction with industries.
  - Since the institution has excellent work ambience, research culture, large number of post graduate and Ph. D. programs, perks offered etc.; faculty members received awards / recognition at the state, national and international level for excellence in teaching.
  - Total number of recognitions and awards received in last four years is more than 15.

# 2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Yes, evaluation of the teachers by the students is made through the feedback. Analysis of the feedback is conveyed to teachers for further improvement.

- Institution has well set process of evaluation of teachers through-
  - Students feedbacks
  - o Parents feed backs
  - Industry personnel feedbacks
  - o The student's feedback is taken twice in a semester. Central Academic Monitoring Committee (AMC), Principal, Heads of the Department take review of the evaluations done by the students. If certain shortfalls are found, such faculty is made aware of it.

Following remedies are applied for improvement in the teacher's performance-

- o Provision of portable public address system for low voice problems
- o Sponsorship to attend communication skill programs
- o Organization of faculty seminars in front of peer-colleagues

#### 2.5 Evaluation Process and Reforms

2.5.1. How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?

- Students and parents are made aware of the evaluation process through the induction program conducted at start of college at institute and department level.
- At the commencement of the semester, students are notified about the criteria for evaluation of term work in the respective labs and lectures.
- Stakeholders of the institution are informed about the evaluation process in the parents meetings conducted.
- The Institute notifies the students and faculties regarding schedule and structure of internal and SPPU evaluation system through the college and department notice board.
- Class teachers, seminar and project guides, subject teachers and mentors inform students about evaluation process and term work assessment.
- The industry is informed about the evaluation processes at the time of Training & Placement activities.

## 2.5.2. What are the major evaluation reforms of the University that the institution has adopted and what are the reforms initiated by the institution on its own?

- Following major evaluation reforms of the University are adopted by the institution—
  - Appointment of College Examination Officer(CEO)
  - Online examinations for first and second year
  - In-Semester examinations for third and fourth year
  - Official University conference and project exhibition for PG and Ph.D students
  - The marks of term work, practical/oral examination are submitted online to the University.
  - College has adopted credit system for post graduate courses as per the SPPU guidelines.
  - Seminars for UG and PG are conducted and evaluated as per the SPPU guidelines
  - Project exams for UG and PG are conducted and evaluated as per SPPU guidelines
  - Majority of the academic activities such as appointment of teachers for examinations, paper setting, paper evaluation, marks filling are operated online.
- Following major evaluation reforms are initiated by the institution on its own-
  - Internal class unit tests.
  - Class tutorials and home assignments
  - Continuous assessment of laboratory assignments
  - Mock oral and practical examinations

- Mini project competition-evaluation
- BE project reviews twice per semester.
- Soft skills activities such as presentations, group discussions, training sessions are conducted to evaluate the performance of the students.
- Final year UG and PG project mock presentation and evaluation
- Project competition and evaluation

### 2.5.3. How does the institution ensure effective implementation of the evaluation reforms of the University and those initiated by the institution on its own?

Effective implementation of the evaluation reforms of the University

- The Institute strictly follows the guidelines given by the SPPU for the conduction of all the examinations and evaluation process.
- The Institute installed of CCTV cameras for monitoring of online examinations
- The institute conducts all the examinations as per the SPPU schedule.
- The institute appoints College Examination Officer(CEO) as per SPPU guidelines
- The institute appoints Senior and Junior Supervisors as per SPPU guidelines
- The institute has adequate infrastructure for the smooth conduction of SPPU exams
- The examination conduction is effectively monitored as guided by University.
- Results of online and In-sem examinations are declared as per the instructions given by SPPU
- Final year term work is jointly evaluated by internal and external examiners.
- Evaluation sheets for UG/PG seminars are maintained with seminar coordinators
- Evaluation sheets for UG/PG projects are maintained by Project coordinator
- The term work marks, practical/oral examination marks are submitted online to the University by using a unique username and password.

The Principal, CEO, HOD and examination coordinator of departments make Sure of

- Completion of term work
- Conduction of practical and theory examinations,
- Submission of term work marks based on continuous evaluation scheme Assessment of in semester examination answer sheets

- Conduction of online and theory examinations
- SPPU exam supervision duties
- Teachers' contribution for assessment of answer sheets at CAP centers

### Effective implementation of the evaluation reforms initiated by the institute

- Display of Unit test Time table on notice board.
- Unit test mark sheets are maintained by Unit test coordinator.
- Evaluation of Class tutorials and home assignments
- Continuous assessment of laboratory assignments records are maintained.
- Mock oral and practical examinations evaluation records are maintained by subject coordinators
- Project competition-evaluation records maintained
- UG/PG project reviews twice per semester evaluation sheets submission to project coordinator
- PG seminars are evaluated as per the SPPU guidelines and records are maintained
- Report of Soft skills activities such as presentations, group discussions, training sessions are conducted to evaluate the performance of the students is maintained

## 2.5.4. Provide details on the formative and summative evaluation approaches adapted to measure student achievement. Cite a few examples which have positively impacted the system.

Formative Evaluation Approaches

The institute uses various approaches for formative evaluation throughout the semester as follows:

- 1. Continuous assessment of practical assignments in the labs
- 2. Performance in two unit tests
- 3. Assessment through assignments given by subject teachers
- 4. Assessment through presentations given in the class
- 5. performance in mini project, project, seminar work
- 6. Attendance in the theory and practical sessions
- 7. Performance in mock test/oral exams in the labs

#### Summative Evaluation Approaches

Summative assessment is carried out mid and at end of semester at institute and university level.

#### **Institute Level Summative Evaluation**

End semester mock test/oral exams.

Project demonstration (BE).

Seminar delivered (TE).

#### **University Level Summative Evaluation**

Written theory examination

Practical/Oral examination

Project work

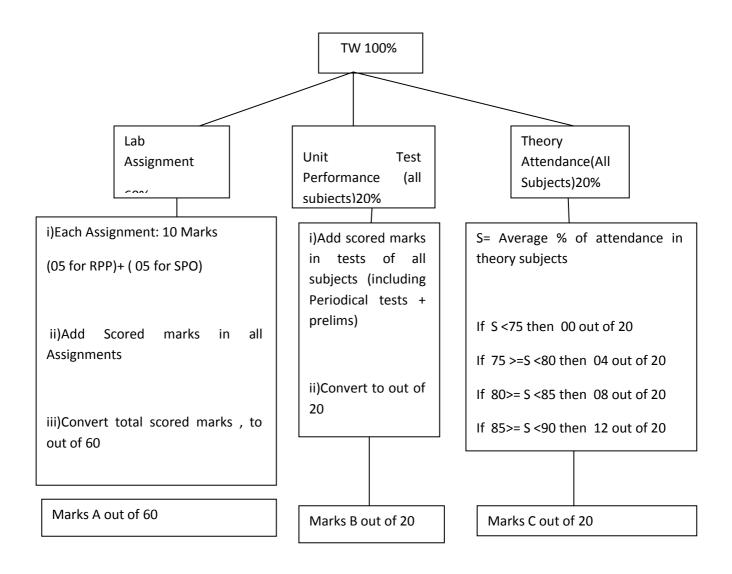
Online Examinations and In-Semester examination

2.5.5. Details on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioural aspects, independent learning, communication skills etc.)

The institute maintains transparency in internal assessment of students by rigorously following the practices mentioned below:

- The attendance record of each student in theory and practical is maintained and displayed on dashboard of individual student's and parent's MIS account.
- Timely submission and assessment of assignments.
- Performance of student in unit tests is displayed on dashboard of individual student's and parent's MIS account.
- After evaluation unit test answer sheets are distributed to students in the class for queries if any.
- Students are informed about the assessment criteria for seminars and project by individual guide at the start of the semester,
- To encourage independent learning and improve presentation skill, few topics for presentation are given to students.

Continuous internal assessment is done by considering the parameters such as behavioral aspect, independent learning, and communication skills. The following diagram represents the weightage given for the above mentioned parameters:



Calculate Total [A+B+C] out of 100

Convert it to out of 25 or 50 as needed, to arrive at final TW Marks

The weightage are decided in the faculty meeting for internal assessment.

The parameters for assessment are (A) Behavioral Aspect, (B) Independent Learning, (C) Communication Skills.

The transparency maintained in the internal assessment improves the behavioral aspects of the students such as regularity in attending labs and lectures It also improves sincerity and adherence to the submission schedule. The weightage given to the independent learning such as orals and presentations improves the performance in SPPU practical exams and overall results.

### 2.5.6. What are the graduates attributes specified by the college / affiliating University? How does the college ensure attainment of these by students?

Institute follows program outcomes (POs) specified by ABET. Each department has defined program educational objectives(PEOs). To achieve PEOs we have used graduate attributes as POs.

#### The POs are as follows:

- 1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. **Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- 6. **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning: Recognize the need for, and have the preparation and ability

to engage in independent and life-long learning in the broadest context of technological change.

#### **Attainment:**

Institute ensures attainment of GAs using following means: Based on graduate attributes defined by institute, every department of the institute has developed course objectives and course outcomes to satisfy the graduate attributes. The attainment graduate attributes is ensured and evaluated using following practices:

Sr.	Assessment	Process	Frequency
No.	Tool		
01	Unit Tests	These tests are conducted by the department to assess students understanding of the course and progress on regular basis. These tests are for 30 marks each based on two units having multiple choice questions as well as theory questions.	Twice in a semester
02	Online Examinations	These examinations are conducted by the university assess students understanding of the course and progress on regular basis. These tests are for 25 marks each based on two units having multiple choice questions.	Twice in a semester
03	Preliminary Examination	This examination is conducted by the department to assess overall progress in the course and to know where the student stands after completion of the course. This examination is for 50 marks based on all six units of the course.	Once in a semester
04	End semester exam	This examination is conducted by the university at the end of the semester to assess overall progress in the course of the student after completion of the course. This examination is for 50 marks based on all six units of the course.	Once in a semester
05	Tutorials	Tutorial is conducted for the subject Engineering Mathematics-1 for better	Once in a week

		understanding of the course and to have one-to-one interaction between the teacher and the students.	
06	Assignments	To evaluate the understanding of a particular topic the course, assignments are getting solved from the students in the lab sessions and from home.	Once in a week
07	Lab assessment	Students understanding is evaluated by the teacher through the performance of student during practical and continuous lab assessment	Once in a week
08	Presentations, group discussion and interview skills	Students are asked to prepare power point presentations on various topics / case studies and present/discuss in group in front of all students, through which the presentation and communication skills of the students can be evaluated.	Once in a semester

- Various Co-curricular activities to develop team work, problem solving and communication
- Extra-curricular activities to sensitize students towards ethics, environment, society and lifelong learning such as blood donation camps organized.
- Institute encourages the independent learning which includes paper presentation by students, project, innovative mini project.
- All these activities are planned at the beginning of each semester and mentioned in the academic calendar of each department

### 2.5.7. What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

#### Redressal of grievances at institute level:

• Level 1 - Departmental Level: The continuous evaluation of students is carried out by faculty in terms of theory lectures, labs, unit tests, assignments etc. The evaluation for each lab assignment is communicated to individual student. The term work is allotted based on defined strategies. Query if any is discussed with concerned faculty, mentor, class coordinator and head of the department.

• Level 2 – College Level: The institute appoints a Senior Supervisor who controls all the online/ theory examinations, displays schedules, instructs to the students for smooth conduction of examinations of University. If students are facing any problems, they are solved by Senior Supervisor in coordination with Chief Examination Officer (CEO) appointed by the University. The grievances during the conduction of online/theory examinations are considered and discussed in consultation with the Principal and if necessary forwarded to the SPPU by examination section.

#### Redressal of grievances at University level:

- Theory examinations The queries and complaint about this evaluation are recorded by examination section of the college and submitted to University for corrective action. These corrective actions are normally re-evaluation, re-checking, providing photocopy of answer sheet to the student etc.
- At University level, students can apply for verification, revaluation and for photocopy of answer book. The University examiners re-verify, reassess the answer books and the revised marks if any, are sent to the institute which are communicated to the respective department and to the student.

#### 2.6. Student Performance and Learning Outcomes

### 2.6.1 Does the college have clearly stated learning outcomes? If "yes" give details on how the students and staff are made aware of these?

**Yes**, the Institute has well defined learning outcomes. Students and staff are made aware about the learning outcomes by following ways:

- The institute has well defined Programme Educational Objectives (PEO). Every department has defined Programme outcomes (PO) and course outcomes (CO).
- PEOs, POs and COs are available on college website.
- PEOs, POs and COs are printed in journal
- PEOs, POs and COs are discussed by faculty in the classrooms and labs.
- Faculty prepares CO-PO attainment matrix for the respective course at the end of semester by using assessment through various direct and indirect measures such as unit test, tutorial and SPPU results.

- 2.6.2. Enumerate on how the institute monitors and communicates the progress and performance of students through the duration of the course / Program? Provide an analysis of the students" results / achievements (Program / course wise for last four years) and explain the differences if any and patterns of achievement across the programs / courses offered.
  - The institute regularly monitors the students progress through a continuous internal evaluation system which consists of unit tests, tutorials, assignments, mock practical / oral examination. These assessment methods are used to find out the progress of the students.
  - To communicate progress and performance of the students the institute makes use of online MIS software. Parent can view the progress through their parents account. Again it is displayed on department and college notice boards
  - Teacher Mentor keeps close watch and track on the progress and performance of the students. The progress is in terms of attendance, test marks, parent contact details, curricular and extra-curricular activities. Students grievances (if any) is recorded in the mentor file available with the mentor. The progress of each student is informed to the parents during parents meet organized in the semester. In case of severity, parents are called to meet the authorities in person.
  - Result analysis is done by the departments for every academic year after the declaration of SPPU results. A comparative study of the results is used to monitor the progress of the students. Based on this analysis, departments decide the corrective actions to be taken whenever necessary.
  - The marks of university online and in-semester examination are also displayed on the notice board for the student reference.

#### First Year Engineering Result

#### 1) All clear percentage Pass + ATKT Percentage

Year	Percentage (%)
2012-13	96.98
2013-14	98.11
2014-15	97.12
2015-16	97.38

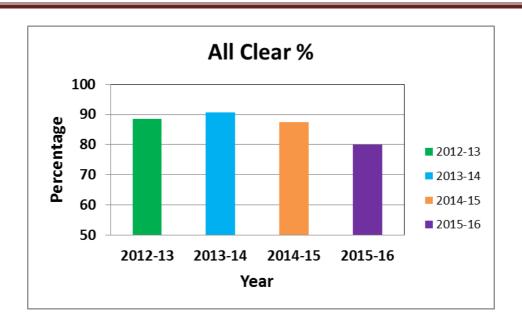


Fig: FE Result Analysis

#### S.E. Result Analysis: Passing Percentage(%)

#### SPPU Exam Results

Exam	Comp. Engg.	IT	E&TC
MAY- 2013	70.67	68.91	84.4
MAY - 2014	82.86	82.99	83.85
MAY- 2015	76.62	83.1	71.88
MAY 2016	76	86.2	73.95

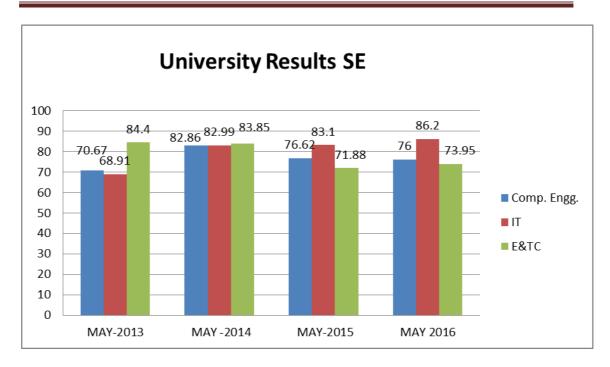


Fig: SE Result Analysis

#### T.E. Result Analysis: Passing Percentage (%)

Exam	Comp. Engg.	IT	E&TC
MAY-2013	81.02	83.82	81.06
MAY -2014	84	83.56	75
MAY-2015	85.37	84.31	80.44
MAY 2016	83.12	79.05	82.41

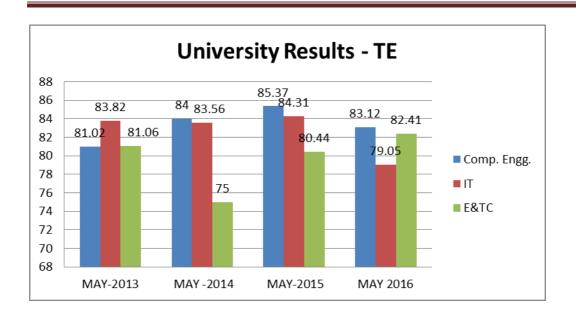


Fig: TE Result Analysis

#### **B.E.** Result Analysis: Passing Percentage (%)

Exam	Comp. Engg.	IT	E&TC
MAY- 2013	97.26	93.24	92.52
MAY - 2014	91.67	92.42	93.28
MAY- 2015	97.93	96.62	89.72
MAY 2016	96.233	89.3	96.15

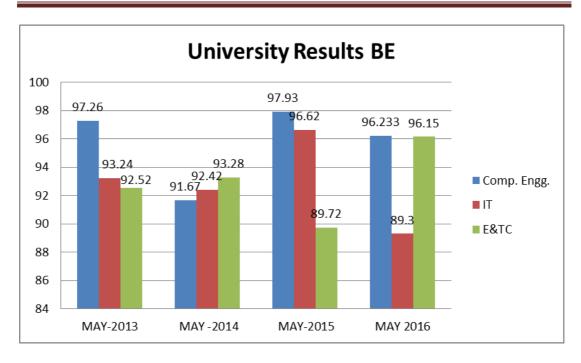


Fig: BE Result Analysis

## 2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

The institute has well defined process for assessment of learning outcomes:

- Teaching strategies start with the preparation of academic calendar in every department which is in line with the academic calendar given by the SPPU.
- Subject allocation to faculties is done well in advance before start of semester
- The methodology to achieve the learning outcome is decided in the meeting of different Subject coordinators, subject teachers and Head of the department
- The subject teacher prepares the teaching plan by considering these learning outcomes. Learning outcomes are mapped with the course outcomes
- The subject teachers and subject coordinator decide the tools for assessment of course outcome
- Course file and innovative study material is prepared by the subject teacher
- Planning of extra lectures/Expert talk/Guest lecturers/Seminars is included in the teaching plan
- The execution of the teaching plan is keenly monitored by Head of Department necessary steps are taken if there are any deviations in teaching plan
- Attendance monitoring during semester for effective dissemination of

content

 Mock orals, practical and tutorial sessions are conducted to increase the effectiveness of the course delivered

#### Learning and assessment strategies:

To accomplish effective learning, students are encouraged to actively participate in various learning activities such as

- Tutorials, Home Assignments
- Paper presentations and Poster competitions
- Industrial visits
- Seminars and Project work
- Workshops and hands-on sessions

In addition to regular teaching and course coverage, learning material from various open resources like NPTEL-learning materials and videos are made available to the students.

For assessment direct and indirect assessment methods are followed. The Direct and Indirect measures are used for attainment of learning outcomes.

- A direct measure includes results of internal and external assessment.
- An indirect measure includes placement analysis, employer's feedback, alumni feedback, list of student organizers and participants in cocurricular and extra-curricular activities.
- The proportion of direct and indirect measures considered for final calculation of attainment is 80: 20.

Apart from direct assessment through examinations students are assessed based on performance in above mentioned activities

# 2.6.4. What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality Jobs, entrepreneurship, innovation and research aptitude) of the courses offered?

- The institute ensures the enhancement of the social and economic relevance of the courses offered by creating, providing and maintaining the platform though a vast range of activities listed as follows:
- For economic relevance including quality jobs, entrepreneurship, innovation and research aptitude institute provides facilities such as:
  - Entrepreneurship and Development Cell (EDC): The institute has established a structured EDC in the campus. The cell not only motivates the youth to start-up their own enterprise, but also makes efforts to provide them with the necessary resources to do so. Through the institute initiatives, we try to bring out the youth's entrepreneurial skills and provide PICT students with the vital support system that a budding

entrepreneur demands. EDC organizes various workshops / seminars / training activities to provide a platform for the creation of successful entrepreneurs.

• **Employability Tests:** The Training and Placement cell of the institute conduct a series of employability tests, Mock interviews, expert sessions to make the students well prepared to clear the aptitude tests conducted by different companies during placement.

#### • Business Incubation Centre:

PICT Business Incubation Centre was established in 2009. We provide space, infrastructure, electricity, internet connectivity, office furniture and technical support to incubate a start-up company for period of maximum 2 years. We have incubated 10 companies so far. Some of them are successfully moved out to their own premises.

The companies who have moved out of incubation facility are:

- Anchanto
- ByClor
- Simpliware
- Helium Inc
- Metamorphs
- Open Cloud

Companies which are incubated currently are:

- **Fizzible:** This is an online retail store that sells the components to make your electronics projects possible. Their goal is to create the best place for learning electronics and making the best designed products for makers of all ages and skill levels.
- **ZangOut app:** This app is made with the objective to help out students by providing them with an information pertaining to their locality / neighbourhood.
- Code DynamiX: It is a leading IT company providing Business Solutions across the globe.
- Edureo: It is a start-up which focuses and aims in providing products which transforms the way of education. The intelligent systems have proved the increase in efficiency of the students learning capabilities and have opened up a new way of self study. The vocal teaching facility combines with the presence and focus detection which provides human-human interaction kind of interface in the virtual environment.

#### • Research Component:

Institute ensures inculcation of the research aptitude among faculties and students through the curriculum and courses offered by Motivating student for adding research component through their teaching learning process,

motivating students for new idea exploration based on learned concept in their regular assignment.

- Identifying research component in their seminar and project work.
- Motivating them for writing research paper for their seminar and project work.
- Motivating them for product development through giving in house mini-project.
- Motivating students in their mini project lab for implementation of research paper.

#### **Professional Activities**

#### Professional societies/chapters and organizing engineering events

#### **Professional Societies/ Chapter**

- PICT IEEE Student Branch (PISB)
- PICT ACM Student Chapter (PASC)
- IET Students Chapter
- CSI

#### **Organizing engineering Events**

- Credenz
- WIE
- Entrepreneurship development cell (EDC)
- Impetus And Concepts
- Well equipped Laboratories are available in each department to support the research activity of faculty and students.
- MoU are signed with leading industries to enrich the R&D.
- Students are encouraged to work on the real life problems as well as funded research projects.
- Faculties are working on various research projects funded by various organizations like DST, AICTE and BCUD S P P U.
- Students are encouraged to attend University level competitions like AVISHKAR and other National and State level project, paper presentation, programming and quiz competitions.
- Students and faculties are encouraged and financially supported to participate in various national and international project competitions/workshops.
- The Institute encourages students and faculties to participate in various conferences at national and international level. Institute also provides sponsorship to students for such activities.
- The Institute encourages students and faculties to publish their research work in technical journals on international repute.

#### • ROBOCON:

Students are given guidance to participate actively in international Robocon competition which is held every year by MIT, Pune.

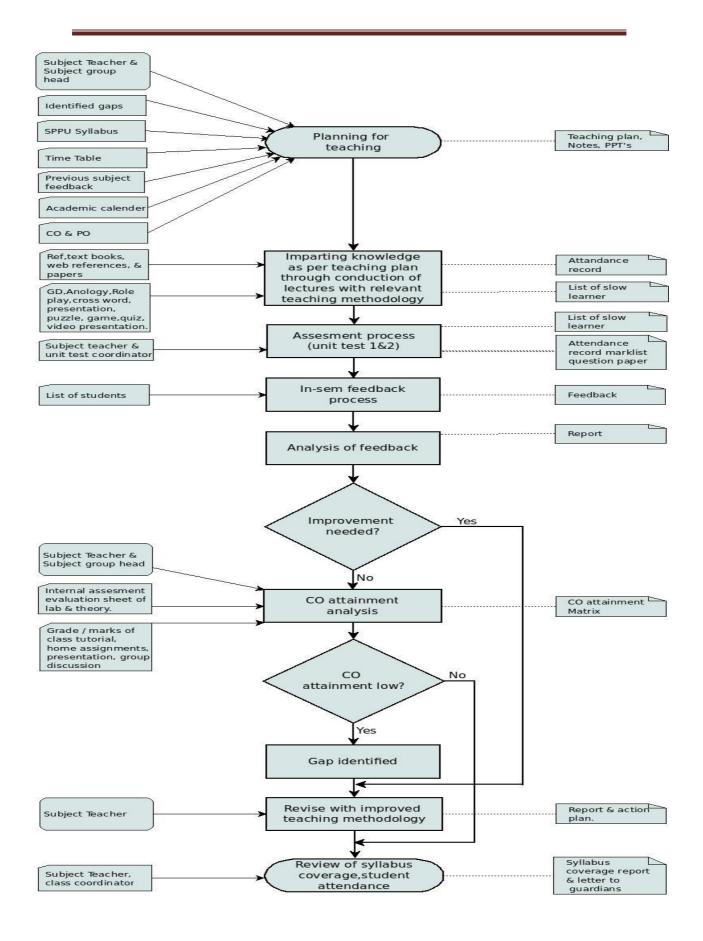
#### For Social relevance

Institute encourages students and staff to organize and participate in various social activities such as "No Paper Day", Blood donation, Tree Plantation, Swachh Bharat Abhiyan etc.

PICTOREAL: PICTOREAL has always been known for being "The
official cultural magazine of the PICT and the series of events it
organizes every year. PICTOREAL provides an opportunity to the
PICTians to showcase their skills, talent and views to the world
outside, and among their social group.

The major events held underneath PICTOREAL are:

- Pics-O-Reel
- Donation Event
- Pict- o-Social
- Blood Donation
- **Departmental newsletters:** All the departments of the institute has departmental newsletters where students are taking part actively in collection, editing, coordinating and printing of newsletter. This activity enhances the students' written communication and coordination skills along with leadership qualities.
- NSS: College has full-fledged NSS unit and has conducted camp at Gogalwadi for a group of 50 students. Physical director of the college attended a course of NSS from Empanelled Training Institute, Ahmednagar.
- 2.6.5. How does the institution collect and analyze data on student learning outcomes and use it for planning and overcoming barriers of learning?
  - The Institute has a well defined process for measuring attainment of learning outcomes.
  - The Learning outcomes are mapped with course outcome.
  - The Data on CO attainment is collected through various means as depicted in the figure
  - The analysis of CO attainment is used for improving the quality of teaching-learning through the well defined process as shown in the following figure.



### **2.6.6.** How does the institution monitor and ensure the achievement of learning outcomes?

The various steps followed in order to monitor and ensure the attainment of learning outcomes are summarized below:

- Academic calendar is prepared for every academic year before the commencement of semester which includes schedule of curriculum, cocurricular and extracurricular activities to be carried out during the semester year. Since the college activities are dependent on University examination programme, the academic calendar of the University is referred for preparing academic calendar of the department.
- The university curriculum is followed which is designed by the Board of Studies (BoS) in Computer Engineering. The BoS involves experienced senior faculty members in curriculum design and also organizes training for all its teachers. Majority of the faculty members are involved in syllabus framing, few being chairman and others contributing as team members. Whenever, the syllabus is revised, training workshops for teachers are organized and our department staff members have worked as resource persons in all these workshops.
- Class room teaching and Laboratory Teaching Plan

  Teaching plan is prepared as per the syllabus specified and also includes
  extra lectures if required. It also includes plan for covering content
  beyond syllabus / addressing gaps..Both laboratory and teaching plan are
  made available to the students on department intranet.
  - Laboratory plan is prepared considering the time required for implementing the assignment. The lab manuals contain the details of experiments.
- Faculty members prepare detailed course file and laboratory manual at the beginning of each semester.

Course file includes following details

- Course Objective & Course Outcomes
- University syllabus structure and copy of university syllabus
- Teaching plan and lab plan
- Copy of academic calendar
- Vision and Mission of the department
- POs and PSOs
- The COs and their mapping with POs and PSOs
- Identified gaps in the syllabus and action plan to bridge the gaps, if any.
- Time table (individual)
- Course file also includes mid semester exam question paper and result, university question papers and solutions, university

- result of the course and its analysis, question bank, class test record with marks obtained, tutorial record.
- List of academically weak and bright students.
- List of additional assignments apart from university syllabus
- Record of progressive assessment of term work and internal assessment are maintained through MIS and are made available to students on MIS.
- Proof of Collaborative Learning i.e. Students and faculty members participate in different collaborative initiatives like Soft Skill development courses, Online courses Webinars, NPTEL etc.
- Result analysis of previous year
- At the end of the course, the attainment level of each course is calculated based on the performance of students and feedback from student on course delivery.
- The laboratory courses are conducted by the faculty members with the support from Laboratory support staff. In the beginning of every semester, the list of experiments is prepared which include experiments prescribed in the syllabus along with additional experiments to be carried out. Laboratory manual is made available on intranet. The Laboratory equipment is upgraded on regular basis to meet the requirements of curriculum. A maximum batch size is 15/20 students so that each student gets a sufficient hands on experience. Progressive assessment for the laboratory courses which have term work is implemented so that the students work throughout the semester.
- The faculty uploads course material on intranet and the students are encouraged to use it in order to increase student-teacher interaction. The course material on intranet includes teaching plan, lab assignments and schedule of conduction, lecture notes, sample questions, assignments etc. All the classrooms have LCD projectors and internet connectivity. The faculty makes use of these modern ICT tools effectively.
- The evaluation of students is done through the examinations conducted by the University which sets the question papers and does the assessment also. With revised syllabus, the assessment of students is done through two examinations viz. online or in-semester examination conducted in the middle of the semester and end-semester examination. A Practical/Oral examination is conducted by the examiners deputed by university in which an external examiner assesses performance of students along with internal examiner.
- Students get an opportunity to present and share their technical knowledge in the department in the form of seminars, They are made to refer to quality journal papers and also department arranges expert talks on

- domains to select their topic. Students get an opportunity to give power point presentation in front of other students and panel of faculty members.
- Students are encouraged to participate in conferences, various competitions at different level. College is providing financial assistance for these activities. Students are encouraged to explore different mini projects as a part of innovative thinking and research.
- Student feedback plays a vital role in improving the quality of teaching learning process. A feedback of each course is taken in the middle of the semester to find the difficulties faced by the students and corrective measures like extra sessions for weak students are taken. A final feedback at the end of semester is taken to assess the learning outcomes of the course
- Teacher mentor is appointed for a batch of 15/20 students and periodic student-mentor interaction takes place once in a month. Mentor addresses all the issues and with the help of head of the department obtains the solutions for different issues raised during the discussion.
- Continuous learning through FDP, workshops, seminars, guest lectures by the faculty members to enhance and update the knowledge of course to deliver the content more effectively to the students.
- Appreciation of bright students is done by felicitation, providing book bank facility, scholarships by funding for participation in conference
- Slow learners are motivated to perform better by continuous guidance by faculty members.
- 2.6.7. Does the institution and individual teachers use assessment / evaluation as an indicator for evaluating student performance, achievement of learning objectives and planning? If "yes' provide details on the process and cite a few examples.
  - Yes. Individual teachers use assessment / evaluation as an indicator for evaluating student performance. Unit Test marks are considered for calculating term work marks as described in section 2.5.5.
  - Individual teachers use assessment/evaluation as an indicator for achievement of learning objectives as direct and indirect measures are used to determine attainment of learning outcomes. The same is also used in planning of teaching/conducting lectures/labs for same and/or next year.

### CRITERIA III: RESEARCH, CONSULTANCY AND EXTENSION

#### 3.1 Promotion of Research

### 3.1.1 Does the institute have recognized research centers / of the affiliating University or any other agency /organization?

**Yes,** The institute has recognized research centers from year 2013 which are affiliated to Savitribai Phule Pune University for following branches

- 1. Computer Engineering
- 2. Electronics and Telecommunication Engineering
- These research centers offer guidance to doctoral students through experienced research guides associated with the centers. The research centers are equipped with adequate infrastructure and electronic facilities. Support and assistance to research scholars is provided at every step that leads to excellence in research and development. The institute also has established Research and Development Cell in collaboration with various industries. The faculty members are actively involved in research projects, sponsored and funded by various national level funding agencies such as DST, DRDO, SPPUBCUD etc. The following table shows the Ph.D. registration details of the institute.

Registered	Registered Students	Approved Guides	Ph.D. Completed	In Progress
E&TC	03	02	NIL	03
COMP	10	04	NIL	10

## 3.1.2. Does the Institution 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 Institute have a research committee to address and monitor issues regarding research and development (R&D) faced by faculty and students. The committee plays the crucial role of promoting research and findings within the Institute. It helps to elevate the alertness of funding opportunities to support R & D. The research committee looks after the processes related to externally funded, sponsored / consultancy projects. Furthermore, it deals with the issues of conference travel funding for faculty and research scholars, and facilitates conferences and workshops held at the institute. The composition of research committee is listed below.

Name of the	Composition		
Committee			
Research Committee fo	r • R & D incharge		
funding projects	<ul> <li>Academic Research Coordinator (ARC) including principal.</li> <li>One senior faculty from every department</li> </ul>		
Research Committee for research center	<ul> <li>R &amp; D incharge</li> <li>Heads of the Department</li> <li>Professors and Associate professors (Reserch guides)</li> </ul>		

Following are the implementation carried out and impact is analyzed.

Implementation	Impact					
Allocate budget to enhance research facilities						
Funds received from different research grant agencies is utilized each department for their R&D activities.	Number of research publications in reputed journals and conferences is increased.					
To allocate research funds to various faculty research projects and creat members to attend STTPs, FDPs, Workshops / conferences / seminars for	-					
<ul> <li>The institute supports faculty members to organize STTPs, FDPs, Workshops / conferences / seminars for skill up gradation.</li> </ul>	More than 50 programs are conducted during last four years.					
• Institute bears registration fees and other related expenses of faculty members and students.						
Improve the quality and productivity of R&D Outcomes.						
<ul> <li>Rigorous formal technical reviews of faculty and students projects are conducted.</li> <li>Faculty and students are motivated to comply with the</li> </ul>	Good research outcomes					
reviewer's suggestions. They are motivated to publish the research work in reputed journals and conference proceedings.	Faculty had received research awards.					
Motivate faculty and students to pursue higher education	_					

The Institute motivate the faculty for taking up higher education for following reasons:

- Promotion avenue
- Passion for discovery of new knowledge
- Reputation that comes with qualification up gradation.
- Recognition in professional circles

- All faculty are with PG qualification
- 22 completed Ph.D.
- More than 35 in process Ph.D.

Assign instructional responsibilities during theory / laboratory load to various research scholars in the Institute.

- Partial teaching load is assigned to research scholars based on their expertise.
- Department assigns additional contact hours for PG students.

The PG students get an experience of academic responsibilities leading to become faculty after PG

### **Objectives of Research and Development Cell:**

- To motivate students and faculty members towards research and innovation.
- To promote research culture in various departments of the institute.
- To create centers of excellence in the area of research and Innovation in all the departments.
- Collaboration with industries for mutual benefits.
- Identify R&D projects by collaborating with other universities, public and private sector companies.
- To work closely with industries to develop products and to improve process/systems or services that will help industry.
- To ensure functioning of R&D cell at the institute through effective monitoring process.
- To promote students and faculty members for filing patents and commercialize the product.

### **Roles, Recommendations and Implementation:**

- The committee recommends and gives all support to seek research projects sponsored by various Government, non-Government organizations and research funding agencies such as UGC, DST, AICTE, BCUD- SPPU, etc.
- Administrate specialized workshops/ conferences/ seminars sponsored by UGC, AICTE, etc.
- Promote joint collaborative Inter-Disciplinary Research activities
- It recommends forming three research laboratories for carrying out research work in the institute for the benefit of institute and society.

- Arrange In-Campus workshops for motivating and aiming to trigger creativity and innovativeness among the students and faculty members, which results in potential growth.
- Administrate joint collaborative programmes by identifying scope for signing MoUs with national as well as multinational industries and academic/research institutions to strengthen the collaborative research efforts.
- Administrate the promotion of institute-industry interactions by providing a helping hand in establishing collaborative research
- Partnerships for conducting creative and advanced research in emerging areas of interest to the industry.
- Administrate to establish registered Institute Research Centre for eligible departments from the affiliating University (SPPU).
- To assist in matters related to collaborative research with other agencies.
- Implementation, follow-up, progress and monitoring of on-going projects

### Impact of the recommendations of research committee:

- Several faculty members have applied for research grants from various agencies like DST, BCUD, etc.
- Faculties have published many research papers in reputed journals and conferences. More than 35 faculty members are pursuing their doctoral programs.
- Two R&D labs have been established in the college which has additional research facilities.
- The student projects for UG and PG courses are being pursued in the R&D labs.

## 3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?

The Institute extends full support for smooth progress and implementation of research projects. This is facilitated with following:

- Assistance to formulate research problem for UG, PG and Ph.D. aspirants through development of in-house project ideas.
- Advice on the various options and best practices for documenting investigators work and for managing, storing, and disseminating the data produced by their research.
- Suggest possible funding sources and offer advice on how to write a successful research grant proposal.
- Institutional support is provided to faculty who undertake funded projects.
- Faculty and students have free access to institutional facilities to carry out

research work.

- As and when required the existing laboratories are upgraded in terms of latest technologies.
- Teachers are allowed to pursue Ph.D. programs and their teaching load is adjusted accordingly.
- Through the R&D cell the auditing and submission of utilization certificate to the funding authorities are done smoothly.
- Faculties are encouraged to participate as resource persons in various workshops, seminars and conferences.
- For the purpose of R&D many separate labs have been setup—with high end systems, internet facility, hardware and software, library resources, E-resources, Research lab along with conference room.
- Research journals in both print and online version are available in the central library.

### 3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

The institute play an instrumental role in developing scientific temper and research culture among students through many activities. The activities are listed as follows:

- Execution of research projects and assigning UG/PG projects to individuals or group of students on topics of promising areas to infuse critical thinking and scientific temper.
- Expert sessions and motivational lectures by eminent speakers on various occasions
- Organization of technical symposium at institute annual technical event like INC, CREDENZ that comprises seminar and technical paper presentations, quiz, projects and programming contests, robotics competitions to storm students' brains beyond threshold and to infuse critical thinking.
- Skill up-gradation among students through co-curricular activity (CCA) activity and free online courses and certification programmes from various industries.
- Study tours, industrial visits, field trips and surveys organized every year to inculcate a sense of scientific temper and research culture.
- Organization of ISTE, AICTE, sponsored and approved Short Term Training Programs for faculty in upgrading technical skills at regular intervals.
- Students are encouraged to participate in various external competitions like Avishkar, project and paper presentation to show case their research ideas. The students are also encouraged to attend and participate in Technical competitions, Seminars, National/International Conferences, etc., under the guidance of faculty members. Most of the projects taken by our students are oriented with direct applications to industry/social causes.

### Research interest in the students is promoted by:

- The institute supports the students for publishing research papers in journals/conferences, reference books.
- Previous thesis are made available to the students for their reference.
- Poster and project exhibitions are organized by the institute every year.
- The faculty members encourage the students to pursue higher education and research.

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

- All teaching faculty of the institute are qualified with M.E./M.Tech.
- There are 21 teaching faculty with Ph.D degree and more than 35 faculty members of the institute are currently pursuing Ph.D. at different universities. Since the institute also has a research center and offers PG programs, many faculty members are recognized as PG/research guides leading to number of research publications having good citation index and impact factor.
- Institute has six Ph.D guide. They are actively involved in research work funded by various agencies. They devote themselves in supporting and guiding students research projects. A good number of research scholars are being successfully guided by research guide.

# 3.1.6 Give details of workshops / training programmes / sensitization programmes conducted / organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and the students.

All Departments of the institute have always remained enthusiastic to arrange training programs, technical workshops, which help academicians and students to update their knowledge through knowledge exchange. Most of these programs are organized in association with industry/professional bodies with financial support from different funding agencies DST/AICTE/BCUD and others. In addition two national and one international conference were organized during the last 4 years. Various workshops and training programs are arranged for the benefit of students and faculty members. These programmes expose the students and staff members to the recent advancements in latest technologies. This helps them to nurture and foster a research environment in the institute. Following table shows various activities conducted by all the departments of the institute.

### Workshops/Seminars/Conferences conducted/organized by Computer Department

Year	Sr. No.	Name of Seminar / Conference / Workshop FDP / SDP / STTP / Webinar etc.	State /National / International	Sponsoring / Funding Agency if any
2016- 17	1	ICEI Conference	International	SPPU, EQ Technologic, IEEE Pune, IEEE computer society Pune chapter
	2	Workshop on Parallel Computing with CUDA	State	BCUD
	3	Workshop on Software Modelling & Testing	State	
	4	Workshop on "Ethical Hacking"	State	Institute
	5	Workshop on "Apache Apex"	State	Data Torrent
	6	Workshop on "R programming"	State	SPPU, BCUD
2015-	1	Conference on "Recent trends in computer Technology"	National	BCUD
	2	Workshop on "Distributed computing using OpenCL MPI BBB"	State	BCUD, SPPU
	3	Workshop on "Apache Apex"	State	Data torrent
	4	Workshop on "High Performance Computing"	State	BCUD,SPPU
		workshop on "Linux Internals" conducted for second year students	State	Symantec Pvt. Ltd. Pune
		Workshop on Java	State	L&T Infotech
2014- 15	1	Workshop on "Object Oriented analysis and design with UML"	State	
		Course for Campus recruitment Training		Winpoint Learning Center

	1	Expert talk on "Applications of theory of computer science"		PSPL Pvt.Ltd.
	2	Workshop on "Massively Empowered		Microsoft
2013-	3	Design and Analysis of protocols using NS-3		(BCUD Sponsored) SAT Infosys, Coimbatore
14	4	Workshop on Mongo DB		Scalearc Pvt.Ltd.
	5	Big data and Hadoop		Harbinger
	6	Mobile application development using Android- a Next generation platform	National	(AICTE Sponsored) Raining Clouds, Marwell
2012-	1	Wired & Wireless Protocol Design & Implementation using NS-2	State	(BCUD Sponsored) SAT Infosys, Coimbatore
	2	Professional ethics	State	Marvell Semiconductors & Dreamz Group

### Workshops/Seminars/Conferences conducted/organized by E & TC Department

Year	Sr. No.	Name of seminar /Conference/ Workshop FDP/SDP/ STTP/FoW/Webinar	National/ Internationa l	Sponsoring/Funding agency if any
2012-	1	Embedded System Design using PIC Microcontrollers	National	Microchip, Pune, e- Prayog, WEL Lab, IIT Bombay, IEEE Signal Processing Society, Pune Section
13	2	Multi Valued Logic Digital Systems (MVLDS))	National	IEEE Computer Society, Pune Chapter
	3	Reconfigurable Digital System (RDS – 2012)		e-Prayog, IIT Bombay

	4	Training on Mentor Graphics VLSI Design Tools		
	1	National Workshop on "Microwave, Antenna and Propagation for Modern Wireless Communication"	National	SPPU and IET Pune Local Network
	2	A 2 Days Workshop on "Robotics and MATLAB Applications"	State	UV Soft Technologies Pvt.Ltd. in association with IISC Bangalore
	3	Training Programme on "LabVIEW"	State	Dept. of E&TC PICT
2013- 14	4	Faculty Development Workshop on "LabVIEW 2012 Applications"	State	Dept. of E&TC PICT
	5	Faculty Development Workshop on "Personality Development"	State	Skill Smart World
	6	Certificate Course on "CMOS VLSI DESIGN"	State	ni logic Pvt. Ltd, Pune (ni2 designs)
	7	Faculty Orientation Workshop on Signal & Systems of S.E. E&TC Revised Syllabus (2012 course)	State	BoS Electronics, SPPU
2014- 15	1	SPPU Approved State Level Workshop on "Embedded System Design using ARM Cores"	State	Savitribai Phule Pune University, Embedded System Solutions (Banglore), Tinychip Embedded Solutions (Banglore) Coreel Technologies (Banglore) Campus Component Pvt. Ltd.( Pune) Silicon Automation (Pune) MEIS India Pvt. Ltd. (Pune) Macart Designs (Pune)
	2	Certificate Course on "CMOS VLSI DESIGN"	State	ni2 logic Pvt. Ltd, Pune (ni2 designs)
	3	Training Programme on "Mission-10x UTLP Boards"	State	Wipro Technology
	4	Certificate Course on "LabVIEW Programming"	State	National Instruments
	5	A 5-days Workshop on "Introduction to Robotics"	State	e-yantra, IIT Mumbai

	6	"Mission -10X Engineering Faculty workshop"	State	Wipro Technology, Bengaluru
	1	Certificate Course on "PCB Design"	State	
	2	Short Term Training Programme on "Routing and Switching Essentials"	State	IET Pune Local Network
	3	A 6 - Day Workshop On "Certificate Course on LabVIEW Primer Training Program"	State	National Instruments
	4	EMPIRE XPU Software	State	Ambition Technologies
	5	STTP on "Routing and Switching Essentials	State	
2015-	6	A lecture series on "Signal processing applications"	State	
16	7	A 4- Day "Workshop on LabVIEW with Software Defined Radio Perspective"	State	National Instruments
	8	Mission 10X - Student Workshop	State	Wipro Technology, Bengaluru
	9	Workshop on Image Processing with case studies( including hands on sessions)	State	
	10	One day workshop on Transformative Teacher Training Programme	State	
	11	CLAD (Certified LabVIEW Associate Developer) Training Program-16	State	National Instruments
	1	Fundamentals of LabVIEW for Graphical Programming	State	National Instruments
	2	Certificate Course on Applied Wave Research (AWR) software	State Lavel	
2016- 17	3	Entrepreneurship Development	State	The IET Pune Local Network
	4	Routing & Switching Essentials	State	
	5	Session on LaTeX	State	
	6	UTLP Practional training Program	State	MTLC
	7	A 3 day workshop on "" Finance for Non Finance	State	IET

### Workshops/Seminars/Conferences conducted /organized by IT Department

Year	Sr. No.	Name of seminar /Conference/ Workshop FDP/SDP/ STTP/FoW/Webinar	National/ Internatio nal	Sponsoring/Fundi ng agency if any
2012-13	1	iPGCON	State	University Of Pune
2012-13	2	"Ethical Hacking and Computer Network"	Institute	-
2012.11	1	workshop on "Linux Operating System"	Department	-
2013-14	2	"Processor Architecture and Interfacing"	Department	-
2014-15	1	"Hadoop and Big data": Modern Tool Usage	Department	-
2015-16	1	Guest lecture on Big Data: Current Impact on Industry	Department	-
	2	Android App Development	State	Institute + IIT Kharagpur
	1	File System Implementation	Department	-
2016-17	2	Setting up ISP network with AWS	Department	-
	3	Opportunities in Bioengineering	Department	-
	4	IOT applications Using RDUNIO	National	Institute + IIT Roorkee

### 3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

• A significant number of faculty members are working coherently in different research areas. Majority of faculty members are well qualified, experienced and cover almost all technical domains. Department of E&TC engineering, department of computer engineering and department of information and technology are pioneers to start PG under the umbrella of SPPU.

- Our faculty members and students are working on many research projects which are funded by agencies like DST/DRDO/AICTE, and SPPU-BCUD.
- All departments have MoUs and industry tie-ups with different companies in respective fields. The prioritized research areas and faculty expertise is given in Table.

Table: Prioritized research areas and availability of faculty expertise

Sr. No.	Prioritized Research Areas	Faculty Members with Expertise				
Com	Computer Engineering					
1.	Distributed System Security	Dr. R B Ingle				
2.	Multimedia, Image processing	Dr. S A Joshi				
3.	Data structure and Algorithm	Dr. G.P.Potdar				
4.	Artificial Intelligence, Machine Learning	Dr. B A Sonkamble				
5.	Computer vision and HCI	Dr. A S Ghotkar				
6.		Prof.R.A.Kulkarni Prof.A.R.Buchade				
7.	Information Retrieval, Natural Language processing, Machine Learning	Prof.M.S.Takalikar				
8.	Data Mining, Information Retrieval	Prof.A.R.Deshpande Prof.S.S.Sonawane				
9.	Data Mining, Speech Processing	Prof.K.C.Waghmare				
10	Machine Learning, Data Mining, Image Processing	Prof.A.G.Phakatkar				
11	Computer Vision	Prof.G.V.Kale				
12.	Network Security	Prof.S.N.Girme				
13.	Machine Learning, Nerual Network	Prof.D.T.Mane				
14.	Image processing, Parallel Computing	Prof.H.H. Patel				
15	Data Analysis	Prof.P.S.Game				
Elect	ronics and Telecommunication Engineering					
1.	Wireless Networking and Communication, Fiber	Dr. P. T. Kulkarni				
2.	Smart Antennas, Communication	Dr. Y. Ravinder				
3.	Digital Electronics, Microwave and Astronomy	Dr. Dhande A. P.				
4.	Devices And Circuits, Power Electronics, Wireless Networks	Dr. Mundada G .S.				

5.	Semiconductor Devices and Circuits, Multi-Valued Logic, Microelectronics	Dr. Narkhede S.S.
6.	Signal Processing, Image Processing, Biomedical Signal Processing	Dr. R. Sreemathy
7.	Digital Image Processing, Pattern Recognition, Computer Aided Diagnosis	Dr. Munot M. V.
8.	Networking and Communication	Dr. Jaiswal R.C.
9.	Embedded Security, Lightweight Cryptography,	Dr. G. Bansod
	Low Power Design,	
10.	Digital Image, Image Processing, Data Security,	Dr. Sunil K Moon
	Steganography	
Infor	mation Technology	
1.	Machine Learning	Dr. A. M. Bagade
2.	Cloud Computing	Prof. S. B. Deshmukh
3.	Information Retrieval	Dr. Emmanuel M.
4.	Information Security	Prof. M. R.Khodaskar
5.	Communication	Prof. V. R. Jaiswal
6.	Soft Computing	Prof. R. V. Kulkarni

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

- As the departments organize different workshop/seminars/conferences in the institute, many experts and industry professional do visit the college on regular basis for interaction with faculty and students. The college invites the researchers of eminence to visit and interact with faculty members and students for enhancing the R&D activities of institute.
  - The institute takes following efforts for attracting researchers of eminence to visit the campus and interact with teachers and students by:
- Organizing faculty development programs by involving industry personalities
- Inviting experienced professional from the industry for sharing their views by organizing conferences and workshops.
- Establishing the existing institutes R&D labs in the institutes as center of excellence
- Initiating and promoting MoU's with industries and R&D organizations.

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

• The sabbatical leave facility have been availed by very few faculty members.

The college has well defined policy for sponsoring the faculty to pursue higher studies leading to Ph.D. In addition, the institute extends full support for faculty members who wish to avail a short period leave for the research work. Because of the college policy, many faculties completed their PG and Ph.D. degree over the period of time. The Institute strongly believes in promoting a research culture by granting study leave for faculties pursuing their Ph.D. and related research work.

## 3.1.10 Details on the College initiative in transferring/advocating the relative findings of research of the College and else where to the students and the community (lab to land).

- The institute regularly initiates awareness drive about announcements of various competitions, call for research projects among faculty and students which will be made available in press releases, in through mail, notice boards, college website, etc. Institute has taken initiative to collaborate with industry by signing for establishing center of excellence.
- Institute has given budgetary provision for research paper publication for staff as well as student
- Exhibition of final year projects.
- Encourage students to participate in inter and intra college technical events.
- Conducting national & international level conferences.
- Encouraging the faculty and students to participate in the national & International level conferences held in other institutions.
- Providing access to national & international journals thereby encouraging the faculty to keep themselves updated with the recent developments in their respective areas of research.

Faculty and students have published about more than 339 research papers in journals and conferences.

#### 3.2 Resource Mobilization for Research.

## 4.2.1. What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

In every financial year, sufficient amount of the total budget allocated to the
institute is utilized for research and development related activities. The major
heads of expenditure are faculty and staff development, research laboratories
and library development. Every department of the institute has its own state of

art facilities in terms of hardware and software in selected areas of research. The digital library with subscription to important journal publishers is also made available for both faculty and student. In addition, research grants are also received from external agencies like SPPU/AICTE/DST/DRDO by the faculty. Following table shows the percentage of budget allocated for last four years.

Year	Amount	%
2012-2013	15 Lacs	1.03
2013-2014	15 Lacs	1.17
2014-2015	15 Lacs	1
2015-2016	20 Lacs	1.05

# 3.2.1 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

Yes, the institute provide seed money for research project as per the need of project with due recommendation from the committee. The seed money is given to both for faculty as well as student's research project. Seed money is also provided for staff and student too attend conferences, seminars, workshops and to publish papers in conferences etc

### 3.2.2 What are the financial provisions made available to support student research projects by students?

**Yes,** Institute supports research projects by providing the financial assistance to the students as per the requirement of project.

- Institute has provision in the budget towards research projects of students. Specific purchases are made in the form of consumables, books, hardware and software based on the project needs.
- To support student research projects, critical components, software's etc. are procured as and when required.
- Faculty members and students are motivated and encouraged to register / file the patents for the intellectual properties.
- Students are allowed to use funds received from the agencies such as BCUD SPPU, DST and UGC through principal investigator

## 3.2.3 How does the various departments/units/staff of the institute interact in undertaking inter disciplinary research? Cite examples of successful endeavours and challenges faced in organizing interdisciplinary research.

The major challenges faced was the intercommunication link between different disciplines, which had been resolved by setting up the process as laid down below-

- The college has a Research Committee which comprises of subject experts from various departments.
- Every department of the college has its own final year project coordinator.
- Various departments/faculty members of the Institute interact with the committee in undertaking inter-disciplinary research work.
- Institute always encourage joint guidance of students project work with the faculty members from different disciplines acting as supervisors.

### 3.2.4 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

The equipment details are displayed prominently on laboratory notice board. Every department of the institute follows following guidelines:

- Thrust area of research by faculty is notified and informed to students.
- Maintaining Log books for usage of equipment and software.
- The Research Committee monitors the research activities and keeps track of the usage of various resources and facilities for research.
- Laboratories are kept open beyond college hours as per the project need
- Central Library facility remains open for students after college hours.

## 3.2.5 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

**Yes**, The institute has signed MoUs with industries and other agencies for promoting training, research and extension activities in technical education. The institute also receives research facility development grants from AICTE/DST/BCUD/SPPU etc.

# 3.2.6 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.

The following efforts are made by the institute for inculcating research culture

- Increased awareness about the research schemes by various funding agencies like AICTE/ DST/BCUD-SPPU among faculty and the institute ensures the participation of faculty and students in those schemes.
- Motivates the faculty for attending/giving research related training and making them aware of cutting edge technologies.
- The institute has research committee to monitor research activities. These committee members guide other faculty members for preparation of research proposals and advise them about current trends in research in their area of

- expertise. Subsequently the research proposals are sent to various funding agencies for their considerations. The important major research projects completed during the last four years is given in following table.
- The Institute has several senior faculty members with good experiences in research activities. These senior faculty members guide other faculty members in preparing research proposals and advise them about current trends in research in their area of expertise. Subsequently the research proposals are sent to various funding agencies for their considerations.

### **Computer Department**

Sr. No	Year	Project Title	Name of Faculty	COST (In Lakh)	Funding agency
1.		Out-Of-Pattern features detection in UAV Video	Dr. Sarang Joshi	9.35	DRDO
2.	2012-13	Vision based real time hand gesture recognition for HCI	Prof. Archana S. Ghotkar	4.80	Ministry of Science and Technology, DST, New Delhi
3	2015-16	Vision based human motion recognition indoor scene	Prof. G. V. Kale	1.90	Savitribai Phule Pune University

### **E&TC Department**

Sr.	Year	Project Title	Name of the	Cost	Funding
No		<b>y</b>	Faculty	(In	agency
				Lakh)	
1.	2014-16	Development of RF	Mr. S. V.	2.00	SPPU
		and MW heating	Gaikwad		
		system to control			
		insect pests in			
		agriculture.			
2.	2014-16	Implementation of	Mr. P. S.	1.80	SPPU
		Energy Efficient	Varade		
		Resource Allocation			
		Scheme for Cognitive			
		Radio Networks.			
3.	2013-16	Spectrum Sharing and	Dr. Y. Ravinder	6.50	AICTE Grant
		Resource Allocation			RPS
		for Cognitive Radio			
		with Green			
		Communication			
4	2014.16	Perspective Multi Antenna Aided	Dr. Y. Ravinder	1.00	SPPU
4.	2014-16	Detection Schemes for	Dr. Y. Kavinder	1.90	SPPU
		the Next Generation			
		Wireless			
		Technologies			
5	2016 -	Smart Fruit	Dr.M.V.Munot	1,50,00	BCUD,
	2010 -	Classification and	Di.ivi. v .iviuiiot	0/-	ŕ
	2010		Dr.R.	0/-	SPPU
		Grading System	Sreemathy		
			Ms.R.V.Bakar		
			e e		
6	2016 -	Design and Develop	Mr.V.B.	1,50,00	BCUD,
	2018	Tactile Feel Display	Vaijapurkar	0/-	SPPU
		for Improved	Dr.Y.		
		Correctness in	Ravinder		
		Human Sensing			

### IT department

Sr. No	Year	Project Title	Name of Faculty	COST (In Lakh)	Funding agency
1	2013- 14	Efficient image morphing algorithm for image security	Prof. Anant M.Bagade	2.00	BCUD Research

		over internet			Project
2	2012-	CBIR for Medical Imaging	Dr. Emmanuel M	1.00	BCUD Research Project
3	13	Channel Allocation in wireless Network	Prof. S B Deshmukh	1.5	BCUD Research Project
4	2011-	Signature Verification in Devnageri Lipi	Dr. Jaydevan	2.4	DST

#### 3.3 Research Facilities

### 3.3.1 What are the research facilities available to the students and research scholars within the campus?

#### • Research Committee

The institute has research coordination committee with one faculty from each department as a member. The adviser and senior professors interact with junior faculty members to ascertain their areas of research interests. The needs of researchers are given highest priority. All the departments have a separate research laboratory so that it can be exclusively made available to the students.

#### Research Center

In the Institute, two departments has specialized research center recognized by SPPU. Every department makes research facilities available for students and the faculty. Faculty and students are allowed to work in other department laboratories for multi-disciplinary research projects.

### • Industry Interaction

All the departments of the institute have Industry-Interaction committee. Every department has Memoranda of understanding (MoU) with industry so as to share the technical facilities for completion of the research projects. In addition, some of the industries such as NI Lab, Texas instruments, Wipro, SAS, IBM, Tech Mahindra etc. has provided equipment's and software's for research activities which helps the students to develop projects.

### • Central Computing Facility

The every lab has browsing facility which provides flexibility to access Wi-Fi facility has been provided in the hostels for the students, research scholars.

The Institute provides facilities like central library and internet with

various information resources and access to digital libraries after college hours.

## 3.3.2. What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

All the departments of the institute have strategic planning for creating the research ambiance and to upgrade the research facilities on continual basis. The institute has 3 PG courses and two Ph.D. programs. Every year, the department wise budget allocation for R&D initiatives is made and required funds to upgrade and create infrastructural facilities are made available. In addition, the institute motivates faculty to apply for research grants from various government agencies and to enhance the industry collaboration in selected areas of research. This budget is utilized for purchasing equipment, consumables, software etc. Some part of the budget is also utilized to sponsor faculty for presenting research papers in international and national conferences.

The Institute is continuously striving to improve its infrastructural requirements in order to facilitate research in new and emerging areas. This is taken care with the help of following points.

- By encouraging faculty and students to attend research programmes, workshops, seminars and conferences conducted in the Institute and at other organizations. The Institute bears the cost of registration fee, conveyance and sanctions duty leave for the same.
- By encouraging faculty members to organize research workshop, seminars, conferences, with funding provided by Institute and from AICTE/UGC/DST/SPPU.
- By making available and upgrading the library of the Institute with wide range of books and various national and international journals. Online journals like IEEE, Springer and Science Direct are also accessible to the researchers.
- By providing uninterrupted facilities like high bandwidth Internet facility along with Wi-Fi connectivity in campus for faculty members and students for carrying out research work.
- With R&D Cell the research groups of faculties and students are formed by the Institute for identifying planning and carrying out research.
- The Institute sanctions budget for procuring latest software and equipments to carry out research work across all departments. Institute also provides support for in-house development of projects

# 3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments / facilities created during the last four years.

**Yes**, the major and minor research projects in laboratories are upgraded and created to meet the state-of-art facilities especially in emerging research areas of the program. All the departments of the institute apply for grants from different funding agencies like AICTE, DRDO, DST, BCUD – SPPU and industry. Several laboratories are developed with the help of the special grants by procuring different hardware and software in all departments of the institute. In the institute there are few laboratories are supported by industry. Details are as follows.

### i. SAS language lab:

The institute has MoU with SAS for postgraduate internships, SAS language lab, industry visits and faculty development program. Training from experts from SAS Research is provided to students. Students are trained to handle datasets, manipulate datasets, translate and analyze datasets.

#### ii. CUDA Lab:

CUDA lab has one K40 and two Titan GTX GPU cards available in lab. Training material with lab books (Programming massively parallel processors by David B. Kirl and Wei-mei W. Hwu) is available for training purpose. Assignments are carried out for parallel computing. BE and ME students and staff are using this facility for project work related to parallel computing

#### iii. Other Labs

	Industry Supported Laboratories										
Sr. No.	Name of the Laboratory	Name of the industry Coordinator Investment		Facilities created	Year / Date						
1	MTLC	Wipro Technologies	Dr. R. Sreemathy	8 Lacs.	20 UTLP boards	2013-14					
2	NI LabVIEW Academy	National Instruments	Dr. Y. Ravinder	15 Lacs. 6.93 Lacs	3 USRP Kit and 10 MyDAQ boards 3 USRP Kit	2014-15					
3	Texas	Texas	Mr. K. V.	1.6 Lacs.	6 Kits of ASLK v 2010	2013-14					

	Instruments	Instruments	Sakhare		2 kits	
					Beaglbone	
					XM	
					2 kits	
					Beaglbone	
					Black	
					8 FIREBIRD	
					V robots and	
	e-Yantra		Mr. S. S.		accessories	
4	Laboratory	IIT, Bombay	Dudam	4 Lacs.	and 10	2013-14
	Laboratory		Dudaiii		SPARK V	
					robots and	
					accessories	

### 3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?

The institute encourages students and research scholars to visit different laboratories for research purpose. The faculty of the institute is motivated and deputed for pursing Ph.D. at IIT's and other renowned institutes. The institute also sponsors students for participation in technical competitions, exhibitions and industrial visits.

## 3.3.5 Provide details on the library/ information resource center or any other facilities available specifically for the researchers?

S r. No.	<b>Particulars</b>	Number
1.	Titles	11750
2.	Volumes	34912
3.	E-Resources	
	IEEE	174
		+
		600000
		Conference Papers
	Elsevier-Science Direct	276
	Springer	149
	J-GATE Engineering & Technology	4532
	(JET)	
	ASTM Digital Library	2062
	McGraw-Hill's Access Engineering	686 eBooks

4.	NPTEL Video Lectures	8898
5.	CDs/DVDs	4028
6.	British Library Online Membership	
	Academic E-books	1,20,000
	Academic E-Journals	7000
	International Newspapers &	4000+
	Magazines	
7.	National Digital Library	Available

- Library facility is available before and after college timing
- Student and staff participation in book/periodical procurement
- Digital Library with multimedia facility with access to E-material 24×7
- Availability of National Digital Library
- British Library online membership
- Orientation and training program for effective utilization of library resources.
- Separate seating arrangement for faculty, PG and Ph.D. students, Group Study, periodical reading
- Reading hall facility with Wi-Fi connectivity, keeping open before and after college timing, extended hours during examination period, provision of additional switches for connecting PCs/laptops, inspirational display boards of scientist/great personalities
- Feedback Facility
- Suggestion box

## 3.3.6 What are the collaborative research facilities developed/created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.

- The department wise collaborative research facilities/laboratories developed for the students and research scholars within- campus.
- Different departments have created some specified research laboratories and procured specified equipment / software / hardware in the respective departments to augment the research facilities.
- With the ongoing and completed research projects of various research

outcomes have been achieved in the three R&D labs of the college. Some of the research lab equipment are developed in collaborative efforts with agencies/Industries like DST, BCUD etc.

### 3.4 Research Publication and Awards

### 3.4.1 Highlight the major research achievements of the staff and students in terms of

• Patents obtained and filed (process and product) The details are given in following table.

Sr No.	Yea r	Bran ch	Title of Patent	Faculty/ Student Name	Date of Patent filed	Patent No.	Status	National (N)/ Internati onal (I)
1	2013 -14	CE	An emulator system with data sample acquisition n, storage and computer control interface system and process	Dr. S. A. Joshi	21/02/201	Application No.195/MUM/20 10 A	Published	N
2	2016 -17	CE	System and method for motion analysis and feedback for amendment of human action	Prof. G. V. Kale	30/08/ 2016	Indian Patent Application No. 201621029482	Applied	N
3	2015 -16	Applied Science	Mist nozzle and method of making the same	Prof. A.M.Deshm ukh	05/06/201 5	Application No. 2035/MUM/2015 A	Published	N
4	2016 -17	Applied Science	Solar operated multipurpose mist spray generator machinery	Prof. A.M.Deshm ukh	28/10/201 6	Application No.20162103536 5 A	Published	N

5	2016 -17	Applied Science	Energy efficient multipurpose mist spray evaporative cooler	Prof. A.M.Deshm ukh	28/10/201 6	Application No.20162103536 9 A	Published	N	
---	-------------	--------------------	---	---------------------------	----------------	--------------------------------------	-----------	---	--

- Original research contributing to product improvement
  - The above mentioned patents by faculty contribute to product development and improvement.
  - Institute has following products developed and being used by faculty:
    - Online feedback system S/W is developed and is being used from 2012-13
    - Online Unit Test S/W is developed and used from 2010-11
    - o COPO S/W is developed to measure the attainment of learning outcomes in 2015-16.
  - Research studies or surveys benefiting the community or improving the services

Year	Title	benefits to community
2012-13	Out-Of-Pattern features	Surveillance, Product, Aeri
	detection in UAV Video	al Photography, Agriculture
2013-14	Vision based real time hand	Social application – sign
	gesture recognition for HCI	language recognition for
		deaf and dumb people
2014-15	Vision based human motion	In the field of healthcare.
	recognition indoor scene	

• Any remarkable achievement by staff/ student (best paper award, innovative idea, etc.)

AY	Total	otal International National S		State	University
2012-	02	01			01
13					
2012	0.2	0.2			0.1
2013-	03	02			01
14					
2014-	04	01	01	01	01

15					
2015- 16	01			01	
2016- 17	03	01	02		

Some of the recent achievements are:

Staff achievements is given in following table.

Year	Name of staff	Achievements
2015-16	Dr. R.B.Ingle	Chair of IEEE R10
		SAC
2015-16	Dr.Sonal C.	member in BoS IT [
	Dharmadhikari	VC Nominee ] at
		MKSS Cummins
		College of
		Engineering for
		Women, Pune
2016-17	Sheetal Sonawane	Received best paper
		award at IEEE
		international
		conference on
		Computing ,
		Analytics and
		Security trends
		(CAST 2016) in the
		track of Natural
		Language Processing
		and Information
		Retrieval
2016-17	1. Dr.A.M. Bagade	Dr. A.P.J Abdul
2010-17	1. DI.A.WI. Dagade	Kalam Best Teacher
		Award
	2. Prof. K A	CSI Distinguished
	Sultanpure	Assistant Professor
	Bultanpure	A5515tailt 1 101C5501

### **Students Achievements:**

Year	Name of Student	Achievements
2012-13	Bhavesh Munot	First prize
	Madhuri Gole, Sahil	First prize own Rs.
	Uppal, Anuj	50,000/-
	Deshpande	First prize
	Narendra pal singh,	3 second prizes
	Mohit Bhadade	
	Nafisa Madliwala	
	Yash Shah	
2013-14	Archit Doshi	Finalist in Top 10
	Pooja Chaudhari	Bits Pilani
	Kajal Barde	Finalist Bits Pilani
		Finalist IIT Kanpur
2014-15	Kruti Chauhan	BITS, Goa invited for
	Saniya Valuskar	presentation IEEE
	Saniya Kaluskar	IACC '15
	Janhavi Kulkarni	
2014-15	Shreyas Tatia (TE-IT)	scholarship from
		BMC software worth
		Rs 94,000/-
2015-16	Mukta Divekar	Second prize in INC
	Vinayak Tejankar	Second prize in
	Piyush	project competition at
	Ms. Kulkarni	Sinhgad.
	Shradha Kamble	
	Apeksha Tadge	
	Ayesha Sayyed	
	Chaitali Shinde	
	Vikram Khopade	Best paper award for Paper
		presentation in National
		Conference on Advancements in
		Computer& Information
		Technology
		NCACIT-2016

3.4.2 Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any

#### international database?

**No**, institute does not publish or partner in publication of research journal. But Institute has published conference proceedings of conferences organized by PICT

Sr. No.	Conference	Year
1	University level conference-cPGCON	2013-14
	and iPGCON	
2	National conference- NCRTCE, 2016	2015-16
3	IEEE International conference ICEI-	2016-17
	2017	

## 3.4.3 Give details of publications by the faculty and student (count) Publication per faculty: average publication per faculty from AY 12-13 to 16-17 mentioned in the following table.

Year	No. of publications	Publication per faculty
2012-13	60	1.722
2013-14	122	3.572
2014-15	147	3.575
2015-16	114	3.683
2016-17	35	0.345

Table: Publications by faculty (Year-wise average)

- Total number of publications: 460
- Number of papers published by faculty and students in peer reviewed journals (national/international):339
- 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.: 187
- Monographs:0
- Chapter in Books: 3
- Books Edited: 0 Books with ISBN/ISSN numbers with details of publishers: 25
- Citation Index- 2.0436 (average of 5 years)
- SNIP--NA
- SJR—0.97
- Impact Factor- 2.4304 (average of 5 years)
- h-index: **13**

The summary of year wise publication details are given in following tables.

### (National/International)

Year	Journ	nal	Conferences		
1001	International	National	International	National	
2012-13	24	2	22	4	
2013-14	55	10	16	10	
2014-15	88	16	10	4	
2015-16	70	3	7	3	
2016-17	13	0	4	0	

Table: Statistics of papers published by faculty/students in peer reviewed journals

### Publications, Citations Statistics of the institute from last four years

Total No. of publications	339
Total No. of Citations	528

### 3.4.4 Provide details (if any)of

Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally:

Year	Name of staff	Achievements
2015-16	Dr. R.B.Ingle	Chair of IEEE R10
		SAC
2016-17	Prof. K. A. Sultanpure	CSI Distinguished
		Assistant Professor

### 3.5 Consultancy

### 3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

The institute industry interface is well established in our institute using the following strategies:

 We have a very strong alumni base since 1988 and they are occupying very high positions like CEO/CTO/VP. They are helping the institute to improve the institute industry interface by the way of internship, scholarship, industry sponsored projects, training programmes, guest lectures, and entrepreneurship activity.

- Our Institute has MoU with industries like National Instruments, EQ Technologic to establish Industry sponsored laboratories.
- We have MoU with industries like Tech Mahindra to establish center of excellence/innovation. NTT Data Japan has signed MoU with our institute for the internship of students in Japan.
- Our institute organizes a national level project competition called "Impetus & Concept" where in many experts from industry, research organization and academics visit our campus for assessing the projects and spot hiring.
- We also depute our faculty to industry on sabbatical leave of 3 to 6 months.

### 3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

• The institute has prepared a policy document for consultancy and it is circulated to all staff members. The information such as research carried out by the faculty, the infrastructure availability, expertise in various areas, etc. is made available on the website and blogs. The faculty also approach and interact with industries to explore the possibility of joint research project and consultancy.

### 3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

 The institution encourages the staff to utilize their expertise and available facilities for consultancy services by providing the proper share in the consultancy and by providing the seed money.

## 3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

The broad areas identified for major consultancy services provided by the institute are

- VLSI and Embedded System
- Analog & Digital Communication
- o Wireless Communication
- Image Processing
- o Big Data
- o IoT
- Mechanical Engineering

## 3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

- There is a policy document regarding consultancy provisions and opportunities in PICT. The earning from the consultancy shall be shared using three different heads.
  - Teacher's share 50%
  - Institute share 30% for resource utilization.
  - R&D fund 20%

### 3.6 Extension Activities and Institutional Social Responsibility (ISR)

## 3.6.1 How does the institution promote institution-neighbourhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

- Social activities like blood donation camps, Computer awareness campaign in rural areas are organized by the students.
- Faculty members and students visit the social organizations and help them by donating the material as per need (food, notebooks, cloths, educational instruments, etc)
- By participating in State level cultural events like "PURUSHOTTAM KARANDAK", "FIRODIYA KARANDAK" Students get opportunity to explore their organization skills, showcase talent and interact with other college students.
- The Institute has a very active and enthusiastic NSS team that regularly organizes camp at rural areas for interacting with the students and resident for promoting the imparting education, health checkups etc.
- PICT has well established Pictosocial group which has remarkably shown its dedication towards various social activities students are encouraged to join the group.
- The student community is being benefited by implementing government reservation schemes and offering good scholarships for both merit and economic basis. The major strength of the institute is its ability to ensure holistic development of students to make them responsible citizens by teaching them the moral values.
- Institute provides quality based education to the students by inculcating moral values, scientific temper and employing state of art technologies. It aims to pursue excellence towards creating students with high degree of intellectual, professional and cultural development to meet the national and global challenges.

## 3.6.2 What is the Institutional mechanism to track students' involvement in various social movements/activities which promote citizenship roles?

The student's participation in social activities is tracked by means of following methods-

- A student record file is maintained for all the students by the mentor teacher at the departmental level which includes all necessary details of the students, including their personal details, performance in technical and cultural events.
- Institute maintains the records of the articles of students published in newspapers.
- Mentor teacher maintains the records of the social activities of concerned students.
- University also has its own mechanism to monitor NSS and Earn & Learn activities
- Students submits the reports of various social activities to respective heads.

### 3.6.3 How does the institution solicit stake holder perception on the overall performance and quality of the institution?

The institute timely obtains the feedbacks and views on its overall growth and performance from important stakeholders including students, parents, alumni, industry, faculties etc.

- Regular parents meet are organized by every department. Parents are
  encouraged to give their valuable feedback on quality and performance
  of students and institution. Parents can communicate with the institute at
  any time apart from parents meet.
- Students feedbacks also play important role in improving teachinglearning process and quality. Student feedbacks are taken twice in a semester.
- Alumni feedback is collected during alumni meet. Alumni feedback help
  to improve quality and performance of the departments and institute as a
  whole. Alumni feedbacks are used to bridge the gap between learning
  and practice.
- Employer feedback is collected which is important for making an assessment on competence and industry readiness of students.

# 3.6.4 How does the institution organize its extension and outreach programs? Providing the budgetary details for last four years, list the major extension and outreach programs and their impact on the overall development of students.

Every academic year various extension and outreach programs are planned by PICTOSOCIAL team and NSS team of the Institute and executed.

Pictosocial has remarkably shown its dedication towards various social activities.

The details of extension activities organized by the institute is given in following table.

### **Extension and Outreach programs**

Sr.		Extension and Outreach pro-	Impact on the
	Year	Event/Activity	-
No			<b>development</b> of
			students
	2014-	Carrier guidance program for school	Makes students aware
1	15,15-	students	about the present
	16,		condition of school
	16-17		students to choose their
			career.
2		<u> </u>	Increased general social
		preparation for NGOs	awareness among the
			students
	2016-17	Teacher Training Program by PICT	Improved leadership
3		ACM Student Chapter(PASC)	qualities and team work.
	2015-16	Earth hour	Increased social
4			awareness about the
			energy crises among the
5	2015-16	• UG students teaches internet	Developed sense of
		lesson to school children	responsibility against
		Money donation(Naam	society
		foundation)	
		Blood donation	
		Tree plantation	
		• NSS special camp at	
		Gogalwadi	

6	2016-17	•	Associated	with	an	NGO	Developed	sense	e of
			named "Mat	toshree	", w	hich is	responsibility	8	against
			an old-age	home	(loca	ated in	society		
			karve nagar,	Pune).					
		•	Conduction	of	Ol	rigami,			
			painting, d	lrawing	5, 8	science			
			and some g	aming	sess	ions at			
			BAL-Sadan						
		•	Association	with	ASE	IA, an			
			NGO whic	h helj	ps i	in the			
			education of	girl ch	nild i	n rural			
			areas, where	e they	don'	't have			
			the facilities	s to av	vail	proper			
			guidance ou	tside sc	choo	1.			

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

- The college has well established NSS unit, PICTOSOCIAL group and other forms of community development services.
- The student members plan the activities and encourage others for active participation.
- During induction programs, coordinators of the extension activities interacts with the students and discuss about the benefits and scope of the activities.
- The students who are active members of NSS and other outreach programs are given academic liberty in the form attendance, based on the performance.
- The information about the proposed activities are disseminated in form of notices, academic calendar, circulars, web notifications and also by word of mouth.

## 3.6.6 Give details on social surveys, research or extension work(if any) undertaken by the college to ensure social justice and empower students from under- privileged and vulnerable sections of society?

- Institute has a well established PICTOSOCIAL students group who every year took up the task of providing career guidance sessions for students of std. 8, 9 and 10 in schools where such counselling is not available.
- A total of 150+ children across the schools benefited from this exercise. This activity is highly appreciated by the principal and teachers of the respective schools.

- Over the years Pictosocial has remarkably shown its dedication towards various social activities. This year, with the great cooperation of the enthusiastic team of more than 50 students led by Mahima Mundra, Mrunal Bhokre, Tushita Singhel and Shraddha Patil, who coordinated Conduction of poetry, story writing and debate competition, an event named "Manthan".
- It was a platform for all Pictians to show their creative writing and speaking skills apart from their technical knowledge.
- PICT has a long Association with an NGO named "Matoshree", which is an old-age home (located in karve nagar, Pune). Team members visited there on weekends and spent some time with them to make them feel happy.
- Visit to BAL-Sadan is planned regularly to conduct origami, painting, drawing, science and some gaming sessions to cheer up the children.
- PICT continued to work over the years for ASHA, an NGO which helps in the education of girl child in rural areas, where they don't have the facilities to avail proper guidance outside school. Just like past 3 years we continued to teach and help them cope up with the various paradigms of their school curriculum.
- Picsoreal team took up the task of commencing a donation drive in 2016-17 and collected total Rs 51000/- which is donated to SAWALEE FOUNDATION, Ahamadnagar, a nonprofit organization which on education of orphans specially girls

# 3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.

Various extension activities helps students to develop a sense of social responsibility and sense of responsible citizen of the country. Details are given in the table.

Year	Activity	Objective	outcome	Comment
2014-15,	career	provide an	Helps	Students learn to work in team
15-16,	guidance to	insight to	students	and helps to develop sense of
16-17	school	choose	to take	social responsibility among
	students	career	the	them.
		path	decisions	
			about	
			their	
			career	

			choices	
			confident	
			ly and are	
			able to	
			understan	
			d the	
			scope in	
			each field	
2015-16	Evaluation	Technical	In time	Increased general social
	tests	support to	preparatio	awareness among the students
	question set	conduct the	n of the	
	preparation	tests	tests	
	for NGOs			
2016-17	Teacher	Educate the	Increase in	Improved leadership qualities
	Training	teachers	the	and team work.
	Program by	about	confidence	
	PICT ACM	recent	level to	
	Student	computer	handle the	
	Chapter(PA	handling	system.	
	SC)	skills		
2015-16	Earth hour	Raise an	Increased	Increased social awareness
		awareness	social	about the energy crises among
		about	awareness	the students
		energy	about the	
		saving	energy	
			crises	
			among the	
			students	

# 3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

The institution has organized various activities and ensure the involvement by following means:

- Awarding certificates in Blood Donation Camps
- Visits to rural areas are communicated well in advance to increase the participants and beneficiaries.
- spreading awareness about social issues such as the dowry system, female feticide and Environment protection and energy saving.
   Rode-plays are organized to encourage the participation.
- Association with the NGOs to reach to community at large.

- Action for Self-reliance, Hope and Awareness (**ASHA**), which helps in the education of the girl child in rural areas, where they don't have the facilities to avail proper guidance outside school.
- "Matoshree", which is an old-age home (located in karvenagar, Pune).
- Visit to Old Age Home, Orphanage home are organized
- Tree plantation program.
- Educational programs to underprivileged students in rural areas are organized.

## 3.6.9 Give details on the constructive relationships forged (ifany) with other institutions of the locality for working on various outreach and extension activities

The institute has developed constructive relationship with institutes PICT has association with following

Name of	Address	Details	
Organization/ NGO			
Matoshree	Karve Nagar	old-age home taking care	
	Pune	of elders.	
NAAM	Pune.	helping farmers and their	
		families of Maharashtra.	
BAL-Sadan	Karve Nagar	Orphanage, aims to	
	Pune	provide Food, Clothing,	
		Shelter, Education and	
		Rehabilitation to	
ASHA		(Educating Girls in rural	
		areas)	
SAWALEE	Hadapsar Pune	Social welfare	
Foundation(Women		organization	
Social Foundation)			

## 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.

Institute has received certificates and appreciation for most of the above mentioned activities.

#### 3.7 Collaboration

#### 3.7.1 How does the institution collaborate and interact with research

laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives-collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

- Institute is keen to provide industry interface to its student, which enhance their practical knowledge and so as to develop right kind of technical manpower.
- Institute collaborates with industry for creating various facilities in the campus through its "Institute-Industry Interaction" process.

The main objective of having "Institute-Industry Interaction" is:

- Industry trends and practices
- Designing course curriculums
- Sponsored projects
- Create industry ready students.
- Consultancy projects
- Sabbatical to create skilled professionals.
- Pedagogy improvements.

#### **Type of Interactions:**

- Part of syllabus coverage by industry experts.
- Usability of concepts from the subject in industry and highlighting opportunities.
- Expert talk on content beyond syllabus.
- Guest lectures on advance technology.
- Sponsored projects

#### **Type of Industries:**

Department has taken initiative for the following types of industries:

- Product based industry (for project sponsorship, internship) : Calsoft, Tibco, SAS, eQ Technologic, Symantec.
- Service Based Industry (for project sponsorship, Expert talk, Guest Lecture): PSPL
- R&D based industry: TRDDC, CDAC

#### **Collaboration Process:**

- Identification of Research Laboratories/Institutes/Industries in corresponding research area through various stakeholders
- Exploring the possibilities of collaboration in various technical domains.

- Formal meetings and discussion regarding facilities and sharing resources between collaborating institutes
- Completion of formalities for MoUs/Agreements.

Table described in following sections focuses on the benefits accrued of the initiatives-collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

- 3.7.2 Provide details on the MoUs / collaborative arrangements (ifany) with institutions of national importance / other universities / industries / Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.
  - The Institute has signed MoUs with external organizations to conduct activities like Training, Placement, Development of training facilities for students, Guest Lectures, Participation in technical events and Advanced Learning. The details on MoU signed with industries is given in following table.

MoU signed with industries/Institutes/University

	Organization /	Contribution in	Date of MoU
Sr.	Institute/Industry/Uni	development of the	
No	versity with which	institute/facilities used	
•	MoU is Signed/		
	Agreements		
1.	BMC	Scholarship	07/09/2016
2.	Harbinger System Pvt. Ltd.	Technical guidance to project,	01/08/2016
3.	IEEE Techno Entrepreneur Programme	Supporting ,inspiring, educating entrepreneur	24/07/2106
4.	Tech Mahindra	Innovation lab	13/06/2016
5.	SAS	Internship sponsored projects, FDP	01/01/2016
6.	Nvidia	Seminar, workshop, provided GPU card	10/09/2015
7.	Persistent	sponsored projects, FDP, guest Lecture	01/07/2015

8.	IBM India	Internship sponsored projects,	2013-2014
9.	TCS	Infrastructure, facility provided	08/08/2014
10.	TIBCO	Internship	13/06/2014
11.	Department of Police	Paperless Investigation project	21/12/2015
12.	ЕТН	Student attendance, practical, test assessment	17/11/2014
13.	WinPoint	Campus Recruitment Training	10 /2/ 2015
14.	Coriolis Technology	Promote and sponsored projects	15/05/2009
	3DPLM Software  ( MoU) for Project  Development.	Internship / project sponsorship / placement	Jan 2014
	NTT Data for Internship program.	International sponsorship / placement	May 2013
	Training Program on Microsoft Technologies	Hands-on on Microsoft IT Academy .	3/7/2015
18.	Brown Cover	Soft skill training Program for students	1 /7/ 2015
19.	Flipick Pvt. Ltd.	Helps in developing e-content for the courses for better understanding of the course and self learning	29/11/2016
	Mission 10X Technology Learning Centre Wipro Technologies	Faculty Training programs	2012-13 2014-15
21.	National Instruments	3 USRP Kit and 10 MyDAQ	2014-15

23	e-Yantra Laboratory	8 FIREBIRD V robots and	2013-14
		accessories,10 SPARK V	
24	Texas Instruments	6 Kits of ASLK v 2010	2013-14
		2 kits Beaglbone XM	
		2 kits Beaglbone Black	

3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment / creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories/ library/ new technology /placement services etc.

Industry-institution-community interactions

Department	Industry Institution Community Interaction	Benefits in terms of creation creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz.laboratories/ library/ new technology/placement services etc.
Comp	NVDIA GPU Centre	Provided high performance graphics cards, which can used by students for their UG or PG Projects.  High configure GPU Card -03[tesla,k40& titan gtx) with 2books  Students implement the real time project in machine learning domain ,NVDIA allow to remotely connect to their office machine and work on them. Students get benefited with, to know the state of the art technology used in industry.
	Industrial visit to CDAC Pune	Understand Architecture of PARAM Supercomputer and achieve Course objectives for the subjects like Computer Organization
TATA components and achieve Course		Understand Architecture of Core networking components and communication technologies to achieve Course objectives for the subjects like Computer Networks, Data communication.
	SaS	Setup a lab in a department can be used by PG students for research purpose.  SaS provided the SaS language tools which installed

		in lab, Students used for their project implementation. students interact with SaS technical team frequently related to technical stuff.
IT	Communication to CSI for CSI Student chapter.	CSI Student Chapter formed on 1 <sup>st</sup> march 2015 with 143 student registrations.  Help in keeping students updated with cutting edge technologies
	Workshops on Cloud computing	Helps student to set up cloud, different installation issues.
Е&Тс	Wipro Technologies	Technical development of students in embedded domain
	National Instruments	Placement, Skill Development for students and faculty, Projects
	e-Yantra Laboratory & Texas Instruments	Students can use hardware tools, software Industrial training

3.7.4 Highlighting the names of eminent scientists/participants, who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

Eminent scientists/participants contributed to the events

Sr N o.	Name of Eminent Scientists / participants/Prof essionals	Association	Purpose of Visit	Year
1	Mrs Vaishali Tepan	Executive MBA from IIM,Bangalore, Regional training head with KFC	Expert Lecture on Soft Skills and Behavioral Skills	2012-
2	Mr.Thirukumaran	SAT,Infosys,Colmbatore	Workshop on Wireless networking,NS- 3,Simulation Tools	2013- 14
3	Prof. Rahul Marathe	Department of Management Science, IIT, Madras	Expert Lecture on Industrial Engg, Statistics, Production Engineering	2013- 14
4	Dr. Sachin Gunthe,	Department of Civil Engg., IIT, MadrasAssistant Professor and Head Max Planck Partner Group at IIT Madras	Expert Lecture on Atmospheric modeling, field measurements, remote sensing	2013-
5	Dr. Prateek Saxena	National University of Singapore.PHD,Universit y of California Berkeley	Expert Lecture on Computer Security, Operating Systems, Programming	2013-
6	Sunita Shetty	Senior Manager SAS R&D, India	Expert Lecture on Business Development and Marketing Operations	2013-
7	Dr.Ankur Teredesai	Professor Graduate Program Coordinator Computer Science & Systems Institute of Technology University of Washington Tacoma	Expert Lecture on Knowledge discovery, Data Mining	2013-

	Dr. Alark Joshi	Professor in the	Expert Lecture on	2013-
8	DI. THAIR VOSIII	Department of Computer Science at the University of San Francisco	Scientific Visualization, Image-guided Navigation for Neurosurgery, and Interfaces for Mobile data visualization	1
9	Mr. Krishan Mittal	CEO, Unfurl Minds, Pune	Expert talk on Product planning, Enterprise IT Management, Mobile development	2013-
10	Mr. Samrit Maity	Senior Technical Officer, CDAC	Expert talk on High Performance and Distributed computing	2013- 14
11	Mr. Souvik Barat	Senior Scientist, TRDDC, Pune	Object Oriented Analysis and Design with UML	2013- 14
12	Dr. Tulika Mitra, Dr. Chan Mun Choon	Department of CS, School of Computing at the National University of Singapore	Design automation of embedded real-time systems and Wireless Communications for Ultra-Wideband Sensor Networks	2013- 14
13	Dr. Parag Kulkarni	Founder CEO and Chief Scientist, iknowlation Research Labs	Expert talk on how todevelop the problem under consideration justify feasibility using concepts of knowledge canvas and IDEAMatrix	2015- 16
14	Mr. Vivek Digambar Kulkarni	Chief Architect Persistent System ltd.	Seminar on Digital Pune Hackathon – theme Smart City	2015- 16
15	Mr. Vinit Tople  Ajay Wagh	AMAZON.COM, Seattle, WA	Delivered live video lecture on Career Guidance	2015- 16
16	Mr. Aditya Khasnis, VP Mr.Vijay Mangeshkar, AVP	Vice President at Barclays Investment Bank, Assistant Vice President at Barclays Investment Bank, Pune	Expert talk on Information Security and Banking Regulations	2015- 16

17	Dr. Navin Kabra	Reliscore.com	ACM Eminent speaker	2015-
18	Ashish Mishra	Senior Software Specialist, SAS R&D India Pvt. Ltd	Introduction to the SAS World	16 2015- 16
19	Srikanth Chandrasekharan	Director - Standards & Technology, IEEE	Webinar on Why Standards Matter	2015- 16
20	Anagha Paranjape- Purohit, Dr. Madhav Mutalik	Architect + Environmental Planner , Doctor + Teacher	TEDx talk*A reflection of your dreams. An insight into your heart's deepest desires.	2015-
21	Dr. Sandeep Deshmukh	DataTorrent	Workshop on Apache Apex	2015- 16
22	Vidya Kadam	IIT Bombay	Certification Course on IIT FOSS	2015- 16
23	Dr.Asish Mukhopadhyay	IIT, Kharagpur	Seminar on Teaching Practices For Faculty Development In Engineering	2015-
24	Dr. VCV Rao	Associate Director and Head of the Department at C-DAC Pune	Expert session on "High Performance Computing"	2015- 16
25	Mr.Sachin Lodha			2015 -16
26	Dr.Virendrakuma C. Bhavsar, Dr.SeungHyun Lee,Mr.Pitke MadhukarVishwanath , Prof.Rajat Moona	International conference	Talk on "Emerging trends in ICE"	2016 -17
27	Mr. Ashish Gupta	Electrono solutions, Bangalore	One week Faculty Training Program on NI LabVIEW and NI USRP, NI MyDAQ Applications	2014 -15

#### National and international conferences organized

Name of the	Date	Status	eminent	Website of
conference		(I/N)	scientists/particip	the
			ants contributed	conference(if
				applicable)
1st International	3rd-5th	I	Dr.Virendrkumar	http://www.ic
Conference on	Feb		C. Bhavsar,	ei.in/
Emerging	2017		Dr.SeungHyun	
Trends &			Lee,Mr.Pitke	
Innovations in			MadhukarVishwa	
ICT (ICEI-2017)			nath, Prof.Rajat	
National	11 <sup>th</sup> -	N	Mr.Sachin Lodha	
Conference on	12 <sup>th</sup> Ma			
Recent Trends in	rch			
Computer Engin	2016			
eering				
(NCRTCE,				
2016)				

- 3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated.
  - 1. Curriculum development/enrichment
  - 2. Internship/ On-the-job training-
  - 3. Summer placement- NA
  - 4. Faculty exchange and professional development-
  - 5. Research-
  - 6. Consultancy-
  - 7. Extension-NA
  - 8. Publication-
  - 9. Student Placement-
  - 10. Twinning programmes- NA
  - 11. Introduction of new courses-
  - 12. Student exchange-
  - 13. Any other UG/PG Project Sponsorship

The linkages/collaborations that have actually resulted in formal MoUs agreements are listed in table.

Department	No. of MoUs	Year
Comp	1	2012-13
	2	2013-14
	4	2014-15
	6	2015-16
IT	1	2013-14
	1	2014-15
	2	2015-16
E&TC	1	2013-14
	1	2014-15
	1	2015-16
Applied Science	1	2016-17

MoUs which enhanced/ facilitated:

 $\begin{tabular}{lll} $A:$ MoUs & which & enhanced/ & facilited & Curriculum & Development \\ Enrichment & \end{tabular}$ 

Department	Collaborating Institute/Compan y	Curriculum development/enrichment - (Workshop and Training Programmes, Competitions arranged by company)
Computer Engineering	SaS	Experts from company come to college for taking a elective named "Business Intelligence and Data Mining" for a PG students.
	Subject: Busineess Analysis & operation(BAO)	FDP conducted for teaching staff
	TechMahindra	Experts from company takes competition by giving Technology challenges to UG students, students

	"Centre of Excellence"	gives them a Concept Design Reviews for the problem.  PICT-COE Lab" under "Centre of Excellence"
IT	3DPLM Software to sign MoU for Project Development.	Internship / project sponsorship/ placement
	NTT Data for Internship program.	International sponsorship / placement
	Training Program on Microsoft Technologies	Hands on on Microsoft IT Academy students will learn new technology
	Brown Cover	Soft skill training Program for students

### B : MoUs which enhanced/ facilited Internship/ On-the-job training:

Department	Name of the company/Industry	No. of students for Internship/on the job training	Year
Computer	SaS, IBM, Persistant,	28	2014-15
Engineering	Calsoft, Nvidia etc		
	Auto desk,Air tight network,NTT,robo kraft technology,vasa technology,bohiyanam Pvt. Ltd.	20	2015-16

#### C: MoUs which enhanced/facilited Placements:

Department	artment Name of the Students placed company/Industry		Year	
Computer Engineering Pubmatic, Nvidia, Thoughworks, Morgan Stanley, eQ-Technologic Etc		96	2012-13	
	Google, Yardi,Pubmatic, Nvidia, Thoughworks, Morgan Stanley, eQ-Technologic etc	92	2013-14	
	Rakuten, Clarice, Pubmatic, Nvidia, Thoughworks, Morgan Stanley, eQ-Technologic etc	122	2014-15	
Avaya, Searce,Rakuten, Clarice, Pubmatic, Nvidia, Thoughworks, Morgan Stanley, eQ-Technologic etc		220	2015-16	

### D: MoUs which enhanced/ facilited Faculty exchange and professional development: Student Exchange:

• The institute has taken initiative for student exchange program with NTU, Singapore. This year 100 students have applied for the same.

MoUs which enhanced/ facilited Faculty exchange and professional development:

Department	Collaborating Institute/Company	Faculty exchange and professional development
Comp	eQ Technology (AY: 2013-14)	Prof. Y.A.Handge

#### E. Research

Name of Institute/company	Research projects and publications	Year
SaS	6PG Projects	2016-17

#### F. Consultancy

Sr. No.	Details of Consultancy (Technical / Academic / Testing)	Name of Faculty	Revenue Generated Rs.
1	Skylab Systems	Dr. Joshi Sarang A.	10,000
2	Weshine Infotech	Dr. Joshi Sarang A.	NIL
3	Rolocule Pvt. Ltd.	Dr. Girish Potdar	NIL

#### G: MoUs which enhanced/facilited Project Sponsorship

Department	Name of the company/Industry	No. of Students	Year
Comp (UG)			
	PSPL , NVIDIA	03,02	2012-13
	NVIDIA,PSPL	01,03	2014-15
	NVIDIA,PSPL	02,08	2015-16
	IBM, NVIDIA	01	2016-17
Comp (PG)			2012-13

	SAS	06	2016-17
IT (UG and PG)	3DPLM	07(UG) + 01(PG)	2013-14

### 3.7.7 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.

Institute is continuously taking the efforts for establishing and implementing the linkages/collaborations with various industry/institutes.

- Institute plans the industrial visits every year to explore the possibilities of collaborations related to academic and research activities for students and faculty members in various domains.
- Institute encourages faculties to sign MoUs with leading industries.
- Institute invites expertise from various industry experts to deliver sessions in conferences, workshops, seminars and FDPs to enhance the possibilities of collaboration.
- Institute encourages to conduct joint training program with leading industry.

### 3.7.8 Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.

• Applied Science Dept. has taken initiative of in-house development of various activities related to experimental setups, experimental models, etc. which has resulted in the income of Rs. 4.48.000/-

Details are as follows:

Academic Year	Amount Saved (Rs)
2016-17 (Till date)	34,000/-
2015-16	1,79,000/-
2014-15	87,000/-
2013-14	1,48,000/-
Total	4,48,000/-

#### CRITERION IV: INFRASTRUCTURE AND LEARNING

#### 4.1 Physical Facilities:

4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

The institute has the policy of providing infrastructure to facilitate effective teaching- learning and to meet the norms of Savitribai Phule Pune University and AICTE. All class rooms and laboratories are provided with more space than required as per the norms for better ambience. Class rooms are provided with LCD projectors and internet connection for effective teaching and learning. Laboratories are equipped with latest and sophisticated hardware and software facilities for better learning experience. Auditorium and seminar halls are provided with ultra modern facilities including video conferencing.

#### 4.1.2 Detail the facilities available for

a) Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.

In addition to conventional teaching-learning, self-learning by the students is also promoted in the institute by generating self learning facilities under various modes.

The various modes of self-learning are:

- Web-based learning: Internet is an open information system in which various sources of information, media and materials such as texts, notes, videos can be linked together in different ways to form self learning environment. Internet offers new possibilities to structure, represent, adapt and integrate various learning content and materials. Furthermore, due to its interactivity, learners can process the material in accordance with their individual preferences and strategies at any time and from any place provided an internet connection is available. Hence, the potential of the Internet self-learning mode is considered to be very high.
- Learning with Multi-media (e-content): Multimedia that's effective in learning doesn't simply consist of using multiple media together, but

- combining media mindfully in ways that capitalize on the characteristics of each individual medium and extend and augment the learning experience.
- Classroom Presentations: Students are required to present latest topics in a classroom which will help them in self learning.
- **Technical Symposiums:** In addition to presentations, symposiums also include panel discussions, small group discussions and poster presentations.
- **Mini projects:** Mini-projects can help to prepare students for open-ended investigative work.
- Extra lab hours: Students are encouraged to learn on their own by providing extra lab hours.
- **Group discussions:** Group discussion on study is essential for effective learning. In group discussion learning is shared and student participating in discussion are benefitted. By participating in group discussions students can also improve their communication skills. In this way it prepares them for oral exams and interviews as well.
- **Assignments:** Well-crafted assignments hold the potential to make learning and teaching more focused and relevant because in the crafting process teachers must be deliberate and highly aware of the context, content, and charge involved in an assignment.
- **Video lectures:** Student use of videos is voluntary, can be tailored by the students to meet their learning and topic-review needs.

#### **Self-learning facilities:**

#### The institute has generated the following facilities for self-learning:

- Broadband Internet access is provided through 155 Mbps leased line and all
  the computer terminals are connected to the Internet. In addition, the whole
  campus is Wi-Fi enabled. This facility will promote and motivate students to
  self-learning.
- Availability of course material on intranet
- Digital library facility: Through digital library facility, students have access to large number of Journal/Conference papers, e-books, video lectures (NPTEL, etc.), and Institute Repository. Students can access the digital library from anywhere in the campus.
- Language laboratory facility
- Wi-Fi internet facility is available in the campus
- Audio/Visual Hall
- Allowing students to prepare and present topics from curriculum and beyond curriculum also
- Arranging presentations on various topics beyond syllabus
- Organizing annual events like, INC, CREDENZ, IET, SCIENTIA, programming and Quiz contests

- Motivating students to participate in inter-college events for paper presentation and project exhibitions at national and international level
- Introducing Soft Skills in the curriculum for First Year engineering students
- Additional notes and Assignments are made available on the institute website.
- Blogs are created by some of the faculty through which students can interact with the faculty.
- Students are motivated to undergo mini projects even beyond their curriculum
- Regular guest lectures and workshops are arranged by inviting the experts from industry, research/educational institution. The students are motivated to take up the self-learning beyond syllabus so that they become familiar to the latest developments in the technology of their field.
- Students are also encouraged to take regular industrial visits during their course to understand and appreciate industry practices and to get exposed to the cutting edge technology. This encourages the students for self-learning and gears them for their future in industry.

Following are the details of various infrastructural facilities for curricular and cocurricular activities:

Sr. No.	Room No.	Room Type	Carpet Area (Sq.m.)
1	A-211	CLASS ROOM-1	85.00
2	A-212	CLASS ROOM-2	85.00
3	A-213	CLASS ROOM-3	85.00
4	A-309	CLASS ROOM-4	85.00
5	A-310	CLASS ROOM-5	85.00
6	A-311	CLASS ROOM-6	85.00
7	A-104	CLASS ROOM-7	66.00
8	C-107	CLASS ROOM-8	83.00
9	C-108	CLASS ROOM-9	83.00
10	C-109	CLASS ROOM-10	83.00
11	C-207	CLASS ROOM-11	83.00

12	C-208	CLASS ROOM-12	83.00
13	C-007	CLASS ROOM-13	68.00
14	C-010	CLASS ROOM-14	68.00
15	C-307	CLASS ROOM-15	90.00
16	C-308	CLASS ROOM-16	88.00
17	C-405	CLASS ROOM-17	90.00
18	C-406	CLASS ROOM-18	88.00
19	C-407	CLASS ROOM-19	88.00
20	HA-206	CLASS ROOM-20	82.00
21	HA-207	CLASS ROOM-21	82.00
22	HA-307	CLASS ROOM-22	82.00
23	HA-308	CLASS ROOM-23	82.00
24	HA-402	CLASS ROOM-24	82.00
25	HA-403	CLASS ROOM-25	82.00
26	A-107	CLASS ROOM-26	66.00
27	B-301	PG CLASS ROOM/TR. RM -1	39.00
28	B-201	PG CLASS ROOM/TR. RM -2	56.00
29	B-401	PG CLASS ROOM/TR. RM -3	39.00
30	A-202	LABORATORY-1	89.00
31	A-203	LABORATORY-2	90.00
32	A-204	LABORATORY-3	85.00
33	A-208	LABORATORY-4	85.00
34	A-209	LABORATORY-5	85.00
35	A-216	LABORATORY-6	86.00
	<u> </u>		

36	A-302A	LABORATORY-7	78.00
37	A-302B	LABORATORY-8	78.00
38	A-303	LABORATORY-9	85.00
39	A-306	LABORATORY-10	85.00
40	A-307	LABORATORY-11	85.00
41	A-314	LABORATORY-12	86.00
42	A-109	LABORATORY-13	66.00
43	C-101	LABORATORY-14	83.00
44	C-102	LABORATORY-15	83.00
45	C-103	LABORATORY-16	83.00
46	C-104	LABORATORY-17	83.00
47	C-105	LABORATORY-18	83.00
48	C-201	LABORATORY-19	83.00
49	C-202	LABORATORY-20	83.00
50	C-203	LABORATORY-21	83.00
51	C-204	LABORATORY-22	83.00
52	C-205	LABORATORY-23	83.00
53	C-206	LABORATORY-24	83.00
54	A-005	LABORATORY-25	66.00
55	A-008	LABORATORY-26	66.00
56	A-103	LABORATORY-27	66.00
57	C-301	LABORATORY-28	90.00
58	C-302	LABORATORY-29	88.00
59	C-303	LABORATORY-30	89.00
60	C-304	LABORATORY-31	83.00
61	C-305	LABORATORY-32	90.00
	1		

62	C-309	LABORATORY-33	88.00
63	C-401	LABORATORY-34	90.00
64	C-402	LABORATORY-35	88.00
65	C-404	LABORATORY-36	90.00
66	H-102A	LABORATORY-37	114.00
67	H-102B	LABORATORY-38	114.00
68	HA-104	LABORATORY-39	82.00
69	HA-105	LABORATORY-40	82.00
70	H-203	LABORATORY-41	81.00
71	H-204	LABORATORY-42	89.00
72	H-304	LABORATORY-43	81.00
73	H-305	LABORATORY-44	89.00
74	HA-503	LABORATORY-45	82.00
75	H-202	LABORATORY-46 (Language Lab.)	78.00
76	B-302	PG LABORATORY-1	80.00
77	B-203	PG LABORATORY-2	74.00
78	B-403	PG LABORATORY-3	80.00
79	B-303	PG RESEARCH LAB-1	80.00
80	B-204	PG RESEARCH LAB-2	66.00
81	B-402	PG RESEARCH LAB-3	80.00
82	B-304	TUTORIAL RM-1	39.00
83	B-202	TUTORIAL RM-2	51.00
84	B-404	TUTORIAL RM-3	39.00
85	A-105A	TUTORIAL RM-4	33.00
86	A-105B	TUTORIAL RM-5	33.00
	1		

87	H-303	TUTORIAL RM-6	33.00		
88	A-010	SEMINAR HALL-1	132.00		
89	C-005	SEMINAR HALL-2	136.00		
90	C-003	SEMINAR HALL- 3	136.00		
91	E-103	SEMINAR HALL- 4	132.00		
92	A-110&111	SEMINAR HALL- 5	132.00		
93	J-001	WORK SHOP	267.00		
94	A-101 & HA- 502	DRAWING HALL	175.00		
95	A-206	DEPT. LIBRARY-CE	33.00		
96	C-106	DEPT. LIBRARY-ETC	32.00		
97	C-306	DEPT. LIBRARY-IT	34.00		
98	B-001	LIBRARY & READING ROOM	891.00		
99	C-403	COMPUTER CENTRE	173.00		
	Total Area				

#### Co curricular / Professional Society Activities:

Co-curricular activities are an integral part of curriculum which provides educational activities to the students and thereby help in broadening their experiences. Such activities stimulate the interests in the students and provide equal opportunities to all the students to participate. These activities enhance the learning experience of the students and help in recognizing and developing their inner skills such as leadership qualities, creative or innovative skills etc.

#### The campus is always technically vibrant with the following activities:

#### 1. Impetus and Concepts (INC):

Impetus and Concepts popularly known as INC, is co-curricular activity organized by the students. It is a 3-day national level technical fest consisting of six different events namely- Concepts, Pradnya, Pratibha, Swayantra, Tantra and Cisco-Net.

**Impetus** is intra college project competition and concept is intercollegiate national level competition. This event is one of the largest technical events in

the country with the prize money of over 7 lakhs, and a footfall of over 30,000+, this event encompasses one and all. There were nearly 2400+ odd student participants from 150+ engineering colleges from inside and outside Maharashtra.

**Concepts** have been attracting corporate giants for not only sponsorship but also in terms of time and guidance to the office bearers. Industries such as S<sup>1</sup>, Tibco, Calsoft, Persistent, Pubmatic, Campus Components, Pune Diary, IBM, Airtight, Wikipedia, etc were closely associated with this event.

#### 2. PICT IEEE Student Branch (PISB):

In 1988, IEEE granted membership to PICT and since then various college activities have been conducted under the membership of IEEE. These college activities are organized and volunteered by a group of people with unimaginable gusto and sheer perseverance. Highlights of PISB are:

- a) Credenz: Credenz is a national level technical event organized by PISB every year which provides platform to the engineering students to showcase their technical skills and talents. Also a series of seminars on trending topics are arranged from the industrialists.
- **b) Special Interest Groups (SIG):** PISB is using this venture to cultivate the habit of having a practical and analytical approach for learning various subjects. Here, the students get a hands-on experience of coding and electronics.
- c) QUIZ: An amalgamation of technical and general knowledge quiz presented by the PISB team, it is one that had seasoned quizzers go dumbfound.
- **d) UNRAVEL:** Unravel is the campus wide scavenger hunt, conducted within the PICT campus. It is an offline treasure hunt which had students from all classes FE to BE running around searching for clues and trying to crack the codes.
- **e) Network Treasure Hunt (NTH):** Network Treasure Hunt, the tagline says 'Decrypt the encrypted', and correctly so. NTH is an online treasure hunt created by the PISB team.
- f) Ideate: A business event introduced by the PISB team, Ideate is an event to develop a habit of analytical thinking among the students. The students get a perfect platform to try out their entrepreneurship skills and to showcase their talent in front of reputed cognoscenti.
- **g)** National Computing Contest (NCC): In keeping up the tradition of bringing the best coders of the city under one roof, PISB organizes National Computing Contest. The competition comprises of several algorithmic problems of varying difficulty, which are to be solved by the participants in  $C/C^{++}$ .
- **h) XODIA:** XODIA, a battle of algorithms, is a unique combat against your fellow mates, where it is your algorithm that competes for triumph.
- i) **IEEE Women in Engineering Affinity Group:** Women in engineering,

a sister affiliation group was started under PISB with a motive of collaborating all student branches in Pune and work together. A social edge was introduced through PISB through its new activity called "PUNE NERDS" and Personality development Workshop under the WIE chapter of PISB.

- **j) PICT IEEE Newsletter Group (P.I.N.G.):** P.I.N.G. is a technical news letter which is published twice in a year mainly in September and February. PING 12.1 was released during Credenz'16 which was scheduled between 9 September and 11 September, 2016.
- **k) All India Computer Society Student Congress (AICSSC):** PISB hoisted the 3<sup>rd</sup> All India Computer Society Student Congress collaterally with INDICON- 14, IEEE's most awaited event in India. AICSSC'14 witnessed the participation of four sections, namely the Kerala section, the Bombay section, the Madras section and the Gujarat section

#### 3. PICT IET Student Chapter (PISC):

Since its inception in 2012, the PICT IET Student Chapter has always aimed at preparing students and providing them with that extra edge for success in the professional world they step in to. PISC has now become the largest student chapter in the state and the second largest in India. The various events organized under PISC are:

- **a) SCIENTIA:** It is a flagship event of PISC. Various competitions, seminars, workshops etc. are organized during this event .
- **b) ePICtomize:** It is annual technical magazine launched by PISC. The magazine contains articles on various topics ranging from science, technology and entertainment to sports and video games. PISC has also launched the e-copy of the magazine on various platforms.
- c) Energy Audit: PISC organized an Energy Audit in PICT to help students to use their technical knowledge in practical situations.
- **d**) Apart from these events, PISC also conducted workshops on GATE, GRE, and Personality Development etc.
- e) PISC also organizes fun trip to give students a break from their daily routine.

PISC is a buzz with events held all around the year and is always open to creative and enthusiastic minds.

#### 4. PICT ACM Student Chapter (PASC):

The PICT ACM Student Chapter was established in March, 2012 with a goal to provide students a better exposure to ideas, knowledge, experience and trends in computing. The chapter aims at creating interest among the students in computer science apart from what they learn during the course of the syllabus. The chapter organizes seminars and workshops on different domains by speakers who are well known in their area, which give students

opportunities to learn about advanced research subjects. The chapter activities include events, seminars, competitions, academia-industry initiatives and various ventures to promote knowledge sharing and innovation.

#### 5. ROBOCON:

PICT Robocon team was established in Sept. 2012 (participation since 2010). Students are given guidance to participate actively in international Robocon competition which is held every year. Team has 30+ members from SE, TE, BE. In the year 2014, PICT team received 4<sup>th</sup> rank amongst 90 colleges in India. Team has received Rs. 1.5 lakh sponsorship from the industry (M/s Mindtree Ltd., M/s Turck Ltd.). This year PICT team stood at 11<sup>th</sup> position amongst 130 colleges.

b) Extra -curricular activities - sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

#### Games and Sports facilities:

- Outdoor and indoor sports facilities are available for volleyball, basketball, cricket net, chess, carom, table tennis, Rubik cubes etc.
- Hired ground/facilities are available for cricket, badminton, football etc. Students are motivated/ encouraged to take part in various tournaments at College/District/University/State/National level.
- Cricket and volleyball coaches are also available.

#### **Intercollegiate Events:**

#### PICT students participated in following inter college events:

 Pune University zonal sports, MIT Summit, VIT Melange, CEO Zest, ISBM trophy, BJ fest, Sinhagad trophy, Kaware trophy, AIT trophy, Modern trophy.

#### **Games Played by PICT Students:**

• Cricket, Basketball, volleyball, table tennis, badminton, chess, handball, athletics,

#### **Events hosted by PICT:**

- Elevate Inter college and co-operate basketball tournament
- Volleymeet Inter College volleyball tournament

#### **Intra College Events:**

• Chess (70 Participants)

- Volleyball (23 teams)
- Basketball (17 teams)

### Achievements of Students at University / State / National / International level:

- **Squash:** Mr. Sumaer Bahl has won Gold medal in Squash at University level with prize money of Rs 10,000 /- (2012-13)
- **Boxing:** Priya Raut, Pune city Zonal boxing championship, won gold medal in her weight class. (2014-15)
- Roller Hockey & Ice Hockey: Parth Jagtap was selected for National level and represented India in "International Ice Hockey Championship" at New Zealand and "International Roller Hockey Championship" at Hyderabad.
- **Athletics:** Rahul Khedkar won Gold medal in triple jump, Silver medal in triple jump and achieved overall 4<sup>th</sup> place at state level. He won Bronze medal in long jump.
- Chess: Tejas Kulkarni has won PCZSC Pune University competition and selected for State level team. Mr. Ishan Ballal, Aditya palarpawar, Tejas Kulkarni, Sujit Savlaour chess team won 2<sup>nd</sup> Prize.
- Football: PICT team has won football tournament "Milange" at VIT, Pune.
- Athletics: Mr. Rahul Khedkar won Gold Medal in Pune city zonal competition.
- Badminton (Boys): Runner up of "BJ FEST"
- Volleyball (Girls): Won PICT Volleymeet tournament Runner up of "BJ FEST" and "Modern Trophy"
- Basketball (Girls): Runner up of "AIT Trophy"
- Cricket: Won VIT MELANGE Cup, Second Place in "Kaware Trophy", Third Place in "BJ Fest", and "SRT Lonawala"

#### **Gymnasium:**

- There is a well equipped GYM with treadmill, chest press bench, pulley, machine flies, leg press, triceps push down machine etc.
- Gym and Sports Instructors are exclusively appointed to look after the gym/ sports

#### **Auditorium:**

 Institute has an auditorium with all modern facilities including video conferencing to cater the needs of co curricular and extracurricular activities.

#### NSS:

College has full-fledged NSS unit and physical director of the college attended a course of NSS from Empanelled Training Institute, Ahmednagar. Following are the various activities carried out by PICT-NSS unit:

#### NSS Camp 2016-2017

- On the occasion of World Tree Day-1<sup>st</sup> July 2016, our team carried out a 'Tree Plantation' activity at Taljai Pathar. Planted about 25 plants around Taljai.
- Participated in the *Ashadhi Waari* and worked under 'Nirmal Waari' program held by the Seva Sahyog organization. Encouraged the people of the waari to use sanitation facilities provided to them in the form of portable washrooms.
- Held a 7 days residential campaign at a village named 'Gogalwadi', situated 18 km from Pune.
  - 1. A team of 25 volunteers participated in the camp along with 10 teachers.
  - 2. Carried out social activities such as cleaning the village with the help of villagers.
  - 3. Went to the school and taught the kids in interactive sessions by showing posters, displaying scientific experiments.
  - 4. Organized a session to raise awareness amongst the villagers regarding some issues which they face.
  - 5. Organized meditation program for three days and other interactive sessions for the volunteers too.

#### **PICTOREAL:**

PICTOREAL has always been known for being "The official cultural magazine of the PICT and the series of events it organizes every year. PICTOREAL provides an opportunity to the PICTians to showcase their skills, talent and views to the world outside, and among their social group.

The major events held underneath PICTOREAL are:

- Pics-O-Reel
- Donation Event
- Pict- o-Social
- Blood Donation

#### **Cultural Activities:**

At campus, we have students cultural group, popularly known as PICT ART CIRCLE that represents college at various university/state/national level competitions. The team consistently participates in most prestigious competitions like Purushottam Karandak , Firodia Karandak , Dajikaka

Gadgil, Savitribai Phule Pune University and many other inter-college events.

The cultural room is used for practice by various sections such as music, dance, acting and set. The infrastructure serves all the sections with major musical instruments along-with spot lights with Avolite controller, LCD projector, PA system with sound Mixer, Speaker systems. Abhivyaktee -an intra-college cultural event provides platform to First Year students under the guidance of senior level students. The Art Exhibition is arranged every year to showcase artifacts prepared by students and staff.

PICT quiz club hosts intra-college quizzing sessions and competitions. The quiz-masters represent PICT at inter-college quizzing events like Sweden-India Nobel Memorial Quiz, Quiz conducted by LIC, Intach India connect etc.

PICT students are actively participating in the following events every year:

Sr. No.	Name of Event/Competition	Type of event
1	Purushottam Karandak	Inter-college Event
2	Daajikaka Gaadgil Karandak	Inter-college Event
3	SPPU One Act Play competition	Inter-college Event
4	Dance Interactive Sessions	Intra-college Event
5	FE Meet	Intra-college Event
6	IIT Powai – Mood Indigo	Inter-college Event
7	Acting Workshop	Intra-college Event
8	Dance Interactive Sessions	Intra-college Event
9	FE Auditions for Firodiya Karandak	Intra-college Event
10	Sinhagad Karandak	Inter-college Event
11	Firodiya Karandak	Inter-college Event
12	Art Exhibition	Intra-college Event
13	Abhivyaktee	Intra-college Event

#### Achievements during 2015-16

Purushottam Karandak Mega Finals Mahakarandak (State Level) 2016 "Avdambar":

- 1. 3 rd Best Drama
- 2. Acting Consolation Aishwarya Gaikwad
- 3. Acting Consolation Bhavesh Joshi

#### Daajikaka Gaadgil Karandak 2016 "Avdambar":

- 1. 3<sup>rd</sup> Best Drama
- 2. Best Music (1<sup>st</sup> prize)
- 3. Best Set (1<sup>st</sup> prize)
- 4. 3<sup>rd</sup> Best Lights
- 5. 2<sup>nd</sup> Best script

#### Savitribai Phule Pune University One Act Play Competition "Avdambar":

- 1. 2<sup>nd</sup> Best Drama
- 2. Best Music (1<sup>st</sup> Prize)
- 3. Best Stage Management (1st Prize)
- 4. Best Actor Bhavesh Joshi

#### Purushottam Karandak 2016 "Avdambar":

- 1. 3<sup>rd</sup> Best Drama (Sanjeev Karadak)
- 2. Consolation for Direction Aishwarya Gaikwad
- 3. Consolation for Acting Aishwarya Gaikwad
- 4. Consolation for Acting Paritosh Bhide
- 5. Consolation for Acting Bhavesh Joshi

#### Achievements during 2015-16

#### Firodiya Karandak 2016 "Avyakt":

- 1. 2<sup>nd</sup> Best Script Nikita Thube
- 2. 3<sup>rd</sup> Best Acting Female Nikita Thube
- 3. Best Organised Team
- 4. 2<sup>nd</sup> prize for Shadow Event

- 5. 1<sup>st</sup> prize for Plastic Animation Aditya Ingawale
- 6. 3<sup>rd</sup> Best Set
- 7. 3<sup>rd</sup> prize for Group Dance

#### Purushottam Karandak 2015 "Sarhad":

- 1. Best Drama (1<sup>st</sup> prize)
- 2. Bhagirath Karandak (Best Organized Team Award)
- 3. Best Director Mayur Auti
- 4. Best Actress Nikita Thube
- 5. Consolation for Acting Sejal Jagtap
- 6. Consolation for Acting Paritosh Bhide

The college put-forth student's innovative ideas at intercollegiate events by supporting them with necessary social, technical, environmental and financial aids

#### **Community Services:**

#### **Blood Donation Camp 2016-2017**

• TEAM PICTOREAL organized Blood Donation Camp on 7th of February 2017, in the college campus. In this noble cause, Poona Serological Institute Blood Blank played the active role.

#### **Blood Donation Camp 2015-2016**

• TEAM PICTOREAL organized Blood Donation Camp on 9th February 2016 in the college campus. In this noble cause, Jankalyan blood bank and Poona Serological Institute Blood Blank played the active role.

#### PICTOSOCIAL 2014-15

- The task that PICTOSOCIAL took up this year was providing career guidance sessions for students of std.8, 9 and 10 in schools where such counselling is not available.
- Team visited following two schools, namely
- 1. Rajashri Shahu Vidyamandir, Ambegaon Bk., Pune, Date:05/02/2015
- 2. Bharati Vidyapeeth Kanya Prashala, Pune, Date:09/02/2015

  A total of 150+ children across the schools benefited from this exercise. The children had a variety of doubts which were answered satisfactorily by our team members immediately after the presentation was over.

#### PICTOSOCIAL 2015-16

- This year, the First year students have continued with the tradition of providing career guidance sessions for students of Std. 8th, 9th, and 10th. They covered more than 250 students across 3 schools, namely:
- 1. Bharati Vidyapeeth kanya prashala, Pune
- 2. Chintamani Vidya Mandir, Ambegaon Pathar, Pune
- 3. Priyadarshini Madhyamik Vidyamandir, Dhanakwadi, Pune
- The committee took part in a street play competition organized by Vishwakarma Institute of Technology, Pune. The street play presented by our team aimed to raise awareness against corruption and how we as the common members of the society can help to eradicate it.
- Associated with the NGO Action for Self-reliance, Hope and Awareness (ASHA), which helps in the education of the girl child in rural areas, where they don't have the facilities to avail proper guidance outside school.

#### PICTOSOCIAL 2016-17

- Initiated poetry, story writing and debate competition, an event named "Manthan". It was a platform for all PICTians to show their creative writing and speaking skills apart from their technical knowledge.
- Associated with an NGO named "Matoshree", which is an old-age home (located in karvenagar, Pune). Team members used to visit there on weekends and spend some time with them to make them feel happy. Also, there is a "BAL Sadan" where our volunteers have been taking origami, painting, drawing, science and some gaming sessions to cheer up the children who reside there.
  - Continued to work for ASHA, an NGO which helps in the education of girl child in rural areas, where they don't have the facilities to avail proper guidance outside school.
- 4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any).

Before commencement of academic year all the infrastructure is provided as per the requirement of various departments considering increase in student's intake. The budget is prepared as per the requirements of various Department/Functional Heads considering the academic growth of the institute. The budget is discussed in the LMC meeting for its adequacy and justification. Finally, it's presented & approved in the Governing Body meeting.

For Master plan of the institute, please refer annexure -8 The following table shows the budget allocated considering academic growth for the construction of additional space for smooth and effective functioning of the Institution.

Sr.	Particulars	Budgeted in CFY	Actual Exps.	Budgeted in CFYm1	Actual Exps.	Budgeted in CFY m2	Actual Exps.	Budgeted in CFY m3	Actual Exps.
No.		2015-16	2015-16	2014-15	2014-15	2013-14	2013-14	2012-13	2012-13
1	Infrastructure Built-up &	10,000,000	14,072,763	5,000,000	1,691,363	8,173,000	12,588,160	8,600,000	10491992
	Exps. For Modernization								
2	Library	2,221,000	1,963,594	2,310,000	2,002,974	2,335,000	2,409,942	2,743,000	1,897,577
3	Laboratory Equipment	5,600,000	10,759,435	8,200,000	4,410,611	8,409,000	9,252,164	10,112,764	7,447,071
4	Laboratory consumables	430,000	507,342	485,000	502,966	624,815	541,810	590,000	1,081,920
5	Teaching &Non Teaching Staff salary	175,855,429	173,266,727	139,100,000	147,893,151	113,081,761	121,858,075	95,290,000	101,635,202
6	Maintenance & Spares	500,000	1,679,431	700,000	625,683	535,000	1,887,946	135,000	4,099,791
7	R & D	2,000,000	1,448,903	1,500,000	795,628	1,500,000	1,642,953	1,500,000	97,950
8	Training & Travel	750,000	306,244	775,000	360,404	875,000	394,264	475,000	78,927
9	Miscellaneous Expenses for Academic Activities	450,000	404,507	650,000	393,366	75,000	317,135	75,000	117,630
10	Others, Specify (12 - 11)	39,200,000	53,472,796	39,945,000	34,525,186	34,164,581	34,896,949	26,031,100	38,234,788
	Total	237,006,429	257,881,742	198,665,000	193,201,332	169,773,157	185,789,398	145,551,864	165,182,848

### 4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

Barrier Free Built Environment is provided for disabled and elderly persons including availability of specially designed toilets for ladies and gents separately. All buildings are provided with entrance accessible to the handicapped and are indicated by proper signage. This entrance is approached through a ramp together with the stepped entry. Unisex toilets with all facilities specified by the National Building Code are provided in the ground floor of regular buildings.

### 4.1.5 Give details on the residential facility and various provisions available within them:

S.No.	Facility	Location	Details	
		B- Bldg. (For	Existing capacity is 70 and	
01	Hostel	Boys)	proposed to increase to 134	
01	Hoster	D- Bldg. (For Existing capacity is 12		
		Girls)	proposed to increase to 212	
		C- 006 (Boys		
02	Recreational	common room)	Additional space is provided in E-	
	facility	C- 001 (Girls	001 with Television	
		common room)		
03	Gymnosium	E- 105	Provided on the first floor of C-	
03	Gymnasium	E- 103	bldg.	
04	Yoga center	E-106	Provided on the first floor of C-	
04	1 oga center	E-100	bldg.	
05	Computer facility including access to internet in hostel	C- 403	Computer centre is accessible for hostel students.	
06	Facilities for medical emergencies	I-001 (For Boys) F-001 (For Ladies)	Two doctors are available on the campus during college hours and for hostel students available on phone 24X7. For emergency, ambulance is also available on call from the nearby hospital.  At critical locations, first aid boxes are also made available.	
07	Library facility in the hostels	A-2 Bldg.	Central library is made available for hostel students as per the requirement.	

08	Internet and Wi- Fi facility		All computers on the campus are connected with high speed internet 155Mbps. WI-FI is available round the clock through 5 hot spots
09	Residential facility for the staff	H-Bldg.  Guest house is available for stand outstation guests	
10	Constant supply of safe drinking water		24 hours water supply by Pune Municipal Corporation is available in the campus. Water is tested at regular intervals for various standards of drinking water. All consumer points are fitted with water purifiers.
11	Security		Round the clock security is provided in the college campus including hostels. Residential wardens are also available for both boys and girls hostels.

### 4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

Two doctors are available on the campus during college hours. For hostel students doctors are available on phone 24X7. For emergency, ambulance is also available on call from the nearby hospital. First aid boxes are made available at all places on the campus.

Medical Insurance scheme is available for students at SPPU level.

# 4.1.7 Give details of the Common Facilities available on the campus –spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counselling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

S. NO.	Room No.	Common Facility	Carpet Area (Sq.m.)
01	A-007	IQAC	10
02	A-001B	GRIEVANCERED RESSALUNIT	10

03	A-001C	WOMEN'S CELL	10
04	A2- Bldg.	COUNSELLING	30.00
05	A-007	CAREERGUIDAN CE,	66.00
06	A-012	PLACEMENT UNIT	66.00
07	E-102	N.S.S. ROOM	17.00
08	A-004	CENTRAL STORES	33.00
09	I-002	MAINTENANCE	10.00
10	I-003	SECURITY	10.00
11	A-015	HOUSE KEEPING	10.00
12	A-018A	PANTRY FOR STAFF	20.00
13	A-115	EXAM CONTROL OFFICE	78.00
14	A-113	SERVER ROOM	24.00
15	E-101	CULTURAL ROOM	25.00
16	C-112	STORE ROOM	39.00
17	A-016	ELECTRIC PANEL ROOM	10.00
18	C-001/ 002	GIRL'S COMM.RM	111.00
19	C-006	BOY'S COMM.RM	75.00
20	E-001	CAFETERIA	384.00
21	A-116	STAN. STORES & REPROGRAPHY	20.00

22	I-001	FIRST AID CUM SICK ROOM	10.00
23	G-101	PRINCIPAL'S QUARTER	150.00
24	G-201	GUEST HOUSE	125.00
25	E-105	SPORT'S CLUB/ GYM	126.00
26	H-001/ 002	AUDITORIUM	267.00
27	ON ALL FLOORS OF EACH BLDG.	SAFE DRINKING WATER FACILITY	

#### 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 initiatives have been implemented by the committee to render the library, student/user friendly?

Yes, PICT Central Library has the Library Advisory Committee. The composition of the committee is shown in the following table:

Sr. No.	Name	Designation
01	Mrs. Kulkarni Rekha	Chairman
02	Mrs. Beke Jyotsna	Member - Secretary
03	Mr. Chavan Mayur	Member
04	Mr. Patil Akshay	Member

The committee meets twice in a year. The committee discusses about budgetary provision, updations in the library services, organization of awareness workshops/seminars, automation of library functions, etc. The committee prepares the action plan of the library developments under 4 categories i.e. Value addition, Quality improvement, Fund generation and Cost reduction.

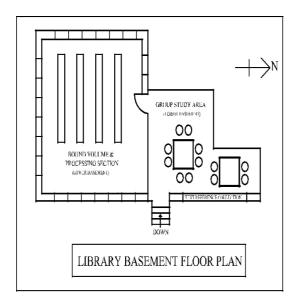
Following significant initiatives have been implemented by the committee to render the library, student/user friendly:

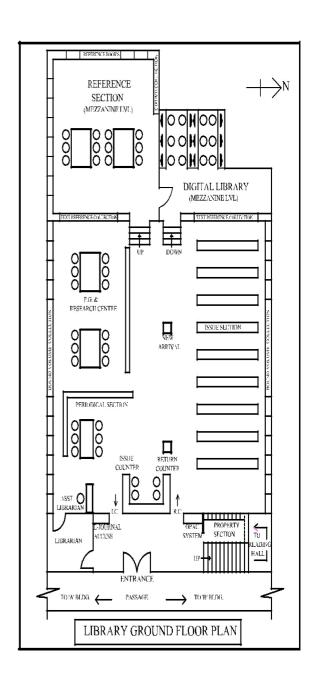
- Facility added-Frequently Asked Questions (FAQs) for library related information
- Improving the awareness of usage of e-resources through various awareness programs
- Organization of J-GATE awareness program
- Uploading and updating NPTEL Video lectures and other E-resources on Storage Area Network (SAN)
- Formation of yearly "Book Addition Policy"
- Developing In-house Library Management System
- Installed and Developed In-house Digital Library Software
- Generation of "Identity Card Portal"
- Re-activation of social networking sites for accessing educational contents

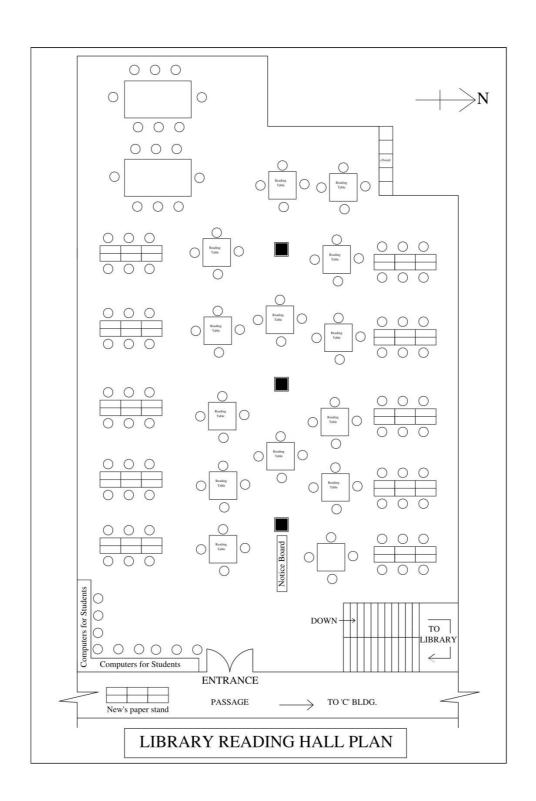
#### 4.2.2 Provide details of the following:

Total area of the library (in Sq. Mts.)	891 sqm.	
Total seating capacity	300	
Working hours (on working days, on holidays,	Library	Reading
before examination days, during examination		Hall
days, during vacation)		
Working hours on working days:	12 hrs.	16 hrs.
Working hours on holidays:	7 hrs.	16 hrs.
Working hours- before & during Examination:	12 hrs.	24 hrs.
Working hours during vacation	12 hrs.	12 hrs.
Layout of the library (individual reading carrels,	Layout is	
lounge area for browsing and relaxed reading,	described in	
IT zone for accessing e-resources)	following figure	

#### Library layout







## 4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

Current titles, print and e-journals and other reading material were procured as per SPPU's current syllabus.

#### Purchase of current titles

Following are the ways for purchasing the current titles:

**Procurement of Syllabus Books**: At the beginning of the academic year, the list of library books (including the number of copies available in the library of that particular title) according to current syllabus is being mailed to all HODs for the recommendation of new titles or additional copies. The recommended and approved books are then procured for the library as per "Yearly Book Addition Policy".

**Procurement of other Technical Books**: Through "Book Display" the books on cutting edge technology has been displayed in the library. Books recommended by Staff and students are procured as per proper justification.

**Procurement of Competitive exams**, Soft Skills, Personality Development, etc Books: Books recommended by Staff and students are procured as per proper justification.

**Procurement of Non-technical Books**: Books recommended by Staff and students are procured as per proper justification.

#### Purchase of print and e-journals

By using following criteria, print and e-journals are procured:

- As per AICTE norms.
- As per recommendations received from staff and students.
- As per publishers catalogue.
- As per usage.

Subscription to British Library for online membership to access e-books and e-journals.

#### Use of current titles

Central Library is having various sources of information which provides the required support to the Academic & Research activities. The Library is committed to respond to the needs of users by providing well-organized and upto-date collection. It offers various services to the users for the better utilization of the collection.

The daily book transactions are supported with Library Management Software for which books and Identity cards are bar-coded.

#### Following table shows use of current titles:

Year	Total Transaction	Average Transaction Per day
2015- 2016	74647	269
2014-2015	61733	220
2013- 2014	78180	262
2012-2013	68415	227

#### Below practices are followed for the better use of books:

Display of New Arrivals, Organization of Library Orientation, Arrangement of books, OPAC (Online Public Access Catalogue), etc.

#### Use of e-resources

Following table shows the usage of e-resources:

Sr. No.	E-Journal Package	No. of Journals	Usage Total No. of Full Text Downloads
1	IEEE	174 + 600000 Conference Papers	15697
2	Elsevier-Science Direct	276	20602
3	Springer	149	1298
4	J-GATE Engineering	4532	10304

	TOTAL	7193 E-Journals + 600000 Conference Papers + 380 eBooks	
6	McGraw-Hill's Access Engineering	380 eBooks	399
5	ASTM Digital Library	2062	
	&Technology (JET)		

Below practices are followed for the better use e-resources:

**Access to E-resources:** Access to E-resources is IP based and it can be accessed from anywhere and anytime within the campus. For the convenience of the students multimedia computers have also been kept in the Digital Library.

**Storage Area Network (SAN):** NPTEL Video lectures, project reports, question papers, syllabus, etc. are available on SAN which can also be accessed from anywhere and anytime within the campus.

Amount spent on procuring new books, journals and e-resources during the last four years :

Library		ar – 1 15-16		ear – 2 14-15		ar – 3 3-14		ar – 4 12-13
holdings	Numb	Total	Numb	Total Cost	Numb	Total	Numb	Total
	er	Cost	er	Total Cost	er	Cost	er	Cost
Text	580	1,87,360	1071	3,88,593	1813	7,04,28	979	3,28,782
Books	360	1,67,500	1071	3,66,393	1013	3	212	3,20,702
Reference	251	68,107	29	19,213	93	34,694	320	64,649
Books	231	00,107	2)	17,213	73	34,074	320	04,047
Journals								
&	60		76		106		116	
Magazines		05.405		1 17 651		1,89,94		2 20 015
Journals	19	95,435	44	1,17,651	73	3	75	3,28,815
Magazines	41		32		33		41	
	7573+		969+		585+		4694+	
e-	60000	17,96,49	60000	14,93,825	9689	12,81,6	9689	13,21,35
resources	0	9	0	14,93,623	Conf.	90	Conf.	4
	Conf.		Conf.		paper		papers	

	papers	papers	S		
Any other (specify)					
NPTEL Video Lectures	1700	 2300	 1500	 1111	
CDs	99	 94	 32 6	 159	

## **4.2.4** Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

OPAC	Yes
Electronic Resource Management package for e-journals	IP based access within
	campus
Library Website	Part of PICT Web-site
In-house/remote access to e-publications	Yes-In house
Library automation	Yes
Total number of computers for public access	12+ 60 (Comp. Centre)
Total numbers of printers for public access	05
	Facility is available
	centrally.
Internet band width/ speed 2mbps 10 mbps 1 gb (GB)	155 mbps
Institutional Repository	Yes
Content management system for e-learning	Yes
Participation in Resource sharing networks/consortia	NA
(like Inflibnet)	

#### 4.2.5 Provide details on the following items:

Average number of walk-ins	620
Average number of books issued/returned	298/day
Ratio of library books to students enrolled	12:1
Average number of books added during last three years	
2015-16	831
2014-15	1100
2013-14	1906
Average number of login to opac (OPAC)	10
Average number of login to e-resources	10

Average number of e-resources downloaded/printed	16
Number of information literacy trainings organized	Approx. 10/year
Details of "weeding out" of books and other materials	-

#### 4.2.6 Give details of the specialized services provided by the library:

Manuscripts	
Reference	Yes, Total No. of
	Books:34912
	Reference Books: 14032
Reprography	Yes
ILL (Inter Library Loan Service)	No.
Information deployment and notification (Information	Notice Board
Deployment and Notification)	PICT Digital World
	PICT Web Site
Download	Yes
	E-Conference/Journal
	papers, E-Books, NPTEL
	Video Lectures, Question
	Papers, etc.
Printing	Yes
Reading list/ Bibliography compilation	Yes
In-house/remote access to e-resources	In-house
User Orientation and awareness	Yes
	Approx. 10/year
Assistance in searching Databases	Yes
	OPAC
	Library Orientation
INFLIBNET/IUC facilities	Access to National Digital
	Library (NDL)

## 4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.

- Library facility is available before and after college timing
- Book transaction facility is available to all the students within the library transaction hours.
- Organization of orientation programme for new students.
- Training program on 'Effective Utilization of E-Resources'.
- Procurement of books according to current syllabus before the commencement of the semester.

- Organization of Book Display Programme
- Book exhibition on various day celebrations eg. Vachan Prerana Din, National Librarian Day, Marathi Bhasha Din, etc.
- Facility is provided to staff and student for participation in book/periodical procurement
- Procuring books on competitive examination, personality development, soft skill, etc.
- Display of Book Location Chart for searching books
- Provided Open Access facility.
- Personal help for searching library resources
- Providing sufficient number of books to all students and teachers.
- Providing additional books to toppers for a semester
- Book Bank Scheme
- Facility of in-house Identity Card printing
- Access to E-Resources 24×7.
- Assistance in searching and downloading papers related to area of research.
- Maintaining and sending SPPU question papers to respective faculty members
- Newspaper reading and clipping facility
- Separate seating arrangement for faculty, PG and Ph.D. students, Group Study, Periodical reading
- Reading hall facility with Wi-Fi connectivity, keeping open before and after college timing, extended hours during examination period, provision of additional switches for connecting PCs/laptops, inspirational display boards of scientist/great personalities, etc.
- Feedback Facility
- Suggestion box

## 4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.

- For visually / physically challenged person ramp facility and Wheel Chair facility is provided.
- Priority is given to physically challenged person in the library.
- 4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)

Through following ways library is getting feedbacks from students:

- ISO
- Student Welfare Committee (SWC)
- Teacher-Guardian Meeting
- Suggestion Box

The suggestions or requirements are attended one by one and if appropriate, corrective actions are taken time to time to solve the issues. Details are as below:

Sr. No.	Date	Suggestions/Queries raised	Action taken/initiated
1.		More number of reference books should be provided.	'Yearly Book Addition Policy' is made to procure Text/Reference Books based on Utilization/ Recommendation.
2.		More special books such as handbooks, manuals must be provided.	We have been procuring special books on recommendation/justification by staff.
3.	14.11.201	There is problem in accessing IEEE, Springer, Elsevier, Journals/Articles.	Orientation programme is being arranged regularly for students to enable students to access the e-contents
4.	4	Reading Room should be kept open 24 hours.	During examination Reading Hall is kept open for 24 hours.
5.		There are less number of volumes of specific titles. It should be increased.	We have been procuring books recommended by the department (No. of copies, Titles & Volumes).  We have number of books exceeding AICTE requirements.  However, books are procured based on the demand and quality.

6.		To allow notebooks inside the library	For security measures it is not allowed.
7.	01.07.201	Extending Reading Hall closing time 8pm to 10 pm.	Timing extended w.e.f. 8.7.2015
8.	25.08.201	Non-availability of non-technical books.	Non-technical books are procured after proper justification.
9.	08.09.201 6	Increase the number of E-Books.	Library is having a good collection of E-books, published by McGraw-Hill.  Also Library subscribes British Library Online Membership through which students can access more than 1 lac. E-books.
10.	02.03.201 7	Require electric socket on reading hall table.	Additional electric sockets are provided.

#### **4.3 IT Infrastructure**

## **4.3.1.** Give details on the computing facility available (hardware and software) at the institution.

Number of computers with Configuration (provide actual number with exact configuration of each available system)

Department	No. of		Configuration					
	PC	i7	i5	i3	C2D	AMD P-iv	Laptop	Server
Computer	397	35	152	145	63	2	2	1
E&TC	239	5	35	119	80		1	

IT	356		8	183	136	29		1
Applied Science	105			27	72	6	1	
Accounts	6		1	4	1			
Principal Office	3		2		1		1	
Dean 2shift	1		1					
SCTR Office	2				1	1		
Office	11			7	4		1	
Library	24		3	7	5	9		1
Purchase Office	2			1	1			
Estate office	2			2				
T&P	3					3	1	
Total	1151	40	202	495	364	50	7	3

#### **Computer-student ratio**

	<b>Actual Students</b>	Sanctioned Intake
UG	1:3	1:2.52
PG	1:1	1:1.15

- Standalone facility
  In our institute, all the systems are connected to LAN and internet.
- LAN facility
  In our institute, all the systems are connected to LAN and internet.
- Wi-Fi facility
  Our Campus is Wi-Fi connected.

#### Licensed software

	Application Software					
S	Name of Software	S r	Name of Software			
1	Oracle 9i	1 9	Hadoop			
2	Rational Rose	2 0	Maxima			
3	QT Creator	2 1	Kaspersky Endpoint Security 10			
4	Blender	2 2	Turbo C / C++ DOSBOX			
5	MS Office 2003, 2007, 2010.	2 3	Adobe acrobat reader.			
6	MS Visual Basic 6, 10	2 4	Adobe reader			
7	Visual Basic .Net	2 5	Eclipse			
8	Visual C++	2 6	Network Simulator 3			
9	Visual java	2 7	JDK 1.6, 1.7			
1 0	Visual Foxpro	2 8	Nero 11.0			
1 1	Microsoft SharePoint	2 9	TASM, NASM, MASM			
1 2	Matlab	3 0	VM Ware			
1	Microsoft SQL Server	3	Libra Office			

3		1	
1 4	Windows Media Player	3 2	Tex maker (Mike Tex and Tex maker)
1 5	Microsoft VBScript	3	Appache Tomacat
1 6	Maya	3 4	Genymotion Android Emulator
1 7	3D Max	3 5	Mysql
1 8	Scilab		

	System Software
Sr	Name of Software
1	Windows XP Professional
2	Windows 2007 Professional, Ultimate (64 bit)
3	Windows 2008 Professional, Ultimate (64 bit)
4	Windows Server2003
5	Windows Vista Professional, Ultimate (32 bit)
6	Windows Server2008
7	Linux Fedora 17, 18, 19,20, 21 (32 bit and 64 Bit)
8	UBUNTO (32bit and 64 bit)
9	CentOs 6.3(32bit and 64 bit)
10	OpenSUSE 13.1
11	Linux MintOS 15

- Number of nodes/computers with Internet facility: 1151 Computers with Internet facility
- Any other: Our Institute has internet bandwidth (1:1) of 155 mbps.

## 4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus.

All the faculty members are provided internet access. The faculty and students can access the internet from anywhere from the campus, since all the systems in this campus are connected to internet (i.e.155 mbps)

## 4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

As on today, the institution has up to date IT infrastructure with all the computers connected to the internet (155 mbps) The number of systems and the internet bandwidth is much higher than what is required as per norms. However, we are upgrading the systems and the internet bandwidth to enable students and staff to carry out their work efficiently. Even the Wi-Fi connectivity will be extended to all the facilities in the campus (like reading room, canteen, hostel)

# 4.3.4 Provide details on the provision made in the annual budget for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)

As and when there is requirement for the procurement and upgradation of the computers and their accessories, the budgetary provision will be made after receiving proper justification from the concerned heads. As and when the systems are received they are deployed at the desired sites and the periodic maintenance is done on regular basis.

Sr	Year	<b>Budget Provision (In lakhs)</b>
1	2016-17	19.80
2	2015-16	22.50
3	2014-15	23.70
4	2013-14	18.43

# 4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/learning materials by its staff and students?

To facilitate extensive use of ICT resources, the institution has made the following provision:

- All the Systems are connected to internet and students can access the resources any time.
- Through Digital Library all the teaching learning material is made accessible to all students and staff.
- In all the classrooms LCD projectors and computers are provided with internet connectivity.
- The self learning material is easily made accessible to the students through intranet.
- Students and staff are encouraged to participate in webinars, video conferences, MOOCs.

# 4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching - learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

In general, in the student centric learning environment, the teacher plays a role of facilitator. This is obvious from the technologies that are deployed by the institution. For example, the ICT enabled classrooms/learning spaces provide more of interactive and collaborative learning experience to the students. Similarly, the access to the Digital Library facilitates students and staff to refer to video lectures, research articles, tutorials from the experts from all over world thereby providing them better exposure to the technological advancements.

## 4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

The institute has upgraded recently to 155 Mbps internet service, which is more than what is recommended by AICTE. Also, an attempt will be made to avail the National Knowledge Connectivity if there is a provision.

#### 4.4 Maintenance of Campus Facilities

# 4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

A review of the requirements of infrastructure is done before the commencement of each academic term. Details of the budget allocated for infrastructure and others are shown below for the last four years:

Items	CFY 2	2016-17	(CFY-1) 2015-16		(CFY-2) 2014-15		(CFY-3) 2013-14	
	Allocated Budget (lakhs)	Expensed (lakhs)						
Building	2.50	7.40	2.50	5.77	1.75	0.07	0.34	0.07
Furniture	2.50	3.51	2.50	2.00	1.75	0.21	0.34	4.36
Equipment	4.0	9.67	4.50	6.33	6.15	5.04	5.40	5.94
Computers and other Hardware	15.80	20.39	18.00	15.71	17.55	13.58	13.03	21.94
Vehicles	-	0.47	-	1.05	-	0.27	-	0.60
Total	24.80	41.44	27.50	30.86	27.20	19.17	19.11	32.91

## 4.4.2 What are the institutional mechanisms for maintenance and upkeep of the Infrastructure, facilities and equipment of the college?

The Institute has a Building maintenance committee. The committee monitors the maintenance of infrastructure and facilities. Members of this committee are as follows

Sr. No.	Name	Designation
1	Dr. P. T. Kulkarni	Chairman
2	A.V. Sapkal	Member
3	H. M. Hiwase	Member

4	A.A. Joshi	Member
5	A M. Chavan	Member
6	Sanjay Shinde	Member
7	S.D. Dhakne	Member
8	R. C. Jaiswal	Member
9	P.P. Parkhi	Member

#### **Functions of the committee:**

- Proper upkeep and maintenance of the buildings
- Maintenance of the surroundings
- Carrying out minor repairs of furniture, electrical and sanitary fittings
- Maintenance of the roads, water tanks and other services in the compound
- Maintaining security
- Ensuring the safety requirements in the college.

#### **Equipment and Computer Maintenance Committee:**

The Institute has a committee who overlooks the maintenance and upkeep of the equipment and computer facilities of the institution and the details are as follows:

Sr. No.	Name	Designation
1	Dr. P. T. Kulkarni	Chairman
2	Rajesh Rao	Member
3	H. M. Hiwase	Member
4	A.A. Joshi	Member
5	S.V. Mundhe	Member
6	R. C. Jaiswal	Member
7	N. B. Patil	Member
8	Sanjay Shinde	Member
9	A.V. Sapkal	Member
10	A M. Chavan	Member

11	P.P. Parkhi	Member
12	Shyam Deshmukh	Member
13	Rakesh Patil	Member

All the stand alone and dedicated computers, network systems connecting these computers are taken care of by the respective departments, System Engineers and Junior Technical assistants

**Management of fittings and fixtures:** All the electrical and Electronic equipment fitted in different positions in the Institute is looked after by the team of Electrical maintenance staff consisting of electricians and engineers.

#### **Caretaking & Housekeeping supervisor of the Institute:**

The Institute has a house keeping supervisor for overlooking the maintenance of cleanliness and minor repairs (sanitation, carpentry) required on a day to day basis. The housekeeping is outsourced.

## 4.4.3 How and with what frequency does the Institute take up calibration and other precision measures for the equipment/ instruments?

Type of maintenance	Resource	Remark
Civil maintenance	Through Estate office for minor maintenance work Through Civil Contractor for major maintenance work	After every 15 days checking is done for leakage, breakage and corrective action will be taken
Electrical Maintenance	In house electrical staff Number of electrical Staff: 02	Maintenance after receiving the complaints

Maintenance of	In house staff.	Maintenance after
computing	number of staff: 01	receiving the
facilities		complaint
Maintenance of	In house plumbing staff.	Maintenance after
water supply		receiving the
water suppry	Number of plumbers : 02	complaints
facility		Cleaning of water tank:
		every six month
	Service provider- ATS	Daily cleaning of
Housekeeping	services	corridors, lecture halls,
Поизексерия	Number of Housekeeping	toilets and parking is
	staff: 18	done.
AMC for	Name of service provider:	Servicing is done
Generators	Omkar services & Trident	bimonthly
Generators	services	omontmy
	222.1222	
	N	Camilia di anni al ant
AMC for lifts	Name of service provider: Schindler	Servicing is carried out
	Schillater	monthly
Maintenance of	Name of service provider:	
Wiamitemanice of	M/C Tachnovision Engage	Servicing is carried out
Online UPS	M/S Technovision Energy Pvt. Ltd.	quarterly
	1 vt. Ltd.	
2.5.1	Name of service provider:	~
Maintenance of	M/S Rapid city sales and	Servicing is carried out
fire extinguisher	services	annually.
	Ser vices	
Maintenance of	Name of service provider:	Servicing is done twice a
water purifier	M/C C I Montratina	year and after receiving
1	M/S S J. Marketing	complaints
		Servicing is done twice a
Maintenance of	Name of service provider:	year and after receiving
water cooler	M/S Comfort Engineering	complaints
		Servicing is done twice a
Maintenance of	Name of service provider:	year and after receiving
AC	M/S Comfort Engineering	complaints
	Name of service provider:	
Maintenance of	Balaji Enterprises	Maintenance is required
CCTV	Dainji Dittorpi 1505	as and when required

Maintenance of EPABX system	Name of service provider: Telematic Comsec P. Ltd	Servicing is carried out quarterly
-----------------------------	--	------------------------------------

4.4.4. What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

#### Maintenance of academic infrastructure and facilities:

- Fire fighting system with fire alarm with talkback system is provided separately in both staircases.
- Hydrant system is provided in main passages.
- Fire extinguishers are provided at multiple locations as per requirement.
- Multiple exits in case of emergency are provided
- Fire fighting equipment training is provided
- Exit signs and floor indication boards are given at strategic locations

#### **Facilities:**

**Electricity:** - 3-Phase line with HT 250 KW electricity supplies from Maharashtra State Electricity Distribution Co. Ltd.

**Generator Backup:-**125KVA – 1No, 160KVA -1No.

**Power Backup: -** 30KVA- 5No, 25 KVA- 1No, 15 KVA- 1No, 3 KVA- 4No, 7.5 KVA- 1No, 6 KVA- 1No.

**Telecom:** - BSNL ten lines service (Telephone No.24371101/FAX No. 24364741) is available with EPBX system (128 intercom lines.)

**Water supply:** - Municipal Corporation water supply is available in the campus round the clock and it is utilized for drinking purpose after filtration. Summary of all the facilities in the Institute is as follows.

Facility	Capacity	Quality	Availability	Location
Electricity	MSEB – 22KV/433V	Good	Yes	Behind Basket Ball court

	200KVA			
Generator  Back Up	125KVA – 1No. 160KVA -1No.	Good	Yes	Behind Basket Ball court
Power Back Up	30KVA- 5No. 25 KVA- 1No. 15 KVA- 1No. 3 KVA- 4No. 7.5 KVA- 1No. 6 KVA- 1No.	Good	Yes	Entire Campus
Telecom Facility	BSNL line with Siemens EPBX 128 intercom lines.	Good	Yes	All floors
Drinking Water	40,000 Litres  22 coolers and water purifiers	Good	Yes	All floors
Security	Name of service provider: Srikrupa services No. of security persons: 14	Good	Yes	24 X 7 security at the College Entrance and Boys & Girls hostels

Other Information Regarding Infrastructure Parking:

Ample parking space is provided for parking of two wheeler vehicles of students. Four Wheeler and Two Wheeler parking are also available for the College Staff.

#### CRITERIA V: STUDENT SUPPORT AND PROGRESSION

#### 5.1 Student Mentoring and Support

5.1.1 Does the institution publish its updated prospectus / handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes, PICT publishes its updated prospectus annually.

The prospectus carries all the information, considered to be essential in the welfare of students. It carries a complete profile of the college, with respect to its location and the list of teaching and non-teaching staff. In addition to the profile of college, it has the information regarding admission procedure, the availability of various courses and scholarships, the list of facilities to be provided, fee details, and the rules and regulations, which the students have to comply with, during their term of study in the college.

The data to be published in the brochure is collected from various departments. It undergoes the process of authentication by the Heads of Departments, supporting documents and proofs for which are collected and maintained in the department. It is then processed centrally and validated before it is published.

The brochure contains the following salient features:-

- Mission and Vision of the institute
- About program and Departmental information
- Admission process
- Best practices
- Placement activities
- Recruiters
- Infrastructural Facilities
- Library information
- Hostel information
- Alumni association
- Student achievements
- University rankers

This brochure is given along with the application form to every candidate who takes admission to the institute. The college has a website named http://www.pict.edu, which is updated regularly.

# 5.1.2 Specify the type, number and amount of institutional scholarships / freeship given to the students during the last four years and whether the financial aid was available and disbursed on time?

There are several scholarships, made available to students by state as well central government, so as to enable the meritorious but economically weaker students to compete with other students at higher level. As a part of this scheme, Department of Social Welfare, Government of Maharashtra State is providing Scholarship to the backward class students. For availing benefit of this scheme, our college students falling under category of SC, ST, VJNT, SBC and OBC are provided all the assistance and guidance to fill-up the E-Scholarship form. The institute has established Backward Class Cell which guides the students about the scheme and filling of the form. The amount of scholarship is directly deposited in the Student's Personal Bank Account. To inculcate the saving habits among the students, the College invites the bank officials to advise and encourage the students to open Saving Bank Account with Zero Balance. Type of scholarships are listed in the table given in the point 5.1.3.

Following is the list of **Type of Scholarship** offered by the institute.

- Book bank facility is provided by departments to the students.
- The institute provides fee waiver to the students who are not in a position to pay the fees and request for concession.

## 5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

The college caters to the academic needs of the students, falling from rural areas, or those belonging to backward and downtrodden classes or non-creamy layers of the society. The college provides financial assistance, in the form of scholarships to these students, which is received from the Central Govt., State Govt. and other agencies.

Sr.	Type of Cahalanghin	Academic Year				
No.	Type of Scholarship	2016	2015	2014	2013	2012
1	SDWO-Scholarship	304	364	317	284	238
2	SDWO-FreeShip	283	368	346	329	281
3	ITDPO-Scholarship	15	18	19	17	17
4	ITDPO-Freeship	29	41	40	34	35
5	EBC	239	184	163	139	155
6	Minority	21	18	20	15	19
7	Central Sector Scholarship	17	15	12	9	11
8	STC/PTC	14	12	9	5	7
9	J&K	3	2	1	2	1
10	Pvt. Scholarship	1435	1168	914	581	571
11	PG- AICTE-GATE Scholarship	25	27	40	45	18

#### 5.1.4 What are the specific support services/facilities available for:

#### Students with SC/ST, OBC and economically weaker section

Students from SC/ST, OBC and economically weaker sections SC/ST, OBC and EBC students are given fee concession by the Government. Citizens having annual income less than Rs.1 lakh and who do not belong to any advantaged social category such as Schedule Caste (SC), Schedule Tribe (ST) and Other Backward Classes (OBC) have been categorized as Economically Backward Classes (EBCs) in India.

#### • Students with physical disabilities

Some quota reserved for students with physical disabilities.

- Preference is given for hostel / in campus accommodation.
- Extra time is given during theory and practical examination.
- Wheel chair, Lift and ramp facility is provided.
- Extra attention is given by faculties.

## • Support for the students to participate in various competitions / National and International

• Students are motivated to participate in various gaming competitions like Chess, Cricket and Volley ball.

- Participation in inter-university project is encouraged amongst students. This begins with conducting international level project competitions (INC).
- The institute encourages students' participation in national events like, TechFest, Mood Indigo etc.
- Students participation in cultural competitions like purushottam, firodiya is also promoted. Cultural committee "Art Circle" takes care of it. Students have won various prices in these competitions.

**ROBOCON:** PICT Robocon team was established in Sept. 2012 but participating since 2010. In PICT Robocon team, Students are given guidance to participate actively in international robocon competition which is held every year. Team has 30+ members from SE, TE, BE. In the year 2014, PICT team received 4<sup>th</sup> rank amongst 90 colleges in India. Team has received Rs. 1.5 lakh sponsorship from the industry (M/s Mindtree Ltd., M/s Turck Ltd.)

#### • Medical assistance to students: health centre, health insurance etc.

- Full time male and female doctor is appointed in campus.
- First aid boxes are made available at each floor, which is maintained regularly.

#### • Organizing coaching classes for competitive exams

- Study material related to GATE, GRE and other competitive examinations is made available in the central library.
- Coaching classes for interested students appearing for GATE is conducted by faculty members.
- Training and placement cell conducts seminar and lecture series for aptitude tests.

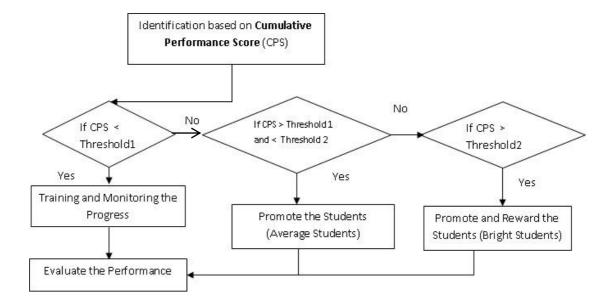
#### • Skill development (spoken English, computer literacy, etc.,)

- Personality Development Programs with the help of different experts are conducted, so as to facilitate the students to develop various human, moral, national and other personality related values among them
- Foreign languages are taught under: Audit course.
- The institute organizes various seminars, workshops and guest lectures
  for the students by experts to enhance their soft skills and to make them
  aware of the current trends in technologies. Language lab, Internet facility
  and Wi-Fi connectivity in campus and hostels, facilitates students in
  overall skill development.

#### • Support for "slow learners"

Slow learners are identified and Special attention is given towards them by following ways

- 1. Extra Theory & practical sessions
- 2. Mock practical examination
- 3. Extra practice assignments
- 4. Assignments based on university question papers for absent and failed students



- Guardian teacher also identifies slow learners and provides them counselling and intense coaching.
- Exposures of students to other institution of higher learning/corporate/business house etc.
- Collaboration with industries, R&D labs is done so as to benefit the students in terms of recent developments.
- Letters of Recommendation & Transcripts are provided to the students to promote higher studies.
- Workshops, seminars and guest lectures are arranged for career guidance which motivates students for higher education & placements.
- Students are encouraged to be a part of industry sponsored projects through which they get exposure to work with the professionals & industry experts of their domain.
- Industrial visits and internships in leading Industries are arranged for students which give them practical exposure.
- MoU's are signed with different industries which gives student different facilities like technology, sponsorship, infrastructure.

- Publication of student magazines
  - To promote creativity among students and equip them with latest knowledge, different magazines are published every year.
    - **Pictorial**: Cultural magazine which is published annually.
    - **PING**: Technical magazine which is published bi-annually sponsored by IEEE.
    - **Magazines by Department:** Technical magazines are published by each department bi-annually.
- Earn and Learn Scheme: This scheme is implemented in cooperation with the University, which enables the socially and economically disadvantaged students to earn by working in various Institute departments/library, while studying.
- Digital Library: Students can use different online / offline video lectures (NPTEL) and research papers (IEEE, ACM, Web of Science).

## 5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

- The Institute has organized various Programs, awareness drives for Entrepreneurship Development.
- Students are selected from each department.
- The institute has its own, active Entrepreneurship cell under which there are various events are organized. List is as follows

Academic year	No. of Events organized	Event Name
2016-17	04	<ol> <li>Entrepreneurs meet website Launch</li> <li>1<sup>st</sup> Entrepreneurs meet at PICT. 17         Entrepreneurs and 300+ participants attended meet. 6 events were conducted.     </li> <li>MoU with IIT Kharagpur</li> <li>MoU with 11 Start-up's</li> </ol>

	1	T
		1. Formation of EDC student group having
		40 student members.
		2. EDC website Launch.
2015-16	4	3. Prashant Pansare, Founder Playerify,
2013-10	4	conducted a session with EDC students team on
		"How a Startup may fail".
		4. Talk by Unmil Karadkar, Assistant
		professor at University of Texas Austin on "
		Emerging Research Trends in Engineering"
		1. Seminar by Mr. Gaurav Godbole Director, 3D
		Zest
		2. Internship offer at Scalearc to Third Year
		student Vaibhav Tulsiyan
2014.15	0.4	3. Internship offer to current Third Year students
2014-15	04	by 3 companies Namely Talking Plastic,
		Ryussi technologies, cascadesystech
		4. Placement offer to current students by
		definition networks
		E- Cell conducted 4 sessions with following
		companies to offer Business Incubation facility &
		start companies
2013-14		
	04	1. Trade Sankul,
		2. Code Dynamics,
		3. Fizzible,
		4. Zang Out
		Solar powered equipment design Solar Clan
		Workshop conducted 3 times by a company
		located in SINE IIT Bombay.
		Desired Institute Control
2012 12		Business Incubation facility offered to 2
2012 - 13	04	companies
	04	1. Simpliware,
		2. Opencloud
		All MoU's are available with Functional Head
		EDC & BIC.

• EDC organizes expert lectures conducted by Industrialists & experienced Professionals to develop entrepreneurial skills among the students.

- 5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extra curricular and co-curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc. additional academic support, flexibility in examinations special dietary requirements, sports uniform and materials any other
  - The institute organizes different events under cultural activities Abivyakti, Addiction thereby promoting students for participating in various extracurricular activities.
  - Students actively participates and win prizes in Firodiya, Purshottam, Daajikaka Gaadgil Karandak state level competitions.
  - Institute has a student group, Art Circle, which is headed by staff, necessary facilities are provided and adequate funds are allocated for different activities under it.
  - The sports and cultural committees arrange and coordinate the extracurricular activities.
  - Programs are conducted with professional societies like CSI, IEEE, ISTE, ACM., IET
  - Participation is encouraged in government projects like HACKTHON.
  - The students are encouraged to participate under the guidance of staff advisors appointed for each sport.
  - To ensure active participation of students in sports and extracurricular activities,
    - Attendance exemption (with prior approval) is given.
    - Rescheduling of examination is done for the national & international sports persons.
    - Provision for adjustment of laboratory work and conduction of extra lectures on topics missed by the students due to participation in various events.
  - 5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defence, Civil Services, etc.
    - Orientation & guidance lectures are organized.
    - Students who are interested and willing to appear in various competitive examinations are helped by the teachers by the way of study material and counselling for preparation.
    - Students are allowed to have access to library and to refer books related to entrance tests.

## 5.1.8 What type of counselling services are made available to the students (academic, personal, career, psycho-social etc.)

- 'Career Counselling and guidance " is given by T&P cell. The professor incharge is available to the students during college hours for the desired guidance.
- The faculty members provide adequate guidance to the students their scope in job selection and the role of a particular subject in different competitive examinations.
- The students are counselled to remove their doubts and overcome the low confidence level through best applicable solution to their problems.
- The students, who seek psychological Counselling or any type of social Counselling, are also attended to, very carefully, so as to keep them free from all worries and peer pressures

The following services are made available for the students:

- Academic and Career Counselling: They are given right kind of Counselling, which helps them carve their career.
- Personal and Psycho-Social Counselling:

The students, during the course of their studies in the college, come across various issues. Sometimes, the students find themselves too immature to handle the problems.

The faculty members counsel the students to become better human being and are nurtured to stand boldly for the social cause. This is especially true with the girl students, who face many issues at family and society level.

- Professional **counsellor** is appointed for the same.
- In addition, the institute arranges various social welfare programs like Blood donation camps, Rice, Cloth donation campaign, which makes them socially aware. Students and faculty of Institute visit social organizations like Orphanage, old age homes. NSS camps are arranged in nearby villages. They observe the activities which make them aware of social responsibilities.
- 5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programs). Yes, The Institute has a structured mechanism to make the students employable and also to help them choose the career of their interest.
  - The institute level training and placement officer who co-ordinates with various department level faculty coordinators for its activities. All students register online on a portal with their personal and academic details. Employability tests (ET) are conducted by the cell to train the students for

placements. Based on the company's criterion and ET score, students are short-listed for placements.

• Some of the activities are listed below:

Activity	Sem	Month	For Whom
	I	Sep-Oct	Pre-Final year students
Training	II	Feb-March	Pre-Final year & unplaced final year students
Placement	I A		Final Year Students
	II	Jan-Feb	Final Year Students
Pre- placement Talk	II	March- April	Pre-Final year students
Placement slot finalization	I	May-June	Final Year
Training Topic Finalization	II	Nov-Dec	Pre-Final year & final year students

	On Campus			Off Campus
A.Y.	Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
2010-11	49	340	297	NA
2011-12	41	317	245	NA
2012-13	39	285	217	NA
2013-14	47	296	244	NA
2014-15	44	388	369	NA
2015-16	50	540	465	NA

## 5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

#### Mechanism and composition of grievance Redressal system:

- A grievance Redressal committee is formed to look in to the complaints from the aggrieved.
- Suggestion/ Complaint Box are provided at office of the Principal for the Students and Staff to lodge their complaints/ suggestions. The report of grievance committee is forwarded to the Principal for further action. The corrective measures are taken and recorded in the register.
- Student's problem related to teaching, general problem, infrastructure problems are solved under this cell.

## 5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

#### (Sexual Harassment of Women at work place- Prevention and remedial):

This cell is formed according to the norms of AICTE. The details of the members are given below:

Sr. No	Name of Member	Designation	Contact No.	Position
1	Dr. R. Sreemathy	Associate Professor	9225675029	Presiding Officer
		(Faculty Member)		
2	Dr. A. S. Ghotkar	Associate Professor	9422357775	Member
		(Faculty Member)		
3	Dr. S.C. Dharmadhikari	Associate Professor	9011042683	Member
		(Faculty Member)		
4	Mrs. U.S. Bhosale	I/C Registrar	9822776123	Member Secretary
		( Non Teaching		
		Employee)		
5	Mrs. M. N. Javalekar	P. A. to Principal	9561606360	Member
		( Non Teaching		
		Employee)		
6	Ms. Neha A. Godse	Student Pre-Final	8605510033	Member
		Year		
7	Mr. Nishant A.	Student Pre-Final	9730070068	Member
	Poorewani	Year		
8	Mr. Shreyas T. Tatiya	Student Pre-Final	8446894567	Member
		Year		
9	Adv. Mrs.	Advocate –Civil Court	9822391011	Outside Member
	K.S.Kolhatkar	Pune ( Member NGO)		familiar with
				sexual harassment
				issue

### Mechanism and composition of Ladies Grievance cell (Sexual Harassment Prevention Committee):

- The committee is formed as per the "The Sexual Harassment of Woman at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and Rules, 2014. The Internal Rules and Policy framed are circulated for proper management and administration of the ICC under The Sexual Harassment of Woman at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and Rules, 2014.
- This is adopted by Board of Trustees of SCTR and circulated amongst the members of ICC for their reference. All the members have carefully gone through the policy and rules.

The following events were conducted by the committee to give awareness about the functioning, rules and regulation of the committee.

- 1. A meeting of all the women employees and students was organised to introduce the committee members and to brief about what is sexual harassment. The procedure for filing the complaints were also explained. Adv.Kolhatkar explained the procedures and answered the queries by participants. The event was conducted on 31<sup>st</sup> August 2016.
- 2. Workshop on "The Sexual Harassment of Women at Workplace) Prevention, Prohibition and Redressal) Act, 2013" conducted by jointly by 'Maharashtra State Commission for Women' and 'SPPU' on 2<sup>nd</sup> Feb. 2017 at St. Mira's College, Koregaon Park, Pune was attended by two internal members and the external member of ICC.
- 3. As per the guidelines of 'Maharashtra State Commission for Women' and 'SPPU' on 2<sup>nd</sup> Feb. 2017 a workshop was organized on 27<sup>th</sup> Feb 2017 in PICT for all the women employees and students to give awareness of the above act and the rules and regulations.

# 5.1.12 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, As per directives of various governing authorities as listed below the act of ragging is strictly prohibited within or outside of the Institute. As per the guidelines, Anti ragging squad or super squad are formed to visit PICT Campus for surprise checks. All the anti ragging squad members instructed to visit institute Campus after college hours. Schedule is maintained for all the activities.

To generate awareness among the students, awareness sessions are taken for all the students.

So far no such instance has been reported during the last four years. Institute submits reports to the university.

### 5.1.13 Enumerate the welfare schemes made available to students by the institution.

- Earn and learn scheme: Institute has appointed a faculty (who acts as welfare officer) to monitor various activities of earn and learn scheme. Under the universities earn and learn scheme, Institute provides financial aid to economically weaker students.
- Various scholarships are given to the students to avail concession in the fees.
- Book bank scheme is available for backward category students.
- Following SPPU social welfare scheme are offered to the students
  - Vidyarthini Vyaktimatwa Vikas, Board of Student Welfare, SPPU
  - Vishesh Margadarshan Yojana, Board of Student Welfare, SPPU
- Health services: On campus doctors are available

## 5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

Yes, PICT has a registered Alumni Association.

PICT Alumni Association has made great progress in its mission to enable alumni-to-alumni connections and foster a meaningful, lasting relationship between alumni and the institute. The Alumni committee aims to strengthen ties between PICT and the alumni, to encourage alumni and prospective graduates to participate in the self-development and professional development programs setup by the alumni committee, to guide PICT in the process of developing and planning academic programs targeted at alumni, to make follow-up studies of employed alumni in order to improve their conditions, and to serve the community.

Following is the process followed by PAA ( PICT Alumni Association ) for data collection:

- Collect the information of final year students and prepare soft copy.
- Update the information of passed out students visiting PICT in alumni database, by reminding alumni time to time to update their current information online at http://pict.edu/alumni/
- Supporting Business Incubation center and incumbent companies. 14 companies so far Site Flu, Take It Easy, Book Bazaar are currently incubated, 2 more have submitted proposal for incubation.
- Providing support to conduct activities of alumni & EDC at PICT. PAA engaged almost 15,000+ people with the PICT. PICT page on LinkedIn has more than 15,000 followers. We have a website for alumni association.

URL is www.pictalumni.org. We have alumni link on our institute website <a href="https://www.pict.edu/alumni">www.pict.edu/alumni</a>. We have group named PICT Alumni Association on LinkedIn and Facebook.

- PAA contributes in development effort of PICT by awarding BMC scholarships to toppers of CE and IT departments since last 5 years.
- PAA also announced Harihar-Boccasam Grant, for entrepreneurs in 2013.
  This association also provides support to conduct various events on campus such as Impetus and Concepts, CrednzTech Days and also facilitated internships to UG and PG students in companies like BMC, Playrify, Vulcan Mind, and Innobytes.
- PAA facilitates to conduct alumni meet worldwide. Recently we have conducted alumni meet in United States at Chicago on 9<sup>th</sup> July 2016. Alumni meet was conducted at Bangalore on 27<sup>th</sup> August 2016, Hong Kong 19<sup>th</sup> January 2017.
- PAA has conducted entrepreneurs meet at PICT on 6<sup>th</sup> August 2016.
- Alumni companies' eQ Technologic and Scorpius Trackers and Mihi Software have sponsored ICEI 2017.
- PAA is in process of forming Tokyo chapter of PICT Alumni Association.
- Zenovoir technologies have proposed MoU with PICT during alumni meet.

#### Some of the prominent alumni are:

S.No.	Name	Designation	Company
01	Mr. Amir Hudda	Chief Executive Officer	Naaya
02	Mr. Michel Susai	Founder, Chairman and CEO	NetScaler
03	Mr. P. V. Boccasam	Chief Executive Officer	Wealth Engine
04	Mr. Tarun Malaviya,	Chief Executive Officer	Mithi Technologies
05	Mr. Unmil Karadkar	Asst. Prof.	iSchool, UT Austin
06	Mr. Purushottam Kulkarni	Asst. Prof.	IIT Bombay
07	Ms. Charumati Kapur	Senior VP	Ramco Systems, San Francisco
08	Ms. Jayshree Athma	Director of Engineering	LG., San Francisco
09	Mr. Sanjeev Tamboli	СТО	eQ Technologic
10	Ms. Meenal Shrotriya	Principal Software Engineer	ARRIS

11	Dr. Sameer Antani	Scientist	National Library of Medicine, Washington D.C.
12	Mr. Girish Mundada	СТО	Hewlett-Packard

#### 5.2 Student Progression

## 5.2.1 Providing the percent age of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

Considering that post-graduation has become an integral part of present education and looking at historical data of the institution, the following trends were observed so far as higher education and employment is concerned.

- Students opting for post-graduation in abroad are increasing progressively.
- Students Opting For Ph.D. is in a nascent stage
- Students opting for employment through college is more than 95% of eligible students

Academic Year	Total Students for Ph.D. opted for PG In India Abroad Total
2015-2016	36
2014-15	11
2013-14	11
2012-13	10

# 5.2.2 Provide details of the program wise pass percentage and completion rate for the last four years (course wise/batch wise as stipulated by the university)? Furnish program-wise details in comparison with that of the previous performance of the same institution and that of the Institutes of the affiliating university within the city/district.

Department	Year	Passing Percentage	Completion Rate (%)
	2015-16	81.22	81.22
Computer	2014-15	92.05	92.05
Engineering	2013-14	76.59	76.59
	2012-13	84.86	84.86
	2015-16	87.5	87.5
E & TC	2014-15	83.73	83.73
	2013-14	86.8	86.8

Engineering	2012-13	84.0	84.0
Information	2015-16	89.31	89.31
Technology	2014-15	96.62	96.62
	2013-14	92.42	92.42
	2012-13	93.24	93.24
Department	Year	Passing Percentage	Passing Percentage of other institutes
	2015-16	81.22	90
Computer	2014-15	92.05	91
Engineering	2013-14	76.59	87
	2012-13	84.86	88
	2015-16	87.5	85
E & TC	2014-15	83.73	92
Engineering	2013-14	86.8	89
	2012-13	84.0	84
T. C	2015-16	89.31	90
Information	2014-15	96.62	94
Technology	2013-14	92.42	90
	2012-13	93.24	85

## 5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

- The institute has a Training and Placement Cell which ensures that students receive quality training for all round personality development from professional trainers, and those maximum numbers of students are placed in good companies with lucrative package deals.
- Entrepreneurship Development Cell: The institute has a very active Entrepreneurship cell which organizes expert lectures conducted by Industrialists and experienced Professionals to develop entrepreneurship awareness and skills amongst the students which leads to self- employment.
- Institute conducts several workshops, seminar for foreign languages.
- Institute conducts several events like INC, Credenz and Pulzion which includes Industry experts. This gives student exposure to the real world/ Technical World.

## 5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

- The college is determined to trim down the drop-out rate of students. The socio-economic, cultural and psychological issues contribute to the dropout behaviour.
- The socio-economic or cultural issues are dealt with effectively, by the experts

- of Counselling cell and grievance cell. The parents are also involved and consulted to help find out the root cause of actual problem.
- Regular tests and mock practical exams are conducted for students to help improve their performance in examinations
- The cases are identified by TG, CC and HOD. Parents are informed about the
  performance of their wards. They are also invited with their ward to discuss
  the reasons and best possible solutions. Parents meet are conducted in every
  semester. Special supports are given for those students who are academically
  weaker by conducting remedial classes. Also they can practice and assess
  themselves with mock tests. Failed students may attend the classes for the
  particular subjects

#### 5.3 Student Participation and Activities.

## 5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

• **PICT Art Circle** is the Cultural group of the college that officially represents the college at various levels. It also conducts and performs various shows on campus for the students. Students from all classes and departments are welcome here. The PICT Art Circle is a place where you start at nothing, but in time can become a master in numerous things like music, painting, acting, etc.

Sr. No.	Name of Event/Competition	Tentative Dates
1	Purushottam Karandak	June to September
2	Daajikaka Gaadgil Karandak	June to September
3	SPPU One Act Play competition	June to September
4	Dance Interactive Sessions	June to October
5	FE Meet	September/October
6	IIT Powai – Mood Indigo	December
7	Acting Workshop	December/January
8	Dance Interactive Sessions	December to January
9	FE Auditions for Firodiya Karandak	January
10	Sinhagad Karandak	January
11	Firodiya Karandak	December to March
12	Art Exhibition	March/April
13	Abhivyaktee	March/April

• **Sports:** Chess, Volleyball, Badminton, Kabaddi, Lawn Tennis, Basketball, Cricket, Fencing, Hockey, Football, Swimming, Athletics.

- Cultural Activities: Drama, Dance, Singing, Fashion
- Extracurricular Activities: Teachers Day, Engineers Day, CSR, NSS, Non Technical Competitions.

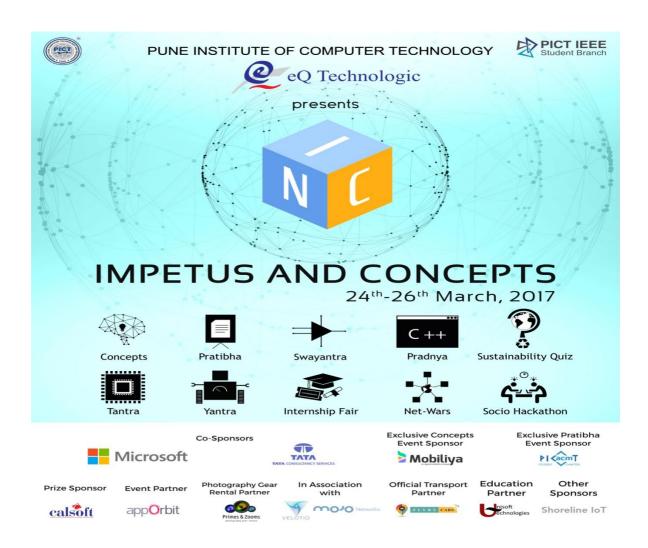
#### Cultural Events held at PICT campus 2014-15:

- i) Fresher's event by Radio Mirchi for F.E. Students: Platform for FE students to share their experiences about new college, new friends etc. Ms. Fresher, Mr. Fresher was selected.
- ii) Teacher's day '14 @PICT: Drama "Which One" for all the teaching and Non-teaching Staff Members.
- **iii) IEEE INDICON 2014:** Invited Cultural Programme: Pune Traditions: Movie, Vocal, Dance Performance, Sand Animation.
- iv) Workshop on Theatre Activities: Guidance by renowned theatre artist Alok Rajwade.
- v) **FE MEET:** Welcome and Awareness about PICT Art Circle to F.E. Students
- vi)Dance Workshop: Conducted by Nikita Thube, Mayur Khadse for FE students
- vii) ADDICTION'15: The annual social gathering for UG and PG Students
- viii) Rangavarsha' 15:A Cultural and Sports activity specially organized for teaching and non-teaching staff of PICT, in which they showcase their talent and skills through sports events and cultural performances.
- ix) Abhivyakti'15: F.E. Student's expressions by way of Cultural performances
- **x**) **Elysian**: is an art competition especially for the FE students. It provides an excellent platform for the students to portray their creative talent and skills.

#### Cultural Events held at PICT campus 2015-16:

- i) Fresher's event by Radio Mirchi for F.E. Students: Platform for FE students to share their experiences about new college, new friends etc. Ms. Fresher, Mr. Fresher was selected.
- ii) Teacher's day '15 @PICT: Drama "SARHAD" for all the teaching and Non-teaching Staff Members.

- iii) Workshop for set/ music/ dance/ acting: Conducted by PICT Students.
- vi) FE MEET: Welcome and Awareness about PICT Art Circle to F.E. Students
- v) ADDICTION'16: The annual social gathering for UG and PG Students
- vi) Rangavarsha' 16: It is a cultural and sports activity specially organized for teaching and non-teaching staff of PICT, in which they showcase their talent and skills through sports events and cultural performances.
- vii) Abhivyakti'16: F.E. Student's expressions by way of Cultural performances



5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

#### **Details**

#### Firodiya Karandak 2017 "Paash":

- 1. 3<sup>rd</sup> Prize
- 2. 3<sup>rd</sup> Best Direction Shubham Mulay
- 3. 2<sup>nd</sup> Best Actor Sejal Jagtap
- 4. 2<sup>nd</sup> Best Actress Aishwarya Gaikwad
- 5. 3<sup>rd</sup> Best Choreographer Yashwant Tekam
- 6. 3<sup>rd</sup> Best Sand Art Ganesh Wadewale & Ankita Chinnawar
- 7. 2<sup>nd</sup> Best Casting
- 8. 2<sup>nd</sup> Best Set
- 9. Best Organised Team

### Purushottam Karandak Mega Finals Mahakarandak (State Level) 2016 "Avdambar":

- 1. 3 <sup>rd</sup> Best Drama
- 2. Acting Consolation Aishwarya Gaikwad
- 3. Acting Consolation Bhavesh Joshi

#### Daajikaka Gaadgil Karandak 2016 "Avdambar":

- 1. 3<sup>rd</sup> Best Drama
- 2. Best Music (1<sup>st</sup> prize)
- 3. Best Set (1<sup>st</sup> prize)
- 4. 3<sup>rd</sup> Best Lighting
- 5. 2<sup>nd</sup> Best script

#### Savitribai Phule Pune University One Act Play Competition "Avdambar":

- 1. 2<sup>nd</sup> Best Drama
- 2. Best Music (1<sup>st</sup> Prize)
- 3. Best Stage Management (1<sup>st</sup> Prize)
- 4. Best Actor Bhayesh Joshi

#### Purushottam Karandak 2016 "Avdambar":

- 1. 3<sup>rd</sup> Best Drama (Sanjeev Karadak)
- 2. Consolation for Direction Aishwarya Gaikwad
- 3. Consolation for Acting Aishwarya Gaikwad
- 4. Consolation for Acting Paritosh Bhide
- 5. Consolation for Acting Bhavesh Joshi

## 5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

- Student's feedback: Institute has an online feedback system, it maintains transparency in the system. Login & password is generated for each stake holder. Set of questionnaire is available. In a Semester twice we conduct a feedback. Feedback taken from students in the form of course feedback and faculty feedback helps in improvement in curriculum and teaching methodologies adopted by faculty members. It also helps the institute in improving the infrastructural facilities if need be. The student's feedback is taken on-line to. Apart from this senior faculty of the department takes feedback orally in the middle of the semester from all students.
- Alumni feedback: The Institute regularly conducts Alumni meets in which the Alumni feedback is taken regarding current industry trends and what enhancements are required in teaching-learning process which will make the current students industry-ready.
- Employer feedback: Training & placement cell conducts feedback from the employer at the time of campus placements, Industry Institute interaction. It helps to improve the training imparted to students.

# 5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications / materials brought out by the students during the previous four academic sessions.

To promote creative skills like writing and communication skills of the students and equip them with latest knowledge, different magazines are published every year.

- **Pictorial:** PICTOREAL has always been known for being "The official cultural magazine of the PICT and the series of events it organizes every year. PICTOREAL provides an opportunity to the PICTians to showcase their skills, talent and views to the world outside, and among their social group.
- **PING:** PICT IEEE Newsletter Group (P.I.N.G.) Technical magazine which is

published bi- annually sponsored by IEEE.

• **Magazines by Department**: Technical magazine is published by each department bi- annually.

### 5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

Institute does not have any specific student council but students are involved in all the activities and major decisions by institutes. For this purpose frequent meeting are conducted with student class representative (CR), Principal, Dean, and some senior faculty members.

- Alumni Club
- PICT IEEE student chapter
- PICT ACM student chapter
- PICT CSI student chapter
- PICT IETE student chapter
- PICT Art Circle

## 5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

The institute has student representatives in many of the academic and administrative bodies for effective functioning of the same. Some of the bodies are listed below:

- Women Grievance Cell
- Anti Ragging Committee
- Training and Placement Cell
- National Service Scheme
- Cultural/Sports Committee
- Social Initiatives
- Student grievance redressal committee.
- Professional bodies
- Hostel Committee
- Mess/Canteen Committee

## 5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

#### Collaborate with the Alumni

The interactions between the Alumni and the present students give a chance for both the parties to develop positive bonding, which helps to enhance growth. Every year the annual Alumni Meet provides a platform for the students to renew old bonds with the Alma-mater and relive the nostalgic college moments.

Alumni's are called for judging of projects, seminar at department level, which boosts confidence of students. Students get connected very easily with them. Alumni association helps to get sponsored project for the final year.

The Alumni Association interfaces between the eminent alumni and the institute creating a strong network that helps in nurturing executives who can thrive in a challenging and changing business environment.

The interaction with alumni helping the institute by way of guest lectures, industrial visits, project work, student internship, training and placementetc. The institute effectively networks and collaborates with alumni which have seen a progressive increase in the number of alumni interacting with the students every year.

#### **Collaborate with the Faculty**

The former faculty of the institution also contributes in the form of speakers and judges of various events, examiners and Ph.D. guides at the respective research centers.

5.3.8 Any other relevant information regarding Student Support and Progression which the college would like to include.

NIL

#### CRITERIA VI: GOVERNANCE LEADERSHIP AND MANAGEMENT

- 6.1 Institutional Vision and Leadership
- 6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?
  - Pune Institute of Computer Technology (PICT) was established in 1983 by a
    group of enterprising professionals and has come a long way and marched
    ahead with quality education imbibed with professional and ethical values.
    Our mission is to be the most sought after institute in engineering education
    and research, that provides relevant knowledge, creates challenging
    opportunities and inculcate values and social responsibilities.

The vision and mission of Pune Institute of Computer Technology is:

#### Vision

Pune Institute of Computer Technology aspires to be the leader in higher technical education and research of International repute

#### Mission

To be the leading and most sought after institute of education & research in emerging engineering and technology disciplines that attracts, retains and sustains gifted individuals of significant potential

- The Mission statement is communicated to all the students, teachers, staff and other stakeholders. Mission is published through the college website, display boards, laboratories as well as college magazine. The mission is also published in the college prospectus making it available to students, parents/guardians and the public.
- Pune Institute of Computer Technology (PICT) has been one of the leading institutes in Information Technology education and research. PICT is situated in nation's education hub, Pune and is recognized for its quality education and research. It was established by the Society for Computer Technology and Research (SCTR) in 1983 and was the pioneer institute to introduce

Computer Engineering branch among private colleges in the Maharashtra state.

- PICT is focused on creating versatile engineers who can apply their knowledge and skills in any field across the globe for the betterment of human kind. The college is well known as a disciplined and quality enhancing institute for UG as well as PG programs in Computer Engineering, Information Technology and Electronics & Telecommunication Engineering. It is also SPPU approved Research center in Computer Engineering and Electronics & Telecommunication.
- PICT aims to be one of the best engineering institutes of India and is continuously putting efforts to provide quality education and placement. To ensure this, the institute is ISO 9001:2015 certified and its all UG programs are NBA accredited to ensure that the outgoing students have the graduate attributes necessary to meet global needs.
- Institute is also accreditation by NAAC two times. It is recognised under section 2(f) and 12(B) of the UGC act 1956.

## 6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The top management, Principal and faculty work in synergy for implementing its quality policy. The leadership provides the road map for achieving excellence in technical education and research of international repute. The academic and administrative processes are geared towards realizing the vision.

The role of top management, Principal and faculty in design and implementation of quality policy and plans is detailed below:

#### **Top Management**

- The management of PICT plays important role to provide excellent infrastructure facilities and healthy teaching and learning environment to the students and faculty in order to implement the quality policy and plans.
- The management periodically reviews the progress made by Principal, HODs and faculty in implementing the policies and plans to the satisfaction of all the stakeholders. Thus the management proactively encourage and motivate faculty and staff for realizing the vision of the institute.

#### **Principal**

• Principal provides academic leadership and try to percolate the qualities of leadership among HODs and faculty. The HODs and faculty members are actively involved in decision-making process through various committees.

- The Principal holds meeting with HODs periodically to monitor and assess the various processes and provides necessary corrective measures if required, all the decisions and policies to improve academic activities are reviewed and discussed during the meetings before implementation.
- The Principal also prepares the institute budget and action plans after discussing with the HODs and other functional heads. Subsequently it is presented and approved in the Local Managing Committee & Governing Body. Therefore, HODs acts as representative of the faculty who are involved in the institutional decision-making.

#### **Faculty**

In case, the faculty or staff wishes to express their views on any other matter, it is also possible to do so through the faculty representatives in LMC. In order to implement the quality policy and plans effectively, the management has following practices which shows the commitment, leadership role, and involvement of each one of us.

- Financial support to each department for facilitating the academic.
- Recruitment of qualified and experienced faculty.
- Motivation, guidance, and appreciation to faculty, staff, and students.
- Periodic meetings for interactions with teaching and non-teaching staff.
- Development programmes for faculty and staff to update them with technologies.
- Support for departmental seminars, project work and guest lectures.

#### 6.1.3 What is the involvement of the leadership in ensuring:

## I] The policy statements and action plans for fulfilment of the stated mission

• The head of the institution administrates all the activities and plays a leading role in governance and management of the institution. The mission is communicated to the faculty and accordingly all activities are planned as per the suggestion of the governing body and other committees.

#### The Institute is working continuously to achieve the following:

- To ensure all-round development of students by providing various cocurricular extra-curricular and entrepreneurship skill development opportunities.
- To enhance research culture amongst the faculty and students, by providing latest, research facilities and industry institute interaction.
- To inculcate moral honor in students and make them socially responsible good human beings.
- To develop leadership qualities and an ability to work in a team, by

- encouraging the students to participate in various activities such as INC, Credenz etc.
- To set up a research center recognized by the affiliating University, SPPU.
- The Management and the Principal ensure that the institution forges ahead with all the planning, to consolidate and become one of the premier institutions. The policy statements and action plans are formulated, after careful consideration of all the stakeholders, by the management.

## II] Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan.

• The action plans for operations are prepared under the supervision and guidance of the Principal and Heads of the departments. Each department has a well-planned academic calendar before the start of each semester. This calendar lists down all the curricular, co-curricular and extra-curricular activities and events to be organized throughout the semester. There are multiple committees that exist within the department, whose responsibility is to plan out developmental activities and ensure their timely execution. As an individual each staff member prepares a teaching plan for the subjects allotted to them much before the start of each semester.

#### **III**] Interaction with stakeholders

• There are regular interactions with the various stakeholders, in the form of alumni meets, parent meetings and discussions with employers, so as to take their viewpoints into consideration. This ensures constant communication with the stakeholders.

### IV] Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders

• The Heads of the departments review the departmental progress for continuous improvement in consultation with the Principal. Based on the suggestions given by the stake holders during interactions, Expert lecturers workshops training programmes are arranged for bridging the gap between academics and industry. The Institute has signed MoUs with various companies for providing additional facility to the students. Some of the companies which provide us such support are NVIDIA, SAS, IBM, Tech Mahindra, BMC, Harbinger and Persistent Systems etc. This number is continuously increasing.

#### Reinforcing the culture of excellence

• The Institute believes in striving for excellence in all aspects. The students are trained to take initiative to act on opportunities and take responsibilities. The Institute inspires and creates culture of involvement, entrepreneurship and improvement by providing support at all levels.

#### V] Organizational change

- Institute is always open for accepting change in policy for achieving excellence. Taking into consideration the preceding year's performance in terms of academic results, placements, research publications in conferences and journals, funded projects etc. the college follows a well-structured approach for implementing the required changes to ensure improvement in the performance of the system.
- Requirements arising, in order to achieve the above goals in the Institute, are systematically conveyed with its justifications to the competent authorities and decisions are taken towards its fulfilment/ implementation.

## 6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

• The functioning of the Pune Institute of Computer Technology (PICT) is monitored at three levels. They are as follows:

#### At Governing body

The resolutions made in the Governing body meetings related to the policies and plans are communicated to the institute.

#### At Institute

Regular meetings of heads of department are conducted for smooth functioning of the college. All suggestions regarding better functioning of the departments are accepted and positively executed. Apart from this, the implementation of policies and plans recommended by the LMC are discussed.

#### At Department

The minutes of HOD meetings are briefed to all the faculty members by the head of each department. Further the planning is made at the department level for effective implementation of policies and plans. The faculty members work as activity chairpersons and members in various administrative committees.

## 6.1.5 Give details of the academic leadership provided to the faculty by the top management?

• The institute provides various platforms for faculty to develop leadership skills at department level, institute level by giving them various portfolios. The policies are decided by the governing body of institute and complete academic, administrative and financial freedom is given to the Principal, heads of the departments and faculty. The details of responsibilities, duties and expected outcomes from the individual are mentioned below:

- Principal is authorized to appoint appropriate person as the head of the department with distinct leadership qualities and good listening ability to understand the students and faculty, their situations and expected outcome
- Head of the department is empowered to allocate specific subjects to appropriate faculty for the betterment of students and to get quality results. Apart from the academic workload the head of the department also assigns few administrative duties to the individual faculty based on the ability and the leadership qualities of the individuals
- Every faculty is given complete freedom to decide the suitable teaching methodology of his/her choice by understanding the time frame and evaluation mechanism of SPPU.
- Decentralization has been done at various levels. Under the leadership of Principal, coordinators of various committees along with the heads of the departments are delegated powers and responsibilities to handle specific task assigned to them.
- Based on the feedback and result analysis, the remedial actions to achieve the expected outcome are specifically given to all the faculty members either by oral discussion or through official orders if necessary by the principal through the heads of the departments

#### 6.1.6 How does the college groom leadership at various levels?

The institute grooms the leadership at various levels as follows:

#### At student level:

- Encouragement to conduct various activities by the students for the students.
- Enhancement of personality development and soft skill to build their confidence while executing specific task.
- Motivation and encouragement for new innovative ideas with strong moral support from faculty.

#### At faculty level:

- Opportunities to lead specific committee while conducting various activities at department and institute level.
- Freedom is given to express their thoughts and innovative ideas.
- Inspiring them to lead the students' community during the classes, practical and industrial visits to guide the students while acquiring the knowledge.
- Encouragement to lead the faculty while organizing various state/national/international level seminars and workshops.

#### At HOD level:

- Decentralization of various tasks to develop leadership at departmental level.
- Assigning few institutional responsibilities well supported by the Principal and the management.
- Creating healthy competition amongst the departments and encourage them to achieve superior academic performance.
- Encouragement to follow administrative practices to avoid confusions and hurdles in the path of the success.

#### At Principal level:

- Freedom is given while executing academics.
- Financial freedom and moral support for the betterment of quality outcome.
- Appreciation of execution of best practices.
- Assigning Institute level tasks to lead and organize specific activity.

## 6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

- The college delegates authority and provides operational autonomy to the departments to work towards decentralized governance system. Academic responsibilities are fairly divided among all the faculty. Committees are formed for the various curricular, co-curricular and extra-curricular activities to be conducted during the academic year. The departments are encouraged and given financial support to arrange various activities for the benefit of students and faculty.
- The administrative office of the College is headed by the Registrar. The Registrar in consultation with the Principal coordinates the day to day activities concerned with administration of the Institute.

## 6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes, the college promotes participative management.

- The college constitutes committees for general and academic development which includes faculty, non- teaching staff and students' participation and everyone is involved in decision making processes. These Committees are formed in the College as per the directives of the Governing Body playing an important role in various institutional functions.
- Regular meetings of these committees are held for the effective and smooth functioning of the college. The innovative ideas, concepts and thoughts from the different committee members are appreciated and due care is taken to implement those.

- There are three levels of administrative structure under which all the activities of the institute are carried out.
  - 1. SCTR- The management of the institute rests with its Governing Body, whose members, are appointed in accordance with the guidelines provided by the Director of Technical Education, Savitribai Phule Pune University and AICTE.
  - **2. Institute** All the main decisions related to the institute are taken by the Principal in consultations with the department Heads. Principal is the academic and administrative head of the Institute and the Member Secretary of the Governing Body.
  - 3. Department-The Heads of Department are responsible for the day-to-day administration of the Department and report directly to the Principal. Student centric activities form very important part of decision making process. Formal and informal feedback from students is also used to modify the system to get positive outcome. Thus, the overall coordination amongst these committees and the participation of all concerned helps in the overall improvement of the functioning of the institute.

#### **6.2** Strategy Development and Deployment

### 6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

**Yes**, the Institute has a formally stated quality policy.

- It has been formed after discussions with the top management, Principal, Heads of the departments and staff members in order to achieve the vision and mission of the Institute. The Institute undertakes various activities to fulfill the quality policies. All the activities are monitored by the committees that meet periodically to decide and discuss various quality issues.
- The management is committed in assuring quality service to all its stakeholders, students, alumni, employees, employers and the community.

The quality policy of the institute is committed to:

- o Provide excellent infrastructure facilities.
- o Employ qualified and experienced faculty.
- o Encourage the faculty for improvement in qualifications.
- o Promote industry institute interaction.
- o Create environment for research and development activities.
- o Encourage industry sponsored projects for the students.
- Strive for quality academic performance of students.
- o Enhance employability, students going for higher studies and entrepreneurs.
- The quality policy of the institute is formulated based on the vision and mission of the institute. The quality policy is driven through entire organizational structure involving Principal, head of department, faculty and

students. All the stakeholders are made aware about the quality policy through institute website, college magazine "pictorial" and other publications related to the institute. The quality policy of the institute is deployed and reviewed by the information collected through various stakeholders like students, parents, industry, faculty and staff. The institutional ways strives to improve its quality of programs through feedback mechanism.

### 6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

**Yes,** The institute has a perspective plan for development.

- Various aspects considered for the institutional perspective plan are as follows:
  - a) Become center of excellence in the field of technical education.
  - b) Enhance student's placements in renowned industries and entrepreneurs.
  - c) Develop interdisciplinary approach.
  - d) Develop ourselves as a research and development center in association with industry.
  - e) Develop international repute and foreign university collaborations for credit transfer.

## 6.2.3 Describe the internal organizational structure and decision making processes.

The broad outline of internal organizational structure of the institute is shown in following figure.

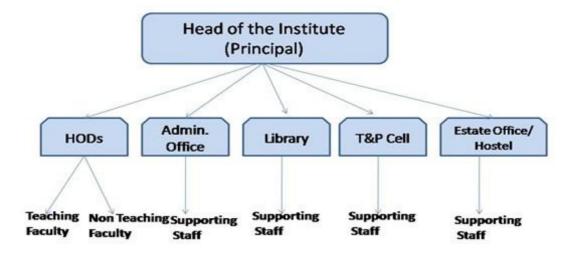


Fig: Organizational Structure of the institute

 All the departments of the institute have departmental committees coordinated by faculty members and monitored by Head of the Department to keep a check on academics and effective as well as efficient performance of the department in all aspects.

- Several committees are formed at institute level for appropriate coordination
  of the activities. The departmental representation is ensured in central
  committees.
- The Local Managing Committee and Governing Body are the final approving bodies

The various committees for internal coordination and monitoring are:

- 1. Governing Council
- 2. Advisory board committee
- 3. IQAC committee
- 4. Local Managing Committee
- 5. Finance Committee
- 6. Purchase Committee
- 7. Human Resource Committee
- 8. Event management Committee
- 9. Maintenance committee
- 10. Scrap committee
- 11. Website Committee
- 12. Research Co-ordination Committee
- 13. Alumni Committee
- 14. Committee for college Magazine
- 15. Co-curricular activity committee
- 16. Professional society chapters committee
- 17. Sports Committee
- 18. Cultural Committee
- 19. Dead stock verification Committee
- 20. Grievance Readdresal Committee
- 21. Internal complaint committee
- 22. Anti-Ragging Committee
- 23. Time table Co-ordination Committee
- 24. Entrepreneurship Development Cell
- 25. Examination committee
- 26. Committee for SC/ST
- 27. Research committee for funding project
- 28. Research committee for research center

### 6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following:

#### **Teaching & Learning:**

- Quality improvement in teaching & learning is achieved by scrupulously following the academic calendar and processes laid down by the University and the institute.
- The institute ensures effectiveness of the Teaching learning process using:
  - o Well planned effective academic calendar.

- Modern audio visual aids and e-resources.
- Continuous evaluation of students.
- o Problem solving sessions for slow learners.
- o Expert talks by industry persons.

#### **Research & Development:**

- The institute ensures research in faculty and students by:
  - o Developing infrastructural facilities,
  - o Promoting and encouraging faculty for research and publication,
  - o Encouraging students to undertake industry projects,
  - o Encouraging students to present technical papers,
  - Signing MoUs with industry / foreign universities,
  - o Encouraging faculties to apply for research grants

#### **Community Engagement**

- Institute believes to support the community through:
  - o Blood donation camp,
  - o NSS activities to create social awareness among students,
  - Encouraging students and faculties to understand current social problems such as traffic, cleanliness, water problem, energy resources etc.,
  - o Organizing self-defence awareness program for girl students

#### **Human resource management**

- The institute has optimized their human resources by:
  - Recruiting qualified and experienced faculty as per the guidelines of SPPU
  - Facilitating and deputing faculty for higher studies
  - o Promoting industry interaction among faculty and staff
  - o Updating knowledge of faculty through FDP, visiting/guest faculty
  - o Training to non-teaching staff

#### **Industry- Institute interaction**

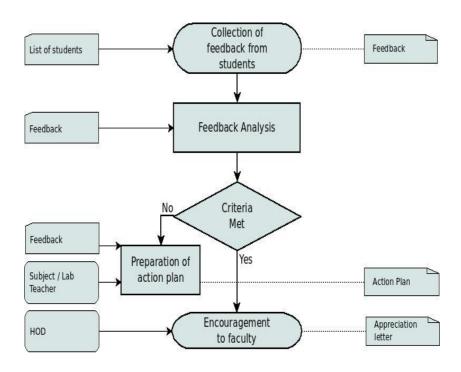
- A good industry-institute interaction exists in the institute. To further strengthen it, the institute aims to
  - Have more number of industry sponsored projects
  - Increase FDP programs for teachers
  - Have Expert lectures delivered by eminent industry personnel
  - Have short term training programs conducted by industry personnel for students and faculty.
  - o Increase the number of MoUs
  - o Increase the participation of industry in laboratory development.
  - Establish center of excellence in collaboration with industries
  - o Conduct Industrial Visits

#### Entrepreneurship cell and incubation facility

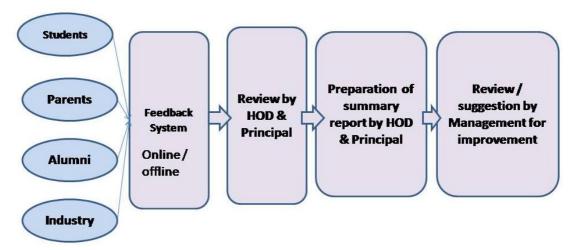
• The Institute has an active entrepreneurship cell. Entrepreneurship Development Cell was established in PICT with identified objectives. Several activities conducted and many more are planned by this cell.

# 6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

- There are various sources available to take feedback from different stakeholders to review the activities of the institute. The Principal consolidates all such feedback information and ensures that the same is available for the top management and the stakeholders to review the academic activities.
- After review by the management, the suggestions are taken as an input to rectify or modify the systems to satisfy for better performance of the institution. The Principal and HODs percolate the corrective actions in all the departments as per the policy decisions. The system of getting feedback from all the stakeholders, its review and corrective actions for the betterment of the institute and to get best of the best performance is continuous process. Process for quality improvement through feedback is depicted in following figure.



Feedback process for quality improvement



Feedback System

## 6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

 The management always encourages faculty to involve themselves in ongoing institutional processes. Faculties are the Heads of various committees at college level. Management maintains communication with the staff and is open to their suggestions.

## 6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

• The resolution made by the Governing Body (GB) in the academic year 2016-17 on Thursday, 9<sup>th</sup>February, 2017, at 3.00 pm.

The Governing Body members:

- 1. Shri, R. S. Kothavale Chairman
- 2. Shri. S. M Sirsikar Member
- 3. Shri. Tarun Malaviya Member
- 4. Dr. Arvind Deshpande Member
- 5. Dr. R. B. Ingle Member
- 6. Shri. A. R Buchade Member
- 7. Dr. P. T. Kulkarni Member Secretary

#### Action Taken Report of the last meeting (29 Oct 2015):

1. The following actions are taken as per the suggestions made during the last Governing Body meeting.

- a. Necessary budget provision is made to make proportional improvement in the infrastructure and student-faculty-ratio, to maintain and improve the quality with the expansion.
- b. There is a mechanism to identify the top performers and encourage them.
- c. Many faculty development programs (FDPs), are conducted in addition to Mission 10X, and other FDPs, to improve the quality of teaching.
- d. A policy is drafted to initiate measures to achieve "zero backlog," three years down the line.
- e. A policy is drafted to initiate measures to ensure that majority of students are placed with Package higher than 5 LPA.
- f. Many training programs are conducted from First year, to enhance the employability and internship of the students.
- g. Exploring the possibility of inviting more number of product development companies and more number of higher package companies.
- h. We have applied to UGC for the purpose of inclusion of PICT under section 2(f) and 12 (B) of the UGC act 1956 and the same has been granted.
- i. We have applied to AICTE (also to DTE & SPPU) for additional intake in UG Information Technology (First Shift 60 intake), for Academic Year 2017-18.
- j. It's decided to reserve appropriate number of seats in the Boys & Girls Hostel to accommodate the students admitted under PIO quota.
- k. Application is submitted to FRA for Fee fixation for AY 2016-17 & 2017-18.
- **2. Budget Approval for 2016-17:** The budget for the year 2016-17 was presented by the Principal by giving all the details and the same was approved.

**Resolution**: It is resolved to approve the Budget.

**3. Ratification of Staff Appointment:** The list of the staff members recruited to meet the expected student-faculty-ratio, in view of the increased intake was presented. Also, the information about the staff members resigned/promoted was provided. Some staff members are given advancement in pay level as an encouragement as per the policy.

**Resolution**: Approval was accorded to all newly selected staff members as per the list.

#### 4. Result Analysis of May 2016 Examination:

• The result analysis of F.E. to B.E. for May, 2016 was presented and the members expressed satisfaction over the improvement in the results.

- Dr. Arvind Deshpande expressed his happiness over the results. He said, PICT is No.1 in results compared to even government colleges. This is due to the strictness, good teaching& learning process, good students and faculty. However, proportionate to the distinctions and first class that PICT gets, the number of ranks is not encouraging.
- Even, Shri, Tarun Malaviya expressed his happiness about the good results and consistent performance in the SPPU examinations.

**Resolution:** Necessary measures to be implemented strictly to achieve 'Zero' backlog within 3 years and efforts should be made to get more number of ranks.

#### 5. Training & Placement:

- Shri. Tarun Malaviya suggested that instead of targeting only companies offering packages above Rs.5 LPA, the product companies even with a lower package must be engaged, since the students get good learning experience in such companies. He also suggested that the internship opportunities can cause increase in the placement opportunities as well as the higher package.
- Shri. R. S. Kothavale & Shri. S. M Sirsikar felt that this trend towards higher package may be due to increased peer pressure and pressure from the parents.
- Even Dr. Arvind Deshpande felt that it is very difficult to control the choice of the students for higher package companies. We need to motivate students about getting the jobs to their satisfaction, irrespective of package.

**Resolution:** It is resolved to conduct more training programs after getting the feed back from the students, TPO & industries to enhance the employability and internship of the students. It is also resolved to explore the possibilities of inviting product development companies and higher package companies like Rakuten, Yahoo, Google etc.

- The Principal thanked the Chairman and all the members for the valuable suggestions/inputs. He assured that the suggestions will be taken up positively and necessary action will be initialed.
- The members expressed satisfaction about the progress and the meeting concluded with vote of thanks from the Principal.

## 6.2.8 Does the affiliating university make approvision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?

**YES**, The Institute is affiliated to the Savitribai Phule Pune University. The University has the provision for awarding autonomy. The institute has all the prerequisites for qualifying for autonomy and is in the process of applying for the same.

# 6.2.9 How does the Institution 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 following committees for hearing grievances/complaints from students, teaching and non-teaching staff.
  - o Local Managing Committee
  - o Committee for SC/ST
  - o Anti-ragging Committee
  - Anti-Ragging Squad
  - o Grievance Cell
  - o Internal complaint committee
  - o Student Council
  - Student Grievance Redressal Cell
- Everybody in the institution is made aware of the existence of these committees. As and when the committee receives a complaint, they meet immediately, review and resolve the problems. They also ensure that necessary actions are taken. The complaint details are filed separately and kept confidential.

## 6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

No court case has been filed by and against the institute in the last four years.

## 6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort?

**Yes**, the institution collects online feedback every semester, from students, on Institutional performance for the improvement and development of academic standard as well as various types of facilities.

- Students provide their feedback on the working of the administrative office, facilities provided by the department, facilities provided by the Institute and the working of the training and placement cell as well.
- In addition to this, students evaluate their subject teachers using the specified questionnaire. This is an online process and is conducted at the department level. A faculty and some supporting staff of the department are assigned this activity and the Heads of the Departments monitor the process.
- Heads of the departments go through the departmental feedback and convey
  it to staff members for corrective action if required. After discussion in the
  top management meeting, decisions are taken for the improvement of
  institutional performance.

#### 6.3. Faculty Empowerment Strategies

## 6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?

- The Institute constantly strives to enhance the professional skills of its teaching and non-teaching staff.
- Efforts on Teaching staff Development:
  - o FDPs are conducted to upgrade their knowledge,
  - Workshops on teaching methodologies are conducted to improve teaching learning skill.
  - Financial support to attend seminars, workshops, FDPs at state/ national / international levels,
  - o Encouraging faculty to become members of professional bodies,
  - o NPTEL video lectures,
  - o Faculties are permitted to improve their qualification,
- Efforts on Non-Teaching Staff Development:
  - The Institute arranges need based training programs for their skill improvement and permits them to attend similar programs at other institutes.
  - They are encouraged to go for higher studies and their work load is adjusted if the need arises
  - o They are encouraged to participate in the organization of technical events
  - o Arranging workshops/seminars for improving communication skills.

## 6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

- The institute invites resources persons from industries, researchers and academicians for interactions with the faculty and staff.
- The institute encourages the faculty to motivate in following ways
  - o Giving essential guidelines and support for lecture/ practicals/ seminar-project guidance, counselling on career advancement.
  - o Involving them in discussions on topics in the syllabus.
  - Creating an open atmosphere for personal growth and to clarify the doubts, concepts and difficulties.
- Institute is always striving to motivate and empower the faculty to create sense of direction and positive awareness to all the departments in the teaching learning processes by:
  - Sponsoring and funding them to attend various programmes like National /International conferences, workshops, STTPs and FDPs carried out at different levels. Funding for International and national level paper presentation.

- Institute provide support and guidance for research project at various level.
- Creating a sense of belongingness amongst faculty members by involving them in various committees.

## 6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

• The performance appraisal system consists of self-appraisal and appraisal by reviewing officer.

#### Performance appraisal system of the faculty:

- Annual self-assessment for the performance based appraisal system is adopted. Hence it is ensured that information on multiple activities is appropriately captured.
- The information includes:
  - **Part A**: General information and academic background, courses / STTP / seminars /workshops attended during the year, Teaching learning and evaluation related activities, Co-curricular, professional development related activities, research, publication and academic contributions.
  - **Part B:** Remarks by Head of Department in Part A which is filled by individual faculty.
  - **Part C:** Principal / Director as the case may be, shall give justification for his remarks if the remarks of Head of Department in Part B is not satisfactory.
  - **Part D:** Final Review by accepting authority.
- The Institute strictly follows all the basic recruitment and promotional policies as stipulated by AICTE, Savitribai Phule Pune University as well as Government of Maharashtra

## 6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

- The outcome of performance appraisal reports is used for reviewing the annual progress of staff and for promotion to the next scale/ designation. The outcome of performance appraisal is communicated to the faculty by making an appropriate entry in service books.
- The procedure adopted for performance appraisal is as follows:

#### Review of performance appraisal:

• The Performance appraisal reports are initially submitted to the Academic Audit committee which is also the review committee appointed by the top

management.

#### **Outcome:**

• The outcome of the performance appraisal is that each faculty/staff becomes aware of self weaknesses and tries to improve oneself in those areas so that they can score better in the next year.

#### Major decision taken:

• The remarks obtained in the Performance appraisal report contributes to the decision about faculty appreciation.

## 6.3.5 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?

The following welfare schemes are available for teaching and non-teaching staff.

Sr.	Welfare Schemes	Percentage of staff availed the benefit
No.		of such schemes
1.	Advance against salary	11.30 %*
2.	Gratuity	5.21 %*
3.	Provident Fund	100 %*
4.	Study Leave under QIP	3.12 %*
5.	Sabbatical Leave	1.25 %*
6.	Maternity Leave (Female Staff)	6.08 %*
7.	Admission to ward of the	2.17 %*
	staff	
8.	Advancement in Pay level	53.43 %*
	policy for Non teaching Staff	

<sup>\*</sup> All eligible staff who have claimed the benefits have been granted. Making beneficiary is all most 100 % in each of the above case.

## 6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

- Pune Institute of Computer Technology (PICT) has been one of the leading institutes in Information Technology education and research.
   PICT is situated in nation's education hub, Pune and is recognized for its quality education and research.
- Following measures are taken by institution for attracting and retaining eminent faculty:
  - o Experienced and qualified faculty is appointed.
  - o The institute offers freedom of work and gives an opportunity to

- excel in the domain of individual areas. It also assigns important administrative roles to the eminent faculty.
- The institute provides functional office infrastructure and other space to carry out their work effectively and efficiently.
- o For retaining the eminent faculty, budget is allocated for staff development, research, participation in seminar, conference, workshop, FDP etc.
- Decentralized academic environment, good governance and flexibility in the teaching learning process are provided in the institute. Due to these factors, the faculty gets full job satisfaction in their field. Appreciation letters are issued to well performing faculty.
- o Institute offers Pay scale as per the norms of Govt. of Maharashtra from time to time. It encourages the transparent work culture.

#### **6.4** Financial Management and Resource Mobilization

### 6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

- The effective and efficient monitoring of use of available financial resources of institute is mechanized in following ways:
  - The budgetary requirements are raised from the department every year, they are forwarded to principal.
  - The Principal reviews budget requirements of all departments and after having two to three round discussions, based on the justification given by the concern intender/Head, the Principal allocate the budget considering the income and necessity of o the said budget.
  - o After considering the entire budget requirement and the total income from all the resources, the draft budget is prepared, insuring that there is no surplus of the budget.
  - The budget proposal is done, it presented to the management giving all the details, after approval from the management the budget is presented in the LMC.
  - After approval from the LMC, the budget finally gets approval from GB.
  - Once the budget is approved, every concern person is informed about their budgetary approval. After which they can spend money for their requirement.

## 6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

Institutional mechanisms for Internal and External audit:

**Yes**, The institute ensures an internal and external audit of all its accounts. Internal and External audit are done two times in a year. Queries in the audit will be reported to Principal and within one month, the queries need to be complied.

- External Auditor verifies all receipts & expenses bills, payments of the Financial Year (FY). The last external audit of FY 2015-16 on 22/06/2016. There were no major objections in balance sheet assessment.
- 6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.
  - The major source of receipts is Tuition Fees and Development fees from the students. Audited income and expenditure statement of academic and administrative activities of the previous four years are available.
- 6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).
  - For acquiring additional funding, the institute generates revenue through projects sponsored by organizations like DST, AICTE DRDO, BCUD, Consultancy work and others.
- 6.5 Internal Quality Assurance System(IQAS)
- **6.5.1** Internal Quality Assurance Cell (IQAC)
  - a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institution alizing the quality assurance processes?

Yes. Institute has established the IQAC as per the NAAC guidelines. Institute has decided the function of IQAC at various catagories such as Academic, Administrative, Purchase/other facility, Multi-dimensional growth of students, Examination and Feedback.

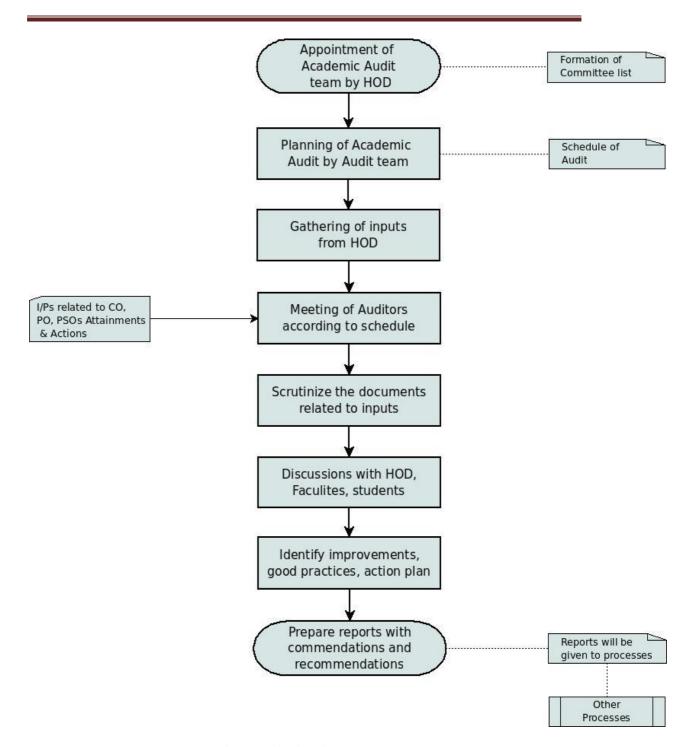
Based on above parameters various sub-committee are formed to assures the quality process. At the begineeing of every academic year, each subcommittee head and its team members design the action plan and discuss with principal for review and modification. The status of the action plan get auditated by IQAC once/twice in year and submission of status report is asked by the principal. Some of the important activites such as teaching learning, feedback analysis are also discussed in management review meetings.

- Other than IQAC the Institute has obtained ISO certification in 2006. Currently we have certification 9001-2015. It played an instrumental role in designing, framing, implementing and reviewing the Quality Policy and processes of the college. In later years, Academic advisory board was established to ensure quality in teaching learning process, specifically for implementing outcome based education, The committee comprises of the Managing Trustee, Principal, Dean, Heads of all the departments, Central NBA coordinator, Training & Placement Officer, Alumni coordinator, student and parent representative.
- Existing policies on academic and administrative systems regarding teaching learning process, evaluation systems, academic performances, faculty recruitment policies, enhancement of training /qualification of faculty are refined for maintaining quality.

#### Functions and Responsibilities of Academic Advisory Board:

- a) To advise institute on new program proposals.
- b) To recommend policies concerning student selection, progression and advise improvements.
- c) To review and advise on student assessment and academic standards.
- d) To review the quality of service delivery and feedback, and advice the improvements for annual academic audit review report.
- e) To review and advise on the operating procedures for ensuring academic quality, integrity and security of assessment tasks and results.
- f) To monitor and advise on the policies and activities directed to continuous improvement in education.

Frequency of Meetings: Twice in a year.



**Academic Audit Process** 

- These committee working are in place at the institute and department level, but not under the umbrella of IQAC. However, all these committee carry effective role of IQAC.
- The revised team members of IQAC are as follows

Chairperson	Dr. P. T. Kulkarni
Management member	Dr. Swastik Sirsikar
IQAC Coordinator	Dr. A.S. Ghotkar
Administrative officers	Dr. R. B. Ingle (Dean 2 <sup>nd</sup> Shift and HOD,
	Computer Engg.)
	Dr. Y. Ravinder (HOD, E&TC)
	Dr. S. S. Dharmadhikari (HOD, IT)
	Prof. E. M. Reddy (HOD, AS)
	Dr. S. S. Narkhede (TPO)
	Mrs. Usha Bhosle (Registrar)
	Mrs. J. A. Beke (Librarian)
Teachers	Prof. K. C. Waghmare
	Prof. M. P. Turuk
	Prof. M. Khodaskar
	Prof. Sheetal Sonawane
Student /Alumni	Dr. B. L. Abhale
	Dr. Sandeep Phatak
	Ms. SonaliPatwe
	Mr. Amit Malegaokar
Employers/Industrialists	Dr. Sanjeev Tamboli
	Mr. Tarun Malviya
	Mr. Udyain Phadke

#### b. How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?

- The experienced, expert and sensible faculty from the department and reputed organizations, local core industry, student representatives and alumni are representing Advisory board committee.
- Following task are implemented by the advisory committee
  - 1. Setting vision mission of the institute and department
  - 2. The important task of framing department objectives and outcomes was delegated to these appropriately represented committees as prioritized agenda.
  - 3. Periodical review of department outcomes is taken, and they are revised based on changing needs of the stakeholders and prevailing trends in the industry.
- c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Yes, advisory committee is having external members. The committee includes members from industry, parent's representatives and Alumni. The inputs from various stakeholders is taken for setting vision and mission of institute and department. These statements are reviewed by the concerned committee for correctness.

### d. How do students and alumni contribute to the effective functioning of the IOAC?

• PICT Alumni Association (PAA) has made great progress in its mission to enable alumni-to-alumni connections and foster a meaningful, lasting relationship between alumni and the institute. The Alumni committee aims to strengthen ties between PICT and the alumni, to encourage alumni and prospective graduates to participate in the self-development and professional development programs setup by the alumni committee, to guide PICT in the process of developing and planning academic programs targeted at alumni, to make follow-up studies of employed alumni in order to improve their conditions, and to serve the community.PAA facilitates to conduct alumni meet worldwide. Few of them are the part of IQAC where they contribute at various level such as resource person for knowledge shairing sessions/hand on sessions/intership/sponsorship for the project.

### e. How does the IQAC communicate and engage staff from different constituents of the institution?

- IQAC committee includes heads of the department and senior staff members. These committee members are leaders for the policies and decisions to be implemented in the departments. Head of the institution is takes corrective actions for the policy decisions made at department level.
- The process is as follows
  - 1. The policy decision are discussed in academic advisory committee meeting, IQAC and MRM.
  - 2. The feedbacks from all the stake holders is taken for corrective actions.
  - 3. Requirements of external stakeholders like employer, university, industry, Alumni, parents, professional bodies and state government bodies such as AICTE, NBA, NAAC are studied.
  - 4. IQAC and institute QMS decides academic policies.
  - 5. As per the guidelines by IQAC and Institute, Heads of the department gives instruction to all teaching and non teaching staff.

# 6.5.2. Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.

**Yes,** We have process defined for quality assurance of the academic and administrative activities since 2005. PICT has ISO certification ISO 9001-2005, ISO 9001-2008 and now it is ISO certification 9001-2015. Under the ISO accreditation we have processes as mentioned below.

Sr. No.	Process						
1	PROVISION OF RESOURCES						
2	HUMAN RESOURCE						
3	SELECTION AND APPROVAL OF VISITING						
	FACULTY – PG (COMP)						
4	PROVISION AND MAINTAINING OF BOOKS AND						
	PERIODICALS IN LIBRARY						
5	CULTURAL ACTIVITIES						
6	CO-CURRICULAR ACTIVITIES						
7	SEMINAR EVENT [PG – COMP]						
8	ADMISSION - UG						
9	ADMISSION – PG-COMP						
10	ADMISSION – PG-E&TC						
11	ADMISSION – PG-IT						
12	CLASSROOM TEACHING / LEARNING – PG -						
	COMP						
13	CLASSROOM TEACHING / LEARNING – PG -						
	E&TC						
14	CLASSROOM TEACHING / LEARNING – PG - IT						
15	CLASSROOM TEACHING / LEARNING - UG						
16	LABORATORY TEACHING / LEARNING - PG -						
	COMP						
17	LABORATORY TEACHING / LEARNING – PG -						
	E&TC						
18	LABORATORY TEACHING / LEARNING – PG - IT						
19	LABORATORY TEACHING / LEARNING - UG						
20	LIBRARY TRANSACTIONS						
21	TRAINING AND PLACEMENT						
22	WORKSHOP ACTIVITIES - UG						
23	DISSERTATION – PG-COMP						
24	DISSERTATION – PG - E&TC						
25	DISSERTATION – PG - IT						

26	EXTERNAL ASSESSMENT (PRACTICAL) - UG
27	EXTERNAL ASSESSMENT (THEORY) - UG
28	INTERNAL ASSESSMENT (UNIT TEST) - UG
29	INTERNAL ASSESSMENT – PG - COMP
30	INTERNAL ASSESSMENT – PG – E&TC
31	INTERNAL ASSESSMENT (UNIT TEST) –PG-IT
32	PROJECTS - UG
33	SEMINAR - UG
34	SEMINAR – PG -E&TC
35	SEMINAR – PG - IT
36	TUTORIALS
37	Admission-Ph.D.
38	Coursework-Ph.D.
39	Continuous assessment-Ph.D.
40	Research Progress-Ph.D.

ISO accreditation process

- All the above process are very well defined and executed. It is audited by external auditor from DNV-GL.
- Following are the continuous evaluation done on defined process
  - Staff awareness and training program for staff by Win-WIN Quality Associates
  - In a year 2- internal and one external audit is there to evaluate all the process
  - All the findings and happenings are presented in Management review(MR) meeting for discussion and verification
  - Internal audit for each process is to be done by other department's auditor and process is checked and verified by auditor team. if there is non-conformity then report is generated and asked to find out the root cause and get it completed by the process owner.
  - External audit is to be happening in every year (before the end of the academic year).

# IQAC is looking following committee in given table to accesses various processes give below and it get auditaed once/twice in year along with status report.

Sr. No.	Committee	
1	Examinations (CEO)	
2	ISO	

3	Training & Placement
4	Industry Institute Interaction
5	International Relations
6	R&D
7	Consultancy, IPR, etc.
8	Academics
9	PG Coordinator
10	Video conference, Webinar, MOOCs, etc.
11	Library
12	Centre Of Innovative Learning
13	Funded/ Sponsered Research Projects/ workshops/ seminars
14	IEEE, EDC, and Alumni
15	Conference/Seminar/Workshop Etc.
16	Stock Verification
17	Removal of Obsolence & Defects
18	MIS Software
19	Campus Network, Internet, Wi Fi, etc.
20	Web Development & Maintenance
21	Maintenance – Overall In-charge
22	(a) Electrical
23	(b) Mechanical, Acquaguard, etc.
24	(c) Telephone, P.A. System, Auditorium
25	(d) Computer, Printer, etc.
26	(e) Network
27	Extracurricular Activities
28	Sports

29	Magazine
30	Students Welfare, Discipline
31	Grievance Redressal Cell
32	Anti-Ragging
33	Institute Brochure & Multi-Media/Ppt
34	Event Management
35	Facility Manager
36	Internal complaint committee

# 6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

Yes, Special training is given to teaching and non-teaching staff to enure effective implementation of Quality assurance procedures. The institute is ISO 9001- 2015. Periodical training is given to internal faculty for being certified internal auditors. They conduct internal audit, external audit once every semester to ensure effective implementation of quality processes. Timely induction training programs at the institute levels are conducted for newly inducted staff members.

# 6.5.4 Does the institution under take Academic Auditor other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

- HOD forms an Academic Audit Team (hereinafter auditors) which will audit
  the focus areas of the department (herein after auditee) using a participatory
  approach. The schedule of academic audit is planned by auditors. HOD will
  submit the department processes and assessment of each course,
  departmental actions carried out and action plan for next academic
  year/semester.
- The auditors will meet according to schedule and the auditors will then carry out the audit as indicated below:
  - (a) Scrutinize the documents collecting the evidence, analyzing and evaluating the documents.
  - (b) Discussion with the department head, faculty and students.
  - (c) Identifying the improvements, good practices, and actions taken.

- (d) Prepare a report which will make recommendations of good practice, affirmations which recognize improvements the auditee is already making, and recommendation of actions for improvement.
- (e) The improvement actions will be incorporated in respective processes.
- The staff members are expected to fill the self-Appraisal form & submit it along with action plan implementation for review, once in a year. These reports will be reviewed by the HoD, Principal, and the Management and suitable corrective measures are suggested. In addition to this, there are two Management review meetings and ISO audit and IQAC audit, every year. The institute conducts internal audit once a semester as per ISO procedure. External audits are conducted by statutory bodies like affiliating University, DTE, AICTE and ISO. In its commitment to ensure quality in all its processes the institute has also obtained NBA accreditation. The suggestions given by the various committees are thoroughly considered by the institute and the shortcomings are addressed. These audits have helped in improving our academic and administrative processes (with regard to teachers' appraisal, student activities, addition of equipment, books and journals, infrastructure etc.).
- The most important ones are
  - (i) Preparing the college for ISO audits, motivating the teachers to participate in all the processes to be followed in ISO and
  - (ii) Preparing the faculty and staff for NBA accreditation where the parameter for accreditation was outcome based teaching and learning. This has brought about a paradigm shift in the perspectives of the faculty towards the teaching-learning process.

# 6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The college **IOAC** updates itself regularly with the new mechanisms/requirements of external quality assurance agencies/regulatory bodies through their circulars/ notifications and websites. This is further studied by the IQAC and discussed by the Principal with Deans and Heads of department. Decisions are taken and implemented for ensuring alignment with the requirements. As an example, ISO has been restructured to include all processes related to framework of Outcome based Education (OBE) that has been adopted for NBA accreditation.

# 6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

- Principal, Dean Academics, Heads and academic coordinators of the
  departments take continuous review of teaching learning process in the
  institute. Before commencement of the term, academic calendar is prepared.
  Faculty prepares teaching plan for the semester and all the coordinators
  ensure that the activities are conducted as per schedule. Head of the
  department and class coordinators monitor class wise, faculty wise and
  subject wise conduction of lectures and practical.
- The summary of steps taken by the institute to review teaching learning process are as follows:
  - Preparation of Academic Calendar.
  - Time table preparation as per work load assigned to faculty.
  - Preparation and implementation of teaching plan (Theory and practical).
  - Conduct meeting with subject head by course coordinator/senior faculty before the commencement of a semester for effective and uniform delivery of course content.
  - Periodic review of syllabus covered in course coordinators and department meetings.
  - Assessment and review of academic performance of students.
  - Midterm submission is conducted to review practical performance and continuous assessment of term work.
  - Corrective action for nonperforming students.
  - Submission and scrutiny of performance appraisal of faculty and staff at the end of each academic year.
  - Letters of appreciation to best performing faculty.

# 6.5.7. How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The institution communicates its quality assurance policies, mechanism and outcomes to stake holders through:

- GB, LMC, MR and IQAC meetings.
- Meetings with Deans and Heads.
- Faculty and staff meetings with Heads.
- Principal meetings with office/administrative staff.
- Meetings with Student Council.
- Through college website.
- Notice/ Circulars/ Emails to respective departments of the college.
- During Parent teacher meetings.
- During Alumni meetings.

### **CRITERIA VII: INNOVATION AND BEST PRACTICES**

#### 7.1. Environment Consciousness

#### 7.1.1 Does the institute conduct a Green Audit of its campus and facilities?

Although the Green audit of the campus and facilities not conducted so far, the process of assessing the environmental impact of the Institute & processes has been initiated. We have also consulted few private agencies for conducting the Green audit.

However, all efforts are being made (and some implemented) to reduce energy consumption.

### 7.1.2 What are the initiatives taken by the college to make the campus ecofriendly.

The following initiatives are taken by the college to make the campus ecofriendly:

#### **Plantation:**

- Plenty of trees are planted making the whole campus look green.
- Instead of using bouquet, we started using saplings to welcome guests. Nearly 500+ saplings are distributed every year, through our guests. This is well appreciated by all the guests visiting our campus.

#### **Energy conservation**

- Carpooling is encouraged among staff & students
- Our cultural committee students spread awareness about eco-friendly campus, through street dramas
- National fuel saving is done by arranging guest lectures and speeches using video conferencing and keeping first and third Saturday non-working by adjusting work load in other working days.
- Most of lights are being replaced by LEDs.
- All computers are connected to on-line UPS
- Two generators of 160 KVA & 125 KVA are synchronized for load management, using control panel.
- All efforts are being made to keep the power factor above 0.9 all the time.

#### Use of renewable energy

• Solar energy is used for hot water in the Hostels. The SPPU has sanctioned

solar project of 8 KW. Even the Institution is planning to go for solar energy of 100 KW.

#### **Efforts for Carbon neutrality**

Environment friendly practices are adopted/ followed to reduce the carbon foot print by less printing of paper. We have an effective MIS in place. The staff & students are asked not to use papers at least one day in a month (asked to use laptop, Tablet, smart-phone, etc).

#### **Water Harvesting**

- The institute has made all arrangements for rainwater harvesting. This has significantly improved the ground water level.
- Many initiatives are taken for water management and preservation of water.

#### E-waste management

• Our institute being a computer institute wherein most of the courses use computer and other electronic device and components, we have made all arrangement for systematic / scientific disposal of e-waste.

#### 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.

Following are the innovations introduced during the last four years which have created a positive impact on the functioning of the college.

# 1. Innovative practices in academics Mentoring

Special efforts are taken for mentoring students in the mentoring session by mentor. Topics like engineering career, placement opportunities, study planning, career development, professional practices and personality development are discussed with students during mentoring sessions. Students are motivated and are psychologically prepared to face professional and social challenges.

## 2. Innovative practices in administration

**MIS** 

MIS system is used for automation of all processes, aims at improving the efficiency and productivity of teaching as well as administrative staff. It

helps the faculty and staff to maintain and review academic status of students. Student admission, parent's notification is done using MIS. An effort is made to make the entire administration paperless.

#### • Google groups (institute login)

Faster, effective and paperless communication with staff is facilitated through Google groups. Official e-mail id is provided to the faculty and staff with domain name @pict.edu

#### • PICT digital library portal

Various documents such as ISO document format, department seminar and project guidelines are kept on central server for easy access in the college.

#### Online feedback system

The institute facilitates online feedback system. The online feedback is taken from all students twice (in the middle and at the end) in the semester.

#### • Innovations in Entrepreneurship development

#### EDC cell

The Entrepreneurship development cell founded by the college students, alumni, industry and faculty, toward the cause of producing quality leaders who contribute to the growth and development of mankind. PICT EDC inaugurated on 4thMarch 2009. Mission is to instil the spirit of entrepreneurship and to provide a platform for the creation of successful entrepreneurs.

#### Following table shows details of events organized by EDC cell.

Academic year	No. of Events organized	Event Name				
2016-17	04	<ol> <li>Entrepreneurs meet website Launch</li> <li>1<sup>st</sup> Entrepreneurs meet at PICT. 17         Entrepreneurs and 300+ participants         attended meet. 6 events were conducted.</li> <li>MoUs with IIT Kharagpur and "111 Start-ups"</li> </ol>				

2015-16	04	<ol> <li>Formation of EDC student group having 40 student members.</li> <li>EDC website Launch.</li> <li>Prashant Pansare, Founder Playerify, conducted a session with EDC students team on "How a Startup may fail".</li> <li>Talk by Unmil Karadkar, Assistant professor at University of Texas Austin on "Emerging Research Trends in Engineering"</li> </ol>					
2014-15	04	<ol> <li>Seminar by Mr.Gaurav Godbole Director, 3D Zest</li> <li>Internship offer at Scalearc to Third Year student Vaibhav Tulsiyan</li> <li>Internship offer to current Third Year students by 3 companies Namely Talking Plastic, Ryussi Technologies, CascadeSysTech</li> <li>Placement offer to current students by Definition Networks</li> </ol>					
2013-14	04	E- Cell conducted 4 sessions with following companies to offer Business Incubation facility & start companies  1. Trade Sankul, 2. Code Dynamics, 3. Fizzible, 4. Zang Out					
2012 - 13	04	Solar powered equipment design Solar Clan Workshop conducted 3 times by a company located in SINE IIT Bombay.  Business Incubation facility offered to 2 companies  1. Simpliware, 2. Opencloud All MoU's are available with Functional Head EDC & BIC.					

#### • Business Incubation Centre:

PICT Business Incubation Centre was established in 2009. We provide space, infrastructure, electricity, internet connectivity, office furniture and technical support to incubate a start-up company for period of maximum 2 years. We

have incubated 10 companies so far. Some of them are successfully moved out to their own premises.

# The companies incubated in PICT business incubation centre till date is given in the following table.

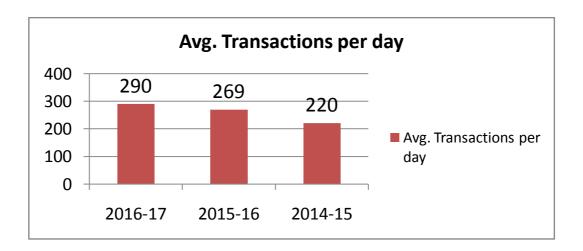
Sr.No.	Name	Company
1	Vaibhav Dhabade	Anchanto Software Services Pvt. Ltd.
2	Vipul Amler	Byclor
3	Sanjay C	Meta Morphs
4	Gaurav Gokhale	Code Dynamix
5	Rupin Karani	Craft Tech Systems
6	AnkitYadav Ashish Malani	Siteflu
7	Sushil Patil	Book Bazaar
8	Anuj Bhadoria	Take It Easy
9	Sahil Sharma	H!nge
10	Vishanth Bharadwaj	EDU RIO
11	Kaustubh Patte	MYTK
12	AmanVarma, Mudassir Khan	Intangles Lab

#### 4. Innovations in Library

Library facility is available to all students and staff during, before and after college timing. Book Display Programme is conducted for newly purchased books in the library. Student and staff allowed participating in book/periodical procurement. Monthly new arrival books are displayed, uploaded on website and intimated to HODS. Book location chart is available with each rack for easy searching of book. Digital Library (e-Books, project reports, NPTEL videos, question papers) with multimedia facility is available in campus.

E-material has access  $24 \times 7$ . Orientation and training program are conducted regularly for 'Effective Utilization of E-Resources'. British Library online membership is available with library. Specious Reading hall facility is

available with Wi-Fi connectivity, keeping open before and after college timing, extended hours during examination period, provision of additional switches for connecting PCs/laptops, inspirational display boards of scientist/great personalities. Transaction of books of last three years is shown in the following bar graph



#### 7.3 Best Practices

7.3.1 Elaborate on any two best practices in the given format at page no.98, which have contributed to the achievement of the Institutional Objectives and / or contributed to the Quality improvement of the core activities of the college.

PICT follows many best practices that have contributed to better academic and administrative functioning of the institute as listed below:

#### 1. Title of the Practice:

Development of quality management system through ISO

#### Goal

To design and deploy quality management system for all processes to achieve quality objectives.

PICT is ISO 9001:2015 certified institute, having adopted Quality Management System (QMS) focused on achieving Quality Objectives to meet requirements of all stake holders through continual improvement. The institute has implemented Quality Management System (QMS) which aims at imparting

quality education in the field of engineering to meet expectations of our customers (students, parents, industries and society as a whole) with a focus on all round development of students. This practice helps in achieving improved consistency of educational service and its performance leading to customer satisfaction.

Towards this end, the following Quality Policy is adopted by the institute:

#### PICT is committed to:

- Enhance customer satisfaction and deliver superior individual and institutional performance by increasing the effectiveness and efficiency of our quality Management System through continuous improvements in the direction, operation and control of our key processes; and
- Comply with applicable statutory and regulatory requirements.

QMS also incorporates processes for supporting activities that facilitate smooth and efficient administration e.g. Training and Placement, Library, Stores, cultural activities, Alumni, Website development and maintenance.

#### The Context

Delivery of quality engineering education is based on issues like quality of students, competence of teachers, expanse and depth of the university prescribed curricula, industrial and societal needs. These factors strongly influence the final outcome of the education process that can be translated into competencies and employability skills developed in the graduating candidates. The QMS adopted by PICT focuses primarily on documenting the processes that address the issues mentioned above in a systematic manner.

External context includes legal, technological, competitive, market, social, economic environment. Internal context includes values, culture, knowledge, performance and resources of PICT.

Quality parameters are decided, processes are documented and implemented, and review of implementation is done in periodic audits.

The QMS, developed by the institute, is designed to be dynamic to adapt to rapidly changing practices and norms of engineering education.

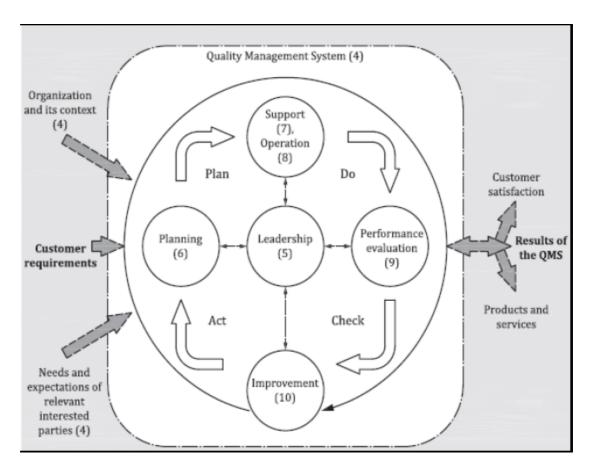
#### **Challenges**

- Designing and identifying measurable quantifiers for academic processes involving performance of students, quality of lectures, practical conduct and gaps in existing curriculum.
- Cultivating the concept of QMS and its advantages, efficacy and need, among the employees (teaching and non-teaching) was also a challenge.

The challenge was addressed by conducting brainstorming sessions and several training programs. The system and the processes have been developed by the active participation of management, faculty and staff.

#### The Practice

Quality Management System (QMS) follows plan-do-check-act cycle.



The methodology of the QMS as a whole.

- 1. **Plan:** Establish the objectives of the system and its component processes, and the resources needed to deliver results in accordance with customers' requirements and the organization's policies.
- 2. **Do:** Implement what was planned
- 3. **Check:** monitor and (where applicable) measure processes and the resulting products and services against policies, objectives and requirements, and report the results.
- 4. **Act:** take actions to improve process performance, as necessary.

#### **Evidence of Success**

QMS has helped in standardizing academic as well as administrative processes. The system is designed to be dynamic, adapting to changing practices and norms of engineering education. For example, the institute has adopted the philosophy of outcome based education (OBE) as a parameter of accreditation by NBA and most academic processes are being designed accordingly

- The system has helped newly joined faculty/staff to get easily tuned to the quality processes after orientation program
- Quality objectives for departments help in setting targets and audits help monitor their attainment
- QMS is certified by DNV-GL. The certification body carries out yearly surveillance audit. We have processes defined for quality assurance of the academic and administrative activities since 2005. PICT has ISO certification ISO 9001-2005, ISO 9001-2008 and now it is ISO certification 9001-2015.

#### QMS has helped PICT in:

- Meeting and complying with statutory and regulatory requirements has become easier and is streamlined.
- Day to day curricular, co-curricular and extra-curricular activities is mechanized and well documented.
- Quick and efficient review of activities.
- Participation of employees in the continual improvement process through suggestions.

#### **Problems Encountered and Resources Required**

Teaching in India has traditionally been teacher centric, unstructured and intuitive. Making a transition to a student-centric, structured and planned teaching—learning process was difficult in the initial stages. However, that difficulty has been dealt with through faculty development programs.

Resources required to establish and implement QMS are identified as follows:

- i) **Human resource:** Internal audits require a number of auditors equipped with the necessary training and certification. External training and certification is provided to carry out this task.
- **ii) Infrastructure resource**: For streamlining the documentation required for QMS an Enterprise Resource Planning (ERP system) is implemented.
- **iii) Financial resources:** Budgetary provisions for Certification, Surveillance audits and trainings are made. Further, Top Management has appointed Management Representative (M.R.), who is responsible for,
  - Ensuring that processes needed are established and maintained,
  - Reporting to top management on the performance QMS,
  - Ensuring the promotion of awareness of customer requirements throughout the organization,
  - Coordinate with external parties, if required.

#### 2. Title of the Practice:

To extend virtual/Innovative learning for staff and students with the help of Industry expert/IIT professors/Subject expert globally for knowledge gain with various activities such as webinars/live video lectures/video lecture/centre of excellence lab/Industry supported labs by industry institute interaction.

#### Goal:

- To interact with industry for Student centric MoUs, establishment of centre of excellence and Industry sponsored Laboratories.
- To arrange ICT based knowledge sessions to the students and staff.

#### The Context

At the institutional level,

- 1. It is essential to promote virtual learning for interactive education by arranging activities among the students and staff.
- 2. Virtual learning is necessary for the use of services oriented to users, reduction and distribution of contents, consolidation of training initiatives, and personalization of contents and reuse of knowledge.

3. It is necessary to provide knowledge to students on industry projects, real life projects and use cases which encompasses of multiple areas to increase employability ratio.

At the student level.

- 1. It is necessary to learn concepts beyond the curricular aspects.
- 2. It is benefit to get experience on hands on given by industry people.
- 3. Industry projects will also be useful for the students

#### The Practice

PICT is affiliated to Savitribai Phule Pune University (SPPU) and hence follows its curriculum and academic structure. Apart from this, gap in syllabus for industry ready students is identify by our subject coordinator with his team and implemented by various activities with industry expert and subject experts by signing MoUs, delivering sessions, webinars, workshops etc.

Institute has industry sponsored labs in campus to enhance the practical learning experience of students beyond the theoretical academic structure of the curriculum.

Students as well as staffs are getting exposure in the field of research and development through industry supported labs.

These labs provide students first-hand experience in area from High Performance Computing, Scale programming, SAS language and R programming. This expose students' knowledge of technology/tools, best engineering practices, project management, leadership, planning, execution, product delivery and soft skills such as presentation and written communication.

To inculcate effective learning experience, following industries are having lab setup in campus.

#### 1] Industry Supported Laboratories:

Following are the Industry Supported Laboratories in various departments of PICT.

#### i. SAS language lab:

The institute has MoU with SAS for postgraduate internships, SAS language lab, industry visits and faculty development program. Training from experts from SAS Research is provided to students. Students are trained to handle datasets, manipulate datasets, translate and analyze datasets.

#### **Evidence of Success**

Achievements of students who have worked for SAS Language Lab is given below:

Year	No of students participated		
2016-17	28 ( Semester I)		
2015-16	30 (semester I and II)		

Students have worked successfully to complete assignment on the basis of IEEE paper implementation. 6 PG students of current year secured internships with SAS R&D with stipend of Rs. 25000/- per month.

#### iv. CUDA Labs:

CUDA lab has one K40 and two Titan GTX GPU cards available in lab. Training material with lab books (Programming massively parallel processors by David B. Kirl and Wei-mei W. Hwu) is available for training purpose. Assignments are carried out for parallel computing. BE and ME students and staff are using this facility for project work related to parallel computing

#### **Evidence of Success**

Details of students who have used CUDA Lab, Computer engineering department for their project work is as follows:

Year	No of students participated
2016-17	21
2015-16	17

Achievements of students who have worked for CUDA lab is given below:

- In year 2016-17, 4 students have got runner up prize in INC project competition in open source category
- In year 2015-16, 4 students have got 3<sup>rd</sup> prize in BITS GOA and 2<sup>nd</sup> prize in MIT COE Project competition, 3 students have got 1<sup>st</sup> prize in INC project competition and D.Y.Patil COE project competition and 4 students have got best paper award in national conference on recent trends in computer engineering.

#### **Problems Encountered and Resources Required**

#### CUDA Lab

- Problem encountered: Compatibility issues for setting GPU enabled machine
- Financial: Purchase of GPU enabled high end machines
- Human resource: Personal training required from industry

#### Notes

- Students can access GPU enabled NVIDIA lab in college.
- Expert sessions are conducted regularly and if necessary queries are solved by NVIDIA experts.
- SAS software can be accessible for use in college.

#### v. PICT-COE Lab:

PICT establishes PICT-COE lab in collaboration with Tech-Mahindra in June -17. Under this, Tech-Mahindra Makers lab (R&D lab) gives technology challenge problem to PICT students for proof of concept (POC) and based on the result of best solution product development activity will be taken in PICT-COE lab. Currently 4 students group has given the solution on problem given to them. Tech-Mahindra offers internship program in their Maker's lab for 12 students.

#### vi. Other Laboratories

Following table shows the details of other industry supported labs.

	Industry Supported Laboratories						
Sr. No.	Name of the Laboratory	Name of the industry	Coordinator	Investment	Facilities created	Year / Date	
1	Mission 10X Technology Learning Centre	Wipro Technologies	Dr. R. Sreemathy	8 Lacs.	20 UTLP boards	2013-14	
2	NI LabVIEW Academy	National Instruments	Dr. Y. Ravinder	15 Lacs.	3 USRP Kit and 10 MyDAQ boards	2014-15	
				6.93Lacs	3 USRP Kit	2015-16	

3	Texas Instruments	Texas Instruments	Mr. K. V. Sakhare	1.6 Lacs.	6 Kits of ASLK v 2010  2 kits BeaglboneXM  2 kits Beaglbone Black	2013-14
4	e-Yantra Laboratory	IIT, Bombay	Mr. S. S. Dudam	4 Lacs.	8 FIREBIRD V robots and accessories and 10 SPARK V robots and accessories	2013-14

#### **Evidence of Success**

- Interactions with the industry have proved beneficial to both, the students and the faculty.
- It has prominently contributed to the growth of the department and the institution.
- The technical activities, workshops and the expert lectures arranged under the aegis of these labs create an awareness of the recent and upcoming trends in E&TC engineering and students also get an exposure to industry culture and practices.
- These labs make available the required resources and help the students and the faculty to get connected and network with other technocrats.
- The projects undertaken by the students upgrade them technically and cultivate out-of-box thinking abilities.
- It inculcates the lifelong learning fortitude and also harnesses the professional ethics and team working spirits.
- These activities also groom the students for fetching better job opportunities.

### **Activities done under Industry Supported Laboratories:**

Activities carried are listed below

#### I. Mission 10X Technology Learning Centre

Activity	Date	Details	Participants	Academic year
Faculty Training at Bangalore	Mar- 14	One week training program at Wipro Technologies Bangalore	<ol> <li>Mr. Shridhar Dudam</li> <li>Mr. Zakee Ahmed</li> <li>Mr.Anand Bhosle</li> </ol>	2013-14
Bangalore	Dec- 14	One week training program at Wipro Technologies Bangalore	<ol> <li>Dr. Sreemathy</li> <li>Mr.Anand Bhosle</li> <li>Mr.Ashwin Bhandekar</li> </ol>	2014-15
Conduction of faculty training	Jan. 2015	Mission 10x Engineering faculty workshop	PICT staff	2014-15
uaning	Jul- Engineering 15 faculty workshop		PICT staff	2015-16
Conduction of workshop for students	Aug- 14	Two days Training Programme conducted on "Mission- 10x UTLP Boards" 28 students have participated	PICT students	2014-15
	Aug., 2015	Mission 10x Engineering student workshop	PICT students	2015-16

	Sept. 2015	Three days Training Programme conducted on "Mission- 10x UTLP Practitioners training programme	PICT students	2015-16
		Smart Menu Card using UTLP Board	<ol> <li>Ms. Babar Gauri Kailas</li> <li>Ms.Bharadiya Diksha</li> <li>Ms.Chalke Sapana</li> </ol>	2014-15
Mini		competitive exam grade calculation	<ol> <li>Ms. Shah Prachi Nilesh</li> <li>Ms.PedgaonkarApoorva</li> <li>Ms. Goyal Shivi</li> </ol>	2014-15
Projects		Kid's Early Learning Centre	<ol> <li>Ms. Phunde Pallavi</li> <li>Ms. Phute Madhuri</li> <li>Ms.Rakhangi</li> <li>Mehzabeen M.</li> </ol>	2014-15
		Security System for authorized entry using UTLP	<ol> <li>Mr. Swastik Chadha</li> <li>Mr. Sachin Bedade</li> <li>Mr.Amol Balekar</li> </ol>	2014-15
		Marathi E- Tutor	Ms.Irabatti Shweta     Ms.Mergu Shraddha	2014-15
		Electronic voting machine	<ol> <li>Ms.Gogte Aishwarya</li> <li>Ms.Gaikwad</li> <li>Aishwarya</li> <li>Ms. Dive Vaishnavi</li> </ol>	2014-15

## II. NI LabVIEW Academy

Activity	Date	Details	Participants	Academi c year
Faculty Training	Nov-14	One week Faculty Training Program on NI LabVIEW and NI USRP, NI MyDAQ Applications	PICT faculty	2014-15
Faculty Certificatio n	Jan-15	One faculty member qualified NI CLAD (Certified LabVIEW Associate Developer)	Mr. Zakee Ahmed	2014-15
Workshops	Sept 2014.	3 days workshop Organized for PICT Students (303 students have participated)	PICT students	2014-15
Research	Since establishmen t	2 Research Scholars are using LabVIEW for their PhD work	Mr. P.S. Varade Mrs. Deepa Reddy	
PG Projects		Implementatio n of Cognitive Radio functions using USRP and LabVIEW	Nishane Ketaki Kishor	2013-14

	A Flexible Digital Radio System for TV white spaces	Andhare C. J.	2014-15
	Multi-Antenna Assisted detection technique for next generation wireless communicatio n	Chetna Sharma	2014-15
	Channel Estimation with adaptive equalizer for OFDM in cognitive radio	Raut Neha H.	2014-15
	Hardware implementatio n of energy efficient resource allocation in cognitive radio using USRP and LabVIEW	Sukruti S. Taori	2014-15
	Implementatio n of 2x2 MIMO communicatio n system using USRP and LabVIEW and its performance evaluation.	Bhoyar Amol M.	2015-16

		Resource allocation based on Geolocation in Cognitive Radio	Kulkarni H. M.	2015-16
		Cooperative Spectrum Sensing in Cognitive Radio Network using machine learning Technique	Munde Ganesh R.	2015-16
	AY 2013-14	Monitoring system for medical paramters using labview	1.Narkar Prajakta 2.Padole Neha Sunil 3.Pandey Juhi Sanjay	2013-14
UG Projects	AY 2013-14	Implementatio n of various modulation schemes for SDR on USRP using LabVIEW	1.Nikita Angre 2.Siddhesh Yawalkar 3.Apoorv Joshi	2013-14
	AY 2014-15	Mind Controlled Robot Using LABVIEW.	1.NamrataDhamal 2.Monali Bhorde 3.Bhushan Parakh	2014-15
	AY 2014-15	Implementatio n of Spectrum Detection Schemes For Cognitive Radio on USRP.	1.Vijay Kamble 2.Rashmi Kaslikar	

	My	DAQ	1.Ms.		2014-15
	based	virtual	RukhsarKa	padia	
	Hardwa	are	2.Ms.		
Mini			SonalKelw	adkar	
Projects			3.Ms.Shara	daNagark	
.,			ar		
	Graphic	cal	1.Mr. Gawa	aliDeelip	2014-15
	Calcula	itor.	2.Mr.	Agarwal	
			Mohan	3.Mr.	
			Choudhary	Tejas	

### **III. Texas Instruments**

Activity	Date	Details	Participants	Academic year
Organization of Competition		Texas Instrument's Analog Design competition conducted at PICT Pune.	Total 213 S.E./T.E./B.E/ students have participated	2013-14
Student Achievements	Apr- 13	one group has participated in Intel Innovation competition 2013 at Bangalore and was shortlisted amongst top 2		2012-13
	Mar- 15	One student has participated TI National design contest 2015 and won \$200 prize		2014-15
Organization of Competition		Texas Instrument's Analog Design competition conducted at PICT Pune.	Total 270 S.E./T.E./B.E/ students have participated	2014-15

Continuing training programme Aug Sept., 2015	IET TI innovation laboratory - Special interest group in Signal processing	08 PICT faculties	2015-16
---	---	-------------------	---------

## IV. e-Yantra Laboratory

Activity	Date	Details	Participants	Academic year
Faculty Training	Oct-13	5 faculty members have participated in Robotics Training Program at MIT Alandi	Mr. S. S. Dudam Mr. K. V. Sakhare Mr.Zakee Ahmed Mr.AjinkyaRasal Mr.Rakesh Kabade	2013-14
Conduction of workshops	09th to 12 <sup>th</sup> and 15thSeptember, 2014.	5 days workshop Organized for PICT Students	23 S. E. students have participated	2014-15
Participation in Competition	Mar-14	4 Faculty Members Participated in National Teachers Robotics competition at IIT B and secured 5th rank	Mr. S. S. Dudam Mr.Zakee Ahmed Mr.Ajinkya Rasal Mr.Rakesh Kabade	2013-14
	Apr-15	2 Faculty Members have participated in Symposium at IIT B	Mr. S. S. Dudam Mr.Tushar Shirsat	2014-15

	2014	4 students Won 2nd Prize (Cash prize of Rs.10000/-, a trophy , and gift vouchers Rs.6000/- each) in National Level Robotics Championship at IISC Bangalore	Mr.Ashish Khairnar Ms. Lakshmi Krishanan Ms.Sharada Nagarkar Ms.Sonal Kelwadkar	
	Apr-15	Students 4 groups have participated in Robotics completion and Group has been shortlisted for participation in Symposium at IITB	T.E. Students	2014-15
	AY 2014-15	Development of Intelligence and Control Algorithm For a Robotic System	<ol> <li>Nimisha</li> <li>Mishra</li> <li>Yashawant</li> <li>Sonawane</li> <li>Ruchika</li> <li>Bhavsar</li> </ol>	2014-15
UG Projects	AY 2014-15	Real Time Web Page updation Using Raspberry pi	<ol> <li>Kajal H. Jain</li> <li>Abhijit</li> <li>Waykos</li> <li>Prasad Tandel</li> </ol>	2014-15
	AY 2014-15	Hand Gesture/Object Recognition For Robotics	<ol> <li>Sayali Patil</li> <li>Siddesh</li> <li>Shinde</li> <li>Sourabh</li> <li>Hingane</li> </ol>	2014-15
	AY 2014-15	Bus (Information) Announcing System at Bus	<ol> <li>Abhijit K.</li> <li>Rathod</li> <li>Dada Bide</li> <li>Prashant</li> </ol>	2014-15

		Stop Using Raspberry Pi	Dhore	
	AY 2014-15	Leveling Measurement Using Raspberry Pi	1. Rohit Gupta	2014-15
		Fireduino	<ol> <li>Ms.Kalyani Hansraj Patil</li> <li>Ms. Manali Patil</li> <li>Ms. Srushti Sanjay Patil</li> </ol>	2014-15
		IC tester kit using raspberry pi	<ol> <li>Ms. Shraddha</li> <li>Govindwad</li> <li>Ms. Francesca</li> <li>Mathew</li> <li>Ms.Rachana</li> <li>Gaikwad</li> </ol>	2014-15
Mini Projects		Automatic seed planter using firebird	<ol> <li>Ms.Kinjal</li> <li>Shrawagi</li> <li>Ms.Kalyani</li> <li>Soholkar</li> <li>Ms.Sushmita</li> <li>Tayade</li> </ol>	2014-15
		Industrial Multi- color Line Follower Robot using Fire-Bird V	1. Ms.Urmila Badade 2. Ms.Kajal Barkade 3. Ms.Apurva Bhamare	2014-15
		Android based Bluteooth controlled robot	<ol> <li>Mr. Rajat</li> <li>Ingle</li> <li>Mr. Kishor</li> <li>Depe</li> <li>Mr.</li> <li>Shivkumar Hale</li> </ol>	2014-15

Hand gesture controlled vehicle	1. Mr. Dara Ankit Inder 2. Mr.Ghate Varad Sanjeev 3. Mr. Gujare Saurabh Nitin	2014-15
Floor Cleaning Robot using Fire bird V	<ol> <li>Mr. Mahesh Mokale</li> <li>Mr. Kiran Shejwal</li> <li>Mr. Raut Swapnil Kumar</li> </ol>	2014-15

#### 2] Centre of Innovative Learning (CIL):

PICT established CIL concept in the campus to explore innovative learning (ICT based) methods for knowledge gain. CIL identify the need of the students and arrange seminar/workshop/expert lecture where communication media is not barrier. If expert is not physically available then live video lecture is arranged for the same. For this, Institute has set up video conferencing facility. Also the expert is called to review student's project work and seminar work.

Sr.N o.	Seminar/Works hop	Target	Title	Speaker	Date
			2016-17		
1	Seminar	Faculty	Faculty development through best teaching and research practices in engineering institutions	Dr. Asish Mukhopadhay , IIT Khargpur	16/12/2016
2	Expert lecture and guidance session (Outcome: 2 project group sponsorship for final year)	T.E./B.E/ M.E students	Currents trends in Big data and Machine learning	Ms. Sonali Patwe	13/7/16
3	Video Lecture	T.E/M.E.	Careers in IT	Mr. Vinit	22/7/2016

				Topale	
4	Hands on Workshop ( series of session planned in 3- 4 weeks)	M.E/Ph.D. students	Hands on session on LaTex	Prof. Sumit Choubey, Dr. Archana Ghotkar	26/8/2016 27/8/2016 10/9/2016
	,		2015-16		
4	Expert Lecture	T.E. Students	"Application of Theory of Computation"	Mr. Vivek Kulkarni	11/09/2015
5	Expert Lecture	B.E. and M.E students	"Recent Trends in text applications of machine learning"	Mr. Aditya Joshi, IIT Bombay	9/4/2015
6	Expert Lecture	B.E. and M.E students	"Big data, Big impact: Exploring new possibilities"	Mrs. Sonali Patwe, Spring Computing	13/08/2015
7	Expert Lecture	B.E, M.E. Students	Visualization, Analysis , Prediction using R- Programming	Dr. Ashish Tendulkar	9/4/2016
			2014-15		
8	Expert Lecture	S.E. Students	Time management and Business manners and Etiquettes"	Mrs. Anushka Sukhija	4/9/2014
9	Expert Lecture	T.E Students	Network Layer and VOIP trends	Mr. Satish Kharat	23/01/15
10	Video lecture	T.E students	Malware analysis	Hrishikesh Nanedkar	15/9/2015
			2013-14	T =:	
11	Workshop	M.E students and staff	"MangoDB Hands on"	Mr. Sarang Shravagi, ScaleArc	8/3/14
12	Expert Lecture	M.E. Students	Recent trends and research	Dr. Aditya Abhyankar	18/02/14

			oppo	ortunities	and	Dr.	
			for	selection	Abhijat		
			of Pı	rojects	Vichare		
13	Video lecture	M.E.	Text	mining	Mr.	Saket	30/10/13
		students	and		Mengal	e	
			Info	rmation			
			Retr	ieval:			
			App	lications"			

#### 3] PICT in Consortium Membership with IUCEE

The Indo US Collaboration for Engineering Education (IUCEE, now it is Indo Universal Collaboration for Engineering Education) was founded with the help of the American Society for Engineering Education (ASEE), Pan IIT (organization of IIT alumni), International Federation of Engineering Education Societies (IFEES) and Indian Society for Technical Education (ISTE) with headquarters at University of Massachusetts Lowell (UML).

It was conceptualized by over 150 leaders of engineering education and businesses from US and India in 2007. Generous financial contributions and intellectual advice from Desh and Jaishree Deshpande, Sudha and Narayana Murthy, Arjun and Kiran Malhotra and in kind support from Infosys Technologies have helped initiate the program which is now on the way to becoming a success and financially sustainable.

The vision of IUCEE is to improve the quality and global relevance of engineering education and research in India with focus on faculty development, student development, curriculum development, as well as improved teaching technologies & research.

#### Following are the Salient Features of IUCEE

- Contacts with over 300 US Experts and their Institutions; short visits by US experts.
- Facilitation of collaborations with US colleges including MoUs, Centers of Excellence, twinning programs, faculty and student exchanges, visits to US universities.
- Short workshops or courses for faculty and/or students by US experts travelling to India (Faculty Leadership Institute, FLI).
- Webinars and short courses on-line by US experts, Indian experts and Industry Leaders relevant for faculty and students on relevant topics conducted regularly.
- Advising by US faculty as Research Co-Guides for faculty pursuing PhDs.

- Opportunities for US faculty or Indian faculty from Member Institution to spend a semester or more at other's college, collaborating in research and teaching.
- Advice in connecting with potential US colleges interested in twinning programs.

#### Activities carried out by IUCEE:

- A team of 4 staff members including Dr. R. C. Jaiswal, Dr. M. V. Munot, Prof. P. T. Blessington & Prof. H. S. Thakar along with members from other departments has been formed and is contributing actively for reaping the above benefits.
- Live webinar conducted by Prof. H. S. Thakar for TE (E&TC) students on "Using LT-SPICE Tool (Linear Technology Inc.) for circuit simulation "dt. 11/03/2016, 9:30 am 12:30 pm. Dr. Jaiswal and Dr. Munot has coordinated the activity.
- A Virtual academy & related experiments for S.E.( E&TC ) students is being coordinated by Prof. P. T. Blessington.
- About 80 + Recorded Webinars on Multi-Disciplinary topics are available on SAN for downloading & viewing.
- Webinar Viewing URLs are regularly sent to all staff members as and when they are published by IUCEE.

### **Computer Engineering**

1. Name of the department: Computer Engineering

2. Year of Establishment: 1983

3. Names of Programmes / Courses offered:

Sr. No.	Name of the Programme	Year of Establishment
1	UG – BE Computer Engineering	1983
2	PG – ME Computer Engineering	2000
3	Ph.D – Computer Engineering	2014

#### 4. Names of Interdisciplinary courses and the departments/units involved:

Sr.	Name of the Interdisciplinary Courses	Departments / Units
No.	Name of the interdisciplinary Courses	Involved
1	Engineering Mathematics - III	Applied Science
2	Digital Electronics and Logic Design	Electronics and
		Telecommunication
3	Digital Signal Processing	Electronics and
		Telecommunication

#### 5. Annual/ semester/choice based credit system (programme wise):

Sr.	Name of the	Pattern/System (Annual/ semester/choice	
No.	Programme	based credit system)	
1	UG- BE Computer	Semester	
1	Engineering		
2	PG- ME Computer	Semester	
2	Engineering	Semester	
3	Ph.D.	Annual	

We are following the syllabi of Savitribai Phule Pune University (SPPU). SPPU has mixed system with Semester based Credit System for PG programmes and percentage based system for the UG programmes wherein the examination scheme includes Theory (paper), Theory (online), term-work, practical, and oral. It also accommodates grade based audit courses.

# 6. Participation of the department in the courses offered by other departments:

Sr.No	Name of the Department	Class	Courses offered
1	Applied Science	FE	FPL-I, FPL-II
2	Electronics and	ME, Ph.D.	Research Methodology
	Telecommunication		

# 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:

Sr. No	Certificate / Course Name	Collaborating Institution / Industry / Universities etc.	
1	Introduction to Oracle 9i	Under Workforce development	
2	PL/SQL	program by Oracle Corporation	

## 8. Details of courses/programmes discontinued (if any) with reasons: From

2015-16 above two courses discontinued due to expenses.

### 9. Number of teaching post:

#### Academic Year:2012 - 2013

Post	Sanctioned	Filled
Professors	4	03
Associate Professors	8	03
Asst. Professors	24	28
Visiting/Guest Faculty	-	1

#### Academic Year:2013 - 2014

Post	Sanctioned	Filled
Professors	4	03
Associate Professors	8	03
Asst. Professors	24	33
Visiting/Guest Faculty	-	1

#### Academic Year:2014 - 2015

Post	Sanctioned	Filled
Professors	5	03
Associate Professors	10	03
Asst. Professors	30	46
Visiting/Guest Faculty	-	1

#### Academic Year:2015 - 2016

Post	Sanctioned	Filled
Professors	6	03
Associate Professors	12	03
Asst. Professors	36	54
Visiting/Guest Faculty	-	2

#### Academic Year:2016 - 2017

Post	Sanctioned		Filled		
	UG	PG	UG	PG	
Professors	5	2	2	1	
Associate Professors	11	2	1	2	
Asst. Professors	32	4	45	5	

## 10. Faculty profile with name, qualification, designation, specialization:

### Academic Year 2016-17

Sr. No.	Name	Qualifi cation	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4
1	Dr. Ingle Rajesh B.	PhD ( CSE)	Professor.	Computer Science Engineering	26yrs	7 + (1 completed in 15-16)
2	Dr. Joshi Sarang A	PhD (CE)	Professor.	Computer Engineering	26yrs	3+ (1 completed in 12-13)
3	Dr. Sonkamble Balwant	Ph.D (CSE)	Professor.	Computer Science Engineering	20yrs	05
4	Dr. Potdar Girish P	PhD (CE)	Assoc. Prof	Computer Engineering	25yrs	-
5	Dr. Ghotkar Archana	PhD (CE)	Assoc. Prof	Computer Engineering	18yrs	-
6	Prof. Sonawane Sheetal	PhD (pursuing	Assoc. Prof	Computer Engineering	16yrs	-
7	Prof. Takalikar Mukta	PhD (pursuing	Asst. Prof	Computer Engineering	23.6yrs	-
8	Prof. Kulkarni Rekha	PhD (pursuing ) (CE)	Asst. Prof	Computer Engineering	19.7yrs	-
9	Prof. Deshpande Arti R	PhD (pursuing ) (CE)	Asst. Prof	Computer Engineering	20 yrs	-
10	Prof. Waghmare Kalyani	PhD (pursuing	Asst. Prof	Computer Engineering	19yrs	-
11	Prof. Phakatkar Anupama	PhD (pursuing	Asst. Prof	Computer Engineering	14.8yrs	-
12	Prof. Kale Geetanjali	PhD (pursuing ) (CE)	Asst. Prof	Computer Engineering	14.10 yrs	-
13	Prof. Joshi Pranjali P.	M.E (CE)	Asst. Prof	Computer Engineering	14.5yrs	-
14	Prof. Jain Preeti A	M.Tech (IT)	Asst. Prof	Information Technology	12.6yrs	-

15	Prof. Wakode Madhuri	M.E (CE)	Asst. Prof	Computer Engineering	14.4 yrs	-
16	Prof. Vidap Pujashri S.	M.E (CE)	Asst. Prof	Computer Engineering	13.7 yrs	-
17	Prof. Patil Pravin R.	PhD (pursuing ) (CE)	Asst. Prof	Computer Engineering	12yrs	-
18	Prof. Game Pravin S.	PhD (pursuing ) (CE)	Asst. Prof	Computer Engineering	12.6yrs	-
19	Prof. Buchade Amar R.	PhD (pursuing ) (CE)	Asst. Prof	Computer Engineering	11yrs	-
20	Prof. Girme Sheetal N	PhD (pursuing ) (CE)	Asst. Prof	Computer Engineering	15yrs	-
21	Prof. Paswan Ratnamala	M.E (CE)	Asst. Prof	Computer Engineering	13yrs	-
22	Prof. Channe Hemlata	M.E (CE)	Asst. Prof	Computer Engineering	12yrs	-
23	Prof. Londhe Atish D.	M.E (CE)	Asst. Prof	Computer Engineering	13yrs	-
24	Prof. Jadhav Anjali J.	M.E (CE) (Pursuing	Lecturer	Computer Science Engineering	8yrs	-
25	Prof. Jewalikar Ashwini	M.E (CE)	Asst. Prof	Computer Engineering	12.2yrs	-
26	Prof. Chandokar Arundhati A	M.E (CE)	Asst. Prof	Computer Engineering	7 yrs	-
27	Prof. Handge Yogesh A	M.Tech (SE)	Asst. Prof	Software Engineering	7yrs	-
28	Prof. Bagade Virendra	M Tech(IT)	Asst. Prof	Information Technology	15yrs	-

29	Prof. Chavan Mayur S	M.Tech (CSE)	Asst. Prof	Computer Science Engineering	5.5yrs	-
30	Prof. Kadam Deepali D.	M.E (IT)	Asst. Prof	Information Technology	8.5yrs	-
31	Prof. Zope Bhushan D.	M.E (CSE)	Asst. Prof	Computer Science	4.5yrs	-
32	Prof. Sharma Amit R	M.Tech (IT)	Asst. Prof	Engineering Information Technology	10yrs	-
33	Prof. Makker Priyanka	M.E (CSE)	Asst. Prof	Information Technology	7yrs	-
34	Prof. Bidwe Ranjeet	M.Tech (IT)	Asst. Prof	Computer Engineering	4.5yrs	-
35	Prof. Shintare Snehal P.	M.E (CE)	Asst. Prof	Computer Engineering	5 yrs	-
36	Prof. Jagtap Vinayak G.	M.E. (I.T.)	Asst. Prof	Information Technology	3yrs	-
37	Prof. Shelke Sunil S.	M.S (Engg) CSE	Asst. Prof	Computer Science Engineering	3yrs	-
38	Prof. Cheke Shailesh D.	M.Tech (CSE)	Asst. Prof	Computer Engineering	5.5yrs	-
39	Prof. Kothari Sukesh A.	M.Tech( CN&IS)	Asst. Prof	Computer Science Engineering	3.6yrs	-
40	Prof. Mane Deepak T.	Ph.D (Pursuing ) CSE	Asst. Prof	Computer Science Engineering	11.9yrs	-
41	Prof. Jambhulkar Parag	M.E(CSE )	Asst. Prof	Computer Science Engineering	4.5yrs	-
42	Prof. Hiremani Vani A.	M. Tech (CSE)	Asst. Prof	Computer Engineering	6.9yrs	-

43	Prof. Ladhake Tejashree	M.Tech (CSE)	Asst. Prof	Computer Science	2 yrs	-
45	Prof. Jaiswal Pavan R.	M.E (IT)	Asst. Prof	Engineering Information Technology	7yrs	-
46	Prof. Joshi Pallavi S.	M.E (ESC)	Asst. Prof	Embedded Systems	7yrs	-
47	Prof. Shingare Meenal	M.E (CSE)	Asst. Prof	Computer Science Engineering	7.6yrs	-
48	Prof. Reddy Sudhakar	M.Tech (CSE)	Asst. Prof	Computer Science Engineering	3.2yrs	-
49	Prof. Pawar Urmila S.	ME (CE)	Asst. Prof	Computer Engineering	3.8yrs	-
50	Prof. Sumit Shinde S.	ME(CE)	Asst. Prof	Computer Engineering	3.8yrs	-
51	Prof. Shinde Ramji N.	ME(CE)	Asst. Prof	Computer Engineering	2.9yrs	-
52	Prof. Madhuri K Mall	M.Tech (CSE)	Asst. Prof	Computer Engineering	1.7yrs	-
53	Prof. Patil Akshay	M.E(CSE	Asst. Prof	Computer Engineering	5yrs	-
54	Prof.Patel Helly H	ME(CN)	Asst. Prof	Computer Engineering	8.6yrs	-
55	Prof Suradkar Swaroop	M.Tech (CSE)	Asst. Prof	Computer Engineering	1.5yrs	-
56	Prof. Kulkarni Rutuja A	ME(CSE)	Asst. Prof	Computer Engineering	8.8yrs	-
57	Prof. Andhare Anurag S.	M. Tech. (CSE)	Asst. Prof	Computer Science Engineering	7.5yrs	-

### 11. List of senior visiting faculty:02

Sr.	Name Of Faculty	Designation	Role
No.			
1	Mr. Pramod	Educational Consultant	
	Pathankar		Appointed for soft skill
2	Kaustubh Karwe	HR	subject for SE students

## 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 3.1%

### 13. Student - Teacher Ratio (programme wise):

Sr. No.	Academic Year	Programme	Student -Teacher Ratio
1	2012-13	UG	19.43:1
		PG	12:1
2	2013-14	UG	15.15:1
		PG	12:1
3	2014-15	UG	16:1
		PG	12:1
4	2015-16	UG	16:1
		PG	12:1
5	2016-17	UG	16.94:1
		PG	12:1

### 14. Number of academic support staff(technical) and administrative staff:

Sta	ff Deta	ils	Academic	Sanctioned	Filled
Support Staff	f (Lab a	assistant)	2012-13	*	10
Support S	Staff	(Technical		*	2
Support Staff	f (Lab a	assistant)	2013-14	*	10
Support S	Support Staff (Technical			*	2
Support Staff	f (Lab a	assistant)	2014-15	*	13
Support Staff (Technical			2014-13	*	2
Support Staff	f (Lab a	assistant)	2015-16	*	13
Support Staff (Technical			2013-10	*	2
Support Staff (Lab assistant)			2016-17	*	13
Support S	Staff	(Technical	2010-17	*	2

<sup>\*-</sup>No such sanctioned post

### 15. Qualifications of teaching faculty with DSc/ D.Litt. / Ph.D. / MPhil /PG.:

Academic Year	Ph.D.	Ph.D. Pursuing	PG	UG
2012-13	04	07	2	01
2013-14	03	07	3	01
2014-15	03	12	4	01
2015-16	05	13	5	01
2016-17	05	14	4	01

## 16. Numberoffacultywithongoingprojectsfroma)Nationalb)Internation al funding agencies and grants received:

Sr.	National /	Number of	Total Grant	
No.	International	Faculty	Received (Rs.)	
1	National	01	1.75L	

# 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sr. No.	Projects Funded by	Total Number	Total Grant Received Rs.
1.	Ministry of Science and Technology,	1	4.80L
3.	DRDO	1	9.35L
4.	Savitribai Phule Pune University	1	1.75L

### 18. Research Centre /facility recognized by the University:

	Sr. No.	Academic	Total Number of PhD students		Number of guides associated
	110.	Year	Registered	Completed	associated
	1	2014-15	04	-	0
,	2	2015-16	06	-	0
	3	2016-17	-	-	0

### 19. Publications:

The faculties of the department have consistent record of publications in National / International Journals / Conferences. The summary of 2012-13 to till date is mentioned below.

### ➤ Publication per Faculty:

Academic Year	Number of Publications	Average
2012-13	45	1.18
2013-14	70	1.84
2014-15	103	2.29
2015-16	69	2.29
2016-17	14	0.25

Parameters	Number
Number of papers published in peer reviewed journals	287
(National / International) by faculty and students	
Number of publications listed in International Database (e.g.: Web	185
of Science, Scopus, Humanities International Complete, Dare	
Database - International Social Sciences Directory, EBSCO host,	
etc.)	
Monographs	NIL
Chapter in Books	3
Books Edited	NIL
Books with ISBN / ISSN numbers with details of publishers	8
Citation Index	2.0436
SNIP	NIL
SJR	0.97
Impact factor	2.4304
H-index	13

## 20. Areas of consultancy and income generated: NIL

### 21. Faculty as members in

- ➤ National Committees b) International Committees c) Editorial Board:
- a) National Committees:

Name of the	Name of the Committee	Nature of work / description
Faculty		
Dr. Rajesh Ingle	Computer society of	Secretary
	India Pune Chapter	
	IEEE Pune section	Treasurer (2012-13)
	IEEE Pune section	Secretary (2013-14)
	IEEE Pune section	Chair Conference committee (2015-
	IEEE Pune section	Chair (2014-15)
	IEEE Pune section	Chair Conference committee (2015-
IEEE India Council		Vice Chair (2015-16,17)
	IEEE India Council	Vice President
Dr.Archana	Technical committee for	Technical advisory member
Ghotkar	National conference on	
	Research trends in	
	Information Technology	
	Session chair for	Session chair
	University level	
	Session chair for	Session chair
	University level BCUD-	
	QIP research proposal	
	evaluation	

### b) International Committees:

Name of the faculty	Name of the Committee	Nature of work / description
	IEEE INDICON 2014 ICEI 2017	General Chair TPC Chair
	IEEE WIECON 2017	General Chair
Dr. Rajesh Ingle	CAST 2016	TCP Chair
	IEEE Region 10 ( Asia Pacific) Students Activities committee	Chair (2015-16,2016-17,2017-18)
Dr. Archana Ghotkar	Track Chair for IEEE International conference	Worked as track chair and session chair
Prof. Sheetal Sonawane	ICEI-17 IEEE International conference ICEI-17	TPC member
Prof. Amar Buchade	Program Committee of ICSICCS-2017  Program Committee of IC4S 2017  Program Committee of IoT4TD-2017  Program Committee of International Conference on Computer,	Assigning appropriate reviewers to submitted papers and monitoring the Paper Review Process. Selecting papers to be presented at the Conference.  Assigning appropriate reviewers to submitted papers and monitoring the Paper Review Process. Selecting papers to be presented at the conference. International Conference on Recent Advancement in Computer, Communication and Computational Sciences 2016 (ICRACCCS-2016)  Assigning appropriate reviewers to submitted papers and monitoring the Paper Review Process. Selecting papers to be presented at the conference. International Conference on Computer, Communication and Computational Sciences
	CAST 2016	Sub reviewer of CAST 2016  Reviewer of IEEE Transactions on
Prof. R. V. Bidwe	Finance Committee for ICEI-2017	Parallel and Distributed Systems  Managing finances required for conferences.

### c) Editorial Boards:

Name of the	Name of Journal/ conference/ magazine/ news paper				
Dr. Rajesh Ingle	Program Chair, CUBE 2013				
	Program Chair, ACC 2014				
	PC Member, CloudCom 2014				
	Technical Committee Chair, ICIC2015				
	PC Member, ICCCA2015				
	Reviewer for International Journal of Network Security, etc				
Dr. Archana Ghotkar	Worked as a reviewer for following journals				
	IEEE Transactions on Industrial Informatics				
	International Journal of Human Computer Interaction				
	IEEE Sensors Journal				
	Springer Journal on Natural Computing				
	Worked as a reviewer for following international				
	conference				
	IEEE ICEI-2017				
	IEEE conference Information processing-2016				
Prof. Sheetal	Worked as a reviewer for following international				
Sonawane	conference				
	IEEE conference CAST-2016				
	IEEE conference Information processing-2016				
Prof. R.V.Bidwe	International Journal on Information Theory (IJIT)				
	Third International Conference of Networks and				
	Communications (NC 2015)				
	Fourth International Conference on Mobile & Wireless				
	Networks (MoWiN 2015)				
	International Conference on Industrial Instrumentation &				
	Control (ICIC 2015)				
	The Fourth International Conference on peer-to-peer				
	networks and Trust Management				
	The Fifth International Conference on Internet Engineering				
	& Web Services (INWES-2014)				
Prof. S N Reddy	Reviewer in Research-script and IJMTES-ISRD allied				
	journals				

## d) Any other committee:

Name of	the	Name (	of the	Nature	of
faculty		Committee/F	Role	Work/Description	
Dr Rajesh Ingle		LIC SPPU		Representative	from
		Senate Men	mber SPPU	university to	inspect
		(2014-15)		academic activities	S
		BOS	Scientific		
		Computing	SPPU		
		(2014-15)			
		Academic	Advisory		
		Board	Committee		
		Member fo	r MMCOE,		

	AIT and SIT Narhe	
Dr. Sarang Joshi	BOS Chairman,	
	Chairman of cPGCON,	
	SPPU member of IITB	
	FOSS campaign	
	(2010-2015),	
	Member of Academic	
	council,	
	Member RR,	
	Member of Academic	
	council sotonomus	
	engineering colleges-	
	MAE Alandi,GH	
	Raisoni	
	Staff Selection SPPU	
Dr. Archana Ghotkar	Subject expert,	University syllabus
	Staff selection	revision workshops for
	committee.	UG and PG
	Coordinator	
Prof. Sheetal	Subject expert	University syllabus
Sonawane		revision workshops for
		UG and PG

### 22. Student projects:

- a) Percentage of students who have done in-house projects include inter departmental/programme.: Following table shows details about inhouse project and industry sponsored projects but department doesnot have inter department projects
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Programme	Academi	Percentage of	Percentage of
Tiugramme	c Year	In-house	sponsored projects
	2016-17	31.2	68.7
LIC	2015-16	26.5	73.4
UG	2014-15	12.1	87.8
	2013-14	15.7	84.2
	2012-13	27.5	72.5
	2015-16	64.7	35.2
PG	2014-15	51.3	48.6
	2013-14	63.0	36.9
	2012-13	80.7	19.2

## 23. Awards / Recognitions received by faculty and students:

Academic Year	Total Number of students	<b>Total Number of Faculty</b>
2012-13	63	02
2013-14	133	03
2014-15	202	02
2015-16	223	01
2016-17	50	02

# 24. List of eminent academicians and scientists / visitors to the department:

Sr	Name of Eminent Scientists/Professionals	Association	Purpose of Visit
	Mrs Vaishali Tepan	Executive MBA from	Expert Lecture on Soft Skills and
1	_		Behavioral Skills
2	Mr.Thirukumaran	SAT,Infosys,Colmbatore	Workshop on Wireless networking,NS-
2			3,Simulation Tools
3	Prof. Rahul Marathe	Department of Management	Expert Lecture on Industrial Engg,
			Statestics, Production Engineering
4	Dr. Sachin Gunthe,	Department of Civil Engg., IIT,	Expert Lecture on Atmospheric
			modeling, field measurements, remote
5	Dr. Prateek Saxena	-	Expert Lecture on Computer Security,
		<u> </u>	Operating Systems, Programming
6	Ms. Sunita Shetty	Senior Manager SAS R&D,	-
		I.	Development and Marketing
7	Dr.Ankur Teredesai	Professor Graduate Program	
		Coordinator Computer Science	
8	Dr. Alark Joshi	Professor in the Department of	
Ü			Visualization, Image-guided Navigation
9	Mr. Krishan Mittal		Expert talk on Product planning,
			Enterprise IT Management, Mobile
10	Mr. Samrit Maity		Expert talk on High Performance and
		CDAC	Distributed computing
11	Mr. Souvik Barat		Object Oriented Analysis and Design
			with UML
1 12	Dr. Tulika Mitra,	-	Design automation of embedded real-
	Dr. Chan Mun Choon	Computing at the National	,
13	Dr. Parag Kulkarni		Expert talk on how
		Scientist, iknowlation Research	1 1
14	Mr. Vivek Kulkarni		Seminar on Digital Pune Hackathon –
	N	-	theme Smart City
1 17	Mr. Vinit Tople		Delivered live video lecture on Career
	Mr. Ajay Wagh		Guidance
116	Mr. Aditya Khasnis, VP	•	Expert talk on Information Security and
	Mr.Vijay Mangeshkar ,		Banking Regulations
17	Dr. Navin Kabra	Reliscore.com	ACM Eminent speaker talk

18	Ashish Mishra	Senior Software Specialist, SAS	Introduction to the SAS World
10		R&D India Pvt. Ltd	
20	Srikanth Chandrasekharan	Director - Standards &	Webinar on Why Standards Matter
20		Technology, IEEE	
21	Anagha Paranjape-	Architect + Environmental	TEDx talk*A reflection of your dreams.
21	Purohit, Dr. Madhav	Planner	An insight into your heart's deepest
22	Dr. Sandeep Deshmukh	Data Torrent	Workshop on Apache Apex
22			
23	Vidya Kadam	IIT Bombay	Certification Course on IIT FOSS
23			
24	Dr.Asish Mukhopadhyay	IIT, Kharagpur	Seminar on Teaching Practices For
24			Faculty Development In Engineering
25	Dr. VCV Rao	Associate Director and Head of	Expert session on "High Performance
23		the Department at C-DAC Pune	Computing"

#### 25. Seminars/ Conferences/Workshops organized & the source of funding: $\label{eq:conferences}$

Year	Sr. No.	Name of Seminar / Conference / Workshop FDP / SDP / STTP / Webinar etc.	State /National / International	Sponsoring / Funding Agency if any	Revenue Generated
2016- 17	1	ICEI Conference	International	SSPPU, EQ Technologic, IEEE Pune, IEEE computer society Pune chapter	5 Lakhs
	2	Workshop on Parallel Computing with	State	BCUD	75,000
	3	Workshop on Software Modeling	State		15,000
	4	Workshop on "Ethical Hacking"	State	Institute	30,000
	5	Workshop on "Apache Apex"	State	Data Torrent	12,000
	6	Workshop on "R programming"	State	SPPU, BCUD	33,000
2015- 16	1	Conference on "Recent trends in computer"	National	BCUD	1,75000
	2	Workshop on "Distributed	State	BCUD, SPPU	60,000
	3	Workshop on "Apache Apex"	State	Data torrent	21,000
	4	Workshop on "High Performance	State	BCUD,SPPU	60,000
2014- 15	1	Workshop on "Object Oriented analysis and design with UML"	State		15,000

2013- 14		Mobile application development using Android- a Next generation platform	National	AICTE	360000
-------------	--	--	----------	-------	--------

## 26. Student profile programme/course wise:

Name of the	Academic	Applications		En	rolled	Pass
Course/programme	Year	received	Selected	*M	*F	percenta ge %
Computer Engg. (First Shift)		Admission	192	130	62	91.09
Computer Engg. (Second Shift)	2012-13	process in the	60	41	19	93.33
ME-Computer Engg.	2012 13	state is only	25	11	14	68
Computer Engg. (First Shift)		through CAP and governed by	188	126	62	88.88
Computer Engg. (Second Shift)	2013-14	Director of	59	43	16	91.52
ME-Computer Engg. (First Shift)	2013-14	Technical	25	10	15	64
ME-Computer Engg. (Second		Education(DTE)	24	15	09	NA
Computer Engg. (First Shift)		<b>,</b>	189	120	69	90.30
Computer Engg. (Second Shift)	2014-15	Government of	60	40	20	88.33
ME-Computer Engg. (First Shift)	2014-13	Maharashtra.	20	08	12	60
ME-Computer Engg. (Second		The Institute	15	11	04	66.66
Computer Engg. (First Shift)		follows the	196	138	58	81.86
Computer Engg. (Second Shift)		rules, regulation &	60	47	13	75.00
ME-Computer Engg. (First Shift)	2013-10	guidelines set by	19	08	11	90
ME-Computer Engg. (Second	15-16	SPPU, State	13	02	11	53.33
Shift)		Government				

<sup>\*</sup>M = Male \*F = Female

## 27. Diversity of Students:

Name of Course	Year	% of students from the same state	% of students from other States	% of students from abroad
	2015-16	68.0	32.0	29.62
UG	2014-15	69.11	30.89	33.33
	2013-14	66.33	33.67	18.51
	2012-13	67.25	32.75	7.40
	2015-16	100	NIL	NA
PG	2014-15	83.33	16.66	NA
	2013-14	95.91	4.08	NA
	2012-13	98	2	NA

# 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?:

NET,SLET – Not Applicable to Engineering

GATE, Civil services, Defence services – 2.6 % (Institute Level)

### 29. Student progression:

Student Progression	Against % Enrolled				
	2012-13	2013-14	2014-15	2015-16	
UG to PG	26.35 %	26.73 %	25.33 %	18.49 %	
PG to M.Phil.	NA	NA	NA	NA	
PG to Ph.D.	NA	NA	33.33 %	28.57 %	
Ph.D. to Post-Doctoral	NA	NA	NA	NA	
Employed					
<ul><li>Campus selection</li><li>Other than campus recruitment</li></ul>	62.65 % 8 %	62.27 % 9%	63.67 % 9 %	70.51 % 7 %	

### 30. Details of Infrastructural facilities:

### A) Library:

Existing		Newly a	Newly added		Total	
	Till 201	14-15	2015	-16		
	No.	Value	No.	Value	No.	Value
Text Books	19848	56,16,628	580	1,87,360	20428	58,03,988
Reference	13690	32,04,060	251	68,107	13941	32,72,167
Books						
e-Books	380	1,54,160	380	1,76,896	380	1,76,896
Journals &	76	1,17,651	60	95,435	60	95,435
Magazines	44		19		19	
Journals	32		41		41	
Magazines						
e-Journals	589+	13,39,665	7193+	16,19,603	7193+	16,19,603
	600000		600000		600000	
	IEEE		IEEE		IEEE	
	Conf.Paper		Conf.Paper		Conf.Paper	
	S		S		S	
Digital	6405		2272		8677	
Database	4911		1700		6611	
<ul> <li>NPTEL</li> </ul>	884		197		1081	
<ul> <li>Project</li> </ul>	610		375		985	
Reports						
<ul> <li>Question</li> </ul>						
Papers						
CD & Video	3952	81574	99		4051	81574
Others	BCL	2200	BCL	999	BCL	999

(specify)	Membershi	Membershi	Membershi	
	p	p	p	

### B) Internet facilities for Staff & Students:

- The complete department building is Wi-Fi enabled.
- Each faculty has cabin equipped with internet connection, white board, table, chairs etc.
- The overall ambiance is highly professional and computers/Laptops are provided to the senior faculty.

### C ) Class rooms with ICT facility:

• All the classrooms are Wi-Fi enabled with enough light intensity, airy and have studious ambiance.

### D) Laboratories:

- Department has well equipped laboratories to conduct UG, PG and Ph.D. programmes.
- Some of the laboratories are with industry collaborated like SAS-Language Lab and NVIDIA GPU education center.
- Tech-Mahindra is also associated with our department for setting up Center of Excellence Lab.

Sr. No	Name of Lab	Major Equipments in the Department				
1	Microprocessor Lab	Core I5 & Core I3 Computers	Total Computer	:432		
2	Hardware Lab	Core I5 Computers	Server	:01		
3	Programming Lab I	Core I3 Computers	Core I7 Computer	: 38		
4	Programming Lab II	Core I3 Computers	Core I7 Computer	. 38		
5	DBSL Lab	Core I5 Computers	Core I5 Computer	:		
6	Software Engg. Lab	Core I3 Computers	_150			
7	Computer Lab I	Core I5 Computers	Core I3 Computer	:		
8	Computer Lab II	Core I5 Computers	<del>-</del> 146			
9	Network Lab	Core I3 Computers	Core 2Duo	: 95		
10	Project Lab II	Core I3 Computers	Dual Core	: 03		
11	Operating Sys. Lab	C2D Computer	Laser Printer	: 20		
12	Project Lab I	Core I5 Computers	Laser Filiter	. 20		
13	PG Lab	Core I7 & I5 Computers	Switches	: 20		
14	Research Lab	Core I7 & I5 Computers	LCD Projector	: 11		
15	Computer Lab III	Core I5 Computers				

# 31. Number of students receiving financial assistance from college, university, Government or other agencies:

Sr. No.	Programme	Type of Scholarship		Academic Year				
51.110.	Trogramme	Type of Scholarship	2016	2015	2014	2013	2012	
1		SDWO-Scholarship	79	109	74	69	55	
2		SDWO-Freeship	138	128	126	108	90	
3		ITDPO-Scholarship	5	6	5	6	6	
4		ITDPO-Freeship	7	8	9	9	10	
5	UG	EBC	70	51	50	38	30	
6		Minority	4	3	7	4	3	
7		Central Sector Scholarship	4	6	3	4	2	
8		STC/PTC	4	3	2	2	1	
9		J&K	1	0	0	0	0	
10		Pvt. Scholarship	358	293	238	147	142	
11	PG	Gate Scholarship	9	28	18	16	13	

# 32. Details on student enrichment programmes (Special lectures / Workshops/ Seminar) with external experts:

• Enrichment programmes organized with the external experts

Sr · N o	Academi c Year	Name of Enrichment	Name of Expert	Organization
1.	2016-17	Guest Lecture Current trends in big data analytics and machine learning	Ms. Sonali Patwe	Sears Holdings Corporation
2.	2016-17	Live video lecture Career Guidance	Mr. Vinit Tople	Amazon.Com

3.	2016-17	Workshop Embedded Systems Application Development	Mr Ashwin Agrawal	phi-education
4.	2016-17	Seminar Understanding Agile Methodology	Mr Rahul Patil	Niyuj Software Enterprise Limited
5.	2016-17	Expert Talk Cyber Forensic awareness & Cyber laws for investigation process	Adv. Rajas Pingale	Advocate
6.	2016-17	Guest Lecture Practical Application of Digital Electronics with real time example	Mr. Shripad Deshpande	CDAC
7.	2016-17	Expert Talk Information Security and Banking Regulations	Mr. Aditya Khasnis, Mr.Vijay Mangeshkar	Barclays Investment Bank, Pune
8.	2016-17	Workshop Ethical Hacking	Mr. Navdeep Sigh	CyberCure Technologies Pvt. Ltd. Delhi
9.	2016-17	Expert Talk Planning Your Career	Dr. Navin Kabra	Reliscore.com
10.	2016-17	Expert Talk Start ups and Entrepreneurship	Mr. Sharad Tandale	Innovation Engineers and contractors
11.	2016-17	Expert Talk Theory of Computation	Mr. Vivek Kulkarni	Persistent Systems
12.	2016-17	Seminar C, C++ and competitive coding	PASC Team	PASC Team
13.	2016-17	Seminar Mentorship for Success at Abroad	Mr. Abhay Bakshi	BIBU
14.	2016-17	Webinar Why Standards Matter	Srikanth Chandrasekharan	IEEE
15.	2016-17	Expert talk Stress Management & Time Management and Team building with effective leadership & Career Goal setting	Mrs. Anushka Sukhija	Mindskillz

16.	2016-17	Expert Session Introduction to the SAS World	Ashish Mishra	SAS R&D India Pvt. Ltd
17.	2016-17	Expert Talk A reflection of your dreams. An insight into your heart's deepest desires.	Anagha Paranjape- Purohit, Dr. Madhav Mutalik	
18.	2016-17	Workshop Apache Apex	Dr. Sandeep Deshmukh, Priyanka Gugale, Yogi Devendra, Bhupesh Chawda, Pradeep Kumbhar, Hitesh Goyal, Chaitanya Chebolu, Tushar Gosavi	Datatorrent
19.	2016-17	Certification Course IIT FOSS	Mr. Vidya Kadam	IIT Bombay
20.	2016-17	Seminar Teaching Practices For Faculty Development In Engineering	Dr.Asish Mukhopadhyay	IIT, Kharagpur
21.	2016-17	Seminar Recent advances in IoT	Mr.Anuj Deshpande	Markville, Pune
22.	2016-17	Seminar Deep Learning	Mr. Adwait Bhave	Druva Softwares
23.	2016-17	Fdp On "Data Analytics With R- Programming"	Dr. Prachi Joshi, Mr. Sanjay Sane Mr. Harshit Lamba Ms. Sonali Patwe	Sears Holdings Coorparation ,Sane Acedamy
24.	2016-17	Expert Session "High Performance Computing"	Dr. VCV Rao	C-DAC Pune
25.	2016-17	Workshop "Software Modeling & Testing"	Mr. Priti Biyani, Apprva Karve, Dhananjay, Mr. Souvik Barat, Mrs. Asmita	Thoughworks, TRDDC

			Indalkar	
26.	2016-17	Workshop Android Application Development	Swapnil Mokashi	Offergear
27.	2016-17	Workshop Parallel Computing with CUDA	Sandip Sathe, Mandar Gurav, Apoorva Joshi, Deepak Mane, Yogesh Desai	NVIDIA Pune,
28.	2016-17	Workshop OpenCL	Ms. Nisha Agrawal	CDAC, Pune

Sr. No	Academic Year	Name of Enrichment	Name Of Expert	Organization
1.	2015-16	Expert Talk/Seminar Healthy Life : Stress Management & Meditation	Mrs. Mayuri Yeole	Art of Living
2.	2015-16	Expert Talk/Seminar Corporate Manners & Etiquettes and Effective Leadership with Listening Skills	Asmita Indalkar	Diztie consultant
3.	2015-16	Expert Talk/Seminar Cloud Computing, IoT, Data Protection and Security	Mr. Aniket Anikhindi	Calsoft
4.	2015-16	Expert Talk/Seminar Career guidance session on "Want to pursue an MS?Start now!"	Nafisa Mandliwala Swapnil Pimple	VM Ware, Pune Cisco System Pune
5.	2015-16	Workshop Linux Internals	Mr.Gaurav Surygandha	Symantec, Pune
6.	2015-16	Expert Talk/Seminar Awareness of Forensic Science & Tools	Mr. Satish Singh	Apin Technologies
7.	2015-16	Expert Talk/Seminar To develop the problem under consideration	Dr. Parag Kulkarni	iknowlation Research Labs

8.	2015-16	Expert Talk/Seminar	Mr. Vivek Digambar	Persistent Systems,
		Digital Pune Hackathon	Kulkarni	Pune
		theme Smart City		
9.	2015-16	Expert Talk/Seminar Excursion of Wireless & Web attacks	Mr.Hrishikesh Deepakrao Nandedkar	Isight Risk Management System Private
		Web attacks		Limted.
10.	2015-16	Workshop Internet of Things	Anuj Deshpande	Markville Pvt
			Dr. P N Mahalle	Solutions
				SKN,COE
11.	2015-16	Expert Talk/Seminar To	Dr. Parag Kulkarni	iknowlation
		develop the problem under consideration and justify feasibility using concepts of knowledge canvas and IDEA Matrix	_	Research Labs
12.	2015-16	Expert Talk/Seminar R- Programming	Ms.Sonali Patwe	Sears Holdings Corporation

Sr.	Academic	Name of enrichment	Name of External	Organization
No.	Year	programmes	Expert	
1.	2014-15	Expert Talk/Seminar Campus		Winpoint Learning
		Recruitment Training Course	Mrs. Anjali Parakhi,	Certer, Pune
2.	2014-15	Workshop Object Oriented Analysis and Design with UML	Mr. Souvik Barat	TRDDC, Pune
3.	2014-15	Expert Talk/Seminar Design	Dr. Tulika Mitra	Department of CS,
		automation of embedded real-		School of Computing
		time systems		at the National
				University of
				Singapore
4.	2014-15	Expert Talk/Seminar Wireless	Dr. Chan Mun Choon	Department of CS,
		Communications for Ultra-		School of Computing
		Wideband Sensor Networks		at the National
				University of
				Singapore
5.	2014-15		Mr. Samrit Maity	CDAC
		Performance and Distributed		
		Computing		
6.	2014-15	Expert Talk/Seminar	Mr. Ashwin Joshi	NVIDIA
		Embedded Systems and		
		Embedded OS		

7.	2014-15	Expert Talk/Seminar Internet	Nikita Nerkar	Marvell
		of Things	Shantanu Potdar	Semiconductors
8.	2014-15	Expert Talk/Seminar	Dr. Umesh Hivarkar	iGATE
		Algorithms, Artificial Neural		
		Network, Artificial Intelligence		
9.	2014-15	Expert Talk/Seminar	Mr. Prashant Uppal	Ramkrishna
		Personality Development		Vivekanand Bhav
				Prachar Parishad
				,Maharashtra.
10.	2014-15	Expert Talk/Seminar	Mr. Sarang Shravagi	Scalearc
		MongoDB		
11.	2014-15	Expert talk/Seminar "CUDA"	Mr. Mahesh Doijade	NVIDIA
12.	2014-15	Webinar/Techtalk "Modern	Bjarne Stroustrup	Webinar from
		C++ style"		Persistent Systems
				Ltd
13.	2014-15	Expert Talk/Seminar Non-	Mr. Krishan Mittal	Unfurl Minds, Pune
		Technical Skills		

Sr	Academic	Name of Enrichment	Name of Expert	Organization
.N	Year			
0				
1.	2013-14	Workshop Design & analysis of protocols using NS-3	Mr.Thirukumaran	SAT, Infosys, Colmbatore
2.	2013-14	Expert Talk/ Seminar Industrial Engg, Statestics, Production Engineering	Prof. Rahul Marathe	Department of Management Science, IIT, Madras
3.	2013-14	Expert Talk/ Seminar Atmospheric modeling,field measurements, remote sensing	Dr. Sachin Gunthe,	Department of Civil Engg., IIT, Madras
4.	2013-14	Expert Talk/ Seminar Scientific Visualization, Image-guided Navigation for Neurosurgery, and Interfaces for Mobile data visualization	Dr. Alark Joshi	Professor in the Department of Computer Science at the University of San Francisco
5.	2013-14	FDP Object Oriented and Multicore Programming	Prof. Anita Joshi	SPCOE, Pune

7.	2013-14	FDP Mobile Development using Android, a next generation platform.  Workshop/FDP Massively Empowered Classrooms for "Design and Analysis of Algorithms"	Kedar Sovani  Vandana Salve  Dr.Sairam Raj  Dr. Ed Cutrell	Marvell Semiconductors  NVIDIA  Microsoft Research, India
Sr .N o	Academic Year	Name of Enrichment	Name Of Expert	Organization
1.	2012-13	Workshop Wired & Wireless Protocol Design & implementation	Mr. Thirukumaran	SAT,Infosys, Coimbatore
2.	2012-13	Seminar/Expert Talk Research Methodology	Mr.Prashant Mohanparta	UC, Davis
3.	2012-13	Seminar/Expert Talk Computer Networks	Mr. Prashant Mohanparta	UC, Davis
4.	2012-13	Seminar/Expert Talk High Performance system interconnects	Mr. Yogesh Jadhav	Zensar Technologies
5.	2012-13	Seminar/Expert Talk Professional Ethics	Mr. Kedar Sovani	Marvell Semiconductors
6.	2012-13	Seminar/Expert Talk Corporate Manners	Mrs. Anushka Sukhija	Mindskillz

# Department organizes Special Student Training Programmes to cultivate multidimensional abilities in the students. The details are given in the table.

Sr.	Title of the Module	No. of Hour	No of students enrolled				
		S	2012-13	2013-14	2014-15	2015-16	2016-17
	Student Training Program (Module I)						
1.	Personal and	2	360	480	480	480	480
	Career Goal						
2.	2. SWOT Analysis		360	480	480	480	480
3.	Behavioral Skills	2	360	480	480	480	480
4.	Public Speaking	2	360	480	480	480	480

5.	Presentation Skills	2	360	480	480	480	480	
6.	Resume Writing	2	360	480	480	480	480	
7.	Listening Skills	2	360	480	480	480	480	
8.	Group Discussion	2	360	480	480	480	480	
9.	Report Writing	2	360	480	480	480	480	
10.	Letter/Application	2	360	480	480	480	480	
	writing							
!	Ţ.	udent	Training Pr	ogram (Mo	dule II)	1		
1.								
2.	Listening Session- I	2	360	480	480	480	480	
3.	Listening Session- II	2	360	480	480	480	480	
4.	Reading Session- I	2	360	480	480	480	480	
5.	Reading Session- II	2	360	480	480	480	480	
6.	Writing Session- I	2	360	480	480	480	480	
7.	Writing Session- II	2	360	480	480	480	480	
8.	Speaking Session-I	2	360	480	480	480	480	
9.	Speaking Session-II	2	360	480	480	480	480	
10.	Speaking Session-III	2	360	480	480	480	480	
	Str	udent 7	Training Pr	ogram (Mo	dule III)		•	
1	Communication	2	120	120	240	240	240	
2	Advance	2	120	120	240	240	240	
3	Programming-I	2	120	120	240	240	240	
4	Programming-II	2	120	120	240	240	240	
5	Electronic Design -I	2	120	120	240	240	240	
6	Electronic Design -II	2	120	120	240	240	240	
7	Digital Design	2	120	120	240	240	240	
8	Embedded Systems	2	120	120	240	240	240	
9	Signal Processing	2	120	120	240	240	240	
			Training Pr					
1.	Introduction	2	120	120	240	240	240	
2	Introduction and Group	2	120	120	240	240	240	
	Formation for Group							
3	Group Discussion-I	2	120	120	240	240	240	
4	Group Discussion-II	2	120	120	240	240	240	
3	Group Discussion-III	2	120	120	240	240	240	
4	Personal Interview-I	2	120	120	240	240	240	
5	Personal Interview-II	2	120	120	240	240	240	
6	Personal Interview-III	2	120	120	240	240	240	
7	Personal Interview-IV	2	120	120	240	240	240	

### 33. Teaching methods adopted to improve student learning-

Following methods are adopted to improve and maintain learning environment amongst the students-

• Department is ISO certified which contains the processes of teaching —learning, laboratory, seminar and project which has continuous evaluation methods through unit tests, assignments, class and home tutorials. Continuous evaluations of practical with mock practical examinations.

- Frequently arranging seminars, Workshop, Conferences and hands on session by eminent personalities from industry and reputed academic organizations.
- Training to faculty through workshops, FDP, Seminars has enriched performance in teaching. This will strengthen the teaching-learning process.
- Programs are organized to ensure effective teaching skills.
- Use of LCD projector, PPT, Animations, Quiz, Video, Real application corelation, Case studies etc. has made the lectures more interesting, interactive, attentive and hence effective.
- Industrial visits to cater real-time applications.
- Videos from The National Programme on Technology Enhanced Learning (NPTEL) of the subject related topics are shown to enhance understanding.

Academic Year	Events
2016-17	Arranged a Industrial visit for UG students at  • BMC Software's, Pune • ThoughtWorks Pune • AVAYA INC Pvt LTD Pune • Ubisoft Pune  Organized a Certificate course "S/w Testing and quality assurance"  Organized a Webinar on "Smart India Hackathon" for UG students
2015-16	<ul> <li>Organized a Seminar/Expert Talk on</li> <li>"How to Write a Technical Paper" for TE students</li> <li>"Recent Trends in innovation for problem solving"</li> <li>"Higher Studies" for SE and TE students</li> <li>"First Year of Working life @ industry" for SE students</li> <li>Developing Real World Mobile Apps: Startup Talk"</li> <li>"Doing right things" for TE students.</li> <li>"Selenium Testing Tools"</li> <li>Organized certificate course on "Fundamentals of Hadoop &amp; Hadoop Ecosystem"</li> </ul>
2014-15	Arranged Industrial Visit for UG students at  • ThoughtWorks.

	Marvell Semiconductors.				
	Organized a Seminar/Expert Talk on				
	<ul><li> "Information Security" for PG students</li><li> "Effective Data Visualization" for PG students.</li></ul>				
2013-14	Organized a Expert Talk/Guest Lecture/Seminar on				
	<ul> <li>"Educational Career Guidance related to Post Graduation at US and German Universities" for UG students.</li> <li>Operating System and Administration for SE students.</li> <li>"Business Intelligence and Software Architecture" for PG students.</li> <li>Dr. Pratik Saxena from National University of Singapore "Rethinking Security in Commodity Computing Platforms".</li> <li>"TOC Applications" for TE students.</li> </ul>				
	ranged Industrial Visit for TE students in eQ Technologic.				
	Organized and Conducted two-months certificate course on "Object Oriented Programming (C++)" for SE students.				
2012-13	Organized Expert Talk/Seminar/Guest Lecture on  • "Presentation and Communication skills."  • "Research Methodology"  • "Computer Networks"  • "Corporate manners and etiquettes. "  • "Personal Interview Orientation."  • "Xperience-13" seminar series for PG students				

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities-

Following measures/initiatives are taken to enhance social awareness -

- Students participate in various social activities such as PICTOSOCIAL, 'NSS', University activities etc.
- The student members plan the activities and encourage others for active participation.
- During induction programs, coordinators of the extension activities interact with the students and discuss about the benefits and scope of the activities.
- The students who are active members of NSS and other outreach programs are given academic liberty in the form of attendance, based on their performance.

- The information about the proposed activities are disseminated in form of notices, academic calendar, circulars, web notifications and also by word of mouth.
- Students are participating in social awareness Seminars like Health awareness, Women safety, etc.
- Social Message through Drama like Rode Play against Dowry, Firodiya and Purushotam Kardandak.
- Students visits to Old age home, Orphanage, Schools etc.

Details are given below.

Sr. No	Year	Event/Activity	Impact on the development of students
1	2014-15 2015-16 2016-17	Carrier guidance program for school students	Makes students aware about the present condition of school students to choose their career.
2		Evaluation tests question set preparation for NGOs	awareness among the students
3	2016-17	Teacher Training Program by PICT ACM Student Chapter(PASC)	Improved leadership qualities and team work.
4	2015-16	Earth hour	Increased social awareness about the energy crises among the students
5	2015-16	UG students teach internet lesson to school children Money donation (Naam foundation) Blood donation Tree plantation NSS special camp at Gogalwadi Voters awareness program (street play) Nirmal wari during pandhrpur pilgrimage Yoga day celebration	Developed sense of responsibility against society

6	2016-17	Associated with an NGO	Developed sense of responsibility
		named "Matoshree", which is an	against society
		old-age home (located in karve nagar, Pune).	
		Conduction of origami, painting, drawing,	
		science and some gaming sessions at	
		BAL-Sadan	
		Association with ASHA, an NGO	
		which helps in the education of girl	
		child in rural areas, where they don't	
		have the facilities to avail proper	
		guidance outside school.	

### 35. SWOC analysis of the department and Future plans –

### **Strengths**

- ISO 9001:2008 certified, ISO 9001:2015 certified from academic year 2016-17
- Accredited by NBA-AICTE in 2012 for 3 years and in 2016 for next 3 years.
- Qualified, committed and experienced faculty.
- Qualified non-teaching staff.
- Availability of department library
- A feedback system is in operation for obtaining the course feedback, project feedback, seminar feedback during academic semester.
- Publications by faculty in various National/International Journal/Conferences.
- Facility to publish in departmental annual newsletter
- Strengthen the Industry-Institute interaction through signing MoU's with various industries from different field for the better placement of students.
- Active participation and coordination in professional body chapters such as IEEE and ACM
- Training programs by Industry people.
- Excellent Teaching Learning Process
- Consistent excellence in University Result
- Research grant received by faculty by various government bodies.
- New facilities created like NVIDIA GPU education center and SAS R&D laboratory in association with industries for enhancing student's knowledge and thus staying in-line with the current I.T. sector.
- Industry Sponsored "Center of Excellence" laboratory
- Initiated Part Time Internship process for students

- Well-kept MIS system for data maintenance of students, staff and communication with parents
- Well equipped classrooms and laboratories

#### Weakness

- IPR and consultancy
- Sponsored research projects

### **Opportunities**

- Centre of excellence in multi-disciplinary areas
- Development of e-learning material for different subjects
- Consultancy projects

### **Challenges**

- Enhancing employability skills of students in rapidly changing technology
- Adaptability to globally challenging industrial scenario.

#### **Future Plans**

- To encourage the faculties for PhD qualifications
- To encourage faculties for IPR.
- To generate revenue from external consultancies.
- To establish association with state of art universities

#### ELECTRONICS AND TELECOMMUNICATION ENGINEERING

- 1. Name of the department: Electronics and Telecommunication Engineering
- 2. Year of Establishment: 1995
- 3. Names of Programmes / Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph. D., etc.):

Sr. No.	Name of the Programme	Year of Establishment
1	UG - BE E &TC	1995
2	PG - ME E &TC ( Microwave Engg)	2006
3	Ph. D. – Electronics and Tele.)	2013

### 4. Names of Interdisciplinary courses and the departments/units involved:

Sr. No.	Name of the Interdisciplinary Courses	Departments / Units
1	Engineering Mathematics-III	Applied Science
2	Research Methodology	Computer
		Engineering

### 5. Annual/ semester/choice based credit system (programme wise):

Sr. No.	Name of the Programme	Pattern/System (Annual/ semester/choice based credit system)
1	UG	Semester
2	PG	Semester
3	Ph.D.	Annual

We are following the syllabi of affiliated university (SPPU). SPPU has mixed system with Semester based Credit System for PG programmes and percentage based system for the UG programmes wherein the examination scheme includes Theory (paper), Theory (online), term-work, practical, and oral. It also accommodates grade based audit courses.

## 6. Participation of the department in the courses offered by other departments:

Sr. No.	Name of the Department	Class	Courses offered
1	Applied Science Department	SE	Basic Electronics Engineering

2	Computer Engineering	SE	Digital Electronics and Logic Design
3	Computer Engineering	TE	Digital Signal Processing

## 7. Courses in collaboration with other universities, industries, foreign inst etc

Sr. No.	Certificate / Course Name	Collaborating Institution /Industry / Universities etc.
1	<ol> <li>Faculty Development Workshop on "LabVIEW 2012 Applications" 2013-14</li> <li>Certificate Course on "LabVIEW Programming" 2 days, 2014-15</li> <li>National level workshop on SDR using LabVIEW and NI USRP sponsor by IET Pune 2016-17</li> <li>Fundamentals of LabVIEW for Graphical Programming for PICT Students 2016-17</li> <li>LabVIEW CLAD 16 workshop for PICT Faculty 2016-17</li> </ol>	National Instruments, Bangalore
2	<ol> <li>One week training program at Wipro Technologies Bangalore 2013-14</li> <li>Training Programme on "Mission-10x UTLP Boards" 2014-15</li> <li>"Mission -10X Engineering Faculty workshop" 2014-15</li> <li>Three days Training Programme conducted on "Mission-10x UTLP Practitioners training programme" for PICT students 2015-16</li> <li>Mission 10x Engineering faculty workshop PICT staff 2015-16</li> <li>Mission 10x Engineering student workshop by Mr. Bhuvan Sundar to PICT students 2015-16</li> </ol>	Wipro, Bangalore

3	<ol> <li>A 2 Days Workshop on "Robotics and MATLAB Applications" 2013-14</li> <li>Five faculty members have participated in Robotics Training Program at MIT Alandi Oct-13</li> <li>A 5-days Workshop on "Introduction to Robotics" 5 days, 2014-15</li> </ol>	eYantra, IIT Bombay				
4	<ol> <li>TEXAS Lab: one group has participated in Intel Innovation competition 2013 at Bangalore and was shortlisted amongst top 2, 2012-13</li> <li>Texas Instrument"s Analog Design competition conducted at PICT Pune.</li> <li>TEXAS Lab: One student has participated TI National design contest,2015 and won \$200 prize 2014-15</li> <li>Texas Instruments Analog Design competition conducted at PICT Pune. 2014-15</li> <li>IET TI innovation laboratory - Special interest group in Signal processing Aug2015-16</li> </ol>	Texas Instruments				
5	Certificate program on various subjects from E&TC, Electronics, Computer Science etc domains	MOOCs NPTEL				
6	Webinar series on recent technology and innovation IUCEE					
7	1 Certificate Course on "CMOS VLSI Design" ni2 Designs, Pune (2012-13,2013-14,2014-15)					
8	1 SPPU Approved State Level Workshop on "Embedded System Design using ARM Cores" 2014-15	ARM Bangalore				
9	Co-curricular Activity sessions (2013-14,2014-15,2015-16)	Skill Smart world Pune				

## $\textbf{8. Details of courses/programmes discontinued (if any) with \ reasons:}$

Nil

### 9. Number of teaching post:

Post	Sanc	tioned	Filled		
	UG	PG	UG	PG	
Professors	5	1	2+1*	1	
Associate Professors	11	1	4	1	
Asst. Professors	32	1	41	1	

<sup>\*</sup> including Principal

# 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil. etc.):

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experi ence	No. of Ph.D. Students guided for the last 4
1	Dr. Kulkarni P. T.	Ph.D.	Professor, Principal	Electronics and Communication Engineering	34 Years	3 completed (5 in progress)
2	Dr. Y. Ravinder	Ph.D.	Professor, HOD (E & TC)	Electronics and Communication Engineering	24 Years	6 (In Progress)
3	Dr. Dhande A. P.	Ph.D.	Professor	Digital Electronic	24 Years	1 (Completed) 5(In Progress)
4	Dr. Mundada G .S.	Ph.D.	Professor (TPO)	E & TC Engineering	24 Years	-
5	Dr. Narkhede S.S.	Ph.D.	Assoc. Professor	E&TC Engineering	24 Years	-
6	Dr. R. Sreemathy	Ph.D.	Assoc. Professor	Electronics Engineering	28 Years	-
7	Dr. Munot M. V.	Ph.D.	Assoc. Professor	E&TC Engineering	12 Years	-
8	Dr. Jaiswal R.C.	Ph.D.	Assoc. Professor	E&TC Engineering	19 Years	-
9	Dr. G. Bansod	Ph.D.	Assoc. Professor	E&TC( Embedded Security)	10 Years	-
10	Dr. Moon S.K.	Ph.D.	Assoc.	Electronics Engineering- Data	19Years	-

			Professor	Security		
11	Mr. Deo V.Y.	M.Tech.	Assist. Professor	ICs & Systems Engineering	31 Years	-
12	Mr. Varade P.S.	ME	Assist. Professor	E&TC	15 Years	-
13	Mr. Yelalwar R.	M.Tech.	Assist. Professor	E &TC	12 Years	-
14	Ms. Turuk M. P.	M.E.	Assist. Professor	Electronics	14 Years	-
15	Mr. Dudam S. S.	M.E.	Assist. Professor	Electronics	12 Years	-
16	Ms. Kale M. R.	M.E.	Assist. Professor	E&TC- (Microwave Engg)	12 Years	-
17	Mr. Patil N. B.	ME	Assist. Professor	E&TC-(Microwave Engg)	11 Years	-
18	Mr. Vaijapurkar V. B.	M.E	Assist. Professor	Electronics and Telecommunicatio ns	11 Years	-
19	Mr. Gaikwad S. V.	PhD	Assist. Professor	Electronics and Telecommunicatio n-Microwave	20 Years	-
20	Ms. Kulkarni A. M.	M.E.	Assist. Professor	Electronics	10 Years	-
21	Mr. Ingole A. S.	M.E.	Assist. Professor	ELECTRONICS	11 Years	-
22	Mr. Shinde D. M.	M.E.	Assist. Professor	Electronics-VLSI Design	9 Years	-
23	Mr. Gangarde M. A.	ME	Assist. Professor	Electronics-VLSI	7 Years	-
24	Mr. Khot S. S.	M.E.	Assist. Professor	E&TC-Microwave	10 Years	-
25	Mr. Sakhare K.V.	M.E.	Assist. Professor	Electronics	10 Years	-
26	Mr. Patil L. P.	M.E.	Assist. Professor	E&TC	6 Years	-

27	Ms. Kulkarni I. P.	M.E.	Assist. Professor	Electronics And Telecommunicatio n	5 Years	-
28	Mr. Hake S. D.	M.E	Assist. Professor	Electronics and TeleCommunic- ation Microwave	5 Years	-
29	Mr. Ramteke A S	M.E.	Assist. Professor	E & TC- SIGNAL PROCESSING	6 Years	-
30	Mrs. Prabhune A. A.	M.E.	Assist. Professor	Electronics(Digital Systems	7 Years	-
31	Mr. Rasal A. S.	M.Tech	Assist. Professor	VLSI Design and Embedded System	3 Years	-
32	Mr. Bhosale A. S.	M. Tech	Assist. Professor	Communication Systems	6 Years	-
33	Mr. Zakee Ahmed	M. Tech	Assist. Professor	Electronics Design Technology	6 Years	-
34	Mr. Sutar R.J.	M.E.	Assist. Professor	Electronics)	10 Years	-
35	Mr. Bhandekar A.A.	M. Tech	Assist. Professor	E&TC-Systems & Communications	4 Years	-
36	Mr. Shriwas R.N.	M. Tech	Assist. Professor	E & TC- SIGNAL PROCESSING	4 Years	-
37	Mr. Thakar H.S.	M.E	Assist. Professor	Electronics- V.L.S.I.	11 Years	-
38	Ms. Bakare R.V.	M.E.	Assist. Professor	VLSI	12 Years	-
39	Ms. Jamage S K	M.E.	Assist. Professor	Microwave	4 Years	-
40	Mr. Shirude N.S.	M. Tech.	Assist. Professor	Electronics	2 Years	-
41	Ms. Joshi S.M.	M.E.	Assist. Professor	Electronics	16 Years	-
42	Mr. Choubhey S.K	M. Tech	Assist. Professor	Signal Processing	4 Years	-
43	Mr. Bhame V.	ME	Assist.	Microwave	2 Years	-

	B.		Professor	Communication		
44	Mr. Gupta A.	ME	Assist. Professor	Microwave Communication	2 Years	-
45	Mr. Upadhyay P. K.	M.Tech	Assist. Professor	Communication Engineering	2 Years	-
46	Mr. Patil Suraj S	M.tech	Assist. Professor	VLSI Design	4 Years	-
47	Mrs. Bhalgaonkar S. A.	ME	Assist. Professor	Communication Engineering	3 Years	-
48	Mr. Praveen Blessington T	M.tech	Assist. Professor	VLSI DESIGN	10 Years	-
49	Mr. Lanjewar R B	M. Tech	Assist. Professor	E&TC-Systems & Communications	2 Years	-
50	Ms. Maheshwari D. B.	M.E	Assist. Professor	E&TC DIGITAL SYSTEMS	5 Years	-
51	Mr. Bobade M. D	M.E	Assist. Professor	Digital systems	1 Years	-
52	Ms. Saini R.A.	M.Tech	Assist. Professor	Electronics	2 Years	-
53	Mr. Pawar A.B	M.Tech	Assist. Professor	Electronic Systems and Communication	1 Years	-
54	Mr.Chaple G.N.	M.Tech.	Assist. Professor	Electronics Engineering	2 Years	-
55	Ms. Dixit A.S.	M.E	Assist. Professor	E&TC- Signals and Systems	7 Years	-

### 11. List of senior visiting faculty:

Sr. No.	Name	Qualificat ion	Designati on	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for
1	Dr. Pathak S.A	Ph.D	Adjunct Professor	Signal Processing	16	NIL

# 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty :NIL

### 13. Student - Teacher Ratio (programme wise):

Sr. No.	Programme	Student -Teacher Ratio
1	UG	15:1
2	PG	12:1
3	Ph. D	8:1

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Staff details	Sanctioned	Filled
Academic Support Staff	14+1	13+1

### 15. Qualifications of teaching faculty with DSc/ D.Litt. / Ph.D. / MPhil /PG.:

Ph.D.	Ph.D. Pursuing	PG	UG
10	11	34	NIL

## 16. Number of faculty with ongoing projects from a) National b)International funding agencies and grants received:

Sr.	National /	Number of	Total	Grant
No.	International	Faculty	Received (Rs.)	
1	National	02	6,50,000/-	

## 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sr. No.	Projects Funded by	Total Number	Total Grant Received Rs.
1.	University-BCUD	05	8,70,000/-
2.	AICTE-RPS	01	6,50,000/-

### 18. Research Centre /facility recognized by the University:

Sr.	Total Number of	Number of	guides	
No.	Registered	Completed	associated	
1	03	NIL	02	

### 19. Publications:

The faculties of the department have consistent record of publications in National/International Journals/Conferences. The summary is mentioned here.

a) Publication per Faculty: 0.5185

Parameters	Num
Number of papers published in peer reviewed journals (National	28
/ International) by faculty and students	26
Number of publications listed in International Database (e.g.: Web of	
Science, Scopus, Humanities International Complete, Dare Database -	02
International Social Sciences Directory, EBSCO host, etc.)	
Books with ISBN / ISSN numbers with details of publishers	
Citation Index	
SNIP	
SJR	
Impact factor	12
H-index	

## 20. Areas of consultancy and income generated: Nil

### 21. Faculty as members in

a) National Committees b) International Committees c) Editorial Board:

### a) National Committees:

Name of the Faculty	Name of the Committee	Nature of work/description	Remark
	·	Curriculum revision Workshops, planning and conduction	2011-12 to 2015-16
		Academic planning formation and guidelines at University level	

Г	TPC chair-2017 ICEI Pune	Session Chair	3-5 Feb 2017
Ī	ET, IEEE member	Professional society activities	
C	Co-ordinator	Various workshop(4)	
F	Principal Investigator	Funded Project(4)	

Name of Faculty	Name of the committee	Nature/ work description	Remark
	University Level		
	BOS, SPPU, Electronics	Chairman(2008-2010	
	BOS, SPPU, Electronics	Member(2005-2010)	
	BOS, VIT(Autonomous Institute)	Member(2008-2010)	
Prof. Dr. G. S.	ePGcon	PG- Proposer and convener	
Mundada	College Level		
	LMC	Member(2000-2010)	
	FIE, MIEEE, LMISTE	Member	
	Institution of Engineers	Chairman(2016-2018)	
	Institution of Engineers	Member(2004-2016)	
	IEI	member -Professional society activities	
	ISTE	Member	
	Principal Investigator	Funded Project	
Prof. Dr.	SPPU Syllabus review committee	Structuring and Revision	
S. S	College Examiner Officer	To coordinate all	
Narkhede		examination activities	
		as per SPPU	
	Management Representative	requirement  To coordinate quality	
	for QMS	management system for	
		effective	
		implementation of ISO	

		standard.
	National conference on Modeling optimization and Control NCMOC-2015(4 <sup>th</sup> - 6 <sup>th</sup> March	Session Chair
Prof. Dr .R.	MTLC- Mission 10X Technology learning centre Wipro-PICT	Coordinator PICT
Sreemathy	Conference on Advance in signal processing CASP-2016	Reviewer
	CCOEW	Membership
	MIETE, LNISTE, MIE, MBMES	Membership

Membership in Editorial Boards (As Reviewers) Session Chair, IEEE-WIECON, AISSMS, Pune, India, 2016 TPC , ICDECT -2016 , Lavasa City , Pune-India, 2016 Session chair, EEECoS- 2016 , AISSMS, Pune , India, 2016  Prof. Dr. M. V. Munot  Reviewer IEEE, System, Man and Cybernetics — Springer Medical and Biological Engineering Computing — Springer Journal of Medical Sciences — Canadian Journal of Electrical and Computer Engineering — IET —Image Processing	Name	Name of the committee	Nature/ work	Remark
Membership in Editorial Boards (As Reviewers) Session Chair, IEEE-WIECON, AISSMS, Pune, India, 2016 TPC , ICDECT -2016 , Lavasa City , Pune-India, 2016 Session chair, EEECoS- 2016 , AISSMS, Pune ,India, 2016  Reviewer IEEE, System, Man and Cybernetics – Springer Medical and Biological Engineering Computing – Springer Journal of Medical Sciences – Canadian Journal of Electrical and Computer Engineering –	of E		description	
Boards (As Reviewers) Session Chair, IEEE-WIECON, AISSMS, Pune, India, 2016 TPC, ICDECT -2016, Lavasa City, Pune-India, 2016 Session chair, EEECoS- 2016, AISSMS, Pune, India, 2016  Reviewer IEEE, System, Man and Cybernetics – Springer Medical and Biological Engineering Computing – Springer Journal of Medical Sciences – Canadian Journal of Electrical and Computer Engineering –	Faculty	-	Manahanahin in	
and Computer Engineering –	Prof. Dr. M. V.	Membership in Editorial Boards (As Reviewers) Session Chair, IEEE-WIECON, AISSMS, Pune, India, 2016 TPC, ICDECT -2016, Lavasa City, Pune-India, 2016 Session chair, EEECoS- 2016, AISSMS, Pune, India, 2016  Reviewer IEEE, System, Man and Cybernetics — Springer Medical and Biological Engineering Computing — Springer Journal of Medical Sciences —	Editorial Boards (As Reviewers)	
International Assignments: Invited and Sponsored by The- IET to attend the IET  International Assignments		and Computer Engineering – IET –Image Processing  International Assignments: Invited and Sponsored by The-		

Volunteer's conference at Savoy Place, London, UK October 2012 and May 2012 Invited and Sponsored by The- IET to attend the IET Volunteer's conference for strategy planning at Savoy Place, London, UK in 2010		
Invited Talk in last one year:  KLE Balegaon (Karnataka),  June 2016  AISSMS IoIT (Pune), Feb 2016  and May 2014  BVCoE( Pune ), Sept 2016	Invited Talk in last one year:	

Name of	Name of the committee	Nature/ work description	Remar
Faculty			k
	Member Board of studies, Electronics, SPPU.	NIL	NIL
	Faculty of Engineering member, SPPU	NIL	NIL
	TPC member-2017 ICEI Pune	NIL	NIL
	IET, IEEE member	NIL	NIL
Prof. Dr. R. C. Jaiswal	Coordinator	IUCEE Coordinator Various workshop (1)  Center of research for Wireless Networks Coordinator Various workshop(3)	2016- 2017 2017- 2018 2016- 2017 2017- 2018
	Principal Investigator	Funded Project(1)	2009- 2011
Prof. Dr. G.	IETE	Life member	
V. Bansod	Advisory Committee	Reviewer, keynote	
	ASECI 2016	Speaker,	

	International Conference	Chair Session
	IEEE WIECON-2016	Reviewer
	IEEE	Life member
Prof. Dr. S.K.Moon	Advisory Committee	IEEE Reviewer For Conferences IEEE/Springer/Inderscienc e Reviewer For Journal
	International Conference	Reviewer

### 22. Student projects:

- c) Percentage of students who have done in-house projects including inter departmental/programme
- d) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Programme	Academic	Percentage of	Percentage of
Trogramme	Year	<b>In-house projects</b>	sponsored projects
	2016-17	99.00	01.00
	2015-16	98.00	02.00
	2014-15	95.00	05.00
UG	2013-14	91.00	9.25
	2012-13	97.62	2.3
	2015-16	93.33	6.66
	2014-15	100	00
PG	2013-14	94.44	5.55
	2012-13	94.44	5.55
	2011-12	68.75	31.25

### 23. Awards / Recognitions received by faculty and students:

<b>Total Number of students awards</b>	<b>Total Number of Faculty awards</b>	
109	06	

Year	Sr. no.	Name of eminent academicians and scientists/ visitors	Association	Purpose of visit
	1	Mr. Krunnal Ghare,	Six steps training services	Soft skills
	2	Prof. P.V. Bhagwat	Freelancer	Soft skills
	3	Mr. Sumaer Bahl	NI, Bangalore	Introduction to LabVIEW and various Data Acquisition Technology used in the industry today
	4	Mr. Vinay sharma	Director, NI Logic Pvt.Ltd., Pune	Certificate course in CMOS VLSI Design
	5	Mr. Yogesh Raghuvanshi	PMP, Senior Manager, ITO Client Services-Voice Engineering, HSBC, Pune.	Principles and Practices for IT Management
	6	Mr. Umesh More	SCOE, Pune	Analog CMOS VLSI Design
	7	Prof. D. B. Gaikwad	Modern College of SCA, Pune.	Reconfigurable Digital Systems
2012	8	Prof. Umesh Kothavade	Modern College of SCA, Pune.	Reconfigurable Digital Systems
2012-	9	Mr. Amol Ranadive	Smart Logic Technologies, Pune.	Reconfigurable Digital Systems
	10	Mr. Nishant Nerpagar	Bit Advanced Processing Unit, Pune.	Reconfigurable Digital Systems
	11	Mr. Avadh Singh	Campus Component Private Limited, Pune	Real Time Operating System
	12	Prof. Dr. M.S.Baghini	Department of Electrical engineering, I.I.T.Bombay Bombay	Recent Trends in Multi Valued Logic Digital System
	13	Prof. Dr. A.D.Gawande	Department of Electrical engineering, II.T. Mumbai	Recent Trends in Multi Valued Logic Digital System
	14	Prof. Dr.A.D.Shaligram	Department of Electronics, Uop, Ganeshkhind, Pune	Recent Trends in Multi Valued Logic Digital System
	15	Prof. Dr.N.Sarvade	Department of Electrical engineering, V.J.T.I., Mumbai.	Recent Trends in Multi Valued Logic Digital System

	16	Dr. Rajashri D. Raut	Dean R&D, Associate Professor, RKNCOE, Nagpur.	Cognitive Radio and its application
	17	Vijay Ghatpande and Tajas Modi	Director of Hathway Communication, Mumbai	Fiber Optic Communication Measurement
	18	Prof. V M Pandharipande,	Vice Chancellor, Marathwada University	Microwave Circuits
	19	Mr Sanjay. M. Panchariya	CMD SD's Learn to Earn System's Pvt. Ltd, Nasik.	Presentation skill enhancement and Personality development program
	20	Prof. Kavita Sultanpure,	IT Dept., PICT, Pune	Tree: A non linear data structure
	21	Prof. Kirti Nandedkar,	IT Dept., PICT, Pune	Abstract Data type and functions
	1	Mr. Kaustubh Karwe	Senior Manager Operations, SA Technologies	What is HR Interview & what is expected from the Candidate in view of the Company
	2	VIKAS PATEL,	TECH LEAD AT SUNGARD TECHNOLOGY	INTERVIEW SKILLS
	3	Mr.Vinay Sharma,	Director, Ni Logic PVT. Limited, Pune.	Certificate course in CMOS VLSI design
	4	Prof.Ashutosh Marathe	Dean, Quality Assurance VIT, Pune	Image Processing
2013-	5	Prof. V M Pandharipande,	Vice Chancellor, Marathwada University	Microwave Circuit Analysis
14	6	Prof. Sandip Shinde	VIT College	Introduction to Latex
	7	Dr.Y.H.Dandawate	Dean, Academics VIT, Pune	Color Image Analysis &Image Compression Techniques
	8	Mr. S. V. Deshpande,	Ex-Engineer, Siemens Ltd.	Embedded System Design and RTOS
	9	Prof. U. R. More	Assistant Professor, SCOE, Pune	Analog CMOS VLSI Design
	10	Mr. Sumaer Beahl	National Instruments, Bengaluru	Practical aspect of Labview
	11	Padmashree Mrs. Rita Ganguly	Professor: National School of Drama	Oratory Acting

	1	Mr. Abhijit Malay	Dy. General Manager, Automotive Electronics ARAI, Pune	EMI / EMC testing
	2	Prof.Alwin Anuse,	MIT College,Pune	Image Transform
	3	Dr.Y.H.Dandawate,	Prof.VIIT College,Pune	Image Compression
	4	Mr. Bhooshan Iyer,	Vice-President, Embedded System Solutions, Banglore.	Embedded System Design using ARM Cores
	5	Dr. Abha Jain	Gynecologists, Practitioner	The Women's Health in all perspectives
	6	Mr. A. N. Sriniwasan,	Director, Tiny Chip Embedded System Solutions, Banglore.	Embedded System Design using ARM Cores
2014-	7	Mr. Mayur Deshmukh,	Field Application Engineer, Core-EL Technologies, Banglore.	Embedded System Design using ARM Cores
15	8	Mr. Bhushan Joshi,	Consultant, Smart Logic Technologies, Pune.	Embedded System Design using ARM Cores
	9	Mr. Nishant Nerpagar,	Design Engineer, Macart Designs, Pune.	Embedded System Design using ARM Cores
	10	Mr. Awadh Singh,	Technical Director, Campus Component Pvt. Ltd., Pune.	Embedded System Design using ARM Cores
	11	Mr. Vineet Shah,	Field Application Engineer, Alchor Infotech Pvt. Ltd., Pune.	Embedded System Design using ARM Cores
	12	Mr. Ranjit Joshi,	Director, MEIS India Pvt. Ltd., Pune.	Embedded System Design using ARM Cores
	13	Dr. R. B. Ghongade	Professor in department of E&TC, VIIT, Pune	Fuzzy Logic Controller
2015-	1	Mr Satyajit Pangu and Ms Madhura Pangu	Intel, Pune	Introduction to VLSI projects life cycle, Industrial aspects of Functional Verification & Behavioral
16	2	Mr. Rajendra Joshi	Industry	PLC & Automation
	3	Mr. Dhananjay Khare	Infosysy, Pune	Introduction to SAP- Enterprise Resource Planning
	4	Prof. Manoj Kakade	E&TC Department, SCoE, Pune	Linux Kernel

			Construction
5	Mr. Samudranil Chatterjee	Founder mentor, Educidate	An Empowering Mentoring Approach to Master's and Doctoral Programs in USA- Motivations, Road maps and Academic and Career fulfillment
6	Mr. Sushil Mundada	Co-Founder, Extra Edge Technology Solutions Pvt. Ltd.	Validating a business idea
7	Dr. Leena Bavadekar	Medical practitioner, Pune	Effect of lifestyle on woman's physical and psychological health and its role in her career
8	Mr. Udayan Phadke	Partner in Scan Electronic Systems	Start-up India A Big Opportunity
9	Prof. Pandharipande V M	Former Vice Chancellor, BAMU Aurangabad	Integrated Leaning Approach towards Antenna Theory
10	Mr. Utkarsh Jain	Fintree Solutions	Finance for Non- Finance
11	Mr. Sushant Kerimani	Director SK Education Foundation, Pune	PLC & AUTOMATIONS
12	Prof. Abhilash M.T	Assistant Professor, DIAT Pune	How FPGA are Helpful in Defence and Space Environment Applications
13	Mr. Amit Chitale	KPIT	IoT: Smart city
14	Samudranil Chatterjee	Professional Educator and Founder Mentor, Educidate	An Empowering Mentoring Approach to Master's and Doctoral Programs in USA- Motivations, Road maps and Academic and Career fulfillment
15	Mr. Sushil Mundada	Co-Founder ExtraaEdge Technology Solutions Pvt. Ltd.	Validating a business idea
16	Ms. Preeti	Application Engineer, Electrono Solution Banglore	NI USRP interfacing with LabVIEW
17	Ashish Joshi	Director of Skillsmart World	Career Planning and Counselling

	18	Rajendra Joshi		PLC & Automation
	19	Dhananjay Khare	Principal Consultant SAP Practice, Infosys India, Pune	Introduction to SAP Enterprise Resource Planning
	20	Mr. Udayan Phadke	Partner in scan electronics systems, pune	Start-up India A big opportunity
	21	Prof. V. M. Pandharipande	Former Vice Chancellor of BAMU	Integrated Learning Approach towards Antenna Theory
	22	Prof. D. R. Luhar Director at Sigma Trainers ar Kits, Ahmedabad		High-tech Technologies of Advanced Wireless Mobile Satellite and Internet Communication
2016- 17	1	Dr. Shekhar Mande	Director, NCCS, Pune	Swami Vivekanand & Science
	2	Mr. Tejas Modi	Director, own firm in Healthcare sector, Pune	Swami Vivekanand & Science
	3	Dr. Sesha Srinivasan	Assistant Professor, FPU Florida, USA	Nanoscience and Nanotechnology for Sustainable Infrastructure
	4	Dr. Vinayak Bairagi	Assoc. Prof., AISSMS Institute of Technology, Pune	Image Compression
	5	Mr. Kedar Dixit	R & D Engineer, Persistant, Pune	Introduction to LINUX
	6	Mr. Krushnan Kutti	TCS, Pune	ADAS- Advance Driver Assistance System
	7	Mr.Sanjay Sahu	Junior Executive at Airport Authority of India	Career Planning and Counselling
	8	Mr.Shipad V. Deshpande	CDAC consultant,Pune	Practical application of digital electronics with real time examples
	9	Anuj Deshpande	Director, Makerville Solutions, Pune	ARM microcontrollers and Wi-Fi for IoT
	10	Dr. G.R.Patil	A.I.T, Pune	Digital Communication
	11	Dr Shabbir Merchant	IIT Mumbai	Cognitive Radio
	12	Dr Sanjeev Gurugopinath	BMS College of Engineering, Bengalure	Cognitive Radio
	13	Mr Sumaer Bahl	National Instruments, Bengalure	Software Defined

				Radio
	14	Mr Panchaksharayya	Electrono Solutions, Bengalure	Labview with SDR
	15	Dr A V Kulkarni	DYPCOE, Pune	Software Defined Radio
	16	Dr R A Patil	COEP, Pune	Cognitive Radio

# 24. List of eminent academicians and scientists / visitors to the department:

		A:-4:	-
Sr.	Name of Eminent Scientists/Professionals	Association	Purpose of Visit
1	IVII.Sanjay Sana		Career Planning and Counselling
2		R & D Engineer, Persistant, Pune	
3	Dr. Vinayak Bairagi	Assoc. Prof., AISSMS Institute of Technology, Pune	
4	Dr. Sesha Srinivasan	-	Nanoscience and Nanotechnology for Sustainable Infrastructure
5	Mr. Tejas Modi	Director, own firm in Healthcare sector, Pune	Entrepreneurship Development
6	Dr. Shekhar Mande	Director, NCCS, Pune	Swami Viveanand & Science
7	r 101. D. R. Eunar	Director at Sigma Trainers and Kits, Ahmedabad	High-tech Technologies of Advanced Wireless Mobile Satellite and Internet
8	Prof. Abhilash M.T	i issistant Troressor, Dirit Tane	How FPGA are Helpful in Defence and Space Environment Applications
9	wii. Sushani Kerimani	Director SK Education Foundation, Pune	PLC & AUTOMATIONS
10	Mr. Utkarsh Jain	Fintree Solutions	Finance for Non-Finance
11	i for i andharipande v ivi		Integrated Leaning Approach towards Antenna Theory
12	ivii. Odayaii i iladke	Partner in Scan Electronic Systems	Start-up India A Big Opportunity
13	Dr. Leena Bavadekar	rize die di presentatione, redic	Effect of lifestyle on woman's physical and psychological health and its role in
14	Mr. Sushil Mundada	Co- Founder, ExtraaEdgeTechnolog	Validating a business idea
15	Mr. Samudranil Chatterjee	Founder mentor, Educidate	An Empowering Mentoring Approach to Master's and Doctoral Programs in
16	Prof. Manoj Kakade	E&TC Department, SCoE, Pune	Linux Kernel Construction
17	Mr. Dhananjay Khare	iniosysy, i unc	Introduction to SAP-Enterprise Resource Planning
18	Mr. Rajendra Joshi	Industry	PLC & Automation
19	Mr Satyajit Pangu and Ms Madhura Pangu	Intel, Pune	Introduction to VLSI projects life cycle, Industrial aspects of Functional

20	IDr. R. B. Gnongage	Professor in department of E&TC, VIIT, Pune	Fuzzy Logic Controller
21			Embedded System Design using ARM Cores
22	Mr. Vineet Shah,		Embedded System Design using ARM
23	Mr. Awadh Singh,	Technical Director, Campus Component Pvt. Ltd.,	Embedded System Design using ARM Cores
24	Mr. Nishant Nerpagar,	Design Engineer, Macart Designs,	Embedded System Design using ARM Cores
25	Mr. Bhushan Joshi,	Consultant, Smart Logic Technologies,	Embedded System Design using ARM Cores
26		Field Application Engineer, Core-EL Technologies,	Embedded System Design using ARM Cores
27		Director, Tiny Chip Embedded System	Embedded System Design using ARM Cores
28	Mr. Bhooshan Iyer,	Vice-President, Embedded System Solutions,	Embedded System Design using ARM Cores
29	Dr.Y.H.Dandawate,	Prof. VIIT College, Pune	Image Compression
30	Prof.Alwin Anuse,	MIT College, Pune	Image Transform
31		Dy. General Manager, Automotive Electronics ARAI,	EMI / EMC testing
32		Professor: National School of Drama	Oratory Acting
33		National Instruments, Bengaluru	Practical aspect of Labview
34	Prof. U. R. More	Assistant Professor, SCOE, Pune	Analog CMOS VLSI Design
35	Mr. S. V. Deshpande,	Ex-Engineer, Siemens Ltd.	Embedded System Design and RTOS
36	Dr.Y.H.Dandawate	Dean, Academics VIT, Pune	Color Image Analysis &Image Compression Techniques
37	Prof. Sandip Shinde	VIT College	Introduction to Latex
38	Prof. V M Pandharipande,	Vice Chancellor, Marathwada University	Microwave Circuit Analysis
39	Prof.Ashutosh Marathe	Dean, Quality Assurance VIT, Pune	Image Processing
40			Certificate course in CMOS VLSI design
41	VIKAS PATEL,	TECH LEAD AT SUNGARD TECHNOLOGY	
42	Mr. Kaustubh Karwe	Senior Manager Operations, SA	What is HR Interview & what is expected from the Candidate in view of
43	Prof. Kirti Nandedkar,		Abstract Data type ' and functions

44	Prof. Kavita Sultanpure,	•	Tree: A non linear data structure
	M.C. : M.D. 1 :	PICT, Pune	D
45	Mr Sanjay. M. Panchariya		Presentation skill enhancement and
		•	Personality development program
46	Prof. V M Pandharipande,	Vice Chancellor, Marathwada	Microwave Circuits
		University	
47	Vijay Ghatpande and	Director of Hathway	Fiber Optic Communication
	Tajas Modi	<u> </u>	Measurement
48	Dr. Rajashri D. Raut	Dean R&D, Associate	Cognitive Radio and its application
		Professor, RKNCOE, Nagpur.	
49	Prof. Dr.NSarvade	Department of Electrical	Recent Trends in Multi Valued Logic
		engineering,	Digital System
50	Prof. Dr.A.D.Shaligram	Department of Electronics,	Recent Trends in Multi Valued Logic
		Uop, Ganeshkhind,	Digital System
51	Prof. Dr. A.D.Gawande		Recent Trends in Multi Valued Logic
		•	Digital System
52	Prof. Dr. M.S.Baghini		Recent Trends in Multi Valued Logic
32		•	Digital System
53	Mr. Avadh Singh	<u> </u>	Real Time Operating System
33	Tradit Singi	Limited, Pune	real Time operating System
54	Mr. Nishant Nerpagar	Bit Advanced Processing Unit,	Reconfigurable Digital Systems
34	ivii. Tvishant Tverpagar	Pune.	Reconfigurable Digital Systems
	Mr. Amol Ranadive		Reconfigurable Digital Systems
55	ivii. Amoi Kanauive	Pune.	Reconfigurable Digital Systems
56	Prof. Umesh Kothavade	Modern College of SCA,	Reconfigurable Digital Systems
		Pune.	
57	Prof. D. B. Gaikwad	Modern College of SCA,	Reconfigurable Digital Systems
"		Pune.	
58	Mr. Umesh More	SCOE, Pune	Analog CMOS VLSI Design
		,	
59	Mr. Yogesh Raghuvanshi	PMP, Senior Manager,	Principles and Practices for IT
		ITO Client Services-Voice	_
60	Mr. Vinay sharma		Certificate course in CMOS VLSI
00	Timey Sharina		Design
61	Mr. Sumaer Bahl	NI, Bangalore	Introduction to LabVIEW and various
01	TVII. Sumaer Burn		Data Acquisition Technology used in
62	Prof. P.V. Bhagwat		Soft skills
62	i 101. I . v . Diiagwat		DOL SKIIIS
63	Mr. Krunnal Ghare,	Six steps training services	Soft skills
	<u> </u>		

# 25. Seminars/ Conferences/Workshops organized & the source of funding:

Year	Sr. No.	Name of seminar /Conference/ Workshop FDP/SDP/ STTP/FoW/Webinar	National/ International	Sponsoring/Funding agency if any
	1	Embedded System Design using PIC Microcontrollers	National	Microchip, Pune, e- Prayog, WEL Lab, IIT Bombay, IEEE Signal Processing Society, Pune Section
2012-13	2	Multi Valued Logic Digital Systems (MVLDS))	National	IEEE Computer Society, Pune Chapter
	3	Reconfigurable Digital System (RDS – 2012)		e-Prayog, IIT Bombay
	4	Training on Mentor Graphics VLSI Design Tools		
	1	National Workshop on "Microwave, Antenna and Propagation for Modern Wireless Communication"	National	SPPU and IET Pune Local Network
	2	A 2 Days Workshop on "Robotics and MATLAB Applications"	National	UV Soft Technologies Pvt.Ltd. in association with IISC Bangalore
	3	Training Programme on "LabVIEW"		Dept. of E&TC PICT
2013-14	4	Faculty Development Workshop on "LabVIEW 2012 Applications"	National	Dept. of E&TC PICT
	5	Faculty Development Workshop on "Personality Development"	National	Skill Smart World
	6	Certificate Course on "CMOS VLSI DESIGN"		ni logic Pvt. Ltd, Pune (ni2 designs)
	7	Faculty Orientation Workshop on Signal & Systems of S.E. E&TC Revised Syllabus (2012 course)	National	BoS Electronics, SPPU

2014-15	1	SPPU Approved State Level Workshop on "Embedded System Design using ARM Cores"	National	Savitribai Phule Pune University, Embedded System Solutions (Banglore), Tinychip Embedded Solutions (Banglore) Coreel Technologies (Banglore) Campus Component Pvt. Ltd.( Pune) Silicon Automation (Pune) MEIS India Pvt. Ltd. (Pune) Macart Designs (Pune)
	2	Certificate Course on "CMOS VLSI DESIGN"	National	ni2 logic Pvt. Ltd, Pune (ni2 designs)
	3	Training Programme on "Mission-10x UTLP Boards"	National	Wipro Technology
	4	Certificate Course on "LabVIEW Programming"	National	National Instruments
	5	A 5-days Workshop on "Introduction to Robotics"		e-yantra, IIT Mumbai
	6	"Mission -10X Engineering Faculty workshop"	National	Wipro Technology, Bengaluru
	1	Certificate Course on "PCB Design"		
	2	Short Term Training Programme on "Routing and Switching Essentials"		IET Pune Local Network
2015-16	3	A 6 - Day Workshop On "Certificate Course on LabVIEW Primer Training Program"		National Instruments
	4	EMPIRE XPU Software		Ambition Technologies
	5	STTP on "Routing and Switching Essentials		
	6	A lecture series on "Signal processing applications"		

	7	A 4- Day "Workshop on LabVIEW with Software Defined Radio Perspective"		National Instruments
	8	Mission 10X - Student Workshop		Wipro Technology, Bengaluru
	9	Workshop on Image Processing with case studies( including hands on sessions)		
	10	One day workshop on Transformative Teacher Training Programme		
	11	CLAD (Certified LabVIEW Associate Developer) Training Program-16		National Instruments
	1	Fundamentals of LabVIEW for Graphical Programming		National Instruments
	2	Certificate Course on Applied Wave Research (AWR) software		
	3	Entrepreneurship Development		The IET Pune Local Network
	4	Routing & Switching Essentials		
	5	Session on LaTeX		
2016-17	6	UTLP Practional training Program		MTLC
	7	A 3 day workshop on "" Finance for Non Finance		IET
	8	National Workshop on Software Defined Radio with Labview and USRP	National	S P Pune University, National Instruments, Institution of Engineering and Technology (IET)

# **26. Student profile programme/coursewise:**

Name o Cour Progra	se /		Applications Received	Selected	Enro	olled	Pass Percentage
Course	Year				*M	*F	
UG	2015-16	First Shift	180	188	133	57	63.73 %

		Second	60	60	42	18	65.51 %
		Shift					
	2014-15	First Shift	180	188	118	70	84.94 %
		Second Shift	60	58	38	20	71.92 %
	2013-14	First Shift	180	188	106	62	86.44 %
	2013-14	Second Shift	60	52	35	17	92.30 %
	2012-13	First Shift	180	191	113	78	85.56 %
	2015-16		18	15	06	09	100 %
PG	2014-15		18	15	08	07	94.44 %
	2013-14		18	18	10	08	66.66 %
	2012-13		18	18	07	11	72.22 %
Ph. D.	2016-17		-	-	-	-	-
111.2.	2015-16		2	2	-	_	-

<sup>\*</sup>M = Male \*F = Female

### 27. Diversity of Students:

Name of Course	Year	% of students from the same state	% of students from other States	% of students from abroad
	2015-16	65.0	35.0	NIL
UG	2014-15	66.34	33.66	NIL
	2013-14	70.45	29.55	NIL
	2012-13	68.0	32.00	3.70
	2015-16	83.33	16.66	NA
PG	2014-15	97.95	2.04	NA
	2013-14	94.44	5.55	NA
	2012-13	100	NIL	NA

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?:

# NET,SLET – Not Applicable to Engineering GATE, Civil services, Defence services – 2.6 %

# 29. Student progression:

Student Progression	Against % enrolled					
Student Progression	2011-12	2012-13	2013-14	2014-15	2015-16	
UG to PG	-	17.29 %	18.28 %	17.33 %	10.68 %	
PG to M.Phil.	NA	NA	NA	NA	NA	
PG to Ph.D.	NA	NA	NA	NA	NA	
Ph.D. to Post- Doctoral	NA	NA	NA	NA	NA	
Employed						
• Campus selection	-	71.71 %	70.72 %	71.67 %	78.32 %	
• Other than		10 %	8 %	9 %	8 %	
Entrepreneurship/ Self-employment	-	1 %	3 %	2 %	3 %	

#### 30. Details of Infrastructural facilities:

# a. Library:

	Exist	ing	Newly a	added	Tota	al
	Till 2014-15		2015-16			
	No.	Value	No.	Value	No.	Value
Text Books	19848	56,16,628	580	1,87,360	20428	58,03,988
Reference	13690	32,04,060	251	68,107	13941	32,72,167
Books						
e-Books	380	1,54,160	380	1,76,896	380	1,76,896
Journals &	76	1,17,651	60	95,435	60	95,435
Magazines	44		19	-	19	
Journals	32		41		41	
Magazines						
e-Journals	589+	13,39,665	7193+	16,19,603	7193+	16,19,603
	600000		600000		600000	
	IEEE		IEEE		IEEE	
	Conf.Paper		Conf.Paper		Conf.Paper	
	S		S		S	
Digital Database	6405		2272		8677	
<ul> <li>NPTEL</li> </ul>	4911		1700		6611	
<ul> <li>Project</li> </ul>	884		197		1081	
Reports	610		375		985	

• Questio n Papers						
CD & Video	3952	81574	99		4051	81574
Others (specify)	BCL	2200	BCL	999	BCL	999
	Membershi		Membershi		Membershi	
	p		p		p	

#### b. Internet facilities for Staff &Students:

- i. The complete department building is Wi-Fi enabled.
- ii. Each faculty has cabin equipped with internet connection, whiteboard, table, chairs, etc.
- iii. The over all ambiance is highly professional and computers / Laptops are provided to the senior faculty.

#### c. Class rooms with ICT facility:

i. All the classrooms are Wi-Fi enabled with enough light intensity, airy and have studious ambiance.

#### d. Laboratories:

Department has well equipped laboratories to conduct UG, PG and Ph.D. programmes. Actel Inc. USA, Texas Instruments, Intel-FICE, ARM-STMicroelectronics UK, have funded thrust domain laboratories. Similarly, laboratories are updated through removal of obsolescence under MODROB schemes of AICTE. Embedded Systems, Electronic Measurements and Communication laboratories are equipped by MODROBs.

R.NO	Name of the Lab	Major Equipments in Dept.
C-101	Electronics Lab	Mentor Graphics front end tools  MODELSIM Plus (VHDL, VERILOG) 5.4a
C-102	Electronics Circuit Lab	Tanner Tools Pro,T-spice pro,L-Edit pro,v/p Lib,CMOS Lib pro,Lset complete manuals/Training material
C-103	Electronics Design Lab	SPJ 8051 IDE Development Tool with Mini 51 –A

		Protel 2004 Academic Version
C-104	Project Lab	Multisim7 SP2 Education Version
		Multisim7 SP 1b Education Version
C-105	Digital Electronics Lab	
		Multisim8 Spice Simulation Software Education Version
C-201	Communication Engineering Lab	Allenbradely Make RS Logix 500 Starter (English) PLC Software
C-202	Audio Video Lab	Microwirnd Packages a)DSCH-3 b) Microwind 3
		Video Compression Software
C-203	VLSI Lab	MATLAB Software Release R2007B version7.4A Concurrent License with Toolboxes & Blocksets
		Network simulation software Netsim Version 2.1
C-204	DSP Lab	Mathwork Product [ Matlab D] 2010(a)
		Matlab Product 2010(b)
C-205	Control System Lab	HDTV CALIBUG USB Pattern Generator Software
		Simulator Precision RTL Synthesis Questa.
C-206	Embedded System Lab	Code Development Studio Software (5Cd's)
		A CAD Tool – CADFEKO 5.5
A-005	Electrical Circuit Machine Lab	Mathwork Product R-2010
A-008	Hardware E&TC Lab	MWO -449 - UV Microwave office university Inclusive of APLAC and AXIEM
		LABVIEW NI Version 2012
A-103	Software E&TC Lab	Xilinx ISE 14.2 System edition

		Xilinx Vivado Design Suite
B-203	PG(Microwave) Lab	Digital Storage Oscilloscopes (Tektronix)
		Vector Network Analyzer
B-204	Research Lab	Power Scopes (Tektronix)
		Arbitrary Waveform Generators (HP & Tektronix)

# 31. Number of students receiving financial assistance from college, university, Government or other agencies:

Sr. No.	Type of Scholarship	Academic Yea		Year		
511101	(E&TC)	2016	2015	2014	2013	2012
1	SDWO-Scholarship	96	111	73	67	51
2	SDWO-FreeShip	169	130	124	104	82
3	ITDPO-Scholarship	5	10	9	6	5
4	ITDPO-Freeship	9	12	15	8	9
5	EBC	93	65	60	47	47
6	Minority	5	5	5	3	5
7	Central Sector Scholarship	3	4	3	1	3
8	STC/PTC	3	3	2	1	2
9	J&K	0	1	1	1	0
10	Pvt. Scholarship	306	232	178	115	112

# 32. Details on student enrichment programmes (Special lectures / Workshops / Seminar) with external experts:

• Enrichment programmes organized with the external experts

		Name of	Name of External	Organization
Sr.No	Academi	enrichment	Expert	

•	c Year	programmes		
1	2016-17	Campus	Mr.Makarand	Winpoint Learning
		Recruitment	Parkhi	Centre Pune
		Preperation		
2	2016-17	Technical Paper	Dr.Vinayak bairagi	Industry Pune
		writing and		
		Introduction to		
		IPR		
3	2016-17	Satellite	Mr. B. D. Mane	Tata
		Communication (		Communications
		Basic concept and		Ltd. VSN
		Satellite link		
4	2016 17	design)	<b>M</b> G ' G 1	G . O.CC
4	2016-17	Career Planning	Mr.Sanjay Sahu	Govt. Officer
	2016 17	and Counselling	M. V. J. Dimit	D 0 D Engineer
5	2016-17	Introduction to	Mr. Kedar Dixit	R & D Engineer,
	2016-17	LINUX	Du Vinavaly	Persistant, Pune
6	2016-17	Image	Dr. Vinayak	Assoc. Prof., AISSMS Institute of
		Compression	Bairagi	
7	2016-17	Nanoscience and	Dr. Sesha	Technology, Pune Assistant Professor,
/	2010-17	Nanotechnology	Srinivasan	FPU Florida, USA
		for Sustainable	Simivasan	TTO Florida, OSA
		Infrastructure		
8	2016-17	Entrepreneurship	Mr. Tejas Modi	Director, own firm
	2010 17	Development	Wiff. Tegus Wiour	in Healthcare sector,
		20 (Clopinone		Pune
9	2016-17	Swami Viveanand	Dr. Shekhar	Director, NCCS,
	2010 17	& Science	Mande	Pune
10	2015-16	High-tech	Prof. D. R. Luhar	Director at Sigma
		Technologies of		Trainers and Kits,
		Advanced		Ahmedabad
		Wireless Mobile		
		Satellite and		
		Internet		
		Communication		
11	2015-16	How FPGA are	Prof. Abhilash	Assistant Professor,
		Helpful in	M.T	DIAT Pune
		Defense and		
		Space		
		Environment		
		Applications		

12	2015-16	PLC &	Mr. Sushant	Director SK
		AUTOMATIONS	Kerimani	Education
				Foundation, Pune
13	2015-16	Finance for Non-	Mr. Utkarsh Jain	Fintree Solutions
		Finance		
14	2015-16	Integrated	Prof.	Former Vice
		Leaning	Pandharipande V	Chancellor, BAMU
		Approach towards	M	Aurangabad
		Antenna Theory		
15	2015-16	Start-up India A	Mr. Udayan	Partner in Scan
		Big Opportunity	Phadke	Electronic Systems
16	2015-16	Effect of lifestyle	Dr. Leena	Medical practitioner,
		on woman's	Bavadekar	Pune
		physical and		
		psychological		
		health and its role		
1.5	2017.15	in her career	2.5	
17	2015-16	Validating a	Mr. Sushil	Co-
		business idea	Mundada	Founder, ExtraaEdge
				Technology
18	2015-16	An Emmarcaina	Mr. Samudranil	Solutions Pvt. Ltd. Founder mentor,
10	2013-10	An Empowering Mentoring	Chatterjee	Founder mentor, Educidate
		Approach to	Challerjee	Educidate
		Master's and		
		Doctoral		
		Programs in		
		USA-		
		Motivations,		
		Road maps and		
		Academic and		
		Career fulfillment		
19	2015-16	Linux Kernel	Prof. Manoj	E&TC Department,
		Construction	Kakade	SCoE, Pune
20	2015-16	Introduction to	Mr. Dhananjay	Infosysy, Pune
		SAP-Enterprise	Khare	
		Resource		
		Planning		
21	2015-16	PLC &	Mr. Rajendra Joshi	Industry
		Automation		
22	2015-16	Introduction to	Mr Satyajit Pangu	Intel, Pune
		VLSI projects life	and Ms Madhura	
		cycle, Industrial	Pangu	

		20000040 06	1	1
		aspects of		
		Functional		
		Verification &		
		Behavioral		
23	2014-15	Fuzzy Logic	Dr. R. B.	Professor in
		Controller	Ghongade	department of
				E&TC, VIIT, Pune
24	2014-15	Embedded	Mr. Ranjit Joshi	Director,
		System Design		MEIS India Pvt.
		using ARM Cores		Ltd.,
				Pune.
25	2014-15	Embedded	Mr. Vineet Shah	Field Application
		System Design		Engineer,
		using ARM Cores		Alchor Infotech Pvt.
		8		Ltd.,
				Pune.
26	2014-15	Embedded	Mr. Awadh Singh	Technical Director,
		System Design	Trick Tive work 2 mgm	Campus Component
		using ARM Cores		Pvt. Ltd.,Pune.
27	2014-15	Embedded	Mr. Nishant	Design Engineer,
27	2014 13	System Design	Nerpagar	Macart Designs,
		using ARM Cores	ricipagai	Pune.
28	2014-15	Embedded	Mr. Bhushan Joshi	Consultant,
20	2014-13	System Design	Wif. Diasilan Josin	Smart Logic
		using ARM Cores		Technologies, Pune.
29	2014-15	Embedded	Mr. Mayur	
29	2014-13		Deshmukh,	11
		System Design	Desimukii,	Engineer, Core-EL
		using ARM Cores		
				Technologies,
20	2014 17	F 1 11 1	3.6 A 3.7	Banglore.
30	2014-15	Embedded	Mr. A. N.	Director,
		System Design	Sriniwasan	Tiny Chip
		using ARM Cores		Embedded System
				Solutions,
				Banglore.
31	2014-15	Embedded	Mr. Bhooshan Iyer	Vice-President,
		System Design		Embedded System
		using ARM Cores		Solutions,
				Banglore.
32	2014-15	Image	Dr.Y.H.Dandawate	Prof.VIIT
		Compression		College,Pune
33	2014-15	Image Transform	Prof.Alwin Anuse	MIT College,Pune

34	2014-15	EMI / EMC	Mr. Abhijit Malay	Dy. General
		testing		Manager, Automotive
				Electronics ARAI,
				Pune
35	2013-14	Oratory Acting	Padmashree Mrs.	Professor: National
			Rita Ganguly	School of Drama
36	2013-14	Practical aspect of	Mr. Sumaer Beahl	National
		Labview		Instruments,
27	2012 14	A 1 CNOC	D CH D M	Bengaluru
37	2013-14	Analog CMOS	Prof. U. R. More	Assistant Professor,
38	2013-14	VLSI Design Embedded	Mr. S. V.	SCOE, Pune Ex-Engineer,
36	2013-14	System Design	Deshpande	Siemens Ltd.
		and RTOS	Besilpande	Stemens Ltd.
39	2013-14	Color Image	Dr.Y.H.Dandawate	Dean, Academics
		Analysis &Image		VIT, Pune
		Compression		
10	2012.11	Techniques	2 2 2	
40	2013-14	Introduction to	Prof. Sandip	VIT College
41	2013-14	Latex Microwave	Shinde Prof. V M	Vice Chancellor,
41	2013-14	Circuit Analysis	Pandharipande	Marathwada
		Chedit Tillarysis	T ununui ipunue	University
42	2013-14	Image Processing	Prof.Ashutosh	Dean, Quality
			Marathe	Assurance VIT,Pune
43	2013-14	Certificate course	Mr.Vinay Sharma	Director, Ni Logic
		in CMOS VLSI		PVT. Limited,
		design		Pune.
44	2013-14	Interview Skills	Vikas Patel	Tech Lead at
				SunGuard
45	2013-14	What is HR	Mr. Kaustubh	Technology Senior Manager
_ <del></del>	2013-17	Interview & what	Karwe	Operations, SA
		is expected from		Technologies
		the Candidate in		
		view of the		
		Company		
46	2012-13	Abstract Data	Prof. Kirti	IT Dept.,
	2012 13	type ' and	Nandedkar	PICT, Pune
		functions		- ,
47	2012-13	Tree: A non linear	Prof. Kavita	IT Dept.,

		data structure	Sultanpure	PICT, Pune
48	2012-13	Presentation skill enhancement and Personality development program	Mr Sanjay. M. Panchariya	CMD SD's Learn to Earn System's Pvt. Ltd, Nasik.
49	2012-13	Microwave Circuits	Prof. V M Pandharipande	Vice Chancellor, Marathwada University
50	2012-13	Fiber Optic Communication Measurement	Vijay Ghatpande and Tajas Modi	Director of Hathway Communication, Mumbai
51	2012-13	Cognitive Radio and its application	Dr. Rajashri D. Raut	Dean R&D, Associate Professor, RKNCOE, Nagpur.
52	2012-13	Recent Trends in Multi Valued Logic Digital System	Prof. Dr. N. Sarvade	Department of Electrical engineering, V.J.T.I.,Mumbai
53	2012-13	Recent Trends in Multi Valued Logic Digital System	Prof. Dr.A.D.Shaligram	Department of Electronics, Uop, Ganeshkhind, Pune
54	2012-13	Recent Trends in Multi Valued Logic Digital System	Prof. Dr. A.D.Gawande	Department of Electrical engineering, II.T.Mumbai
55	2012-13	Recent Trends in Multi Valued Logic Digital System	Prof. Dr. M.S.Baghini	Department of Electrical engineering, II.T.Bombay Bombay
56	2012-13	Real Time Operating System	Mr. Avadh Singh	Campus Component Private Limited, Pune
57	2012-13	Reconfigurable Digital Systems	Mr. Nishant Nerpagar	Bit Advanced Processing Unit, Pune.
58	2012-13	Reconfigurable Digital Systems	Mr. Amol Ranadive	Smart Logic Technologies,Pune.
59	2012-13	Reconfigurable	Prof. Umesh	Modern College of

		Digital Systems	Kothavade	SCA,Pune.
60	2012-13	Reconfigurable Digital Systems	Prof. D. B. Gaikwad	Modern College of SCA,Pune.
61	2012-13	Analog CMOS VLSI Design	Mr. Umesh More	SCOE, Pune
62	2012-13	Principles and Practices for IT Management	Mr. Yogesh Raghuvanshi	PMP, Senior Manager, ITO Client Services- Voice Engineering, HSBC, Pune.
63	2012-13	Certificate course in CMOS VLSI Design	Mr. Vinay sharma	Director, NI Logic Pvt.Ltd., Pune
64	2012-13	Introduction to LabVIEW and various Data Acquisition Technology used in the industry today	Mr. Sumaer Bahl	NI, Bangalore
65	2012-13	Soft skills	Prof. P.V. Bhagwat	Freelancer
66	2012-13	Soft skills	Mr. Krunnal Ghare	Six steps training ser

#### 33. Teaching methods adopted to improve student learning.

Following methods are adopted to improve and maintain learning environment amongst the students-

- Continuous evaluation methods:
  - o Tests, re-tests and Prelims examinations
  - o Continuous evaluation of practicals and mock practical examinations
  - Continuous Projects evaluations by expert committees and maintenance of project workbooks.
- Arranging Seminars, Workshop, Conferences, Students Training Programs (STP), activities and hands on session by eminent personalities from industry and reputed academic organizations
- Training to faculty through workshops, FDP, STP has enriched performance in teaching. This has strengthened the teaching-learning process.

- Facultyseminars/ workshopareorganizedtoensureeffective teaching skills.
- UsageofLCDprojector,PPT,Animations,Quiz,Video,Realapplicationcorelation,Case studies etc. has made the lectures more interesting, interactive, attentive and hence effective.
- Industrial visits to cater real-time applications.

# 34. Participation in Institutional Social Responsibility (ISR) and Extension activities-

Following measures/initiatives are taken to enhance social awareness -

- Students participate in various social activities such as 'PRAYAS', 'KSHITIJ', 'NSS', IEEE, etc.
- Students have inherent self-motivation and willingness to work for common people particularly in villages. Various camps, workshops on general reading- writing, technology awareness and computer literacy were organized for rural school-children.
- IEEE Student Awareness Contest (SAC) was held for social activity issues.
- Helping hand to traffic police in peak office-hours etc. is being given by the students in social context.

#### 35. SWOC analysis of the department and Future plans

#### **Strengths**

- 1. Good academic track record, strict adherence to academic schedule, excellent University results and ranks at University level every year.
- 2. Well equipped laboratories with the state of the art facilities, in addition to Industry supported laboratories.
- 3. MoUs with WIPRO, National Instruments, Texas Instruments, IIT Mumbai e-yantra
- 4. Good blend of senior experienced and young faculty with excellent retention
- 5. Good harmony among staff members
- 6. Well qualified supporting technical staff
- 7. Good quality of student intake
- 8. Training programs, certificate programs and co-curricular activities to bridge the curricular gaps.

#### Weaknesses

- 1. Faculty publications and consultancy
- 2. Student placement in core companies

#### **Opportunities**

- 1. Collaborations with industries for internships
- 2. Association with foreign Universities and other reputed institutes at national level for student exchange programs
- 3. Innovative teaching and learning practices
- 4. Sponsored projects from state and national level funding agencies
- 5. Enhancing the number of students opting for higher studies

#### **Challenges**

- 1. Dynamic academic, industrial environment globally
- 2. Variation in the quality of student intake in view of hike in intake
- 3. Adapting to fast and dynamic technological changes across the world
- 4. Meeting the stringent requirements of various accreditation bodies such as NBA, NAAC, ISO, ABET
- 5. Improvement of overall personality development of the students in addition to academic development.

#### **Future Plan**

- 1. Quality improvement program for the faculty
- 2. Increase number of PhD holders
- 3. Establishment of center of excellence

#### **INFORMATION TECHNOLOGY**

1. **Name of the department :** Information Technology.

2. **Year of Establishment**: 2001

3. Names of Programmes/Courses offered: UG and PG.

Sr. No	Name of the program	Year of Establishment
1	UG	2001
2	PG (Information Technology)	2011

#### 4. Names of Interdisciplinary courses and the departments/units involved:

S.No.	Interdisciplinary course	Departments involved
01	Fundamentals of Programming Languages-I	Applied Science
02	Fundamentals of Programming Languages-II	Applied Science

#### 5. Annual/ semester/choice based credit system (programme wise):

Sr. No	Name of the program	Pattern/System	
1	UG	Semester	
2	PG (Information Technology)	Semester	

We are following the syllabi of affiliated university (SPPU). SPPU has mixed system with Semester based Credit System for PG programmes and percentage based system for the UG programmes wherein the examination scheme includes Theory (paper), Theory (online), term-work, practical, and oral. It also accommodates grade based audit courses.

# 1. Participation of the department in the courses offered by other departments:

S.No.	Name of the	Class	Courses offered
	Deptartment		
01	Applied	FE	Fundamentals of Programming
	Science		Languages-I
02	Applied	FE	Fundamentals of Programming
	Science		Languages-II

# 2. Courses in collaboration with other universities, industries, foreign institutions, etc. :

- o 3DPLM Software Solution Limited,.
- o ATS Infotech Pvt. Ltd.,
- o Microsoft IT academy.
- o Brown Cover.
- o Internship by NTTDATA.

#### 8. Details of courses/programmes discontinued (if any) with reasons:

**NIL** 

#### 9. Number of teaching posts

Post	Sanctioned	Filled
Professors	3	1
AssociateProfessors	6	2
Asst.Professors	19	28

# 10. Faculty profile with name, qualification, designation, specialization, (D.Sc. / D.Litt. / Ph.D. / M.Phil. etc.,)

Name	Qualification	Designatio n	Specialization	No.ofYears of Experience	No.ofPh. D. Students guidedfor the last4ye ars
Dr.S.C.Dharmad hikari	PhD	Associate Professor	Machine Learning	15.6	Nil
Dr.Emmanuel M	PhD	Professor	IR	19.6	5
Dr.A.M.Bagade	PhD	Associate Professor	Data Security	17.6	Nil
Mr.S.S.Pande	ME(CSE)	Assistant Professor	Data Mining	15.6	NIL

Mr.	ME(CE)	Assistant	Distributed	16.6	NIL
S.B.Deshmukh		Professor	Systems		
Ms. D.D.Londhe	ME(CSE)	Assistant Professor	Data Mining	14.1	NIL
Mr.T.A.Rane	M.E. (IT)	Assistant Professor	Networking	15.6	NIL
Mr.M.R.Khodas kar	ME(CE)	Assistant Professor	Network Security	15.3	NIL
Ms.K Y Digholkar	ME(CSE)	Assistant Professor	Cloud Computing	13.11	NIL
Mr.V.R.Jaiswal	ME(CE)	Assistant Professor	Wireless Sensor	12.11	NIL
Ms.S.H.Chandak	ME(CE)	Assistant Professor	Data Mining	11.11	NIL
Ms.R.R.Chhajed	ME(CSEIT)	Assistant Professor	Data Mining, Cloud	11.3	NIL
Mr.R.B.Murumk ar	ME (CE)	Assistant Professor	IR	13.6	NIL
Mrs.P.V.Chavan	ME (CE)	Assistant Professor	Data Mining	10.6	NIL
Mr.N. V. Buradkar	ME(CE)	Assistant Professor	Security	14.2	NIL
Mr.S.D.Shelke	ME(IT)	Assistant Professor	Software Engineering	12.7	NIL
Mr.S. R. Warhade	ME(IT)	Assistant Professor	Embeded System	16.6	NIL
Mr. P.P.Jadhav	ME(CE)	Assistant Professor	Software Engineering	9.6	NIL
Mrs.J. B.Jagdale	ME(IT)	Assistant Professor	Data knowledge	15.11	NIL
Mr. S. S. Shevtekar	ME(CE)	Assistant Professor	Software Engineering	9.2	NIL
Ms.K.A.Sultanpu re	ME(CE)	Assistant Professor	High Performance	13.7	NIL
Ms.R V. Kulkarni	M.Tech(CST)	Assistant Professor	Data Mining	11.9	NIL
Mrs. S.A.Jakhete	ME(CE)	Assistant Professor	Web Mining	12.2	NIL
Mr. S. D. Pande	ME (CSE)	Assistant Professor	Image Processing	6	NIL

Mrs. N. R. Sodha	ME(CE)	Assistant	Data	9.9	NIL
		Professor	Structures		
Mr. A. G.	ME(CE)	Assistant	Cloud	6.3	NIL
Dhamankar	WIE(CE)	Professor	Computing	0.5	TVIL
		Assistant		4.0	
Mr. A. H. Bhaise	ME (IT)	Professor	Big Data	4.9	NIL
			Web		
Mr. V.B.	ME (CSE)	Assistant	Application	6.9	NIL
Bhosale	ME (CSE)	Professor	Developmen	0.9	NIL
			t and		
Ms. S. V.	ME(IT)	Assistant	Data	6	NIL
Deshmukh	MIL(II)	Professor	Mining	U	NIL
Ms. R.S. Rahate	ME (IT)	Assistant	Sentimental	2.10	NIL
Wis. K.S. Kanate	WILL (11)	Professor	Analysis	2.10	INIL
Mrs. S. R. More	ME(IT)	Assistant	Cloud	2.5	NIL
IVIIS. S. K. IVIOIE	ME(IT)	Professor	Computing	2.3	INIL

### 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):

	Faculty : Student ratio	Professor	Associate Professor	Assistant Professor	Total
		A	В	С	A+B+C
Requirement	1:15	S / (15xR <sup>#</sup> )	$\begin{array}{c} S /\\ (15xR^{\#}) *\\ 2 \end{array}$	$\frac{S/}{(15xR^{\#})*}$	S / 15
Sanctioned Intake S=360	1:15	2.66 ≈ <b>3</b>	5.33 ≈ 5	16	24
Actual Intake S=438	1:15	3.24 ≈ <b>3</b>	6.49 ≈ 6	19.47 ≈ 20	29

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Post	Sanctioned	Filled
Technical Assistant	*	1
Lab Assistant	*	12
Administrative Staff	*	NA

<sup>\*</sup> No such sanction post.

#### 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. :

Ph.D.	Ph.D. Pursuing	PG
03	14	14

# 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: 6.9 Lac

Sr. No.	Projects Funded by	Total Number	Total Grant Received Rs.
1.	Savitribai Phule Pune University	3	6.9L

18. Research Centre /facility recognized by the University: NIL

#### 19. Publications:

a) Publication per faculty: 1.26

#### **Publication Details**

#### Academic Year 2013-2014

Sr. No.	Publication	Total No.
1	Local— University/ College level	12
2	National/ International Conference	02
3	National/ International Journal	25

# Academic Year 2014-2015

Sr. No.	Publication	Total No.
1	Local– University/ College level	10
2	National/ International Conference	02
3	National/ International Journal	19

### Academic Year 2015-2016

Sr. No.	Publication	Total No.
1	Local– University/ College level	15
2	National/ International Conference	02
3	National/ International Journal	22

### **Details are listed below:**

### AY 2013-14

#### **National/International Conference**

Sr.	Author (s)	Title of the	Journal	Vol	ISSN/	Impac
N		papers	Name	Page	ISBN	t
0.				Year		Facto
						r
1	Ankit Bhakkad, Dr. S.C. Dharmadhikari, Dr. Parag Kulkarni Dr. Emmanuel M.	E-VSM: Novel Text Representatio n Model to Capture Context-based Closeness between two Text documents	Proceedings of IEEE sponsored 7th International Conference on Intelligent Systems and Control (ISCO 2013), Coimbatore,		345- 348	
2	Shyam Deshmukh , J. V. Aghav, Rohan Chakravarthy,	Job Classification for MapReduce Scheduler in Heterogeneou s Environment" , IEEE International Conference on Cloud & Ubiquitous Computing & Emerging Technologies	Cloud & Ubiquitous Computing & Emerging Technologie s (CUBE), 2013 International Conference (CUBE)	2013, pg. 26- 29,15- 11- 2013	978-1- 4799- 2234-5	

# **National /International Journal**

Sr. No.	Author (s)	Title of the papers	Journal Name	Vol Page Year	ISSN/ ISBN	Impact Factor
1	Shraddha K.Popat, Dr. Emmanuel M	Review and Comparative Study of Clustering Techniques.	Intl. J1 of Computer Science and Information Technologies.	Vol. 5(1), 805-812, 2014,	0975-9646	2.93
2	Deepa B. Mane, Dr. Emmanuel M	Review on Privacy and Utility in High Dimensional Data Publishing.	Intl. Jl of Emerging Trends & Technology in Computer Science.	Vol. 3, Issue 1, 186-191, 2014	2278-6856	3.258
3	Saurabh Khatri, Dr. Emmanuel M	Review on Classification Algorithms in Email Domain	Intl. Jl of Applied Research & studies.	Vol.2, Issue 2,1- 6,2013	2278-9480	1.86
4	Rohini S Rahate, Dr. Emmanuel M	Feature Selection for Sentiment Analysis by using SVM	Intl. Jl of of Computer Application	Vol. 84, No 5, 24- 32 ,2013	2250-1797	2.52
5	Supriya V. Deshmukh,  Dr. Emmanuel M	Survey on Aggregation Operators and Functions of RDMS.	Intl. Jl of Advanced and Innovative Research.	Vol 1, Issue 7, 292- 298,2012	2278-7844	0.349

6	Dr. Emmanuel M Sucheta Thakur	An Approach to Develop Invoice Validation Framework	Intl. Jl of & Engineering Research Technology.	Vol.1, Issue 9, 1- 5, 2012	2278- 0181	1.76
7	Pallavi D. Phalke, Dr. Emmanuel M	Emotion Recognition from Text-a Survey.	CiiT, Data Mining & Knowledge Engineering.	Vol 6, No 3, 2014	0974 – 9578	2.815
8	Rutuja S. Lachake  Dr. Girish  Potdar	A Survey on Personalized Search :An Web Information Retrieval System	In Cyber Times International Journal of Technology & Management	Vol.5,No.2 PP-1120- 1127	ISSN:0975- 9646	5.941
9	Trupti Bhushan Bhosale Dr. Girish Potdar	Enhancing Blowfish Cryptography Technique for Cassandra	In Cyber Times International Journal of Technology & Management	Vol.7,No.2 pp 541- 548	ISSN: 2278 7518	5.941
10	Dr. S. C. Dharmadhikari Maya Ingle Dr. Parag Kulkarni	Analysis of performance of classifier algorithms for different text representations	CiiT International Journal of Artificial Intelligent Systems and Machine Learning	5	25-29	

11	Ankit Bhakkad, Dr. S. C. Dharmadhikari Dr. Parag Kulkarni	Efficient Approach to find Bigram Frequency in Text Document using E-VSM	IJCA	68		2013
12	Pratik Kamble, Dr. S. C. Dharmadhikari	Conetxt based sentence extraction for document summarization,	In Cyber Times International Journal of Technology & Management	Vol.7, No.1 Pp157-162	ISSN: 2278 7518	5.941
13	Umakant Dakulge, Dr. S. C. Dharmadhikari	Automated Text Summarization : A Case Study For Marathi Language	In CiiT Int. J. Data Mining and Knowledge. Eng	Vol.7, No.1	ISSN: 2278 7518	0.620
14	Khuteja Farha Kazi, Dr. S. C. Dharmadhikari	Intelligent Sms Classification For Mobile Environment	In Cyber Times International Journal of Technology & Management	Vol.7,No.2	ISSN: 2278 7518	5.941
15	Nikhil S. Dhavase, Dr. Anant Bagade	Event Detection and Location Identification By Geoparsing Tweets	In Cyber Times International Journal of Technology & Management	Vol.7,No. 1 pp. 152- 156	ISSN: 2278 7518	5.941

16	Rushikesh B. Rampure, Dr. Anant Bagade	QR Authentication mechanism integrating with risk based approach	In Cyber Times International Journal of Technology & Management	Vol.7, No.1 Pp.141- 144	ISSN: 2278 7518	5.941
17	S.N.Talbar  Dr. Anant  Bagade	Secure transmission of morphed stego keys over Internet using IP steganography	International Journal of information and computer security	Vol.6, No. 2, p.p 133- 142		0.519
18	T.V. Deshmukh, Dr. Anant Bagade	A Survey On: Analysis of Pattern Mining and Behavior Prediction in M-Commerce	International Journal of Computer Applications	Vol.71, No. 23 p.p.19-23		3.12
19	Utsav Prajapati, Prof. Shyam Deshmukh	Locality Aware Scheduling Using Prefetching Technique in Hadoop, CiiT International Journal of Artificial Intelligent Systems and Machine Learning	CiiT International Journal of Artificial Intelligent Systems and Machine Learning	Vol 6, No 4 (2014)	0974 – 9667	0.763

20	Rushikesh Garadade, Prof. Shyam Deshmukh	Performance Improvement Issues and Approaches for Hadoop	CiiT International Journal of Data Mining and Knowledge Engineering	Vol 6, No 4 (2014)	0974 – 9683	0.621
21	Prof. Sachin Pande Spurti Shinde	A Survey on: Emotion Recognition with respect to Database and Various Recognition Techniques	International Journal of computer application	(Volume 58/Number 3	(ISBN: 973-93-80870-33-5))	3.1
22	Preshit Pandit Prof. Sachin Pande	Ear detection using Haar classifier and its application to augmented reality	Cyber Times International Journal of Technology and Management	Vol 7(1), 525-529 2013-2014	2278-7518	4.89
23	Parth Srivastava, Prof. Sachin Pande	Identity management system as a virtual appliance	In Cyber Times International Journal of Technology & Management	Vol.7, No.1 pp. 163- 168.	ISSN: 2278 7518	5.941
24	Vijay B. Raut Prof. Deepali Londhe	Survey on Opinion Mining and Summarization of User Reviews on Web	(IJCSIT) International Journal of Computer Science and Information Technologies	Vol. 5 (2), 1026- 1030, 2014,	ISSN: 0975-9646	3.32

	Rushi		Survey	Paper	In	Cyber	Vol	7,	ISSN	No.:	5.941
	Phutane,		On		Times		No.1		2278-	7518	
		Computa	ation	Internat	tional	page(s):					
25	Prof.	T.A.	Offloadi	ng In	Journal	of	696				
	Rane		Mobile	Cloud	Techno	logy					
			Computi	ing	&						
					Manage	ement					

# Local– University/ College level

Sr. No.	Author (s)	Title of the papers	Conference Name	Vol., Page Year	City
1	Dr. Emmanuel M	Survey on features selection Sentiment Analysis	iPGCON 2013	pp -355, 2013	Pune
2	Prof. Dharmadhikari	Application of E-VSM	iPGCON 2013	pp -104, 2013	Pune
3	Prof. A.M.Bagade	Secure data processing in Cloud computing	iPGCON 2013	pp -207, 2013	Pune
4	Prof. Sachin Pande	Meta Analysis of Emotion Recognition through Facial Expression using different recognition method and Database	iPGCON 2013	pp -38, 2013	Pune
5	Prof. S.S.Pande	Efficient Intelligent Silhouette Wave Steganography	iPGCON 2013	pp -197, 2013	Pune
6	Dr. Emmanuel M	An Approach to tabular Dataset Preparation by using Aggregations		pp -94, 2013	

7	Prof. Shyam Deshmukh	Job classification for Task Assignment in Hadoop MapReduce	iPGCON 2013	pp -202, 2013	Pune
8	Prof. Tushar Rane	Secure Data Transfer using Conditional Re- encryption in cloud	iPGCON 2013	pp -191, 2013	Pune
9	Prof. S.S.Pande	Business rule engine for Product Lifecycle Management	iPGCON 2013	pp -300, 2013	Pune
10	Prof. A.M.Bagade	Online review spam detection using n-gram language model and feature selection	iPGCON 2013	pp -334, 2013	Pune
11	Dr. Emmanuel M	Survey on classification Algorithm in the Email Domain	iPGCON 2013	pp -341, 2013	Pune
12	Dr. Emmanuel M	Survey on features selection Sentiment Analysis	iPGCON 2013	pp -355, 2013	Pune

AY 2014-15 National /International Conference

Sr. No.	Author (s)	Title of the papers	Journal Name	Vol Page Year	ISSN/ ISBN	Impact Factor
1	Parth Shrivastav, Prof. Sachin pande	A novel architecture for Ientity Management  System using Virtual  Appliance Technology	Contemporary Computing (IC3), 2014 Seventh International Conference on	15 <sup>th</sup> September 2014	DOI: 10.110 9/IC3.2 014.68 97168	

		Opinion	2014 Sixth			
	Vijay B	Mining and	International			
	Vijay B Raut	Summarization	Conference on			
	Kaut	of Hotel	Computational	556-559,	978-1-	
2	Prof.		Intelligence and	14-16 Nov.	4799-	-
	Deepali	Reviews	Communication	2014	6928-9	
	Londhe		Networks			
			IEEE Explore			

## **National /International Journal**

Sr	Author (s)	Title of the papers	Journal Name	Vol Page Year	ISSN/ ISBN	Impact Factor
1	Tati Pati Sai Krishna, Dr. Emmanuel M,	Optimizing business processes using process mining techinques	CiiT International Journal of Data Mining and Knowledge Engineering,	Vol 7, No 1, Page 39-41, 2015	ISSN 0974 – 9578	0.621
2	Sagar Mane, Dr. Emmanuel M,	Review and Comparative Study of Bitmap Indexing Techniques	CiiT International Journal of Data Mining and Knowledge Engineering,	Volume 7, Issue 1, February , Page 30- 34 2016	ISSN 0974 – 9578	0.621
3	Yogesh V. Jilhawar, Dr. Emmanuel M,	Literature Survey on Different Cloud Computing Infrastructure- as-a-Service Framework	CiiT International Journal of Networking and Communicatio n Engineering	Volume 7, Issue 1, Page 26- 29, 2016	0974 – 9713	0.569

4	Honey s Goyal, Dr. Emmanuel M,	A Survey on Asset Planning and Work Allocation for Team-In-Loop in Optimized Way	CiiT International Journal of Networking and Communicatio n Engineering	Volume 7, Issue12, April, 2016	0974 – 9713	0.569
5	Amar U. Khopade, Dr. Emmanuel M,	A Comparative Study of Techniques used in Breaking CAPTCHA	CiiT International Journal of Artificial Intelligent Systems and Machine Learning	Volume 7, Issue 1, Page. 12-15 February	0974 – 9543	0.763
6	Nilesh k Dengle, Dr. S. C. Dharmadhi kari	A Comparative Study of Malware Detection System from Hadoop Perspective	CiiT of Data Security,	Vol. 7, No .1 Page. 1- 3,	ISSN 0974- 9632	0.620
7	Minal P. Bharambe, Dr. S.C. Dharmadhi kari	Stock Market Analysis Neural Network on Big Data	CiiT International Journal of Artificial Intelligent Systems and Machine Learning	Vol.7, No.1 Page. 16- 19	ISSN 0974 – 9543	0.620
8	Sujata S. More, Dr. S. C. Dharmadhi kari	A Review on Web-based Image Re- Ranking Techniques	CiiT International Journal of Digital Image Processing	pp. 1-4, Vol 7, No 1	ISSN: 2394 - 658X	0.620

9	Harshpal R Gosavi, Dr. Anant Bagade	A Review on Zero Day Attack Safety Using Different Scenarios	European Journal of Advances in Engineering and Technology,	Vol.2(1), pp. 30- 34	ISSN: 2394 - 658X	3.569
10	Amit A Kadam, Dr. Anant Bagade	A Survey on Generation of Automated Test Data for Coupling Based Integration Testing	European Journal of Advances in Engineering and Technology	pp. 69- 74, Vol.1	ISSN: 2394 - 658X	3.569
11	Nirali Rana, Prof. Shyam Deshmukh	Shuffle performance in Apache Spark	International Journal of Engineering Research and Technology	Vol. 4 - Issue 02 (Februar y - 2015),Pa ge-177- 180	2278- 0181	2.07
12	Nirali Rana, Prof. Shyam Deshmukh	Performance Improvement in Apache Spark through Shuffling	International Journal of Science, Engineering and Technology Research (IJSETR)	Volume - 4, Issue 5, May 2015, Page- 1636- 1638	2278– 7798	3.59
13	Shrihari A. Rathod Prof. Shyam Deshmukh	A Survey on Replica Placement Mechanisms with Awareness in Distributed Computing Networks	CiiT International Journal of Software Engineering and Technology	Volume- 7, Issue- 1, Page - 4-7; 2015	0974 – 9632	0.261

14	Nachiket Sadashiv Bhosale, Prof. Sachin S. Pande	A Survey on Recommendat ion System for Big Data Applications	CiiT International Journal of Data Mining and Knowledge Engineering	Vol 7, No 1 (2015) Page 42- 44	ISSN 0974 – 9578	0.620
15	Nachiket Sadashiv Bhosale, Prof. Sachin S. Pande	A Service Recommendat ion Method based on User Preferences for Big Data Applications	Spvryan's International Journal of Engineering Sciences & Technology (SEST)	(2015)	2394- 0905	
16	Pradeep Mhaske, Prof. Deepali Londhe	A Survey on Optimal Opportunistic Routing in Mobile Social Network	CiiT International Journal of Networking and Communicatio n Engineering	Vol 7, 51-54, FEB 2015	ISSN 0974 – 9616	0.569
17	Pradeep Mhaske, Prof. Deepali Londhe	Optimal Opportunistic Routing in Mobile Social Network	Spvryan's International Journal Of Engineering Sciences &Technology( SEST)	Forth Post Graduate Conferen ce of Pune Universit y iPGCON March 2015	ISSN 2394- 0905	1.15
18	Prof.Pramo d Jadhav Dr. Shashank Joshi	Analysis of Test Driven Development For Software Design	international journal of computing and technology (IJCAT)	volume 1, Issue 6, , page no. :149- 152 July 2014	ISSN: 2348-6090	

	Prof.Pramo	Survey on	International	Volume:	E-	
	d Jadhav,	Test Driven	Research	02 Issue:	ISSN:	
		Development	Journal of	07   Oct-	2395 -	
	Dr.	for feasibility:	Engineering	2015	0056	
19	Shashank	An Industrial	and	page no.		
	Joshi	Approach	Technology	931 –	p-	
			(IRJET)	938	ISSN:	
					2395-	
					0072,	

# Local- University/ College level

Sr.	Author (s)	Title of the	Conference	Vol Page	City
No.		papers	Name	Year	
1	Dr. Emmanuel M	Study of Gender Driven Approach for Speech Emotion Recognition	iPGCON 2014	pp -554, 2014	Pune
2	Dr. Potdar G.P.	Personalized Search :An Web Information Retrieval System	iPGCON 2014	pp -409, 2014	Pune
3	Prof. Dharmadhikari S.C.	Intelligent SMS classification for Mobile Environment	iPGCON 2014	pp -416, 2014	Pune
4	Prof. S.B.Deshmukh	Performance Improvement Approaches for Hadoop	iPGCON 2014	pp -404, 2014	Pune
5	Dr. Emmanuel M	Study of Algorithm and features set used in Emotion Recognation	iPGCON 2014	pp -421, 2014	Pune

6	Prof. Tushar Rane	Instrusion Tolerant ARP spoofing Detection and Prevention System	iPGCON 2014	pp 2014	-434,	Pune
7	Prof. S.S.Pande	Ear Detection using HAAR Classifier And its Application to Augmented Reality	iPGCON 2014	pp 2014	-525,	Pune
8	Dr. Emmanuel M	Hierarchical Clustering with Multi-viewpoint based Similarity measures	iPGCON 2014	pp 2014	-429,	Pune
9	Prof. Dharmadhikari S.C.	Automated Text Summarization for Marathi language	iPGCON 2014	pp 2014	-535,	Pune
10	Prof. D.D.Londhe	Opinion Mining and Summarization of User Reviews	iPGCON 2014	pp 2014	-530,	Pune

AY 2015-16

# **National/International Conference**

S	Author (s)	Title of	Journal	Vol Page	ISSN/	Impact
r.		the	Name	Year	ISBN	Factor
N		papers				
0.						
1	Yuvrajsing Chi lhare, Prof. D.D.Lon dhe	Compet ative Analytic s Framew ork Using Social Media	7th Post Graduate and Doctoral Conferenc e for Informati on Technolo gy IPGDCO N-2016	pp.78-82, March 2016	ISBN(13): 978-93- 5260-179- 0	
2	Prof. Radhika V. Kulkarni, Suhas H. Patil, R. Subhashini	An overvie w of learning in data streams with label scarcity	IEEE Internatio nal Conferenc e on Inventive Computat ional Technolo gies (ICICT20 16)	ICICT 2016, Vol.2, pg 334- 339	978-1- 5090- 1284-8	26-27 Aug 2016, Coimba tore

## **National /International Journal**

Sr. No	Author (s)	Title of the papers	Journal Name	Vol Page Year	ISSN/ ISBN	Impac t Factor
1	Gaurav Dalvi, Dr.Emmanu el M.	Survey Paper on Different Emotion Recognition Techniques on Text	IJMCS,	Vol. 4, issue 1, pp.49- 54	ISSN: 2320- 7868	4.55
2	Monica Ingle, Dr.Emmanu el M.	A Review on Social Sentiment Analytics for Public Opinions on Twitte	IJMCS	Vol. 4, issue 2, pp.10- 15	ISSN: 2320- 7868	4.55
3	Rani Kubetkar, Dr. Emmanuel M.	Semantic Based Friend Recommendation System: Review	EJAET	Vol.3 (2) pp.31-38	ISSN: 2394 - 658X	3.569
4	Sushmita Jain, Dr.Emmanu el M.	Survey on Different Techniques for Secure Data Sharing in Public Clouds	IJMCS	Vol.4, issue 1, pp.63-68	ISSN: 2320- 7868	4.55
5	Tushar Tekade, Dr.Emmanu el M.	Review Paper on Various Aspect Level Opinion Mining Probabilistic Approaches for Drug Reviews	IJMCS	Vol.4, issue 1, pp.33-38	ISSN: 2320- 7868	4.55
6	Supriya Deshpande, Dr. S.C.Dharm adhikari	Analysis on Camera Attacks and their Defenses on Android Smartphones	EJAET	v.3, issue 3, pp.26-29	ISSN: 2394 - 658X	3.569
7	Supriya Deshpande, Dr. S. C. Dharmadhi kari	Analysis of Camera based Attacks and their defenses on Android Smart phones,	RACE	pp.57-61		

8	Supriya Deshpande, Dr. S. C. Dharmadhi kari Shreya S. S	Video Based Spyware for 3G Smartphones  Keyword Extraction	ICSTSD Kuala Lumpur, Malaysia	Vol.3(4)	ISSN: 2394 -	3.569
9	urjuse, Dr. S. C. Dharmadhi kari	Mechanism for Efficient  Document Recommendation:  A Review		Page.12-17	658X	
10	Supriya Deshpande, Dr. S. C. Dharmadhi kari,	Video Based Spyware for 3G Smartphones	IJCSE,	pp.58-63	ISSN: 2348 – 8387	2.162
11	Rashid Sal man, Dr. S. C. Dharmadhi kari	Aspect Ranking Mechanism for Mining Consumer Opinions : A Survey	EJAET	Vol.3 (2) Page .48-51	ISSN: 2394 - 658X	3.569
12	Himanshu Joshi, Dr.A.M.Ba gade	Comparative Analysis of Face Recognition Technology	IIRSET	Vol.2, issue 3 pp.64-71	ISSN: 2319- 8753	6.209
13	Suvarna Jadhav, Dr.A.M.Ba gade	Comparative Analysis of Reranking Techniques for Web Image Search	IJATES	Vol.4,Issue no. 1, pp.16-22	ISSN -2348- 7550	2.870
14	Palash Karmore, Dr.A.M.Ba gade	Multi-label incremental learning from data streams and its application to web pages classification	IConSIP			

15	Shubham Krishna Aggarwal, Prof. S. S Pande	A Review Paper on Automatic Bug Triage Systems	Ciit Internati onal Journal of Network ing and Engineer ing	Vol.8, Issue 1, pp.07-10, Jan 2016	Print:ISSN  0974 –9713  &  Online: ISSN  0974 –9616	
16	S hubham Krishna Aggarwal, S.S Prof. S. S Pande Dr. Emmanuel	EFFICIENT BUG TRIAGE USING SOFTWARE REDUCTION TECHNIQUES	SCESM	2016 (9- 10 sept)		
17	Shubham Krishna Aggarwal, Prof. S. S Pande	Efficient Bug Triage Using Software Reduction Techniques	IP GDCO N '16	April 2016		
18	Anuj Sachan, Prof. S. B. Deshmukh	Resource-Aware Scheduling through Improved Speculative Task Execution	Internati onal Journal Of Modern Compute r and Science	Volume-4 Issue-3(June 2016)	2320-7868	4.55

19	Yuvraj sing Chilhar e, Prof. D.D.L ondhe	A Survey Paper on Sentiment Analysis of Social Media & Application	Internati onal Journal of modern Compute r Science( IJMCS)	Vol.4(3), pp 69-72, 2016	ISSN: 23 7868	320-	4.556
20	Indrajeet Zade, Prof. T .A. Rane	A Review on Denial of Service Attacks and their Countermeasures	IJIRSET	Vol. 5, issue 6, pp. 10913 – 10920	ISSN: 23 8753	319-	6.209
21	Pramila Kupkar, Prof. Pramod Jadhav	Android Controlled Wheel Chair	Imperial Journal of Interdisc iplinary Research (IJIR)	Vol-2,Isse 6,2016 page no. 1219 to 1222 2016	ISSN: 24 1362,	454-	3.16.
22	Kavita Sultanpure	Enhancing cloud computing server to use cloud safely and to produce infrastructure of high performance computing	Advance s in Intellige nt Systems and computi ng springer	PP 57-62. http://link.springer.com/chapter/10.1007%2F978-981-10-0419-3_7	ISBN 978-9 10-0417-9,		

# Local—University/ College level

Sr.	Author (s)	Title of the	Conference	Vol Page	City
No.		papers	Name	Year	
1	Dr. Emmanuel M	Social Sentiment Analytics for Public Opinion on Twitter	iPGCON 2015	pp -24, 2015	Pune

2	Dr. A.M. Bagade	Face Recognition Using Facial Color Reflection And Support Vector Machine Classification	iPGCON 2015	pp -12, 2015	Pune
3	Prof. S.B. Deshmukh	Resource-aware Scheduling Through Improved Speculative Execution	iPGCON 2015	pp -01, 2015	Pune
4	Prof. Tushar Rane	Anti-Denial of Service System: A Detection and Mitigation	iPGCON 2015	pp -18, 2015	Pune
5	Dr. A.M.Bagade	Improving web filtering mechanism of firewall by using multi-lable incremental learning	iPGCON 2015	pp -29, 2015	Pune
6	Dr. Emmanuel M	Semantic Based Friend Recommendation System	iPGCON 2015	pp -35, 2015	Pune
7	Dr. Dharmadhikari S.C.	Identification and Ranking mechansim for product aspects	iPGCON 2015	pp -42, 2015	Pune
8	Prof. S.S.Pande	Efficient Bug Triage Using Software Reduction Techniques	iPGCON 2015	pp -46, 2015	Pune

9 Dr. Topic Diversity iPGCON pp - Dharmadhikari S.C. Document Recommendation  10 Dr. Light weight iPGCON pp - Dharmadhikari Defense 2015 S.C. Mechanism against Camera	57, Pune
Recommendation  10 Dr. Light weight iPGCON pp - Dharmadhikari Defense 2015 2015 S.C. Mechanism	57, Pune
10 Dr. Light weight iPGCON pp - Dharmadhikari Defense 2015 S.C. Mechanism	57, Pune
Dharmadhikari Defense 2015 2015 S.C. Mechanism	57, Pune
S.C. Mechanism	
against Camera	
agamst Camera	
Based Attacks on	
Android	
Smartphones	
	62, Pune
Security and 2015 2015	
Confidentiality in	
Public Clouds	
Using	
Certificateless	
Encryption	
	67, Pune
Search Using   2015   2015	
Semantic	
Attributes	
	72, Pune
Evaluation and 2015 2015	72, 1 4110
Interpretation for	
Drug Reviews	
14 Prof. D.D.Londhe Competative iPGCON pp -	78, Pune
Analytics 2015 2015	
Framework Using	
Social Media	
15 Dr. AM.Bagade Survey on iPGCON pp -	83, Pune
Medical Image 2015 2015	
Watermarking	

## **Book Publication**

Sr. No.	Auther	Title of book	University	Publication	ISBN
1	K. A. Sultanpure and P. S. Vidap	Principles of modern compiler design	Pune	Tech-Max Publication, July 2015	ISBN- 978-93- 5224- 096-8
2	K. A. Sultanpure and P. S. Vidap	Principles of compiler design	Pune	Tech-Max Publication, August 2012	ISBN- 978-93- 5077- 077-1
3	K. A. Sultanpure	Compiler design	Rohtak	Tech-Max Publication, August 2013	ISBN- 978-93- 5077- 317-8
4	K. A. Sultanpure and P. S. Vodap	Compiler design	Gujarat	Tech-Max Publication,  1 <sup>st</sup> edition September 2012,  2 <sup>nd</sup> edition June 2013	ISBN- 978-93- 5077- 117-4
5	K. A. Sultanpure and Pratibha Karmarkar	Information Retrieval	Pune	Tech-Max Publication,  1st edition February 2012,  2nd edition January 2013,  3rd edition January 2014	ISBN- 978-81- 8492- 053-6

6	K. A. Sultanpure, S. C. Dharmadhikari and S. S. Pathak	Fundamental of Programming Languages-I	Pune	Tech-Max Publication,  1st edition August 2012,  2nd edition July 2013,  3rd edition August 2014,  4th edition July 2015	ISBN- 978-93- 5077- 072-6
7	K. A. Sultanpure, S. C. Dharmadhikari and S. S. Pathak	Fundamental of Programming Languages-I	Pune	Tech-Max Publication,  1st edition January 2013,  2nd edition January 2014,  3rd edition January 2015	ISBN- 978-93- 5077- 161-7
8	K. A. Sultanpure	Theoretical Computer Science & Compiler Construction- II	Pune	Tech-Max Publication, January 2015	ISBN- 978-93- 5077- 771-8

## 20. Areas of consultancy and income generated:

NIL

# 21. Faculty as members in a)National committees b) International Committees c) Editorial Boards...

Name of the faculty	Name of the committee	Nature of work/description
Dr. A. M. Bagade	Reviewer of International Journal and Conference	IEEE International conference on Advances in Electronics, Communication and Computer Technology on December 2016 at RSCOE Pune.
Dr. A. M. Bagade	Technical program committee member	International conference on Computing.
Dr. M.R. Khodaskar	Reviewer of International Journal and Conference	IEEE International conference on Advances in Electronics, Communication and Computer
Dr. S.C.Dharmadhikari	Technical program committee member	International conference on Computing at PCCOE, Pune
Dr. S.C.Dharmadhikari	Technical program committee member	International conference on Computing at PICT, Pune
	Network Analysis and Mining	Reviewer
	Journal of information processing system, Korea 2014-15, 15-1616	Reviewer
	Departmental News Letter 2013-14	Editor
	Departmental News Letter 2014-15	Editor
Dr EmmanualM	Departmental News Letter 2015-16	Editor
	ICCUBEA 2015 International Conference 2015	Reviewer
	ICCUBEA 2017International Conference 2013-16	Reviewer
	ICICC-2017 International Conference 2017	Reviewer
	CAST-2016 International Conference 2016	Reviewer

	CUBE 2012 International Conference	PC Member
	CUBE 2013 International	PC member(Student Track)
	Conference	PC Member(Emerging
		Technologies)
	INDICON 2014 International	
	Conference	sub reviewer
Dr. Emmanual M,	Technical program committee	iPGCON 12-13,13-14,14-15,15-16
Dr.	member and reviewer	
S.C.Dharmadhikari		
Dr. A. M .Bagade,		
		IDGGGGY 12 12 14 15 15 15
Mr.M.R.Khodaskar	Technical program committee member and reviewer	iPGCON 12-13, 14-15,15-16
S.S. Pande,	member and reviewer	
Mrs. D.D.Londhe		
S.B.Deshmukh, Mr T. A. Rane		
IVII 1. A. Kalle		
M.R. Khodaskar	Reviewer of International	IEEE International conference on
	Journal and Conference	Advances in Electronics,
		Communication and Computer
		Technology on December 2016 at RSCOE Pune.

Sr. No	Name of the faculty	Name of the committee/ Role	Nature of work/description
1	Dr. Emmanual M	Local Inquiry Committee, SPPU Member of Interview Panel, UGC	Visit to various colleges and submit report to University
2	Dr. Emmanual M, Dr. A.M.Bagade, Mrs. D.D.Londhe	Squad for SPPU Examination	Vigilance of University Exams
3	Mr. M.R. Khodaskar , S.S. Pande, V.R.jaiswal, N.V,.BuradkarS.B.De shmukh, R.R.Chhajed, S.H.Chandak	Senior Supervisor for SPPU Examination	Vigilance of University Exams

Mr. M.	R. Khodaskar,	Sullaybes Setting	University
S.S. Pa	nde,		
V.R.jai	swal,		
S.B.De	shmukh,		
K.K.N	andedkar,		
T.A.Ra	ine,		
K.A.Sı	ıltanpure,		
R.V.Kı	ılkrani.		

### 22. Student projects

# a) Percentage of students who have done in-house projects including inter departmental/programmer

Program	Academic Year	Percentage of in- house	Percentage of sponsored projects
		projects	
	2016-17	56%	44%%
UG	2015-16	57%	43%
	2014-15	37%	63%
	2013-14	38%	62%
	2012-13	51%	49%
	2016-17	90%	10%
PG	2015-16	90%	10%
	2014-15	84%	16%
	2013-14	84%	16%
	2012-13	91%	11%

## b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Item	2016-17	2015-16	2014-15	2013-14
Total No. of final year Students	148	159	148	132
No. of students placed in companies or Government sector	94 Till Date	89	124	79
% Placements		58%	87%	67%

## **Details of campus placement**

On campus	Off Campus			
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed	
50	122	98	NA	

### 23. Awards / Recognitions received by faculty and students

Total Number of students awards	Total Number of Faculty awards
74	2

### By Faculty

- 1. Dr. A.M.Bagade was awarded with **Dr. A.P.J Abdul Kalam Best Teacher Award** by Iitech 2016.
- 2. Prof. K A Sultanpure was awarded "Distinguished Assistant Professor" at the CSI TechNext India 2017 Awards to Academia.

#### By students

	Section	Particulars	No. Of St	tudents	
Academic Year			Winners	Participation (Excluding winners)	
2015-16	A	Inter Institute events outside state	4	10	
	В	Inter Institute events within state	70	147	
	С	Intra Institute Events			

Academi c Year	Section	Particulars	No. of Students	
			Winne rs	Participation (Excluding winners)
2014-15	A	Inter Institute events outside state	1	5

В	Inter Institute events within state	22	35
С	Intra Institute Events	2	1

Academic Year	Section	Particulars	No. of	Students
Tear			Winners	Participation (Excluding winners)
2013-14	A	Inter Institute events outside state	-	-
	В	Inter Institute events within state	28	42
	С	Intra Institute Events	1	3

Academic Year	Section	Particulars	No. of Stu	dents
			Winners	Participation (Excluding winners)
2012-13	A	Inter Institute events outside state	3	Nil
	В	Inter Institute events within state	21	31
	С	Intra Institute Events	3	12

## 24. List of eminent academicians and scientists / visitors to the department

Name of eminent academicians, scientists, visitors	Association/Affili ation	Event Name	Event Type Workshop / Other
Mr. Yuktesh	IBM Global	Cloud	Workshop
Chintamadaka,	Entrepreneur	Computing Workshop	
Community	Program &		
Manager	Academic		
	Initiative, IBM		
	India Pvt.Ltd		
Deliverd By Sonali		"Impact of Bigdata on	Seminar
Patwe		Industry	

Delivered by S. A.		Mongodb connectivity	Seminar
Jakhete		with front end	
		languages.	
Seminar	with SIEC	Abroad studies	Seminar
Conducted in	Education Pvt. Ltd.		
association	Pune		
Seminar by Mr.	trainer of elixir	Soft Skill	Seminar
Ilahi sheikh Soft	spoken academy		
skill for SE			
students			
Seminar by	Assistant	Opportunities for	Seminar
Dr.Makrand Rao,	Professor, Norfolk	computer-based	
	State	modelers in the field of	
	University, Virginia	Bioengineering	
Seminar by Mr.	Team Lead in	"Analyze the Effect of	Workshop
Ashish Gadkary	Krixi ideas and	storage Area Network	•
For SE IT	Technology	(SAN) in View of	
Students.	Solution, Pune	performance and	
		reliability: an Industrial	
		Approach"	
Seminar by Mr.	CEO, Co-founder,	Applied Algorithms:	Workshop
Gajanan Sakhare	SmartCloud	Case study	•
3	Infotech -		
	SmartCommute <sup>TM</sup> ,		
	Pune.		
Mr. Rajesh	MD techno wings	Web hosting and SEO	Seminar
Agrawal,	Inc pune		
<i>3</i> ,	F 3		
Mr. Sunil Shinde	Free lance trianer	Communication Skills	Seminar
Mr. Vinit Tople,	AMAZON, Seattle	Careers in IT Industry	Seminar
	Washington D. C.		

# 25. Seminars/ Conferences/Workshops organized & the source of funding a) National b) International

ICEI (Internationa conference organized by college )	Conducted by College with all department	5 Lac
iPGCON 13	Conducted by department	Pune University Sponsered

Seminars / Conferences / Workshops	Guest lecture on Big Data: Current Impact on Industry	Arranged by Prof. S. A. Jakhete  and Prof. S. H. Chandak Delivered by Ms. Sonali Patwe Senior Technical Associate at Sears Holdings on 12/09/2015 for the students of TEIT
organized & the source of funding is	Guest lecture on File System Implementation	Arranged by Prof. S. D. Pande. Delivered by Mr. Yogesh Babar Senior
from College university/ private company etc.		Developer  Redhat Pun, on 09/02/2016 for
company etc.		the students of TE IT
	Workshops Conducted	Arranged and Conducted by
	AndroidApp Development	Prof. N. R. Sodha, Prof. S. A.
		Jakhete in association with
		IIT on 07/09/2015 for the
		students of TE-IT*

<sup>\*</sup> College is benefited in association with organization.

# 26. Student profile programme/course wise:

Name of Course Program	the / me		Selecte	Enroll	ed	Pass Percentage
Course	Year	Applications Received	d	*M	* <b>F</b>	
	2015-16	Admission process in the state is only through CAP and governed by	124	86	37	71.90 %
UG	2014-15	Director of Technical Education(DTE), Government of	127	76	51	87.59 %
	2013-14	Maharashtra. The Institute follows the rules, regulation & guidelines set by	127	76	45	85.95 %

		SPPU, State Government body.				
	012-13		127	69	58	86.50 %
	2015-16		10	05	05	93.33 %
PG	2014-15		15	09	06	77.77 %
10	2013-14		18	12	06	88.88 %
	2012-13		18	11	07	66.66 %

<sup>\*</sup>M=Male \*F=Female

#### 27. Diversity of Students

Nameofthe	Academic Year	%of students fromthe samestate	%ofstudents fromother States	%of students from abroad
	2012-2013	71.20	28.80	NIL
UG	2013-2014	76.09	23.91	NIL
	2014-2015	77.09	22.91	NIL
	2015-2016	88.0	12.0	NIL
	2012-2013	94.44	5.55	NA
PG	2013-2014	94.44	5.55	NA
	2014-2015	77.77	22.22	NA
	2015-2016	100	NIL	NA

# 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

NET, SLET – Not Applicable to Engineering

GATE, Civil services, Defense services – 2.6 %

## 29. Student progression

Student progression	Against % Enrolled				
	2012-13	2013-14	2014-	15-16	
			15		
UG to PG	15.43 %	16.29 %	18.91 %	19.81 %	
PG to Ph.D.	-		-		
Employed					
Campus selection	73.57 %	72.71 %	70.09 %	69.19 %	
Other than campus recruitment	9 %	10 %	8 %	9 %	
Entrepreneurship/Self-employment	2 %	1 %	3 %	2 %	

## 30. Details of Infrastructural facilities

# a) Library

	Exist Till 201	_	Newly a 2015		Total	
	No.	Value	No.	Value	No.	Value
Text Books	19848	56,16,628	580	1,87,360	20428	58,03,988
Reference Books	13690	32,04,060	251	68,107	13941	32,72,167
e-Books	380	1,54,160	380	1,76,896	380	1,76,896
Journals & Magazines	76	1,17,651	60	95,435	60	95,435
Journals	44		19		19	ĺ
Magazines	32		41		41	
e-Journals	589+	13,39,665	7193+	16,19,603	7193+	16,19,603
	600000		600000		600000	
	IEEE		IEEE		IEEE	
	Conf.Paper		Conf.Paper		Conf.Paper	
	S		s		S	
Digital Database	6405		2272		8677	
<ul> <li>NPTEL</li> </ul>						
<ul> <li>Project Reports</li> </ul>						
Question Papers						
	4911		1700		6611	
	884		197		1081	
	610		375		985	
CD & Video	3952	81574	99		4051	81574
Others (specify)	BCL	2200	BCL	999	BCL	999
	Membershi		Membershi		Membershi	
	p		p		p	

#### b) Internet facilities for Staff & Students

- Internet & Lan facility is provided in every Lab for each and every system.
- Student can access internet in practical hours as well as in free time.

#### c) Class rooms with ICT facility

- All classrooms are equipped with White Board/ Green Board.
- Classroom are having facilities like Computer system, internet, Wi-Fi Connection and LCD projector

#### d) Laboratories

- Adequate infrastructure is available for staff and student.
- Internet &Lan facility is provided in every Lab for each and every system.
- Infrastructure Details are given Below

Sr. No	Name of the laboratory	Number of students per setup (Batch size)	Name of Important equipments	Weekly utilization status (all the courses for which the lab is utilized)
1	C – 301 – Multimedia Laboratory	25 Students	25 PCs- Intel Core 2 Duo, 160 GB HDD, 2 GB RAM, 19" TFT Monitor, Joysticks, Headphones, Speakers, Web Camera, Cisco 24 port Switch, Laser Printer, LCD Projector. Online UPS Backup	Semester II (2015-16) TE- 16 Hrs BE- 12 Hrs Semester I (2016-17) TE- 16 Hrs BE- 08 Hrs
2	C – 302 – Micro- processor Laboratory	25 Students	25 PCs-Intel core 2 duo, 2GB RAM, 80 GB HDD, 17'' Monitor, Oscilloscope, 8255 add-on card, 8251 add-on card, 8259 add-on card, SMPS cable & Connector, Dyna-8085 Study Card, 8255 Study Card, Cable & Connector Set 8253 Study Card, 8251 Study Card, 8259 Study Card, 8279 Study Card, 8279 Study Card, ADC-08 Study Card, DAC-01 Study Card, Dyna 86 v4, ADC-01 Study	Semester II (2015-16) SE- 24 Hrs Semester I (2016-17) SE- 26 Hrs

		1	Card CMDC 02 A C.	
			Card, SMPS 03A, Cisco 24 port Switch, Laser Printer , Online UPS Backup	
3	C – 303 – Network Laboratory	25 Students	25 PCs- Intel Core 2 Duo, 4GB RAM, 320 GB HDD, 18.5" TFT Monitor, Cisco 24 port Switch, Laser Printer, Scanners, Headphones, Web camera, Speakers, Wireless Routers, Cisco Routers, LCD Projector, Wireless USB cards, Online UPS Backup	Semester II (2015-16) TE- 16 Hrs BE- 08 Hrs Semester I (2016-17) TE- 16 Hrs BE- 10 Hrs
4	C – 304 – Programming Lab – I	25 Students	25 PCs- Intel core i3, 4GB RAM, HDD 500GB, 18.5" LED Monitor, Cisco 24 port Switch, Laser Printer, , LCD Projector, Online UPS Backup	Semester II (2015-16) SE-24 Hrs BE-02 Hrs Semester I (2016-17) SE- 20 Hrs BE- 04 Hrs
5	C – 305 – Database Management Lab	23 Students	23 PCs-Intel Core 2 Duo, 4GB RAM,320 GB HDD, 18.5" TFT Monitor, Cisco 24 port Switch, Laser Printer, Online UPS Backup 01 PC-Intel core I5, 8 GB RAM, 1 TB HDD	Semester II (2015-16) TE- 22 Hrs BE- 04 Hrs Semester I (2016-17) TE- 16 Hrs BE- 08 Hrs
6	C – 309 – Project Lab	24 Students	24 PCs-Intel Core 2 Duo, 4GB RAM,320 GB HDD, 18.5" TFT Monitor, Cisco 24 port Switch, Laser Printer, Online UPS Backup 01 PC-Intel core I5, 8 GB RAM, 1 TB HDD	Semester II (2015-16) TE- 10 Hrs BE- 18 Hrs Semester I (2016-17) SE- 20 Hrs BE- 06 Hrs
7	C – 401 – Operating System Lab	25 Students	23 PCs- Intel Core I3, 4GB RAM, HDD 500GB, 18.5" LED Monitor, 02 PCs-Intel core I5, 8 GB RAM, 1 TB HDD Cisco 24 port Switch, Laser Printer, Online UPS Backup	Semester II (2015-16) SE-24 Hrs Semester I (2016-17) SE-18 Hrs BE-08 Hrs

	T		T	
8	C – 402 – Software Testing Lab	25 Students	25 PCs- Intel Core i3, 4GB RAM, HDD 500GB, 18.5" LED Monitor Cisco 24 port Switch, Laser Printer, LCD Projector, Online UPS Backup	Semester II (2015-16) TE- 16 Hrs BE- 08 Hrs Semester I (2016-17) SE- 02 Hrs TE- 16 Hrs BE- 08 Hrs
9	C – 404 – System Software Lab	25 Students	25 PCs- Intel Core i3, 4GB RAM, HDD 500GB, 18.5" LED Cisco 24 port Switch, Laser Printer, LCD Projector, Online UPS Backup	Semester II (2015-16) SE-24 Hrs BE-02 Hrs Semester I (2016-17) SE- 04 Hrs TE- 16 Hrs BE- 04 Hrs
10	B 401 Research Lab 1	18	1. Dell i5 processor, 8GB RAM, 1TB HDD, DVD R/W, 1GB Dedicated Graphics card, Dell Usb Keyboard +Mouse, 18.5LCD Monitor.  2. I3 2100 Processor, 500GB HDD, 3GB RAM, 1GB dedicated Graphics card, dell keyboard +Mouse, 18.5LCD Monitor.  3. LAN Adaptor Netgear USB WirelessN-150  I 3 2120 Processor II GEN., 500GB HDD, 4GB DDR3 RAM, dell keyboard +Mouse, 18.5Tft Monitor.  4. Epson Printer Switch2960 Cisco 24port.	Project Stage-II, Seminar-III
11	B402 PG Lab	18	1. Computer (Dell Inspiron 620s Intel core i3-2100 Processor, 3 GB RAM, 500 GB HDD, 1GB Graphics card, LCD monitor 18.5", mouse+ keyboard, DVD/RW.).  2. Printer (Hp Laser-Jet	LP-II. Seminar-I, EL-II.

	1020plus).		
	3. Switch2960	Cisco	
	24port.		

# 31. Number of students receiving financial assistance from college, university, government or other agencies

Sr.			Academic Year			
No.	(IT)	2016	2015	2014	2013	2012
1	SDWO-Scholarship	43	61	48	44	34
2	SDWO-FreeShip	78	73	82	67	56
3	ITDPO-Scholarship	3	5	4	4	3
4	ITDPO-Freeship	4	6	5	7	7
5	EBC	39	29	32	32	50
6	Minority	6	5	4	3	5
7	Central Sector Scholarship	5	1	4	1	2
8	STC/PTC	2	2	2	0	1
9	J&K	0	0	0	1	0
10	Pvt. Scholarship	229	142	104	67	72
11	AICTE PG GATE Scholership	4	2	9	11	7

# 32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts.

Task	Action	Status			
Industry Institute Interaction	Microsoft Technologies	Organized by Dr. M. Emmanuel by Microsoft IT Academy on 3 <sup>rd</sup> July2015			

	Soft skill training Program by Brown Cover	Organized by Dr. M. Emmanuel on 1 July 2015
Introduction of professional bodies to students.	Communication to CSI for CSI Student chapter by K.A.Sultanpure.	CSI Student Chapter formed on 1 <sup>st</sup> march 2015 with 143 student registrations.
Motivating TE students to Finalize project definition/ carry ahead existing project	Project Team has designed form for visiting BE project Exhibition and asked TE students to make report on it.	TE students have visited the exhibited BE projects and submitted the report to Project team
Motivating students for higher studies	Seminar on Abroad Studies	Arranged by Prof. R.V.Kulkarni Conducted by Mr. Benwen Lopez Senior Career Advisor SIEC Education PVT LTD Mumbai on 26/08/2015
Knowledge gaining and	Guest lecture on Big Data: Current Impact on Industry	Arranged by Prof. S. A. Jakhete  and Prof. S. H. Chandak Delivered by Ms. Sonali Patwe Senior Technical Associate at Sears Holdings on 12/09/2015 for the students of TEIT
skill development for student and staff	Guest lecture on File System Implementation	Arranged by Prof. S. D. Pande. Delivered by Mr. Yogesh Babar Senior Developer  Redhat Pun, on 09/02/2016 for the students of TE IT
	Orientation for TE- Seminar	for the students of TE IT  Delivered by R. V. Kulkarni on 16 Aug 2016 for TE-IT

Seminar on Opportunities in Bioengineering	Arranged by Prof. N. R. Sodha  Prof. S. A. Jakhete Conducted by Dr. Makarand Dev Asst. Prof. of engg Norfolk state university Virginia on 30/12/2015 for the students of BE IT
Workshops on Cloud computing	Arranged by Prof. P. V. Chavan  Conducted by Mr. Yuktesh Chintamadaka, Community Manager, IBM Pune, on 01/08/2015 for the students of TE, BE and MEIT
Workshops Conducted Soft Skills	Arranged by Prof. N. R. Sodha  Conducted by Mr. Ilahi Shaikh soft skill trainer Elixir spoken Academy on 22/08/2015 for he students of SEIT
Workshops Conducted Mongo DB: connectivity with Front End	Arranged by Prof. S. A. Jakhete Conducted by Prof. S. A. Jakhete,  Prof. A. G. Dhamankar, Prof. S. H. Chandak ITDEPT, PICT, Pune on 22/08/2015 for he students of TEIT
Workshops Conducted PHP: A Conceptual point of View	Arranged by Prof. S. S. Pathak  Conducted by Prof. S. S. Pathak on 07/09/2015 for he students of TE-IT

	Workshops Conducted AndroidApp Development  Workshops Conducted	Arranged and Conducted by Prof. N. R. Sodha, Prof. S. A. Jakhete in association with IIT on 07/09/2015 for the students of TE-IT  Arranged and Conducted
	Machine Learning Assignments	by Dr.Anant M.Bagade, Prof. R.B.Murumkar Prof.M.R. Khodaska on 12/09/2015 for he students of BEIT
	FDP on Mathematical Modeling and Statistical Analysis in computation	Attended by Prof. P. V. Chavan on 13/06/2015 at MITCOE,Pune
	FDP on SL-IV and SMD of BEIT 2012 course	Attended by Prof. D. D. Londhe on 30/06/2015 at Cummins COEW in association with BOSIT and SPPU
	Machine Learning & Software Laboratory-III	Attended by Prof. M. R. Khodaskar on 03/07/2015 at SCOE Pune in association with BOSIT
	Intelligent Computing: Algorithms and Applications – ICAA15	Attended by Kavita Sultanpure on on 30/11/2015 at MIT COE, Pune, sponsored by QIP and CSI
Motivating staff to be a resource person	Machine Learning & Software Laboratory-III	<b>Delivered By</b> Prof. A. M. Bagade on 03/07/2015 at SCOE Pune in association with BOSIT
_	Machine Learning, Linear Regression & Polynomial Regression	<b>Delivered By</b> Prof. A. M. Bagade on 05/08/2015 at BVCOEW, Pune

Motivating students for certification	Certificate FOSS online exam IITB spoken tutorial	Coducted by Prof. J. B. Jagdale, Prof. S. V. Deshmukh, Prof. R. S. Rahate, Ms. S. L. Rane, Prof. S. R. More on 03/07/2015 and 05/08/2015
Industrial Visit	Industrial Visit Hackmania and Zify,IITHyderabad  Industrial Visit Thouhtworks Pune	Arranged by Prof. V. R. Jaiswal, Prof. Pramod Jadhav from 14/02/2016 to 16/02/2016 for students of TE IT  Arranged by Prof. S. A. Jakhete  Prof N R Sodha on 28/01/2016 for students of TEIT
Motivating students for curricular and extracurricular activities	Participation in inter institute events outside state and within state.	Outside state: Participation- 14 Winner-4 Within state: Participation- 217 Winner- 70

#### 33. Teaching methods adopted to improve student learning.

Innovative processes adopted by the institution in Teaching and Learning:

The revision of the curriculum is done by the Savitribai Phule Pune University every four to five years to cope up with the technological changes in the industry and impart better education to the students. This has helped in the enhanced learning amongst the students. The faculty members from the department are actively involved in designing, planning and implementing the syllabus at university and college level. The university has introduced the Midsem examination this year for third year engineering. The mid-sem examination is of 30 marks and end-sem examination is of 70 marks. The department takes the following effort to make teaching and learning:

- 1. Mock online examinations are conducted.
- 2. Mock practical examinations are conducted.
- 3. Two unit-test are conducted in each semester.

- 4. Guest lectures, Seminars, Industrial Visits are conducted throughout the year.
- 5. NPTEL videos are available for the students.
- 6. Remedial Classes for Diploma/Weak students are conducted regularly.

#### The various modes of self learning are:

• Online Learning Resources: Internet is a big source of information. Information interms of video's, PPts, Document is vailable on all subjects and can be downloaded from any where. learners can use theses materials for there project and seminar preparations .And uses them for their references. Students can communicate with foreign authors thru mail and can get some advice of them.

**Multi-media/ Animations**: As we know visual effects are more effective for better understanding. Use of Multimedia, Animations enhances the understanding of characteristics of each topic. It extends and augment the learning experience.

**Mini projects:** Mini-projects can help to prepare students for open ended investigative work.

**Extra lab hours:** Students are encouraged to learn on their own by providing extra lab hours.

Group discussions / Seminar: Group discussion on study is essential for effective learning. In group discussion learning is shared and student participating in discussion are benefitted. By participating in group discussions students can also improve their communication skills. In this way it prepares them for oral exams and interviews as well. Preparing a seminar on some of the topic gives a different angle to their study. Such seminars can be presented in classroom.

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities.

- In addition, Department arranges various social welfare programs like Blood donation camps, Rice, Cloth donation campaign, which makes them socially aware.
- Students and faculty of Institute visit social organizations like Orphanage, old age homes. NSS camps are arranged in near by villages. They observe the activities which make them aware of social responsibilities.
- Students visit different schools and junior colleges for teaching them and giving them career guidance.

#### 35. SWOC analysis of the department and Future plans

#### Strength

- Full strengths of faculty with enthusiasm
- Good students with motivation

- Good and adequate infrastructure facilities are available in department
- Good lab faculty and support staff
- Excellent academic performance with SPPU meritorious students

#### Weakness

- Consultancy Projects, IPR
- Ph.D. qualified faculties
- Few Research Publications

#### **Opportunities**

- Strengthen the Industry-Institute Interaction through signing MoU's, with various Industries from different field for the better placement of students.
- Improving research culture in the department

#### **Challenges**

• Attracting consultancy projects

#### Plans of institution for next year

- Introduction of professional bodies to students.
- Preparing requirements for new BE IT syllabus.
- Knowledge gaining and skill development for student and staff
- Motivating TE students to carry ahead existing BE project
- Proposed Ph.D. research Center under SPPU in IT.

#### **Department of Applied Science (FE)**

**1. Name of the department** : Applied Science (First Year Engineering)

2. Year of Establishment : 1983

**3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)** : UG (First Year Engineering). First Year Engineering is common for all UG programmes.

4. Names of Interdisciplinary courses and the departments/units involved:

S.No.	Interdisciplinary course	Departments involved	
01	Basic Electronics Engineering	Electronics and Telecommunication	
		Engineering	
02	Fundamentals of Programming	Computer Engineering / Information	
	Languages-I	Technology	
03	Fundamentals of Programming	Computer Engineering / Information	
	Languages-II	Technology	

**5.** Annual/ semester/choice based credit system (programme wise) : semester based credit system.

We are following the syllabi of affiliated university (SPPU). SPPU has mixed system with semester based credit system for PG programmes and percentage based system for the UG programmes wherein the examination scheme includes Theory (paper), Theory (online), term-work, practical, and oral. It also accommodates grade based audit courses.

## 6. Participation of the department in the courses offered by other departments:

S.No.	Course	Department			
01	Engineering Mathematics-III	Computer Engineering			
02	Engineering Mathematics-III	Electronics and Telecommunication			
		Engineering			
03	Engineering Mathematics-III	Information Technology			

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:

<b>Teaching Posts</b>	Sanctioned	Filled
Professors	4	1
Associate Professors	9	-
Asst. Professors	27	39

## 10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil. etc.):

S.No.	Name	Qualifi cation	Designation	Specialization	No. of Years of Experien ce	No. of Ph.D. Students guided for the last 4 years
01	Mr. E. M. Reddy	M.E.	Asst. Prof. and HoD	Civil Engg.	18	
02	Dr. K. C. Nandi	Ph.D.	Professor	Physics	20	
03	Dr. P. W. Deshmukh	Ph.D.	Asst. Prof.	Mechanical Engg.	12	
04	Mrs. V. J. Damle	M. Phil.	Lecturer- Senior Scale	Mathematics	29	
05	Mr. N. A. Gadade	M.Sc.	Asst. Prof.	Mathematics	9	
06	Mr. V. B. Tanpure	M.Sc.	Asst. Prof.	Mathematics	5	
07	Mr. V. B. Patole	M.Sc.	Asst. Prof.	Mathematics	9	
08	Mr. S. Y. Godse	M.Sc.	Asst. Prof.	Mathematics	6	
09	Mrs. Pramila Karale	M.Sc.	Asst. Prof.	Mathematics	6	
10	Mr. S. N. Gorde	M.Sc.	Asst. Prof.	Mathematics	1	
11	Mrs. P. S. Khatri	M.Sc.	Asst. Prof.	Physics	1	
12	Mr. H. S. Khatri	M.Sc.	Asst. Prof.	Physics	1	
13	Mrs. B. M. Vyas	M.Sc.	Lecturer	Chemistry	20	
14	Mrs. D. M. Kulkarni	M.Sc.	Lecturer	Chemistry	8	
15	Mr. A. M. Kulkarni	M.Sc.	Asst. Prof.	Chemistry	5	
16	Mrs. S. A. Barde	M.E.	Asst. Prof.	Civil Engg.	6	
17	Mrs. K. R. Jadhav	M.E.	Asst. Prof.	Civil Engg.	4	

18	Mr. P. D. Jadhav	M.E.	Asst. Prof.	Civil Engg.	4	
19	Mr. S. A. Gursale	M.E.	Asst. Prof.	Civil Engg.	3	
20	Mr. R. R. Vardhaman	M.E.	Asst. Prof.	Civil Engg.	2	
21	Mr. A. M. Deshmukh	M.E.	Asst. Prof.	Mechanical Engg.	17	
22	Mr. H. M. Hiwase	M.E.	Asst. Prof.	Mechanical Engg.	13	
23	Mr. S. V. Mundhe	M.E.	Asst. Prof.	Mechanical Engg.	10	
24	Mr. N. P. Sapkal	M.E.	Asst. Prof.	Mechanical Engg.	8	
25	Mr. M. D. Bandkar	M.E.	Asst. Prof.	Mechanical Engg.	8	
26	Mr. S. G. Ilag	M.E.	Asst. Prof.	Mechanical Engg.	5	
27	Mr. A. A. Chavan	M.E.	Asst. Prof.	Mechanical Engg.	7	
28	Mr. S. D. Hade	M.E.	Asst. Prof.	Mechanical Engg.	4	
29	Mr. V. S. Sanap	M.E.	Asst. Prof.	Mechanical Engg.	2	
30	Mrs, A. A. Joshi	M.E.	Asst. Prof.	Electrical Engg.	20	
31	Mr. V. R. Bhoi	M.E.	Asst. Prof.	Electrical Engg.	5	
32	Mr. M. S. Reddy	M.E.	Asst. Prof.	Electrical Engg.	5	

#### 11. List of senior visiting faculty:

S. No	Name of the faculty	Subject	
1	Mr. P.R. Patankar	Communication Skills	
2	Mr. K. Karve	Communication Skills	
3	Mrs. Madhu Yadav	Communication Skills	

## 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporaryfaculty:

<b>Lectures delivered</b>	Practical classes handled
3.8 %	2.77%

- 13. Student Teacher Ratio (programme wise): 15:1
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Sta	ff details		Sanctioned*	Filled
Academic	Support	Staff	12	12
(technical)				

<sup>\*</sup> There are no specific norms for sanctioned posts.

#### 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil /PG.:

Ph.D.	M. Phil	PG
2+5*	1	24

<sup>\*</sup> Pursuing PhD

16. Number of faculty with ongoing projects from National and International funding agencies and grants received

Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Projects funded by	Total	Total Grants
1 Tojects funded by	Number	Received
University (SPPU – BCUD)	5	Rs. 8,65,000/-

#### 18. Research Centre /facility recognized by the University :NA

#### 19. Publications:

a) Publication per faculty: 2.04

Parameters	Number
Number of papers published in peer reviewed journals (National /International) by faculty and students	08
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.)	Nil
Monographs	Nil

Chapter in Books	Nil
Books Edited	Nil
Books with ISBN/ISSN numbers with details of publishers	01
Citation Index	
SNIP	
SJR	
Impact factor	2.58
h-index	

#### 20. Areas of consultancy and income generated

Income generated through various in-house development activities (related to mechanical) is as follows:

Academic Year	Amount Saved (Rs)
2016-17 (Till date)	34,000/-
2015-16	1,79,000/-
2014-15	87,000/-
2013-14	1,48,000/-
Total	4,48,000/-

#### 21. Faculty as members in

a) National committees :Nil

b)International Committees: Nil

c) Editorial Boards :Nil

d) Any other committee :

S. No	Name of the faculty	Name of the	committee	
1	Dr. K. C. Nandi	University	Staff	Selection

		University Ex	kamination (	Committee
2	Mrs. V. J. Damle	University	Staff	Selection
		University Examination Committee		

#### 22. Student projects: NA

- 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

#### 23. Awards / Recognitions received by faculty and students:

Dept. staff and students worked as volunteers for "Nirmal Wari-2016" to create awareness about cleanliness amongst the warkaries

S.No.	Name of the Student	Competition	Achievements	
01	Tejas Kulkarni	University level Chess	Runner-up	
02	Aditya Sangvikar	championship	ramer up	
03	Tejas Kulkarni	Inter collegiate Chess competition	Winner	
		Long Jump, University level	Bronze Medal	
04	Rahul Khedkar	Triple Jump, University level	Silver Medal	
		Long & Triple Jump, Athletics Association Tournament	Gold	
05	Ishaan Ballal	University level Chess competition	Runner up	
06	Saket Autee	Badminton, University level	Reached Quarter final	
		Badminton, B. J. College event	Runner up	
07	Parth Jagtap	Asia Ice Hockey World Cup	Selected in National Team	
08	Ajinkya Suhas Rithe			
09	Atharva Charuhas Bhagwat	COEP ZEST 2017	Table tennis winner	

10	Mayur Ranjit Patil	VIT Millange	1500 Mtrs. 4th place	
11	Vedant Pritam Mundhe	SPPU Hndball Team	Selected as a Captain	
12	Shrutika Shrikant Sawai	VIT Millange	Runner Up ( Volleyball	
13	Priyanka Rajendra Wagh		Team)	
14	Mayur Ranjit Patil		Decree May (Well-shall	
15	Vedant Pritam Mundhe	COEP ZEST 2017	Runner Up ( Volleyball Team)	
16	Ved Vinod Padmawar			
17	Isha Abhay Chidrawar			
18	Manasi Pramod Vyas	PICT CONTRAPTION CREDENZ	Runner Up	
19	Amogh Dhananjay Kulkarni	CREDEIVE		
20	Madhura Satish Avachat	BVP Debate	3rd Place	
21	Madhura Satish Avachat	PICT Entrepreneurship Quiz	Winner	
22	Joanna Sam	Trinity College of London	Electronic keyboard final with Grade 8	

#### 24. List of eminent academicians and scientists / visitorsto the department:

S.	Name	Designation	Institute / Industry
No.			
01	Mr. P. M. Kurulkar	Associate Director	DRDO, Pune
02	Mr. Amarjit Gupta	Principal Software Engineer	Symantec
03	Mr. Jayesh Bhangdiya	Executive, MBA	Symantec
04	Dr. Makarand Upkare	Associate Professor	VIT, Pune
05	Mr. Nitin Kurane	Project Engineer	Whilpool India, Pune
06	Mr. Narendra Kapure	Deputy Manager	Global Technology, Whilpool India, Pune
07	Mr. Kiran Bhojak	Proprietor	B K Engineering

#### 25. Seminars/ Conferences/Workshops organized & the source offunding

a) National : Nilb) International:Nil

#### 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:

#### a) Library:

It is a centralized facility.

	Existing Till 2014-15		Newly a 2015		Tot	al
	No.	Value	No.	Value	No.	Value
Text Books	19848	56,16,628	580	1,87,360	20428	58,03,988
Reference Books	13690	32,04,060	251	68,107	13941	32,72,167
e-Books	380	1,54,160	380	1,76,896	380	1,76,896
Journals & Magazines	76	1,17,651	60	95,435	60	95,435
Journals	44		19		19	
Magazines	32		41		41	
e-Journals	589+	13,39,665	7193+	16,19,603	7193+	16,19,603
	600000		600000		600000	
	IEEE		IEEE		IEEE	
	Conf.Paper		Conf.Paper		Conf.Paper	
	S		S		S	
Digital Database	6405		2272		8677	
<ul> <li>NPTEL</li> </ul>	4911		1700		6611	
<ul> <li>Project Reports</li> </ul>	884		197		1081	
Question Papers	610		375		985	
CD & Video	3952	81574	99		4051	81574
Others (specify)	BCL	2200	BCL	999	BCL	999
	Membershi		Membershi		Membershi	
	p		p		p	

#### b) Internet facilities for Staff &Students:

PICT network connects to a fabric of other national research and education networks with fiber backbone to internet service provider. It consists of more than 17 km of structured cabling. Department level connectivity is on fiber of 1 GB speed. More than 50 manageable switches connect around 1000+ workstation/nodes in campus ensuring local connectivity of each machine at 155 Mbps speed. PICT is having one Central-Administration-Server-Room with backup of 16 hours for its undisturbed campus connectivity.

Availability of internet in an exclusive lab	: Dedicated Lab for internet usage is equipped
exclusive lab	with 40+ machines at Lab C-403.
Availability in most computing labs	: All labs in campus are having internet facility.
Availability in departments and	: More than 50 CISCO switches across campus
other units	with more than 1000 endpoints, all departments
	& units are connected to internet.
Availability in faculty rooms	: All departments & respective staff rooms are
	connected through LAN network as well as are having internet facility.
	,
Institutes own email facility to	: Email facility provided to faculty via Google
faculty/ students	mail solution under <i>pict.edu</i> domain.
Security/privacy to email/ internet	: Internet secured behind squid proxy server
users	and zentyal (4.0) gateway firewall. All systems
	in campus are additionally secured with Kaspersky Antivirus(10.2.2) & Kaspersky personal firewall.
Wi-Fi Campus	: WI-FI is available round the clock through 5 hot spots developed in campus with DLINK 3500AP which are controlled by dedicated Wi-Fi controller switch DLINK 3024s.

Wi-Fi security	: Two level security implied for safe browsing over Wi-Fi.
	level-1 WPA2 Protected Access security
	level-2 Mac Authentication through registration
	via email verification.

#### c) Class rooms with ICT facility:

All Class rooms are provided with LCD projectors and internet connection

S. No.	Class Room	Room No.	Carpet Area
			(Sq.m.)
01	Class Room-	HA-206	82.00
	1		
02	Class Room-	HA-207	82.00
	2		
03	Class Room-	HA-307	82.00
	3		
04	Class Room-	HA-308	82.00
	4		
05	Class Room-	HA-402	82.00
	5		
06	Class Room-	HA-403	82.00
	6		
07	Class Room-	A-110	66.00
	7		

#### d) Laboratories:

All Laboratories have sophisticated equipment

S. No.	Laboratory	Room No.	Carpet Area
			(Sq.m.)
01	Physics	H-503	82.00
02	Chemistry	H-104	82.00
03	Electrical Engg.	H-105	82.00
04	Civil Engg. / Engg. Mechanics Lab-1	H-203	81.00
05	Civil Engg. / Engg. Mechanics Lab-1	H-204	89.00
06	CAD Lab-1	H-102A	114.00
07	CAD Lab-2	H-102B	114.00
08	Mechanical Engg. Lab-1	H-304	81.00
09	Mechanical Engg. Lab-2	H-305	89.00
10	Engg. Graphics Lab-1	A-101	93.00

11	Engg. Graphics Lab-2	H-502	82.00
12	Language Lab	H-202	78.00
13	Work shop	J-001	267

## 31. Number of students receiving financial assistance from college, university, government or other agencies:

Sr.	Type of Scholarship	Academic Year						
No.	Type of Scholarship	2016	2015	2014	2013	2012		
1	SDWO-Scholarship	61	43	49	56	55		
2	SDWO-FreeShip	111	77	87	98	96		
3	ITDPO-Scholarship	4	5	4	4	3		
4	ITDPO-Freeship	7	7	8	7	8		
5	EBC	37	39	21	22	28		
6	Minority	6	5	4	5	6		
7	Central Sector Scholarship	5	4	2	3	4		
8	STC/PTC	5	4	3	2	3		
9	J&K	2	1	0	0	1		
10	Pvt. Scholarship	542	501	394	252	245		

## 32. Details on student enrichment programmes (Special Lectures/workshops/ Seminar) with external experts:

Following lectures by external experts were organized as a part of studentenrichment programmes:

S.	Name	Designation	Topic
No.			
01	Mr. P. M.	Associate Director ,DRDO,	Future challenges for young
	Kurulkar	Pune	engineers & achievements of
			DRDO.'
02	Mr. Amarjit	Principal Software	Personality Development
	Gupta	Engineer, Symantec	
03	Mr. Jayesh	Executive, MBA	Personality Development
	Bhangdiya		
04	Dr. Makarand	Associate Professor, VIT	Personality Development

	Upkare		
05	Mr. Nitin Kurane	Project Engineer, Whilpool	Product Development Cycle
		of India, Pune	
06	Mr. Narendra	Deputy Manager, Global	Product Development Cycle
	Kapure	Technology, Whilpool of	
		India, Pune	
07	Mr. Kiran	B K Engineering	Interdisciplinary
	Natawarlal	(Proprietor).	Developments for latest
	Bhojak		Boilers

#### 33. Teaching methods adopted to improve student learning:

In addition to regular class room teaching, learning is also promoted by generating self learning facilities under various modes. Students are urged for self learning through personal counselling and organizing various contests.

The various modes of self learning are:

- Web- based learning: Internet is an open information system in which various sources of information, media and materials such as texts, notes, videos can be linked together in different ways to form self learning environment. Internet offers new possibilities to structure, represent, adapt and integrate various learning content and materials. Furthermore, due to its interactivity, learners can process the material in accordance with their individual preferences and strategies at any time and from any place provided an internet connection is available. Hence, the potential of the Internet self-learning mode is considered to be very high.
- Learning with Multi-media: Multimedia that's effective in learning doesn't simply consist of using multiple media together, but combining media mindfully in ways that capitalize on the characteristics of each individual medium and extend and augment the learning experience.
- Classroom Presentations: Students are required to present latest topics in a classroom which will help them in self learning.
- **Technical Symposiums:** In addition to presentations, symposiums also include panel discussions, small group discussions and poster presentations.
- **Mini projects:** Mini-projects can help to prepare students for open-ended investigative work.
- Extra lab hours: Students are encouraged to learn on their own by providing extra lab hours.
- **Group discussions:** Group discussion on study is essential for effective learning. In group discussion learning is shared and student participating in discussion are benefitted. By participating in group discussions students can

also improve their communication skills. In this way it prepares them for oral exams and interviews as well.

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- On the occasion of World Tree Day-1<sup>st</sup> July 2016, our team carried out a 'Tree Plantation' activity at Taljai Pathar. Planted about 25 plants around Taljai.
- Participated in the *Ashadhi Waari* and worked under 'Nirmal Waari' program held by the Seva Sahyog organization. Encouraged the people of the waari to use sanitation facilities provided to them in the form of portable washrooms.
- Held a 7 days residential campaign at a village named 'Gogalwadi', situated 18 km from Pune.
- A team of 25 volunteers participated in the camp along with 10 teachers.
- Carried out social activities such as cleaning the village with the help of villagers.
- Went to the school and taught the kids in interactive sessions by showing posters, displaying scientific experiments.
- Organized a session to raise awareness amongst the villagers regarding some issues which they face.
- Meditation program for three days and other interactive sessions for the volunteers too.
- TEAM PICTOREAL organized Blood Donation Camp on 7th of February 2017, in the college campus. In this noble cause, Poona Serological Institute Blood Blank played the active role.
- Providing career guidance sessions for students of std.8, 9 and 10 in schools where such counselling is not available. A total of 150+ children across the schools benefited from this exercise. The children had a variety of doubts which were answered satisfactorily by our team members immediately after the presentation was over.
- PICT took part in a street play competition organised by Vishwakarma Institute
  of Technology, Pune. The street play presented by our team aimed to raise
  awareness against corruption and how we as the common members of the
  society, can help eradicate it.
- Associated with the NGO Action for Self-reliance, Hope and Awareness (ASHA), which helps in the education of the girl child in rural areas, where they don't have the facilities to avail proper guidance outside school.
- Initiated poetry, story writing and debate competition, an event named "Manthan". It was a platform for all Pictians to show their creative writing and speaking skills apart from their technical knowledge.
- Associated with an NGO named "Matoshree", which is an old-age home (located in karvenagar, Pune). Team members used to visit there on weekends

- and spend some time with them to make them feel happy. Also, there is a "BAL Sadan" where our volunteers have been taking origami, painting, drawing, science and some gaming sessions to cheer up the children who reside there.
- Continued to work for ASHA, an NGO which helps in the education of girl
  child in rural areas, where they don't have the facilities to avail proper guidance
  outside school.

#### 35. SWOC analysis of the department and Future plans:

#### **Strengths:**

- Experienced and Committed faculty
- Good faculty retention
- · Good students intake
- Good results with consistent university toppers
- · Good infrastructure

#### Weaknesses:

- Faculty with PhD qualification
- Involvement of faculty in research

#### **Opportunities:**

- More involvement of faculty in curriculum development of affiliated university to bridge the gap between academics and industry
- · Interdisciplinary student projects

#### **Challenges:**

- Consultancy
- R & D Projects

#### **Future Plans:**

• To get autonomy status for better curriculum design and development to meet the needs of industry time to time.

#### POST ACCREDITATION INITIATIVES

Institute has re-accredited by NAAC in year 2010, after this following are the initiative taken by the institute for overall growth of the institute and quality assurance

Following are the major initiatives has been taken after post-accreditation such as

#### 1. National Service Scheme(NSS):

PICT has started NSS in 2016. Following are the activities done under the NSS.

- On the occasion of **World Tree Day**-1<sup>st</sup> July 2016, our team carried out a '**Tree Plantation**' activity at **TaljaiPathar**. Planted about 25 plants around Taljai.
- Participated in the AshadhiWaari and worked under 'NirmalWaari' program held by the SevaSahyog organization. Encouraged the people of the waari to use sanitation facilities provided to them in the form of portable washrooms.
- Held a **7 days residential campaign** at a village named **'Gogalwadi'**, situated 18 km from Pune.
- A team of 25 volunteers participated in the camp along with 10 teachers.
- Carried out social activities such as cleaning the village with the help of villagers.
- Went to the school and taught the kids in **interactive sessions by showing posters, displaying scientific experiments.**
- Organized a session to raise awareness amongst the villagers regarding some issues which they face.
- **Meditation program** for three days and other interactive sessions for the volunteers too.

#### 2. Ph.D. Research Centre:

Institute has applied and got approved Ph.D. research center in the year 2013-14 by SPPU. Currently 13 research scholar doing their research in the PICT research Centre and total 6 Ph.D. Guides are available for guiding the students.

#### 3. Additional intake sanction for UG, PG:

Following are the details of additional sanctioned intake after post accreditation

Year	Sanctioned additional intake
2012	UG: Computer- 60, E&TC: 60
	2 <sup>nd</sup> shift-60
	PG: 2 <sup>nd</sup> shift-24
2013	UG: E&TC-2 <sup>nd</sup> shift- 60
2013-14	Ph.D. research Centre permission
	Total research scholar till date: 13
	Total Research Guide till date: 6

**4. NBA Accreditation:** Institute has been re-accredited twice by NBA after 2010.

In the year 2013- 4<sup>th</sup> time

In the year 2016-5<sup>th</sup> time for 3 years.

#### 5. ISO 9001-2015 certification

Institute has already certified by ISO 9001-2008 and now it is again certified with new ISO standard ISO 9001-2015 for quality assurance services which include all UG, PG and Ph.D. programs and additional process such as purchase, maintenance, extra-curricular activities, co-curricular activities. The main focus of ISO 9001-2015 focuses is identifying risk and opportunities of each process so that institute can design the action plan for compliance of conformity and maintaining in services to achieve institute vision, mission and objectives

#### 6. Formation of internal complaint committee for sexual harassment

Institute had Woman's grievance readdresal cell but currently institute has form Internal complaint committee (ICC), as per All India Council for Technical Education (Gender Sensitization, Prevention and Prohibition of Sexual Harassment of Women Employees and students and redressal of Grievances in Technical Institutions Regulations 2016).

As per the above regulation Internal Complaints Committee is formed on 15th June 2016. Following are the ICC committee members:

Dr. Mrs. R. Sreemathy – Presiding Officer

Dr.Mrs.S.Dharmadhikari-Member

Dr. Mrs. A. S. Ghotkar – Member

Mrs. M. N. Javalekar - Member

Ms. Neha A Godse - Member

Mr. Nishant A Poorswami – Member

Mr. Shreyash R Tatiya – Member

Mrs. U. S. Bhosale – Member Secretary

Advocate Mrs. K. S. Kolhatkar (outside member familiar with sexual harassment issues)

The following events were conducted by the committee to give awareness about the functioning, rules and regulation of the committee.

A meeting of all the women employees and students was organized to introduce the committee members and to brief about what is sexual harassment. The procedure for filing the complaints was also explained. Adv.Kolhatkar explained the procedures and answered the queries by participants. The event was conducted on 31<sup>st</sup> August 2016.

Workshop on "The Sexual Harassment of Women at Workplace) Prevention, Prohibition and Redressal) Act, 2013" conducted jointly by 'Maharashtra State Commission for Women' and 'SPPU' on 2<sup>nd</sup> Feb. 2017 at St. Mira's College, Koregaon Park, Pune. It was attended by two internal members and the external member of ICC.

As per the guidelines of 'Maharashtra State Commission for Women' and 'SPPU'on 2<sup>nd</sup> Feb. 2017 a workshop was organized on 27<sup>th</sup> Feb 2017 in PICT for all the women employees and students to give awareness of the above act and the rules and regulations.

#### 7. Professional body chapters IETE, ACM, CSI

#### i. IET:

PICT IET Students' Chapter (PISC) was established in 2012 and currently has strength of 65 students and 7 faculty branch counselors. Under the aegis of IET Pune Local Network, PICT IET Student Chapter is involved in various activities in campus and at Local network level.

PISC since its inception has gradually emerged with its signature technical event SCIENTIA, in the Pune region and IET network. Under Scientia the events/competitions organized are

- Imaginario : A non-technical event based on abstract thinking.
- Encuesta : A Non-technical general knowledge based quiz competition.
- Consilium : A problem statement to design electronics circuit.
- Logica: A logical aptitude and algorithm development competition.
- Cod-e-fest : A competition related to coding and debugging.
- Wordbuzz : Game of words.
- Rubik's cube: Rubik's cube solving competition.
- Workshop : A technical workshop on the topic 'Ethical hacking' & 'Google for work'.

Which enhance the team spirit of the students at the same time an exposure to the technical advancements in the society.

Apart from it PISC has been consistently performing in various events/competitions organized by IET, India and IET, Pune Local Network such as Present around the World (PATW), Regional scholarship round, mini project competition and NICE (Nurturing Intelligence through Curious Engineers). PISC also offers chapter level scholarship to 2 meritorious student members from T.E. every year in the name of Late Mr. JalKharas.

#### ii. ACM:

**ACM, the Association for Computing Machinery** is the world's largest educational and scientific society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges.

Establishment year: Jan-2012

PICT ACM Student Chapter (PASC) was started in January 2012 with a vision to carry on ACM internationals intentions on a grass root level in PICT. We aim to provide opportunities to students by organizing world class seminars, lectures and workshops to meet peers and experts in their fields of interest. The chapter organizes seminars and workshops on different domains by speakers who are well known in their area, which gives opportunities to the students to learn about advanced research subjects. The chapter activities include seminars, competitions, academia-industry initiatives and various ventures to promote knowledge sharing and innovation. PASC also aims to provide students a platform to hone their technical as well as their organizational skills.

#### **Activities by PASC**

PASC organizes its annual event, **Pulzion**, every year in the month of August. We started Pulzion from the year 2014 in order to provide students a stage to prove their **technical** as well as **non-technical skills**. Under Pulzion, PASC holds many technical competitions such as coding competitions, Hackathons, Capture The Flag competitions, etc. We also conduct non-technical events such as General Knowledge quizzes, Fandom Quiz, Wordworth, etc. Pulzion also gives students opportunities to learn various skills and technologies by conducting workshops on multiple topics such as Ethical Hacking, Android Development by Google Developer's Group, etc. We also conduct **multiple seminars** by renowned personalities in their fields. Over the years, seminars by Mr. Vivek Kulkarni & Dr. Sachin Lodha, on topics such as "Theory of Computation" & "Security and Privacy", respectively were conducted. A part from technical seminars, we also conduct seminars on non-technical aspects such as "Planning Your Career - MS, MBA or Job" by Mr. Sharad Tandale, "Planning Your Career - MS, MBA or Job" by Dr. Navin Kabra, etc.

Apart from Pulzion, PASC also holds Special Interest Groups (SIGs) on

various topics such as Cyber Security, Competitive Coding, Machine Learning, Web Development, etc. Members in the SIGs meet on a regular basis and discuss new ideas, learn new technologies, develop new products and teach others as well.

We also hold **workshops and seminars** for the college students on topics such as Assembly Language Programming, Python Development, Open-Source Development, JavaScript and PHP Development, Linux Shell, Programming Basics, etc.

Recently, PASC members have also started working as content creators and curators for **CS Pathshala**, an initiative by ACM India.

#### iii. CSI:PICT Computer Society India Student Chapter (PCSC)

Chapter/Student Branch Name- PICT CSI student community (PCSC)

Region - VI

Establishment year: 2016

The event/activity organized:

- Orientation program
- Building command line tool with PYTHON
- Career in Management and Interview Outsmarting Skills
- CodeVenture

#### 8. Additional Infrastructure facility for Applied Science Department.

- Total carpet area: 800sq.mt
- Class rooms: 6
- Laboratories: 4
- Lift facilities available
- New language lab is developed.



Society for Computer Technology & Research's

### **PUNE INSTITUTE OF COMPUTER TECHNOLOGY**

(Affiliated to the Savitribai Phule Pune University & Accredited by NBA [All UG Programs]) SR. NO. 27, PUNE-SATARA ROAD, DHANKAWADI, PUNE - 411 043. (INDIA)

ID No.: PU/PN/Engg./054 (1983)

Tel.: +91 20 24371101/8063

Fax No: +91 20 24364741

Website: www.pict.edu

E-mail: principal@pict.edu

#### Declaration by the Head of the Institution

I certify that the data included in this 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.

Place: Pune.

Date: 30/03/2017.

Principal
Page Institute of Computer Technology





#### Society for Computer Technology & Research's

#### PUNE INSTITUTE OF COMPUTER TECHNOLOGY

(Affiliated to the Savitribai Phule Pune University & Accredited by NBA [All UG Programs]) SR. NO. 27, PUNE-SATARA ROAD, DHANKAWADI, PUNE - 411 043. (INDIA)

ID No.: PU/PN/Engg./054 (1983)

Tel.: +91 20 24371101/8063 Fax No: +91 20 24364741 Website: www.pict.edu E-mail: principal@pict.edu

#### **Certificate of Compliance**

(Affiliated/Constituent/Autonomous Colleges and Recognized Institutions)

This is to certify that **SCTR's Pune Institute of Computer Technology** fulfils all norms

- 1. Stipulated by the affiliating University and
- 2. Regulatory Council [ AICTE] and
- 3. The affiliation is valid as on date.

In case the affiliation 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: 02|05|2017

Place: Pune

Dr. Prahlad T. Kulkami PRINCIPAL

SCTR's Pune Institute of Computer Technology

8 No 27 Pune-Satara Road, Dhankawadi Pune-411043

ROF COMPUTE TECHNOLOGY

SOCIETY FOR COMPUTER TECHNOLOGY & RESEARCH, PUNE - 411 043.



UGC Website: www.ugc.ac.in Ph. 011-23604414 (CPP-I/Colleges)



**Speed Post** 

विश्वविदयालय अनुदान आयोग **University Grants Commission** (मानव संसाधन विकास मंत्रालय, भारत सरकार) Ministry of Human Resource Development, Govt. of India

बहादुर शाह जफर मार्ग, नई दिल्ली – 110 002 Bahadur Shah Zafar Marg, New Delhi - 110 002

July, 2016

148 JUL 2016

The Registrar, Savitribai Phule Pune University

F. No. 8-556/2015 (CPP-I/C)

Ganeshkind, Pune - 411 007 Maharashtra

Recognition of College under Section 2 (f) & 12 (B) of the UGC Act, 1956.

Sir,

I am directed to the letter no. SPPU/DEV/293 dated 06.04.2016 received from Principal, Society for Computer Technology & Research's Pune Institute of Computer Technology, Sr. No. 27, Pune Satara Road, Dhankawadi, Pune - 411 043, Maharashtra on the above subject and to say that it is noted that the following college is un-aided/self financed and permanently affiliated to Savitribai Phule Pune University, Ganeshkind, Pune. I am further to say that the name of the following college has been included in the list of colleges prepared under Section 2 (f) & 12 (B) of the UGC Act, 1956 under the head 'Non-Government, self financed Colleges teaching upto Bachelor's Degree'.

Name of the College	Year of Establishment	Remarks
Society for Computer Technology & Research's Pune Institute of Computer Technology Sr. No. 27, Pune Satara Road Dhankawadi, Pune – 411 043 Maharashtra	1983	The College is now declared fit to receive Central assistance in terms of Rules framed under Section 12 (B) of the UGC Act, 1956. However, the College, being a self financing & unaided, would be eligible to receive UGC's support only in respect of teachers & students
AISHE CODE:- C-42072		related schemes as per the decision of the Commission dated 8 <sup>th</sup> July 2011.

The Indemnity Bond and the other supporting documents submitted in respect of the above College have been accepted by the University Grants Commission.

Yours faithfully,

(Charan Dass) **Under Secretary** 

Copy to:-

The Principal, Society for Computer Technology & Research's Pune Institute of Computer Technology, Sr. No. 27, Pune Satara Road, Dhankawadi, Pune - 411 043, Maharashtra.

2. The Secretary, Government of India, Ministry of Human Resource Development, Department of Secondary & Higher Education, Shastri Bhawan, New Delhi - 110 001.

3. The Principal Secretary, Tech. & Higher Education Deptt. Government of Maharashtra, Mantralaya, Annexe Building, Mumbai - 400 032, (Maharashtra).

4. The Joint Secretary, UGC, Western Regional Office (WRO), Ganeshkhind, Poona - 411 007, (Maharashtra).

5. Section Officer (FD-III Section), UGC, New Delhi.

6. Guard file.

PUNE INSTITUTE OF COMPUTER TECHNOLOGY Dhankawadi Pune-43.

(M.P. Singh) Section Officer



#### All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Date: 10-Apr-2017

Nelson Mandela MargVasant Kunj, New Delhi-110067 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 <u>www.aicte-India.org</u>

F.No. Western/1-3330294993/2017/EOA

To,

The Secretary, Tech. & Higher Education Deptt. Govt. of Maharashta, Mantralaya, Annexe Building, Mumbai-400032

Sub: Extension of approval for the academic year 2017-18

Ref: Application of the Institution for Extension of approval for the academic year 2017-18

Sir/Madam.

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2016 notified by the Council vide notification number F.No.AB/AICTE/REG/2016 dated 30/11/2016 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Permanent Id	1-5592509	Application Id	1-3330294993
Name of the Institute	SCTR'S PUNE INSTITUTE OF COMPUTER TECHNOLOGY	Institute Address	S.NO.27, PUNE SATARA ROAD, DHANKAWADI, PUNE, PUNE, Maharashtra, 411043
Name of the Society/Trust	SOCIETY FOR COMPUTER TECHNOLOGY AND RESEARCH, PUNE	Society/Trust Address	SURVE. NO. 27, PUNE - SATARA ROAD, DHANKAWADI, PUNE - 411043,PUNE,PUNE,Maharashtra,411043
Institute Type	Unaided - Private	Region	Western

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable
Opted for Conversion from degree to diploma	No	Opted for Conversion from diploma to degree	No	Conversion (degree to diploma or vice-aversa) Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2017-18

Application Id: 1-3330294993		Course	ā	Affiliating Body	oved for	oved for	al status	f quota/ us	on/Twining pproval	
Program	Shift	Level		Full/Part Time		Intake Approv. 2016-17	Intake Approved 2017-18	NRI Approval status	PIO / FN / Gulf qu OCI/ Approval status	Foreign Collaborarion/T Program Appro status*
ENGINEERIN G AND TECHNOLO GY	1st Shift	POS T GRA DUA TE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	25	25	NA	NA	NA

Application Number: 1-3330294993 Note: This is a Computer generated Report.No signature is required.

Page 1 of 3 Letter Printed On: 13 April 2017

Printed By : AE047331



#### All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela MargVasant Kunj, New Delhi-110067 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 <u>www.aicte-India.org</u>

	1st									
ENGINEERIN G AND TECHNOLO GY	Shift	POS T GRA DUA TE	ELECTRONICS & TELE- COMMUNICATI ON ENGINEERING	FULL TIME	University of Pune, Pune	18	18	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	1st Shift	POS T GRA DUA TE	INFORMATION TECHNOLOGY	FULL TIME	University of Pune, Pune	18	18	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	1st Shift	UND ER GRA DUA TE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	180	180	NA	Yes	NA
ENGINEERIN G AND TECHNOLO GY	1st Shift	UND ER GRA DUA TE	ELECTRONICS & TELE- COMMUNICATI ON ENGINEERING	FULL TIME	University of Pune, Pune	180	180	NA	Yes	NA
ENGINEERIN G AND TECHNOLO GY	1st Shift	UND ER GRA DUA TE	INFORMATION TECHNOLOGY	FULL TIME	University of Pune, Pune	120	180	NA	Yes	NA
ENGINEERIN G AND TECHNOLO GY	2nd Shift	POS T GRA DUA TE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	24	24	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	2nd Shift	UND ER GRA DUA TE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	2nd Shift	UND ER GRA DUA TE	ELECTRONICS & TELE- COMMUNICATI ON ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA

#### The above mentioned approval is subject to the condition that

SCTR'S PUNE INSTITUTE OF COMPUTER TECHNOLOGY

shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation

Application Number: 1-3330294993 Note: This is a Computer generated Report.No signature is required. Page **2** of **3** Letter Printed On: 13 April 2017

Printed By : AE047331



#### All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela MargVasant Kunj, New Delhi-110067 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

Note: Validity of the course details may be verified at www.aicte-india.org

Prof. A.P Mittal Member Secretary, AICTE

## Copy to: 1. The Regional Officer,

All India Council for Technical Education Industrial Assurance Building 2nd Floor, Nariman Road Mumbai - 400 020, Maharashtra

#### 2. The Director Of Technical Education\*\*,

Maharashtra

#### 3. The Registrar\*\*,

University of Pune, Pune

#### 4. The Principal / Director,

SCTR'S PUNE INSTITUTE OF COMPUTER TECHNOLOGY S.NO.27, PUNE SATARA ROAD, DHANKAWADI, PUNE, PUNE, Maharashtra,411043

#### 5. The Secretary / Chairman,

SOCIETY FOR COMPUTER TECHNOLOGY AND RESEARCH, PUNE SURVE. NO. 27, PUNE - SATARA ROAD, DHANKAWADI, PUNE - 411043, PUNE PUNE. Maharashtra,411043

#### 6. Guard File(AICTE)

Note:  $^{**}$  - Approval letter copy will not be communicated through post/email. However, provision is made in the portal for downloading Approval letter through Authorized login credentials allotted to concerned DTE/Registrar.

Application Number: 1-3330294993 Note: This is a Computer generated Report.No signature is required.

Page 3 of 3 Letter Printed On: 13 April 2017

Printed By: AE047331

## University of Pune

Telephone Nos.: 020- 25691233 25601258 25601259 25601257



ACADEMIC SECTION Ganeshkhind, PUNE-411007, INDIA

Telegraph: 'UNIPUNE' Fax: 020-25691233

Webside: www.unipune.ac.in e-mail: dyracademic@unipune.ac.in

Date: 13-10-2011

Ref. No. : CA 2724

Revised Letter

To, The Principal, Pune Institute of Computer Technology, S.No.27, Pune Satara Road, Dhankawadi, Pune- 411 0043

Sub: Grant of Permanent Affiliation to Engineering Faculty from Academic Year 2010-11

Sir,

Referring to the subject captioned above, I am directed to inform you that the University Authorities have been pleased to grant **Permanent Affiliation** to your College according to section 88 of the Maharashtra University Act,1994. Subject to the terms & conditions laid down by the University of Pune, Government of Maharashtra & University Grants Commission etc., from time to time, with effect from the Academic year 2010-11 Which may pleased be noted.

(Note: This Office Letter CA/2548, Dated: 04/07/2011 be treated as cancelled)

Under Graduate Course:

1)B.E.- Computer Engineering (Intake-120)

2)B.E.- E&TC (Intake-90)

3)B.E. Information Technology (Intake 120)

Yours Faithfully

B.C.U.D

Copy forwarded with compliments for information & necessary action to:

1. The Secretary, Higher & Technical Education, Mantralaya, Mumbai-400 032.

2. The Administrative Officer, Higher Education Grant, Pune Division, Maharashtra State, 17, Dr. Ambedkar Road, Near Sent Mathyu Marathi Church, Opp. Lal Mandir, First Floor, Pune-411 001.

3. The Dy. Registrar, Development Section, University of Pune, Pune- 411 007.

Telephone nos 020-25691233 25601257 25601258 25601259

15120045

Savitribai Phule Pune University (Formerly Pune University) Logo of the Pune University Academic Department
Ganeshkhind, Pune 411007
Telegraph: "unipune"

Fax: 020-25691233 Website: www.uipune.ac.in

e-mail: dyracademic@unipune.ac.in

Reference no : CA / 1306

Dated: 23.05.2016

To,

The Honorable Principal,

Society for Computer Technology and Research,

Pune Institute of Computer Technology,

Survey Number 27, Pune Satara Road, Dhankawadi,

Pune 43 Tehsil: Pune Municipal Corporation Limits,

District : Pune

Pune Institute of Computer Technology

Dhankawadi Pune 43 Inward number : 8538 Inward Date : 18.8.2016

Dispatcher Signature: SD

Subject: Verification report of compliance of the terms and conditions

Sir, In terms of the decision taken by the University Academic Council in respect of the subject under reference, you are hereby informed that the verification report with respect to the compliance of the conditions for the affiliation renewal / natural extension of the curricula mentioned in the following table, of your college for the educational year 2016-17has been accepted subject to the curriculum and intake capacity approval by the All India Council for Technical Education, New Delhi and Directorate of Technical Education, Government of Maharashtra.

While issuing the letter of compliance of the conditions, for the educational year 2016-17, the appointments of the teachers mentioned in the Local Inquiry Committee report for the purpose, should be continued for the educational year 2016-17. Similarly inspection will be carried out by the

University, in this respect from time to time.

Sr	Details of course	Number of	First Shift / Second Shift	Type of
no		Students		Affiliation
1	M. E. (E & TC) Microwaves	18	2016-17 – First year and second year –Division number 1	Renewal
2	M. E. ( Information	18	2016-17 – First year and second year –Division number 1	Renewal

43. PECHW 2

Dr. Prahlad T. Kulkarni PRINCIPAL

SCTR's Pune Institute of Computer Technology S No 27 Pune-Satara Road, Dhankawadi Pune-411043 Dr. B.V. GIRDHARI

Govt. Authorised Translator

Panel Member

R.No. LNG/2007/681- Case No. 9-07-20B

Dt. 18-1-2008

State of Languages Maharashtra State

3	M. E. (Computer)	49	2016-17 – First year and second year  –Division number 1 First year and second year –Second Shift Division number 2	Renewal
4	B. E ( Electronics and Telecommunication	150	2016-17 –First to fourth year – Division number 2 - First to fourth year, Division number 3 - First to third year – Second Shift – Division number 4	Renewal
5	B. E. ( Computer )		2016-17 –First to fourth year – Division number 3 - First to fourth year,– Second Shift – Division number 4	Renewal
6	B. E ( Electronics and Telecommunication	150	2016-17 – Fourth year - Second shift Division number 4	Natural Extension

Yours Faithfully SD/-23.5.2016 Deputy Registrar **Academics Department** 

Dr. Prahlad T. Kulkarni

PRINCIPAL
SCTR's Pune Institute of Computer Technology
S No 27 Pune-Satara Road, Dhankawadi Pune-411043



दूरध्यनी क्रमांक :

070-74598733 74508748 74508748 74508749



15120045

सावित्रीबाई फुले पुणे विद्यापीठ

ज्ञान पुण निद्धापाठ

ठि गणेशखिंड, पुणे-४११० पृ७. लेगाफ : 'युनिपुणे'

: ०२०-२५६९१२३३

वेबसाइट : www.unipune.ac.in

इ-मेल : dyracademic@unipune.ac.in

は: 23104)2698

शैक्षणिक विभाग

संदर्भ कः सी दा १ ९ ३०६

प्रति,

मा. प्राचार्य, सोसायटी फॉर कॉम्प्युटर टेक्नॉलॉजी ॲण्ड रिसर्च पुणे इन्स्टिट्यूट ऑफ कॉम्पूटर टेक्नॉलॉजी पता: स नं २७ पुणे-सातारा रोड धनकवडी पुणे ४३ ता.: पुणे (महानगर पालिका हदद) जि: पुणे

विषय:- अटींच्या पूर्ततेच्या पडताळणी अहवालबाबत...

PUNE INSTITUTE OF COMPUTER TECHNOLI Ohankawadi Pune-43.

inward Date: 18/8/2016

महोदय,

वरील विषयासंदर्भात विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार आपणास कळविण्यात येते की, आपल्या महाविद्यालयास शैक्षणिक वर्ष २०१६-२०१७, या वर्षाकरिता खालील रकान्यात नमूद केलेल्या अभ्यासक्रमांच्या सलग्नीकरणाच्या नुतानिकरणास / नैसर्गिकवादीस अखिल भारतीय तंत्रशिक्षण परिषद, नवी दिल्ली व तंत्रशिक्षण संचालतालय, महाराष्ट्र शासन यांचे अभ्यासक्रम व प्रवेश क्षमता मान्यतेच्या अधीन राहून अटी पूर्ततेचा पडताळणी अहवाल स्वीकारण्यात आलेला आहे.

शिक्षणिक वर्ष २०१६-२०१७ करिता अटी पूर्तता अहवालाचे पत्र देत असताना स्थानिक चौंकशी समितीच्या अहवालात नम्द्र केलेल्या ज्या शिक्षकांच्या तदर्थ नेमणुका करण्यात आलेल्या आहेत अशा सर्व शिक्षकांना शैक्षणिक वर्ष २०१६-२०१७ मध्ये कायम ठेवण्यात यावे.तसेच याबाबत विद्यापीठामार्फत वेळोवेळी तपासणी करण्यात येईल.

अभ्यासक्रमाचा तपशील	विद्यार्थी संख्या	प्रयमपाळी/व्दितीय पाळी	संलग्नीकरणाचा प्रकार
एम.इ. (इ ॲण्ड टीसी) माइक्रोवेव्स	18	2016-2017 : - वर्ष प्रथम व व्दितिय- Div No.1.,	न्तनीकरण
एम.इ. (इन्फर्मेशन टेक्नॉलॉजी)	18	2016-2017 : - वर्ष प्रथम व व्दितिय- Div No.1,,	न्तनीकरण
एम.इ. (कॉमप्यूटर)	49	2016-2017 : - वर्ष प्रथम व व्दितिय- Div No.1,- वर्ष प्रथम व व्दितिय- दुसरी पाळी Div No. 2,,	नूतनीकरण
बी.ई. (इलेक्ट्रॉनिक्स ॲंड टेलिकम्पूलिकेशन)	150	2016-2017 : - वर्ष पहिले ते चौथे- Div No.2,- वर्ष पहिले ते चौथे- Div No.3,- वर्ष पहिले ते तिसरे- दुसरी पाळी Div No.4,	नूतनीकरण
बी.ई. (कॉमप्यूटर)	120	2016-2017 : - वर्ष पहिले ते चौथे- Div No.3,- वर्ष पहिले ते चौथे- दुसरी पाळी Div No. 4,	नूतनीकरण
बी.ई. (इलेक्ट्रॉनिक्स ॲंड टेलिकम्युनिकेशन)	150	2016-2017 : - वर्ष चौथे- दुसरी पाळी Div No. 4,,	नैसर्गिकवाढ
	एम.इ. (इ ॲण्ड टीसी) माइक्रोवेव्स एम.इ. (इन्फर्मेशन टेक्नॉलॉजी) एम.इ. (कॉमप्यूटर) बी.ई. (इलेक्ट्रॉनिक्स ॲड टेलिकम्यूनिकेशन) बी.ई. (कॉमप्यूटर)	अश्यासक्रमाचा तपशील संख्या  एम.इ. (इ ऑण्ड टीसी) माइक्रोवेट्स  18  एम.इ. (इन्फर्मेशन टेक्नॉलॉजी)  18  एम.इ. (कॉमप्यूटर)  49  वी.ई. (इलेक्ट्रॉनिक्स ॲंड  टेलिकम्यूनिकेशन)  वी.ई. (कॉमप्यूटर)  120  वी.ई. (इलेक्ट्रॉनिक्स ॲंड  150	प्रम.इ. (इ ऑण्ड टीसी) माइक्रोवेव्स  एम.इ. (इ ऑण्ड टीसी) माइक्रोवेव्स  एम.इ. (इर्ल्फमॅशन टेक्नॉलॉजी)  18  2016-2017 : - वर्ष प्रथम व व्वितिय- Div No.1  2016-2017 : - वर्ष प्रथम व व्वितिय- Div No.1  2016-2017 : - वर्ष प्रथम व व्वितिय- Div No.1 वर्ष प्रथम व व्वितिय- Div No.1 वर्ष प्रथम व व्वितिय- Cur No.1 वर्ष पहिले ते व्याथ- Cur No.2 वर्ष पहिले ते व्याथ- Div No.2 वर्ष पहिले ते व्याथ- Cur No.3 वर्ष पहिले ते व्याथ- Cur No.4  वा.ई. (इलेक्ट्रॉनिक्स अँड

PUNE-43. TECH

Dr. Prahlad T. Kulkarni PRINCIPAL

SCTR's Pune Institute of Computer Technology \$ rie 27 Pune-Satara Road, Dhankawadi Pune-411043 उधकुलसचिव शेक्षणिक दि: ग Telephone nos 020-25691233 25601258 25601259 Savitribai Phule Pune University (Formerly Pune University) Logo of the Pune University Academic Department
Ganeshkhind, Pune 411007
Telegraph: "unipune"

Fax: 020-25691233 Website: www.uipune.ac.in

e-mail: dyracademic@unipune.ac.in

Reference no : CA / 3606

Dated: 27.09.2016

To,

The Honorable Principal,

S. C. T. R

Pune Institute of Computer Technology Pune Satara Road, Pune 411043

Subject : Renewal of Research Center

Sir,

In terms of the decision taken by the Academic Council in respect of the subject under reference, you are hereby informed that the renewal approval of the Ph. D Research Center curricula mentioned in the following table has been permitted subject to the condition of submission of progress report to the Academic Department every six months.

Sr Subject	Academic Branch	Educational Year	Period	Fresh / Renewal
<ul> <li>Ph. D Computer Engineering</li> <li>Ph. D Electronics and</li> <li>Telecommunication Engineering</li> </ul>	Engineering	2015-16 to 2018-19	4 Years	Renewal

Dr. B.V. GIRDHARI

Sovt. Authorised Translator

Panel Member

R.No. LNG/2007/681. Case No. 9.07.200

of Languages Maharash

SD/-27.9.16 Deputy Registrar Academics Department

Yours Faithfully

Dr. Prahlad T. Kulkarni PRINCIPAL

SCTR's Pune Institute of Computer Technology S No 27 Pune-Satara Road, Dhankawadi Pune-411043

#### सावित्रीबाई फुले पुणे विद्यापीठ



शैक्षणिक विभाग

, गणेशखिंड, पुणे—४११ ००७

टेलिग्राफ : 'युनिपुणे'

फॅक्स : ०२०—२५६९१२३३ वेबसाइट : www.unipune.ac.in

ई—मेल : dyracademic@unipune.ac.in

दिनांक : २७/०९/२०१६

संदर्भ क. :सीए/3६०६ प्रति, मा. प्राचार्य, एस.सी.टी.आर. पुणे इन्स्टिटयुट ऑफ कॉम्प्युटर टेक्नोलॉजी, पुणे—सातारा रोड, पुणे — ४११०४३

विषय: - संशोधन केंद्राच्या नूतनीकरणाबाबत...

महोदयं

उपरोक्त विषयासंदर्भात विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार आपणास कळविण्यात येते की, आपल्या महाविद्यालयात खालील रकान्यात नमूद केलेल्या विषयांच्या पीएच.डी. संशोधन केंद्राच्या नूतनीकरणाच्या मान्यतेचा अहवाल दर सहा महिन्याने प्रगती अहवाल (Progress Report) शैक्षणिक विभागात सादर करण्याच्या अटीवर परवानगी देण्यात येत आहे.

अनु. क	विषय	विद्याशाखा	शैक्षणिक वर्ष	कालावधी	नव्याने / नूतनीकरण
٧.	पीएच डी. कॉम्प्युटर इंजिनिअरिंग,	अभियांत्रिकी	२०१५-१६ ते २०१८-१९	४ वर्षे	नूतनीकरण
٧.	इलेक्ट्रॉनिक्स ॲण्ड टेलिकम्युनिकेशन इंजिनिअरिंग				

PUNE 43. POOR

2

(शैक्षणिक विभाग) ——

उपक्लसचिव

26/2/2

Dr. Prahlad T. Kulkarni PRINCIPAL

SCTR's Pune Institute of Computer Technology
S No 27 Pune-Satara Road, Dhankawadi Pune-411043

#### NATIONAL BOARD OF ACCREDITATION

NBCC Place, East Tower, 4th Floor, Bhisham Pitamah Marg, Pragati Vihar, New Delhi-110 003
Tel: +91 11 2436 0620-22, 2436 0654 Telefax: +91 11 2436 0682
Website: www.nbaind.org



Date: 03-02-2017

File No: 28-248-2010-NBA

To.

The Principal, SCTR'S Pune Institute of Computer Technology, Sr. No. 27, Pune-Satara Road, Dhankawadi, Pune-411043, Maharashtra.

Subject: Accreditation status of programmes applied by SCTR'S Pune Institute of Computer Technology, Sr. No. 27, Pune-Satara Road, Dhankawadi, Pune-411043, Maharashtra.

Sir,

This has reference to your application Id. No. 1345 dated 17/04/2015 seeking accreditation by National Board of Accreditation to UG Engineering programmes offered by SCTR'S Pune Institute of Computer Technology, Sr. No. 27, Pune-Satara Road, Dhankawadi, Pune-411043, Maharashtra.

2. An Expert Team conducted on-site evaluation of the programmes during 23<sup>rd</sup> to 25<sup>th</sup> September, 2016. The report submitted by the Expert Team was considered by the concerned Committees constituted for the purpose in NBA. The competent authority in NBA has approved the following accreditation status to the programmes as given in the table below:

S.No.	Name of the Programme (UG)	Basis of Evaluatio n	Accreditation Status	Period of validity	Remarks	
(1)		(3)	(4)	(5)	(6)	
1.	Computer Engineering	Tier-II (June, 2015 Document)	Provisionally Accredited	Academic Years 2016-2017, 2017-	Accreditation status granted is valid for the period indicated in	
2.	Information Technology		Provisionally Accredited	2018 and 2018-19 i.e., upto 30-06-	Col.5 or till the program has the approval of the	
3.	Electronics & Telecommunication Engineering		Provisionally Accredited	2019	competent authority, whichever is earlier.	

- 3. It may be noted that only students who graduate during the validity period of accreditation, will be deemed to have graduated with an NBA accredited degree.
- 4. The programs have been granted provisional accreditation. SCTR'S Pune Institute of Computer Technology, Sr. No. 27, Pune-Satara Road, Dhankawadi, Pune-411043, Maharashtra should submit the Compliance Report at least six months before the expiry of validity of accreditation mentioned above to be eligible to be considered by the concerned Committee in NBA for further processing of the accreditation status. This could entail further extension of accreditation or a revisit, as deemed appropriate by NBA Committees.
- 5. The accreditation status awarded to the programmes as indicated in the above table does not imply that the accreditation has been granted to SCTR'S Pune Institute of Computer Technology, Sr. No. 27, Pune-Satara Road, Dhankawadi, Pune-411043, Maharashtra as a whole. As such, the Institution should nowhere along with its name including on its letter head etc. write that it is accredited by NBA because it is programme accreditation and not Institution accreditation. If such an instance comes to NBA's notice, this will be viewed seriously. Complete name of the programme(s) accredited, level of programmes and the period of validity of accreditation, as well as the date from which the accreditation is effective should be mentioned unambiguously whenever and wherever it is required to indicate the status of accreditation by NBA.

du s

Contd/...

- 6. The accreditation status of the above programmes is subject to change on periodic review, if needed by the NBA. It is desired that the relevant information in respect of accredited programmes as indicated in the table in paragraph 2, appears on the website and information bulletin of the Institute.
- 7. The accreditation status awarded to the programmes as indicated in table in paragraph 2 above is subject to maintenance of the current standards during the period of accreditation. If there are any changes in the status (major changes of faculty strength, organizational structure etc.), the same are required to be communicated to the NBA, with an appropriate explanatory note.
- 8. Copy of the Report of Chairman of the Visiting Team and Evaluators' Reports in respect of the above programmes are also enclosed.
- 9. If the Institute is not satisfied with the decision of NBA, it may appeal within thirty days of receipt of this communication giving reasons for the same and by paying the requisite fee.

Yours faithfully,

(Dr. Anil Kumar Nassa) Member Secretary

Encls: 1.Copy of Report of Chairman of the Visiting Team.
2. Copies of Expert Reports of the Visiting Team.

#### Copy to:

- The Director of Technical Education Mahapalika Marg, Dhobi Talao, Chhatrapati Shivaji Terminus Area, Fort, Mumbai, Maharashtra 400001.
- The Registrar, University of Pune, Ganeshkhind, Pune-411 007.
- 3. Master Accreditation Folder of the State.







## राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

#### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

## Certificate of Accreditation

The Executive Committee of the

National Assessment and Accreditation Council

on the recommendation of the duly appointed

Peer Jeam is pleased to declare the

Society for Computer Jechnology and Research (R) Pune,

Institute of Computer Jechnology

Dhankawadi, Pune, affiliated to University of Pune, Maharashtra as

with CSPA of 2.88 on four point scale

at B grade

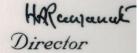
valid up to September 03, 2015

Accredited



Date: September 04, 2010











## राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

#### **NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

An Autonomous Institution of the University Grants Commission

प्रो. एच. ए. रंगनाथ <sup>निदेशक</sup> Prof. H.A. Ranganath

Director

FASc, FNASc, FEAI, FNA.,

Dhankawadi une-411 043.
Inward Day 13/9/10
Dispatcher Signature:

GRY SNAAC FILE.

September 06, 2010

NAAC/RAR/EC-53/58/2010,

The Principal

Society for Computer Technology and Research (R) Pune Institute of Computer Technology

Sr. No. 27, Pune-Satara Road, Dhankawadi

Pune - 411043 Maharashtra

Dear Principal,

Greetings of Quality from NAAC.

I am glad to inform you that the outcome of the Re-accreditation exercise of your institution has been processed and approved by the Executive Committee of NAAC and your institution has been *Accredited* for a further period of five years with a CGPA of 2.88 on a four point scale at B *Grade* valid from 04/09/2010. The provisional certificate of accreditation will be sent to you shortly. However, the original certificate of accreditation with the quality profile will be presented to the heads of accredited institutions during the "NAAC Accreditation Awards Ceremony" to be convened in due course. I am sure the detailed peer team report given to you already by the peer team will enable the institution to initiate further quality enhancement measures.

With best wishes.

Yours sincerely,

(H. A. Ranganath)

2-10 pulm 10

पिए ओए बाक्स नं. 1075, नागरभावी, वेंगलूर - 560 072, भारत P.O.Box No. 1075, Nagarbhavi, Bangalore - 560 072, INDIA



# DNV BUSINESS ASSURANCE MANAGEMENT SYSTEM CERTIFICATE

Certificate No. 26331-2008-AQ-IND-RvA Rev. 03

This is to certify that

#### PUNE INSTITUTE OF COMPUTER TECHNOLOGY

at

Survey No. 27, Dhankavadi, Pune - Satara Road, Pune - 411 043, INDIA

has been found to conform to the Quality Management System Standard:

ISO 9001:2008

This certificate is valid for the following scope:

PROVIDING UNDER-GRADUATION AND POST-GRADUATION EDUCATION IN ENGINEERING PROGRAMS - COMPUTER ENGINEERING, ELECTRONICS & TELECOMMUNICATION ENGINEERING AND INFORMATION TECHNOLOGY

Initial Certification date: 04 April 2005

This Certificate is valid until: 03 April 2017

The audit has been performed under the supervision of:

Sudhir Kusurkar

Place and date of issue: Chennai, 08 April 2014

for the Accredited Unit:
DET NORSKE VERITAS CERTIFICATION B.V.,
THE NETHERLANDS

Sivadasan Madiyath Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement & the annexure to this certificate may render this Certificate invalid.

