

MARATHWADA MITRA MANDAL'S COLLEGE OF ENGINEERING

SELF STUDY REPORT (SSR)

Submitted To

**NATIONAL ASSESSMENT AND
ACCREDITATION COUNCIL, BANGALORE**



Submitted By

**MARATHWADA MITRA MANDAL'S
COLLEGE OF ENGINEERING**

**Survey No. 18, Plot No. 5/3, Karvenagar, Pune-411 052.
Maharashtra, India.**

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SELF - STUDY REPORT (SSR)

**For NAAC Accreditation of
Marathwada Mitra Mandal's
COLLEGE OF ENGINEERING**

**Submitted to
National Assessment and
Accreditation Council**



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COLLEGE OF ENGINEERING
Survey No. 18, Plot No. 5/3, Karvenagar, Pune-411 052.
Maharashtra, India.
www.mmcoe.edu.in**

ABBREVIATIONS

ABET	Accreditation Board for Engineering and Technology
ACES	Association of Computer Engineering Students
ACM	Association for Computing Machinery
AICTE	All India Council for Technical Education
AIEEE	All India Engineering Entrance Examination
AIVSC	All India Vayu Sainik Camp
AMC	Academic Monitoring Committee
AMS	Academic Monitoring System
AMMI	Association of Management of MBA/MMS Institutes
ARAI	Automotive Research Association of India
ARC	Application-Form Receipt Center
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ATMA	AIMS Test for Management Admissions
BCUD	Board of College and University Development
BETA	Bench of Electronics & Telecommunication Association
BOS	Board of Studies
CAD	Computer Aided Design
CAP	Centralized Admission Process
CCC	Campus Coordination Committee
CDC	Campus Development Council
CEO	College Examination Officer
CET	Common Entrance Test
CII	Confederation of Indian Industries
CMAT	Common Management Admission Test
CO	Course Outcomes
CRD	Corporate Relations Division
CSI	Computer Society of India
DICCI	Dalit Indian Chamber of Commerce and Industry
DTE	Directorate of Technical Education
E&TC	Electronics & Tele-Communication Engineering
EBC	Economically Backward Class
ECA	Extra Curricular Activity
EDC	Entrepreneurship Development Cell
EEF	Education Excellence Forum
EESA	Electrical Engineering Students Association
FDP	Faculty Development Programme
GATE	Graduate Aptitude Test in Engineering
GOI	Government of India
GMAT	Graduate Management Admission Test
GRE	Graduate Record Examination

HOD	Head of Department
HPC	High Performance Computing
HRD	Human Resource Development
IAENG	International Association of Engineers
ICT	Information and Communication Technology
IGBC	Indian Green Building Council
IGCC	Indo-German Chamber of Commerce
IE(I)	Institution of Engineers (India)
IELTS	International English Language Testing System
IES	Indian Engineering Services
IETE	Institution of Electronics and Telecommunication Engineers
II	Industry Institute Interaction
IIM	Indian Institute of Management
IIT	Indian Institute of Technology
IQAC	Internal Quality Assurance Cell
ISACA	Information Systems Audit and Control Association
ISHRAE	Indian Society of Heating, Refrigerating and Air-Conditioning Engineers
ISTE	Indian Society for Technical Education
IT	Information Technology
ISBN	International Standard Book Number
ITSA	Information Technology Students Association
JEE	Joint Entrance Examination
LMC	Local Management Committee
MAT	Management Aptitude Test
MCCIA	Mahratta Chamber of Commerce, Industries and Agriculture
MEDA	Maharashtra Energy Development Agency
MESA	Mechanical Engineering Students Association
MHCET	Maharashtra Common Entrance Test
MIS	Management Information System
MoU	Memorandum of Understanding
MSRTC	Maharashtra State Road Transport Corporation
NAAC	National Assessment and Accreditation Council
NBA	National Board of Accreditation
NCC	National Cadet Corps
NDL	National Digital Library
NFR	No Fee Reimbursement
NGO	Non-Governmental Organization
NPTEL	National Programme on Technology Enhanced Learning
NSS	National Service Scheme
OER	Open Educational Resources
OMS	Other than Maharashtra State
OPAC	Online Public Access Catalog
PMC	Pune Municipal Corporation
PO	Programme Outcomes

PTM	Parent Teacher Meeting
PUC	Pollution Under Control
QCFI	Quality Circle Forum of India
R&D	Research and Development
SAE	Society of Automotive Engineers
SBC	Special Backward Class
SC/ST	Scheduled Caste/ Scheduled Tribe
SPPU	Savitribai Phule Pune University
STR	Student Teacher Ratio
STTP	Short Term Training Program
SWOC	Strength, Weaknesses, Opportunities and Challenges
TFWS	Tuition Fee Waiver Scheme
TG	Teacher Guardian
TOFEL	Test of English as a Foreign Language
UGC	University Grant Commission

NAAC STEERING COMMITTEE

Sr. No.	Name	Designation
Chairperson		
1	Dr. S. M. Deshpande	Principal
Co-ordinator		
2	Dr. K. R. Patil	HOD, Dept. of Mechanical Engg and Dean R&D
Deputy Co-ordinator		
3	Mr. R. V. Dagade	Dean, Academics
Members		
4	Ms. S. N. Deshmukh	Dean, Administration
5	Dr. V. R. Deulgaonkar	Dean, Student Affairs
6	Ms. H. K. Khanuja	HOD, Dept. of Computer Engineering
7	Ms. P. S. Sawant	HOD, Dept. of E&TC Engineering
8	Ms. Rupali Chopade	HOD, Dept. of IT Engineering
9	Mr. M. R. Tarambale	HOD, Dept. of Electrical Engineering
10	Dr. Ms. A. S. Sawaikar	HOD, Dept. of Engineering Sciences
11	Mr. Vijay Bhatkar	In-Charge, Criterion No. I
12	Mr. S. N. Belsare	In-Charge, Criterion No. II
13	Ms. P. N. Paranjape	In-Charge, Criterion No. II
14	Ms. A. P. Thakur	In-Charge, Criterion No. III
15	Ms. S. A. Upasani	In-Charge, Criterion No. IV
16	Ms. Tina Corera	In-Charge, Criterion No. V
17	Ms. Anita Shinde	In-Charge, Criterion No. VI
18	Ms. M. R. Pangaonkar	In-Charge, Criterion No. VI
19	Ms. Pranjali Kuche	In-Charge, Criterion No. VII
20	Mr. Sanjeev Aboti	Office Superintendant

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COVERING LETTER OF THE INSTITUTION



'येथे बहुतांचे हित'

Marathwada Mitra Mandal's COLLEGE OF ENGINEERING

S. No. 18, Plot No. 5/3, Near Vandevi Temple, Karvenagar, Pune 411 052
Tel. : 020 - 25473160, 25479811, 25479812 Exten. 202, 203 Fax No. : 25470909

E-mail : mmcoe@mmcoe.edu.in Web Site : www.mmcoe.edu.in

(Approved by AICTE New Delhi, recognised by Government of Maharashtra and
Affiliated to Savitribai Phule Pune University, Id No. : PU/PN/Engg./251/2006)

Ref. No: MMCOE/ADMIN/NAAC/SSR/17-18/ 27

Date: 13 April 2017

To,

The Advisor

National Assessment and Accreditation Council,
P.O. Box No: 1075, Opp. NLSIU,
Nagarbhavi, Bangalore – 560072

Subject: Submission of Self Study Report (SSR)

Ref: LOI bearing Track ID MHCOGN27287

Dear Sir,

With reference to our LOI bearing Track ID MHCOGN27287 submitted on 28 March 2017 and accepted by NAAC office on 11 April 2017.

We are glad to submit Self Study Report (SSR) of our institution. The SSR is uploaded on the institution website www.mmcoe.edu.in on 27 March 2017.

The complete URL is as follows:

http://mmcoe.edu.in/NAAC_SSR_MMCOE_PUNE.pdf

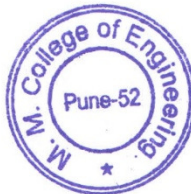
The institution is ready for Assessment and Accreditation by the peer team from NAAC. It is kindly requested to consider the SSR of this institution for further processing.

This is for your kind information and consideration please.

Thanking you,

Yours sincerely,

Dr. S. M. Deshpande
Principal



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1. PREFACE

Marathwada Mitra Mandal's College of Engineering (MMCOE) is a private unaided Institution established in the year 2006. It is one more feather in the cap of Marathwada Mitra Mandal Trust which was established in the year 1967 by Hon. Late Shri. Shankarraoji Chavan, former Home Minister, Govt. of India. The sole objective of the trust is 'Welfare of Masses' with the mission to impart quality education for professional excellence and sustainable development through continual improvement and teamwork. The trust provides quality and affordable education in the field of Engineering, Architecture, Interior Design, Management, Law, Science, Commerce, Pharmacy etc.

MMCOE offers five undergraduate engineering programmes and two postgraduate programmes having annual intake of 540 and 78 respectively. All the undergraduate and postgraduate programmes are approved by AICTE, recognized by DTE, Government of Maharashtra and affiliated to Savitribai Phule Pune University. The Institution is centrally located in the heart of the city with a conducive environment and enormous learning opportunities for the students. The programmes run by the Institution are as follows:

Undergraduate programmes:

- Computer Engineering (120 seats)
- Electronics & Telecommunication Engineering (120 seats)
- Electrical Engineering (60 seats)
- Information Technology (60 seats)
- Mechanical Engineering (First shift: 120 seats, Second shift: 60 seats)

Postgraduate Programmes:

- Master of Computer Engineering (18 seats)
- Master in Business Administration (60 seats)

The Institution has state-of-the-art infrastructural facilities in all the departments to impart quality and affordable engineering education. MMCOE has a strong Industry Institute Liaison having 18 MoU's with renowned industries/organizations and membership of various professional bodies such as CII, MCCIA, DICCI, QCFL, ISTE, IGCC etc.

The Institution has recently received 'Distinguished College Award' from Computer Society of India, it is recognized as 'Education Excellence Forum' by CII, 'Center of Excellence' by Persistent Systems, Pune and recognized as Nodal Center for Virtual Labs, IIT Bombay. MMCOE aims and strives to be an Engineering Institution where students are nurtured for their holistic development so as to emerge as leaders of developed India.

PRINCIPAL

2. EXECUTIVE SUMMARY

Criterion I: Curricular Aspects

MMCOE is a self financing institute affiliated to Savitribai Phule Pune University since 2006. The Institution follows the curriculum designed by the parent University. The faculty members of the Institution take active part in designing and implementing the University curriculum. Many senior faculty members are involved in various University activities such as Local Inquiry Committee, staff selection committee, University examinations, subject chairman, Post Graduate Conference evaluators etc. Academic flexibility is achieved by arranging different skill oriented certified add-on courses and industry sponsored competitions for overall development of the students. The students are provided with seed money for different activities and research projects. Students are exposed to social issues through NSS, NCC activities and holistic development through Yoga workshops. The Institution has formal feedback mechanism to obtain feedback from various stakeholders such as students, alumni, parents and industry. Corrective measures are taken based on the feedback to improve the academic, administrative and infrastructural facilities. The Institution has started add-on courses for students to meet the industry requirements and bridge the gap between industry expectations and curriculum.

Criterion II: Teaching-Learning and Evaluation

The Teaching-Learning and Evaluation processes are as per the rules and regulations of the parent University. The process of admission to First Year, Direct Second Year Engineering, MBA and ME in the Institution is transparent, and it is conducted as per the rules and regulations laid down by Admission Regulatory Authority, Govt. of Maharashtra from time to time. The Institution follows transparent process to recruit qualified and competent faculties. The Institution has a good blend of experienced, qualified and young teaching faculty members. Most of the faculties have undergone training programme such as Mission10X to enhance their skills for effective teaching-learning process. The Institution motivates faculties to participate in research activities by organizing conferences, seminars, workshops and deputing them to such events organized at National and International level. Institution invites senior and experienced resource person from research organizations and industries to motivate the students on recent trends and emerging areas. Institution has 360 degree faculty appraisal system which collects feedback of the faculties from student, peers and HOD's, which helps in enhancing quality in teaching-learning process and overall development of the faculty.

The Institution has Academic Monitoring Committee which periodically conducts meeting to discuss various issues of Teaching-Learning and

Evaluation process to strengthen necessary graduate attributes of the students by imparting quality education and strive to achieve well-rounded development in the student by exposing them to various co-curricular and extra-curricular activities. Meticulous planning by Academic Monitoring Committee at the beginning of the semester lays foundation of efficient teaching environment during entire semester. Taking efforts in syllabus completion, imparting content beyond syllabus, innovative teaching methodologies, continuous evaluation processes are key strength in teaching-learning and evaluation process.

The Institution has student-centric approach for overall development of students with good blend of academics, co-curricular and extra-curricular activities. Institution persuades students to take part in various competitions at Regional, National and International level. The Institution always tries to sensitize the students and the faculties about the values of gender equality, inclusive development and healthy working environmental conditions. The Institution provides support to underprivileged sections of society, physically challenged, slow learners and economically weaker sections in different ways as per requirements. The Institution conducts orientation programme such as FE counseling in which students and their parents are made aware about Institution vision, mission and policies. The Institution takes efforts for enabling the students to cope up with advancements in curriculum and technology by conducting various bridge, remedial, add-on and enrichment courses.

Criterion III: Research Consultancy and Extension

The Institution has Research and Development cell comprising Scientist, Industry Experts, Academicians and Senior faculties. The committee members ensure smooth functioning of R&D activities and motivate faculties to do research work. The Institute takes special effort to develop scientific temperament among the faculties and students. Seminars, workshops and expert lectures of eminent technologists are organized to inculcate the research interest. Presently eight faculties have completed their PhD and 19 faculties are pursuing PhD. The Institution has Sponsored Research Project committee to guide the faculty members to apply for research proposals of various funding agencies.

Students are encouraged to participate in project competitions, paper presentations, conferences and technical events at National and International level. The Institution organizes various competitions for students to exhibit their technical skills and invites industry experts for performance evaluation. The Institution has established Industry Institute Interaction Cell to develop linkages and collaborations with industries, research centers for promoting research. The Institution has signed student centric 18 MoUs with various

industries and research organizations. Various community social service programs are organized under NSS in villages and in the neighboring city area. Blood donation camps are also regularly organized in the Institute. Students visit old age home, orphanage and try to understand and solve their problems. The regular activities of NCC and NSS inculcate civic values in the students. Youth empowerment programs are organized for students through various NGOs to teach yoga, breathing technique, overall personality development and social aspects that instills leadership qualities among students and faculties.

Criterion IV: Infrastructure and Learning Resources

The Institution has state-of-the-art infrastructure facilities with adequate number of spacious and well ventilated classrooms having audio-visual and Internet facilities and well equipped laboratories. The additional new classroom complex having 16 classrooms are hexagonal in shape with tiered seating arrangement. The laboratories are fully equipped with advanced instrumental facility. The Institution has 48 Mbps Internet leased line. All the computer laboratories are well interconnected by LAN and Internet facility. The institution has computerized Central Library with ample books, journals, magazines, e-resources etc. The book bank facility along with access to National / International journals and e-resources are provided to students and staff. The Institution provides hostel facility to boys and girls which accommodate 450 students. All modern facilities such as solar water system, TV room, Wi-Fi, hygienic canteen and mess facility, modern gymnasium and sick room are provided in the hostel. The Institution has well equipped and spacious multipurpose Seminar hall with Internet connectivity. Adequate space and furniture is provided to various functional committees.

Criterion V: Student Support and Progression

The Institution extends many support and progression avenues for the development of the students. The Institution follows a teacher guardian system wherein the academic and personal issues of the students are looked after. The Institution has also appointed professional counselors to address the personal, psycho-social and other problems of the students. The Corporate Relations Division Cell of the Institution assists the students by conducting trainings, seminars and workshops for their overall grooming thereby making them eligible for better placement opportunities. The Institution provides fee waiver facility to economically weaker students in order to support them to continue their education. Various committees are in place to motivate and encourage the students to participate in competitions at different levels. Along with academics, numerous co-curricular and extracurricular activities are conducted for the students throughout the year. The Institution maintains a good rapport with its alumni through its registered Alumni Association. Many social

activities are carried out by the students through NSS and NCC. The Institution has a Woman Grievance Cell, Anti-Ragging Committee and Anti-Ragging Squad for solving issues pertaining to harassment. No instance of ragging has been observed in the Institution.

Criterion VI: Governance, Leadership and Management

The Institution focuses on formulation of various quality improvement strategies and continual monitoring of their implementation. The management, principal, faculty members, students, alumni, parents, industry and society plays an important role in forming and implementing the quality policy to attain vision and mission of the Institution. The Institution believes in professional development of teaching and non-teaching staff members. Faculty members are encouraged to carry out funded research projects. The Institution implements 360 degree staff appraisal system for the quality assurance mechanism. The faculty and staff members cohesively work on different functional committees for overall growth of the Institution. The financial mechanism of Institution monitors effective and efficient use of available financial resources. It also guides in securing additional funds and utilization of it. The Institution has formulated Internal Quality Assurance Cell which prepares and reviews academic and administrative policies.

Criterion VII: Innovations and Best Practices

Institution ensures eco-friendly and healthy environment by conducting green audit and energy audit from accredited organizations. The Institution has solar water heater system, rain-water harvesting, bio-medical & chemical waste disposal, vermi-composting, e-waste management to make the campus eco-friendly. The Institution has installed solar power plant of 1 kW capacity on the terrace of the institute building. Various innovative practices are carried out in the Institution to ensure overall development of students, faculties and the organization. University has sanctioned NSS unit of 100 students headed by a Program Officer. NSS cell works to fulfill social responsibilities and conducts various activities like blood donation camps, tree plantation, fund collection for needy people and adopting a village for socio-economical transformation. The Institution has various best practices for the quality improvement and to achieve objectives. To enhance the employability of the students the Institution has focused on various student centric activities and competitions. The Institution has established effective Industry-Institute Interaction cell to maintain relationships with corporate world through MoUs, Center of Excellence, sponsored projects, industrial visits and in-plant trainings. MMCOE is recognized as 'Educational Excellence Forum' by Confederation of Indian Industries.

SWOC Analysis of the Institution

Strengths

- State-of-the-art infrastructure facilities such as laboratories, classrooms, tutorial rooms and hostels
- Student centric teaching and learning process with conducive environment
- Quality education at affordable fees with the motto of 'Welfare of Masses'
- Experience and qualified faculty members
- State-of-the-art Central Library
- Effective Industry-Institute Interaction cell
- MoU's with various industries and organizations for student centric programs
- Institute is recognized as Center of Excellence by various organizations
- Effective teacher-guardian system for caring of the students
- Mission10X trainer program for newly inducted faculties
- Students participation for social cause through NSS & NCC activities
- Professional skill development through student centric activities and competitions
- Campus is well guarded with safe environment
- Centrally located in the heart of Pune city known for Education, Automotive and Information Technology hub

Weaknesses

- Limited number of consultancy work
- Lack of foreign University collaborations for faculty and student exchange
- Less number of book publications and patents

Opportunities

- Increasing research and funding facilities from state and central government funding agencies
- Improving faculty cadre ratio
- Networking with institutes and organizations of National and International repute
- To seek NBA & ABET accreditation for all programmes
- Improving alumni networking to enhance academic and placement activities
- Improving Collaborative research with corporate world
- Establishment of research centers in each department

- To initiate incubation center through Entrepreneurship Development cell
- Enhancing facilities to improve interdisciplinary research

Challenges

- Overall decline in engineering admission scenario
- Enhancing employability skills of students in rapidly changing technology
- Increasing the number of placements for slow learners

3. PROFILE OF THE INSTITUTION

1. Name and Address of the College:

Name:	Marathwada Mitra Mandal's College of Engineering		
Address:	Sr.No. 18, Plot No. 5/3, CTS No.205, Behind Vandevi Temple, Karvenagar, Pune - 411052		
City:	Pune	Pin: 411052	State : Maharashtra
Website:	www.mmcoe.edu.in		

2. For communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. S. M. Deshpande	020 – 25473160 25475825	8446447118 9423003319	020-25470909	principal@mmcoe.edu.in
Steering Committee Coordinator	Dr. K. R. Patil	020 – 25473160	9881025368	020-25470909	krpatil@mmcoe.edu.in

3. 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

☐
☒

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

Not Applicable

6. Sources of funding:

Government

Grant-in-

Self-financing

Any other

☐
☐
☒
☐

7. a. Date of establishment of the college: 27/07/2006

b. University to which the college is affiliated /or which governs the college (If it is a constituent college)

Savitribai Phule Pune University, Pune, Maharashtra

c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks(If any)
i. 2 (f)	-	-
ii. 12 (B)	-	-

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 and Year (dd-mm-yy)	Validity	Remarks
i.	B.E.- Mechanical Engineering (1 st Shift)	27-07-2006	1 year	Approval is extended every year by submitting the required Documents as per AICTE
ii.	B.E.- Mechanical Engineering (2 nd Shift)	08-04-2013	1 year	
iii.	B.E.- Electronics & Telecommunication	27-07-2006	1 year	

iv.	B.E.- Computer Engineering	27-07-2006	1 year	
v.	B.E.- Information Technology	27-07-2006	1 year	
vi.	B.E.- Electrical Engineering	08-04-2013	1 year	
vii.	M.E.- Computer Engineering	10-02-2012	1 year	
viii.	MBA	25-07-2007	1 year	

(The recognition/approval letters of all the programs from statutory bodies AICTE and SPPU are given in Annexure)

8. Does the affiliating University Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes ☒

No ☐

If yes, has the College applied for availing the autonomous status?

Yes ☐

No ☒

9. Is the college recognized?

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

Yes ☐

No ☒

b. for its performance by any other governmental agency?

Yes ☐

No ☒

10. Location of the campus and area in sq.mts:

Location	Urban
Campus area in sq. mts.	20315.22 sq. m
Built up area in sq. mts.	20817.55 sq. m

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

Sr. No.	Facilities Available	Yes/No
1	Auditorium/seminar complex with infrastructural facilities	Yes
2	Sports facilities	Yes
3	Play Ground	Yes
4	Swimming Pool	No
5	Gymnasium	Yes
6	Hostel : Boys - Number of hostels – 1 - Number of inmates: 240 - Facilities: Common room with TV, Indoor games, Internet Connection, Wi-Fi, Medical Officer Hostel: Girls - Number of hostels: 01 - Number of inmates: 197 - Facilities: Common room with TV, Indoor games, Internet Connection, Wi-Fi, Medical Officer	Yes
7	Working women's hostel - Number of inmates: Not Applicable - Facilities: Not Applicable	No
8	Residential facilities for teaching and non teaching staff (give numbers available cadre wise)	No
9	Cafeteria	Yes
10	Health centre: First aid, Inpatient, Outpatient, Emergency care facility	Yes
11	Health centre staff : Qualified Doctor – Part time Qualified Nurse – Part time	Yes
12	Facilities like banking, post office, book shops: Students Consumer Co-op Store is available	Yes
13	Transport facilities to cater to the needs of students and staff	No

14	Animal house	No
15	Biological waste disposal	Yes
16	Generator or other facility for management/regulation of electricity and voltage	Yes
17	Solid waste management facility	Yes
18	Waste water management	Yes
19	Water harvesting	Yes

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
1	Under-Graduate	B.E.- Mechanical Engg	4years	HSC / CET	English	180	168
2		B.E.- Electronics & Telecommunication Engg	4years	HSC / CET	English	120	86
3		B.E.- Computer Engg	4years	HSC / CET	English	120	123
4		B.E.- Information Technology	4years	HSC / CET	English	60	58
5		B.E.- Electrical Engg	4years	HSC / CET	English	60	50
6	Post-Graduate	M.E. Comp. Engg	2 years	BE / CET	English	18	06
7		MBA	2 years	Graduation/ CET	English	60	53

13. Does the college offer self-financed Programmes?

Yes

☐

No

☒

If yes, how many?

Not Applicable

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

Yes ☒ No ☐ Number

15. 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	Department	UG	PG	Research
Engineering	Computer Engg	Yes	Yes	-
	Electrical Engg	Yes	-	-
	Electronics & Telecommunication Engg	Yes	-	-
	Information Technology	Yes	-	-
	Mechanical Engg	Yes	-	-
Management	MBA	-	Yes	-

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

a. Annual system	-
b. Semester system	07
c. Trimester system	-

17. Number of Programmes with

a. Choice Based Credit System	-
b. Inter/Multidisciplinary Approach	-
c. Any other (specify and provide details)	-

18. Does the college offer UG and/or PG programmes in Teacher Education?

Yes ☐ No ☒

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

Yes ☐

No ☒

20. Number of teaching and non-teaching positions in the Institution

Positions	Teaching Faculty						Non-Teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor		M	F	M	F
	M	F	M	F	M	F				
Sanctioned by UGC/ University/ State Government	-		-		-		-		-	
Recruited	-	-	-	-	-	-	-		-	
Sanctioned by the Management/ society or other authorized bodies	18		35		102		-		-	
Recruited	01	00	03	02	55	87	24		38	
Yet to recruit	17		30		-		-		-	

Adjunct Faculty - 17

*M-Male *F-Female

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	1	-	2	1	1	1	6
M.Phil.	-	-	-	-	-	-	-
PG			1	1	7	29	38
Temporary teachers							
Ph.D.	-	-	-	-	-	1	1

M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	47	54	101
Part-time teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	2	2
GRAND TOTAL	01	00	03	02	55	87	148

22. Number of Visiting Faculty /Guest Faculty engaged with the College. 09

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

Categories	Year 1 2015-16		Year 2 2014-15		Year 3 2013-14		Year4 2012-13	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	40	12	24	11	37	15	35	14
ST	01	01	01	-	02	-	02	02
OBC	91	30	76	28	58	50	68	25
General	228	108	233	115	211	119	196	101
Others(VJ,NT & SBC)	44	12	30	08	45	12	32	17

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

Type of students	UG	PG	M.Phil.	Ph.D.	Total
Students from the same state where the college is located	478	57	-	-	535
Students from other states of India	07	02	-	-	09
NRI students	-	-	-	-	-
Foreign students	-	-	-	-	-
Total	48	59	-	-	544

25. Dropout rate in UG and PG (average of the last two batches)

UG 3.89%

PG 0.00%

26. Unit Cost of Education (*Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled*)

(a) Including the salary component

Rs.55901/-

(b) Excluding the salary component

Rs.20244/-

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

Yes

☐

No

☒

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

Program/Course	UG	PG
Computer Engineering	1:12.85	1:12
Electronics & Telecommunication Engineering	1:12.85	--
Electrical Engineering	1:13.84	--
Information Technology	1:13.84	--
Mechanical Engineering	1:15	--
Engineering Science	1:15.42	--
MBA	--	1:15

29. Is the college applying for?

Accreditation: Cycle 1 ☒ Cycle 2 ☐ Cycle 3 ☐ Cycle 4 ☐

Re-Assessment: ☐

(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)

30. Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Not Applicable

31. Number of working days during the last academic year.

292 days

32. Number of teaching days during the last academic year

(Teaching days means days on which lectures were engaged excluding the examination days)

186 days

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

04th January 2016

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

Not Applicable

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

For reference point no. 20, additional 17 adjunct faculties are appointed as follows:

Sr. No.	Name of Department	No. of Adjunct Faculties
1	Computer Engineering	04
2	Electronics & Telecommunication Engineering	04
3	Electrical Engineering	02
4	Information Technology	02
5	Mechanical Engineering	04
6	Engineering Sciences	--
7	Master in Business Administration	01
Total		17

4. CRITERIA-WISE INPUTS

CRITERION 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, teachers, staff and other stakeholders

Vision of the Institution

To aspire for the welfare of society through excellence in science and technology.

Mission of the Institution

Our Mission is to-

- Mould young talent for higher endeavours.
- Meet the challenges of globalization.
- Commit for social progress with values and ethics.
- Orient faculty and students for research and development.
- Emphasize excellence in all disciplines.

Objectives of the Institution

- To equip students with the updated knowledge and skill sets required for flourishing in the society.
- To make students more creative, innovative and entrepreneurial to accomplish and build a competitive edge in the global context.
- To cultivate research culture among faculty members and students through MoUs, consultancies and gaining research funds.
- To give a supportive environment that encourages students towards social and professional values.

Vision and Mission are displayed in the Principal's office, Institution website, HOD offices, Central library, Entrance of the main academic building, Hostels, Seminar halls, Laboratories and at all the prominent places. These are also communicated to the students, teachers and the other stakeholders through Institution brochure, newsletter and during student induction programs.

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 example(s).

Institution efficiently plans and monitors the activities for the effective implementation of the curriculum.

- Faculty members give choices of the subjects for the new semester as per their expertise. To finalize the elective subjects, students' choice is taken as per the University curriculum.
- Allocation of the subjects to the faculty member is done as per the faculty choice listed, number of times subject taught, teaching/industrial experience and area of specialization. The subject distribution is finalized and communicated to the faculty members well in advance for the preparation.
- Academic planner is prepared by referring the academic calendar published by the University.
- Each department prepares detailed departmental academic calendar as per the Institution academic planner by incorporating class tests, extra-curricular/co- curricular activities, industrial visits and any other activity planned. Time tables for different courses, individual faculty members, classrooms and laboratories are prepared. These time tables are finalized by HODs and approved by Principal, then circulated to the faculty members and displayed on the notice board and website.
- Theory and practical teaching plans, course files and lab manuals are prepared by the faculty members before start of the semester.
- AMC continuously monitors the schedule of classes, practicals and tutorials through daily attendance.
- Interdepartmental/departmental academic coordinators conduct the academic audit of faculty members thrice in a semester and submit the report to the HOD, Dean Academics and Principal.
- Performance and attendance of all the students is regularly communicated to parents through teacher guardian by telephonic conversation, postal letters, SMS and through email communication.
- Laboratory equipments are properly maintained and calibrated before the start of the new semester. If any new equipments and softwares are required then they are purchased well in advance.

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 detailed syllabi of all courses are given by SPPU. Senior faculty members participate in the University syllabus design and development of curriculum.
- BoS conducts syllabus detailing workshop for faculty members of all the affiliated Institutions.
- Institution encourages and sponsors faculty members to organize/attend FDPs for enriching their subject knowledge.

- For effective teaching methods, Institution provides LCD, PA system and internet access to classrooms.
- Faculty members are motivated to seek research funds from BCUD, AICTE and various other funding agencies for research projects.
- Institution supports in-house projects of students and faculty members.
- Faculty members are encouraged to attend and organize Seminars, Workshops, Conferences and STTPs for enriching their subject knowledge.
- Internet and intranet facility is available throughout the campus to access e-books, e-journals and NPTEL videos.
- Digital, central and all departmental libraries have large collection of text and reference books for preparation and effective delivery of lectures.
- Each department encourages faculty members to attend in-plant training programs and appear for online certification courses for getting specializations in their respective domain during vacation period.

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.

- Institution has provided all class rooms with LCD projector and internet access. NPTEL videos, contents from online courses and webinars are used by faculty members for effective curriculum delivery.
- Institution has formed various functional committees to focus on specific areas such as academic monitoring, time table, theory and practical examination, technical events and so on.
- Institution has various student chapters such as SAEINDIA, ISHRAE, ASHRAE, IETE, ACM, CSI, ISACA, ISTE, IE (I) etc. to keep the pace with the research and recent advancements
- Question banks, assignments and other teaching material including content beyond syllabus is shared with all the students by the respective subject teacher on Google Apps.
- Each department assigns teacher guardians to all the students. They regularly take feedback from students and try to solve their problems by counseling them.
- Each department regularly evaluates the students through continuous assessment system such as class test, mock practical/orals, assignments, tutorials, surprise tests, quizzes, group discussions etc.
- Each department does the detailed result analysis after declaration of the University result.
- Faculty assesses their subject results to improve their teaching methodology.
- Subject teacher monitors the performance of each student and conducts remedial classes for further improvement.

- Library is kept open for all the students after the Institution hours. During examination period, the reading hall is kept open for 24 hours including Sundays.
- Each department has allotted two hours sessions per week in the class time table on enhancement of employability skills through CRD.
- Guest/Expert lectures are organized for each subject and for content beyond syllabus.
- Extra lectures, lab-sessions and tutorials are conducted for difficult subjects.

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?

Institution has taken initiative to interact with various industries through Industry Institute Interaction committee that maintains professional relations with industries. Industrial visits are arranged for students and faculty members to gain practical exposure and keep abreast their knowledge. Students are also encouraged to interact with industries and research organizations through sponsored projects, trainings and internships. Industry professionals are regularly invited for sharing their knowledge with the students.

- To bridge the gap between industry and academia, Institution has opted for memberships of professional bodies such as CII, MCCIA, IGCC, DICCI, QCFI etc. To meet the requirements of industries students get updated knowledge through various student chapters such as ISHRAE, ASHRAE, SAEINDIA, IETE, ISTE, ACM, CSI, ISACA etc.
- Adjunct faculty members have been associated with the Institution to mentor students in their domain expertise for industry projects, placements, internships etc.
- Total 18 MoUs are signed with various industries and organizations.
- Persistent Systems Ltd. has recognized MMCOE as Centre of Excellence which provides sponsored projects and trainings to students.
- MMCOE has been selected as GPU Education Center by NVIDIA Corporation as an academic alliance. Institution has also received one Tesla K40 {active} and two Titan X GPU cards.
- IIT Bombay has recognized the Institution as Nodal Center for Spoken Tutorial Certification courses and as Nodal Center for Virtual Labs.
- CII has shortlisted Institution under Education Excellence Forum which provides numerous interventions, architected solutions, recommendations and training to academia throughout the year.
- Institution has received grants and funds for Research Projects, Equipments, conduction of FDPs, Workshops, Conferences, Seminars etc.
- Research scholars are invited for guest lectures to encourage students and faculties for undertaking research projects and enhancing their research capabilities.

- CRD organizes campus placements to help students in advancing their careers.

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.

- Prof. M. R. Tarambale is a member of BoS, Electrical Engineering and has contributed in developing the curriculum.
- Senior faculty members are invited as expert during the syllabus framing and detailing workshops conducted by SPPU through BoS Chairman.
- Institution organizes syllabus framing and detailing workshops sponsored by SPPU for all the affiliated Institutions.
- Institution takes suggestions/feedback from stakeholders on the existing curriculum and forwarded to the University through the members of BoS.

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.

- As the Institution is affiliated to SPPU, all the courses are under the purview of University. Any changes in the curriculum are taken care and incorporated by the University in consultation with members of BoS and suggestions received from affiliated Institutions during syllabus detailing workshops.
- Some senior faculty members of the Institution are involved in the process of curriculum design and development of Automobile Engineering, an open elective of final year Mechanical Engineering.
- To improve the employability skills of the students, every department in the Institution conducts various short term certification and add-on courses like CATIA, CCNA, C Programming, Basics of JAVA, GD&T etc.

1.1.8 How does Institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?

- Institution analyzes the performance of the students by assessing the assignments given, conducting class tests, participation in workshops/conferences/paper presentations, project, quiz competitions etc.
- By arranging guest/expert lectures, covering content beyond syllabus and arranging industrial visits for various subjects.
- Course End Survey based on the course objectives is taken from the students to ensure the achievement of course implementation.
- CRD collects and analyze data from students pursuing higher education, working in the industries and opt for entrepreneurship.

- Institution takes feedback from the campus recruiting companies about the students to improve employability of the students.

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.

Goal: To enhance the employability skills of the students

Objectives:

- To upgrade technical knowledge of students by conducting regular seminars, workshops, short term courses etc.
- To improve the interaction of students with the outside corporate environment
- To make students aware of the latest technologies with hands-on training sessions
- To enhance students skills as per the industrial requirements. Apart from the programs of SPPU, Institution offers some of the add-on courses which basically serve the purpose of value addition.

Sr. No.	Course Name	Target Students	Academic Year	Resource Person/ Institutions
1	One week National Summer Training Program (NSTP) on "IoT using Raspberry Pi"	TE, BE Comp.	2016-17	IIT Roorkee
2	Workshop on "Bootstrap Framework"	BE Comp.	2016-17	Mr. Rahul Sharma Mr. Mohammad Ali Shaikh
3	Workshop on "Big Data & Hadoop Ecosystem"	BE Comp.	2016-17 2014-15	Mr. Rahul Sharma Mr. Mohammad Ali Shaikh
4	Two days workshop on "How to Make Your Own OS?"	TE, BE Comp.	2016-17	Mr. Yogesh Babar
5	Three days workshop on "Solar Thermal Systems"	SE Elect.	2016-17	Dr. Nishant Mate
6	One week Winter Training Program on Networking (CCNA)	TE, BE E&TC	2016-17	IIT, ELAN Hyderabad
7	Two days National Level Workshop on Python	TE, BE E & TC	2016-17	Mr. Sashank Adagonkar
8	Two days Workshop on "Cloud Computing"	TE, BE IT	2016-17	Mr. Jitendra Singh Gholat
9	Two days workshop on "Migrating towards FOSS"	SE, TE, BE IT	2016-17	Mr. Krishnakant Mane
10	One week Certified course on Autodesk Fusion 360	SE, TE, BE Mech	2016-17	Mr. Rushikesh Sawant

11	Training on ANSYS Software	TE Mech	2016-17	Mr.Venkatesh E.
12	CATIA Software Training Program	SE Mech	2016-17, 2015-16, 2013-14	Mr. Mithilesh Kumar Mr. Nikhil Pratap Mrs. Tejashree Mehta
13	Student development program on “ MasterCam X9 Software”	BE Mech	2016-17	Ms. Madhuri Gaikwad
14	Spoken tutorial based certification course on C++, JAVA Programming	SE ,TE Comp.	2015-16	IIT Bombay and MHRD Government of India
15	Course on C, C++	BE Comp.	2015-16	Mr. Rahul Sharma, Mr. Mohammad Ali Shaikh
16	Add on course on Basics of JAVA	TE, BE Comp.	2015-16	Mr. Rahul Sharma, Mr. Mohammad Ali Shaikh
17	Algorithms in machine learning and data mining course and PCI winter School for Prog.	TE, BE Comp.	2015-16	Persistent Systems Ltd,
18	Training program on education and employment enhancing vocation skills	TE Comp.	2014-15	Zensar Technologies Ltd.
19	PIC Microcontroller Based Project Workshop	TE, BE E &TC	2015-16 2012-13	Prof. C. B. Joshi
20	Three days hands-on training program on “Embedded Linux”	BE E&TC	2015-16	Mr. Mangesh Edke, Mr. Ashish Bhopale
21	LabVIEW workshop	BE E&TC	2015-16 2014-15	Ms. Pooja Kulkarni Mr. Archis Bhav
22	Geometric Dimensioning and Tolerancing	TE, BE Mech.	2015-16 2014-15	Mr. Anand Bhise
23	Workshop on “Digital Marketing”	MBA II	2015-16	Mr. Pranav Nayar
24	Training program on “IBM COGNOS & Business Intelligence”	BE Comp.	2014-15	IBM India Pvt. Ltd.
25	A course on KiCAD hands-on training	TE, BE E&TC	2014-15 2013-14	Mr. Archis Bhav
26	Workshop on Simulation Software Proteus	TE, BE E&TC	2014-15	Ms. Mitali Piran Gute, Mr. Vaibhav Jadhav
27	A session on “Campus to Corporate”	MBA II	2014-15	Mr. Narayan Joglekar
28	Ethical Hacking & PCB Designing	TE, BE E&TC	2013-14	Mr. Pankaj Talele, Mr. Vaibhav Jadhav
29	A Workshop on Personality Skills Development	MBA I, II	2013-14	Mrs. Hyacinth Arya

1.2.2 Does the Institution offer programmes that facilitate twinning/dual degree? If yes give details.

Yes. The students of MBA after completing two years course can enroll for dual degree in another specialization.

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?

Following are the academic flexibilities-

- Add-on courses, workshops and guest lectures are regularly organized for the students to upgrade their skills.
- CRD and Industry Institute Interaction committee provides opportunities to students to get associated with various industries for internships, projects and industrial visits to gain practical exposure.
- Optimum utilization of laboratories for project work, seminar and presentation after college hours.
- Students can select electives offered by University based on the latest trends in the industry.
- Institution offers remedial coaching for the subjects as per AMC.
- Setup of Virtual Class room for GATE Examination preparation in collaboration with Vidyalankar, Mumbai
- Active participation of students in different technical activities and intercollegiate events are encouraged.
- Guidance for higher studies and competitive examinations such as GATE, IES, GRE/TOEFL, CAT, IELTS, MPSC, UPSC, etc. is provided.
- Industrial visits are arranged to provide students an insight regarding internal working of companies which combines theoretical knowledge with industrial operations.

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

Yes, Institution provides additional skill oriented programmes in terms of BAJA, ROBOCON, GOKART, BSNL Training, Robotics, e-Yantra, APART etc. Zensar Technologies Ltd. conducts training programs for Computer Engineering and IT students on JAVA, Hadoop, .Net, C++. Institution has MoUs with different leading industries which provide training for increase in employability. ISHRAE organizes Job Junction for final year Mechanical Engineering student members.

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.

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?

To meet the goals and objectives, Institution takes additional efforts by organizing following programs:

- Add-on courses, workshops and seminars
- Soft skill trainings
- NPTEL videos, Online Certification courses
- Flipped classrooms
- Expert lectures from Industry and Academia
- Industrial visits/tours and internships
- Co-curricular and Extra Curricular Activities
- Institution conducts pro-remedial and remedial classes
- Sponsored BE projects with industries
- Pre-placement trainings under CRD

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?

- CRD arranges soft skill, aptitude and pre-placement trainings
- Institution provides seed money for projects
- Choice of open elective is given to students
- Add-on courses are organized to cope up with the industrial requirements
- Organizing Dexterity-National level technical event every year
- Organization of various programs in association with EEF under CII
- Institution has student associations like MESA, BETA, ACES, EESA and ITSA to imbibe the leadership and organizational skills of students through technical and extra-curricular activities.

Some of the activities organized under different student associations are listed:

Sr. No.	Event Name	Student Association	Activities in the Event	Academic Year
1	Peer Learning Class	ACES, Comp	Shapes & Languages, Laws & Transformations	2016-17
2	IOT based on RaspberryPi & Python	ACES, Comp	Hand on workshop	2016-17
3	BRAINIAC 2K17	BETA, E&TC	Quiz Competitions	2016-17

4	Poster Presentation	ACES, Comp	Poster Presentation	2015-16
5	Mini project exhibition	BETA, E&TC	Mini project exhibition	2015-16
6	ACWAR	MESA, Mech	Written test on academic subjects for SE and TE	2015-16
7	Code Optimization	ACES, Comp.	Optimization of code	2014-15
8	Innovatus 2K14	ACES, Comp.	Project Competition	2014-15
9	Civil Services	ACES, Comp.	Career in armed forces	2014-15
10	Creatronics	BETA, E&TC	Circuit Making Competition	2014-15
11	Web App	ITSA, IT	Web Design Competition	2014-15

Technical Events

Sr. No.	Departmental Events	Academic Year
1	Cyber Fest, Comp.	2016-17
2	Tech-Fest, Comp.	2016-17
3	Utkraanti-2017, all Dept.	2016-17
4	SEED Idol, IT	2016-17
5	Hackathon, Idea selection, presentation, coding, IT & Comp.	2016-17
6	Hour of Code, IT	2016-17
7	Fastrack, 12hrs nonstop coding, IT	2016-17
8	Tech-Fest, paper presentation, Quiz Competition for all Dept.	2016-17
9	Aakruti, CATIA Competition, Mech.	2016-17, 2014-15
10	Mech-Impact, Mech.	2015-16
11	Idea-3D, Mech.	2015-16
12	Techno-2015, E&TC	2014-15
13	Texas Instruments Analog Contest, E&TC	2014-15
14	Poster Presentation, E&TC	2014-15
15	Project Exhibition, IT	2014-15
16	Auto Quizon, Mech.	2014-15
17	Sankalpana 2K14, CAD Competition, Mech.	2014-15

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?

Gender Equality:

- Institution organizes various programs under NSS and NCC so as to

sensitize students about gender equality.

- Boys and girls work together in various curricular and co-curricular activities.

Environmental Education and Climate Change:

- Institution has rain harvesting system and good greenery is maintained in the campus.
- Certified energy auditor of Maharashtra Energy Development Agency (MEDA) has conducted energy audit of entire building and corrective measures are initiated. Energy audit of building was also regularly conducted by the students of Energy Audit and Management.
- Institution has replaced all the conventional 40 W tube lights with 17 W LED tube lights.
- The Institution has installed solar power plant of 1KW capacity on the terrace of Institution building.
- The hostel campus has solar water heating system.
- The Institution has initiated Green audit of campus in association with Green Solution Provider, Pune.
- Institution has e-waste collection center and decomposition of biomedical waste.
- In case of water scarcity from PMC, water supply is made available using water tankers. But these numbers of tankers has been reduced because of available resources like bore-well which is recharged by rain water harvesting. Rainwater from rooftops of main building of the Institution and hostel building is collected in the pit of rainwater.
- NSS wing of the Institution is actively involved in social service through Swachhta pledge under Swachh Bharat Abhiyan.
- Institution has also adopted Manerwadi village near Pune for campaigning
- Tree plantation drive is carried out yearly
- Celebration of World Environment Day
- PUC Camp is regularly organized under MESA
- Utilization of rough/one sided paper for printing
- Use of environmental friendly tea cups in canteen

Human Rights:

- Institution has friendly environment for differently abled students.
- Grievance Redressal Cell and Women Grievance Cell are formed to deal with grievances of staff and students. Anti ragging committee, anti ragging squad and discipline committee which ensures healthy environment in the campus.

ICT:

- Class rooms are provided with LCD projectors and internet connectivity for effective teaching learning process.
- All the study material is made available to the students on Google-apps.
- Wi-Fi facility is provided in hostel premises.

Other Activities:

- Earn and Learn scheme is available to the students to get financial benefit

- by working after Institution hours.
- Scholarship schemes are offered to the students as per the government rules.
 - Various student chapters/associations organizes programs such as Teachers' Day, Engineer's Day, Guru Purnima, FE welcome function, SE direct second year student induction program, social awareness programs, different guest lectures, collection and donation of funds to poor and needy people etc.

1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of Students? Moral and ethical values, Employable and life skills, better career options, Community orientation?

Moral and ethical values:

- Activities like YES +, YOGA, Blood donation, Art of Living, Social services like Swachh Bharat Abhiyan is organized and guest lectures on health and safety issues are delivered by eminent personalities.
- Every year NSS wing organizes one week camp at Manerwadi village to guide villagers about health and cleanliness issues. The students are involved in trekking activity for cleanliness and 'Grow More Trees' drive.
- The students organize and celebrate Ganesh Festival, Teacher's Day etc.
- National anthem is played in the Institution at 11:00 am each day as an exercise to enlighten the nationality spirit of students and staff.
- Every year Ensemble-cultural gathering is conducted for students to showcase their interest, talent and for their overall development.
- ECA committee is regularly conducting various curricular and extra-curricular activities for students throughout the year.
- Every year International Yoga Day is celebrated in the Institution on 21st June
- Seminars on Cyber Security and Ethical Hacking are organized.
- Institution also promotes and conducts health awareness programs listed as:

Sr.	Topic	Speaker	Academic Year
1	Yuvalaksha 2017	Mr. Parag Thakur	2016-17
2	Blood Donation and Hemoglobin Checkup	Gholap, Acharya Anandrushiji and Janakalyan Blood Bank	2016-17 2015-16
3	Secrets of health, wealth and happiness	Mr. E.V. Gireesh	2016-17
4	Dr. Babasaheb Ambedkar, 125 th Birth Anniversary	Prof. Devdatta Bhingarkar	2015-16
5	YES+ Course for Students	Shri Hasan Taftiji, International Teacher of Art of Living (with Ms Anjali Dhavade as a guide)	2014-15
	YES+ Course for Staff		2012-13
	YES+ Course for Students, Staff		2012-13

Employable and life skills:

Institution has signed MoUs with various industries for students' projects, trainings for better career. Guest lectures/workshops/awareness programs for opportunities in various fields are listed as:

Sr. No.	Activity Name	Academic Year
1	'Career Opportunities for Engineering Students' by Mr. Avinash Dharmadhikari (Ex. IAS)	2016-17
2	Guidance on 'Self Defence skills' for women empowerment by Mrs. Shubhangi Deshmukh, Assistant Government Leader and Public Prosecutor, Advocate	2016-17
3	'How to Land Your Dream Job' by Mr. Sunil Kashikar, Zensar Technologies and Mrs. Ira Tiwari, Human Resource Manager, Honeywell	2016-17
4	Barclays-GTT Youth Employability Initiative for Communication skills Programme	2016-17
5	Wheebox Employability Skill Test (WEST) for all BE students	2016-17
6	Employability Skills Development Program on '.NET and Soft skills'- Phase I & II, III	2016-17
7	'Career in Armed Forces' by Mr. Pradeep Brahmanekar	2015-16
8	Corporate Trainer, Mrs. Anjali Pashankar	2014-15
9	Lecture on 'How to prepare for competitive Exams.' by Mr. Jitendra Tiwari & Mr. Ajay Shrivastav, Made Easy Education Pvt. Ltd, New Delhi	2013-14
10	'Career opportunities after graduation' Mr. Vijo Joy, Talent Edge, Pune	2013-14
11	Opportunities on training from IBM, Ms. Sheetal Soni, IBM	2013-14

Better career options:

- CRD organize expert lectures throughout the year on career guidance and placement.
- Institution is a member of Education Excellence Forum under CII. Various activities such as entrepreneurship sessions, industrial visits, industrial trainings etc. are regularly organized through EEF.
- The Institution has signed MoUs with different companies to conduct value added courses.
- Institution has various professional body memberships and student chapters to interact with industries to upgrade the knowledge of students.

Community Orientation:

- NSS organizes various activities like camp at Manerwadi, Traffic Awareness Program, Don't Drink & Drive Program, Cycle Rally, Blood Donation Camp, Tree Plantation, Swachh Bharat Abhiyan, e-waste management etc.

- Institution has active NCC which regularly organizes Yuvalaksha- a youth program every year and expert lectures from defence sector. NCC cadets are actively involved on 15th August and 26th January programs.
- Students and staff members understand the social issues and try to help the needy people. The generous donations collected of amount Rs. 10, 30,245/- for various causes are as given below:

Sr. No.	Reason for Donation	Fund Collected
1	Ms. Sanjana Biradar, Blood cancer patient	2,71,050/-
2	Ms. Riya Kshirsagar, Heart patient	60,000/-
3	Mr. Mahesh Awaghade , Medical reason	5000/-
4	Indian Association of Blinds	10,130/-
5	Ganesh Ramshette- for Brain Surgery	1,85,764/-
6	Jammu and Kashmir rescue operation in association with Aseem foundation.	2,47,301/-
7	NAAM Foundation	2,51,000/-
Total funds collected		10,30,245/-

- AADHAR Club organizes "Share Food-Share Emotions" under Corporate Social Responsibility for Goodwill NGO.
- Awareness of Self Defense skills to girl students
- Institution has contributed towards Jammu and Kashmir natural disaster relief fund in association with Aseem Foundation.
- Institution has donated LCD projector and music system to 'Jeevan Vardhini' school for special children.
- Institution has donated fruits and groceries to Matoshree Vrudhashram and "Srivatsa" an orphanage for celebration of birthdays.
- Scholarship of Rs.10, 000/-is given by Mr. Jaideep Honap, Alumni, E&TC.
- Nine Scholarships of each Rs. 5000/- under Alumni Association are awarded to needy and deserving students.

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

- Feedback from students, alumni, parents, employers/industries is proactively utilized for enhancing the curriculum.
- Institution is organizing Annual General Meet by inviting alumni. They are interacting with faculty members and students, sharing their knowledge which creates strong bond for getting projects, trainings, job links etc.
- Feedback collected from the experts, project examiners about the students is used to enhance the quality of projects. Employer's feedback is taken during the campus recruitment to enrich the curriculum and to cover content beyond syllabus for better employment opportunities in the market.
- Feedback from parents is collected during the departmental parents meet.
- Feedback given by the participants during the conferences, workshops, State & National level programs is utilized for organizing future programs.
- Constructive suggestions given by parents, students, alumni, participants are discussed in the departmental meetings and implemented.

- Adjunct faculty members have been associated with the Institution to mentor students in their domain expertise for industry projects, placements, internships, MoUs etc. and to discuss case studies relevant to their domain.
- Feedback collected from the stakeholders is represented time to time at various levels during the syllabus setting and detailing workshops organized by the University and BoS meetings. The concerned authorities accept the appropriate suggestions and incorporate in the curriculum.

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

- Institution collects feedback from the students about the enrichment program. For add-on courses, evaluation is done using assignments and examinations at the end of the course where the conceptual knowledge of students is assessed.
- Institution ensures the enrichment program which focuses on the human values, creating competency in the technology and quest for excellence.
- Information is collected about the placement in the companies and pursuing higher education.
- IQAC monitor and evaluate the performance of the enrichment program.
- Paper presentations, project competitions and other such activities are organized by different student chapters where the evaluation is done by academic and industry experts.
- University results are used for evaluation of the quality of the enriched program.
- Institution monitors and evaluates the quality of its enrichment programs by analyzing the stakeholder's feedback.

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?

- At present one faculty is a member of BoS, Electrical Engineering.
- Institution encourages faculty members to attend meetings with BoS for syllabus restructuring.
- Faculty members of the Institution attend FDPs, seminars and workshops organized by the University during implementation of the revised curriculum.
- Institution takes feedback of stakeholders and suggestions of its faculty members are forwarded to University through the members of BoS.

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

Yes, the Institution has well established system for collecting feedback from its stakeholders. Different questionnaires are prepared for different stakeholders such as students, alumni, parents, industry etc. Communication with Alumni members is accomplished through e-mail, telephonic talk and social media, on the occasion of Annual General Meet and Graduation Ceremony. Alumni contribute towards awareness on recent trends in industry through guest lectures. They are also invited to evaluate undergraduate projects for further improvements. Some of the feedbacks of the Alumni:

Sr. No.	Feedback comments	Corrective Action	Effectiveness to corrective action	Add-on course/ workshop
1	Lab timing for Project work should be extended	Labs are kept open beyond College hours	Participation in project competition increased	-
2	More practical knowledge is required	Add-on courses are introduced	Enrichment of practical knowledge	Workshop /Add-on course
3	To improve communication skills	Soft skill Trainings	Improvement in Communication skills	Guest lecture/ Workshop
4	Focus on competitive exams	Guest lectures for higher studies	Students score in GATE/GRE	MoU with Vidyalkar
5	Content beyond syllabus should be taught	Industry experts and adjunct professors are appointed	Up gradation in Knowledge	Regular sessions on latest trends

- Parent Teacher Meetings are conducted once in a semester and feedback is taken from the parents for betterment of curriculum.
- Course End Survey based on course objectives is carried at the end of every semester for attainment of Course Outcomes.

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/programmes? Any other relevant information regarding curricular aspects which the college would like to include.

Institution has introduced following programs:

Sr. No.	Name of Programme	Starting Year	Intake
1	BE Mechanical (Second Shift)	2013-14	60
2	BE Electrical	2013-14	60
3	ME Computer	2012-13	18

The rationale for introducing new courses/programs in the Institution is:

- Providing an avenue for higher studies and to encourage research and development among the budding engineers
- To develop skilled manpower to meet the increased demand of Mechanical Engineers and Electrical Engineers
- To develop the center of excellence in related areas

CRITERION II: TEACHING - LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

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

Publicity:

- Institution ensures publicity by advertising through various media viz. flexes/hoardings at prominent places, local and regional newspapers, radio, educational exhibitions, digital marketing, e-advertising like www.shiksha.com, SMS and e-mail marketing
- Institution prospectus provides all academic, infrastructure and placement related detailed information
- Information regarding admission procedure, branch wise intake, fee structure, placement and other facilities available is displayed on Institution website <http://www.mmcoe.edu.in/>
- Admission counseling cell provides extensive counseling to prospective students
- Institution organizes campus visit and technical events for aspirants so that they get an insight into the campus facilities
- Faculty are encouraged to deliver lectures on career opportunities in various disciplines of engineering at junior colleges and coaching classes across the state
- Good referrals from alumni have also helped in admissions
- All the publicity efforts are generously supported by management

Transparency:

- Institution follows the rules and regulations regarding admission process as specified by the Directorate of Technical Education, Maharashtra State (MS-DTE), Savitribai Phule Pune University (SPPU) and AICTE, New Delhi
- Institution gives advertisement in local and regional newspapers clearly mentioning intake of Institution. All applications received at Institute level are processed considering eligibility criteria and filled on merit basis
- All details of admissions done by the Institution are submitted to the State Government's Admission Regulatory Authority (ARA) for further approval and ARA's approval is then submitted to University for eligibility work
- Institution's Admission Counseling Cell provides comprehensive information regarding the admission process, allotment of seats, reservations, Government norms etc. to aspirants and their parents

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 programme of the Institution.

As the Institution is recognized by Director of Technical Education, Maharashtra State (MS-DTE) and affiliated to Savitribai Phule Pune University, it follows the Central Admission Process (CAP) as per the guidelines given by MS- DTE.

DTE governs the eligibility criterion for the selection of students to first & second year of Engineering, ME (Computer) and MBA.

Students have to qualify in the following exams for admission to the respective programme:

- Engineering –
UG Programmes: MH-CET/JEE Mains/ AIEEE
PG Programmes: M.E (Computer Engineering) – GATE
- Management-
MBA: CMAT/MAH- CET/CAT/ATMA/AMMI/MAT

2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programme offered by the Institution and provide a comparison with other Institutions of the affiliating University within the city/district.

The following table depicts the minimum and maximum marks of admitted students of the respective qualifying entrance test

UG Programmes:

Sr. No	Year of Admission	Min. Marks of Admitted students		Max. Marks of Admitted students	
		MH- CET	JEE /AIEEE	MH- CET	JEE /AIEEE
Computer Engineering					
1	2016-2017	47 (Merit Marks)	105 (MH-CET / JEE)	104 (Merit Marks)	136 (MH-CET / JEE)
	2015-2016	41.06 (Composite Score)		80.25 (Composite Score)	
	2014-2015	28.64 (Composite Score)		84.34 (Composite Score)	
	2013-2014	51 (Merit Marks)	60 (JEE / AIEEE)	110 (Merit Marks)	86 (JEE / AIEEE)
Electronics & Telecommunication engineering					
2	2016-2017	46 (Merit Marks)	56 (MH-CET / JEE)	74 (Merit Marks)	92 (MH-CET / JEE)
	2015-2016	22.35 (Composite Score)		56.93 (Composite Score)	
	2014-2015	31.97 (Composite Score)		83.92 (Composite Score)	

	2013-2014	67 (Merit Marks)	52 (JEE / AIEEE)	103 (Merit Marks)	73 (JEE / AIEEE)
Information Technology					
3	2016-2017	35 (Merit Marks)	88 (MH-CET / JEE)	91 (Merit Marks)	93 (MH-CET / JEE)
	2015-2016	23.29 (Composite Score)		70.16 (Composite Score)	
	2014-2015	57.63 (Composite Score)		73.00 (Composite Score)	
	2013-2014	78 (Merit Marks)	49 (JEE / AIEEE)	93 (Merit Marks)	64 (JEE / AIEEE)
Mechanical Engineering					
4	2016-2017	25 (Merit Marks)	95 (MH-CET / JEE)	95 (Merit Marks)	112 (MH-CET / JEE)
	2015-2016	44.10 (Composite Score)		84.12 (Composite Score)	
	2014-2015	48.45 (Composite Score)		85.00 (Composite Score)	
	2013-2014	73 (Merit Marks)	79 (JEE / AIEEE)	118 (Merit Marks)	89 (JEE / AIEEE)
Mechanical Engineering (Second Shift)					
5	2016-2017	54 (Merit Marks)	85 (MH-CET / JEE)	83 (Merit Marks)	100 (MH-CET / JEE)
	2015-2016	29.02 (Composite Score)		76.72 (Composite Score)	
	2014-2015	38.20 (Composite Score)		76.96 (Composite Score)	
	2013-2014	41 (Merit Marks)	65 (JEE / AIEEE)	107 (Merit Marks)	77 (JEE / AIEEE)
Electrical Engineering					
6	2016-2017	55 (Merit Marks)	83 (MH-CET / JEE)	74 (Merit Marks)	87 (MH-CET / JEE)
	2015-2016	35.90 (Composite Score)		73.47 (Composite Score)	
	2014-2015	24.91 (Composite Score)		57.30 (Composite Score)	
	2013-2014	70 (Merit Marks)	51 (JEE / AIEEE)	85 (Merit Marks)	65 (JEE / AIEEE)

PG Programmes:

Sr. No	Programme	Year of Admission	Min. Marks of Admitted students	Max. Marks of Admitted students
1	M.E. Computer Engineering	2016-2017	6.86(GATE Score)	9.49(GATE Score)
		2015-2016	9.16(GATE Score)	13.24(GATE Score)
		2014-2015	2.85(GATE Score)	22.51(GATE Score)
		2013-2014	35(Merit Marks)	374(Merit Marks)
2	M.B.A.	2016-2017	5.23	92.85
		2015-2016	2.09	63.44
		2014-2015	1.16	56.34
		2013-2014	39	102

As entry level admissions are done through the Centralized Admission Process (CAP) governed by MS-DTE, data required for the comparison of minimum and maximum marks with peer Institutions is not available.

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?

Since admission rules and regulations are laid down by MS-DTE, the Institution has no scope to change the admission process. However, record of student profiles are maintained and reviewed annually to analyze diversity and assess abilities of the students. This analysis gives an insight into:

- The students' academic performance and strength in various courses viz. Mathematics, Physics etc.
- Gender
- Regional and social-economic background

As training and placement, academics, faculty and infrastructure influence admissions, Institution has taken following proactive measures:

- Induction program for FE, DSE and MBA students
- Direct second year admission counseling cell
- Extensive library and well-equipped laboratories
- IQAC Cell to focus on quality
- Dedicated and active CRD and Placement Cell
- Industry Institute Interaction Cell
- Geographical analysis is used for effective campaigning

These measures have resulted in a positive impact on overall admission process

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**

- The Institution follows all the rules and norms laid down by Admission Regulatory Authority, Government of Maharashtra regarding admission of students in the reserved category. It offers seats to SC, ST, VJ, NT, SBC, OBC categories, women, differently abled and economically weaker sections (TFWS- Tuition Fee Waiver Scheme) as per the State Government's norms, rules and regulations
- There is a special quota for the candidates of Jammu and Kashmir, GOI and Defence as per MS-DTE norms
- Financially challenged students are given counseling regarding various government schemes for financial assistance, educational loan schemes from banks and government web portals like Vidya Lakshmi etc
- Additionally, Management offers complete/partial fee waiver to meritorious and economically weak students through MM Trust's scholarships

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 programme.

Following table gives details of demand ratio for various programmes

UG Programmes:

Sr no.	Program	Year of Admission	No. of Applications (Y)	No. of Students Admitted (X)	Demand Ratio (X/Y)
1	Computer Engineering (Intake 120)	2016-2017	Admission process in the state is only through CAP and governed by Directorate of Technical Education (DTE), Government of Maharashtra. The Institution follows the rules, regulations and guidelines set by Savitribai	116	0.97
		2015-2016		115	0.96
		2014-2015		120	1
		2013-2014		106	0.88
2	Electronics & Telecommunication	2016-2017		79	0.66
		2015-2016		83	0.69

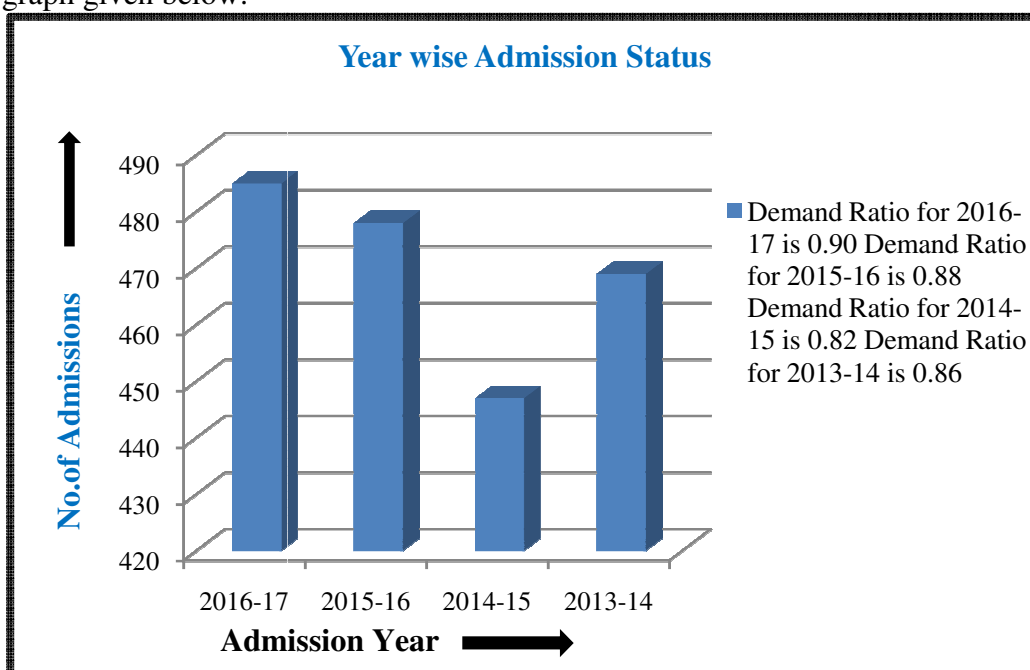
	Engineering (Intake 120)	2014-2015	Phule Pune University, Maharashtra State Government and AICTE	102	0.85
		2013-2014		97	0.81
		2012-2013		111	0.93
		2011-2012		117	0.98
3	Information Technology (Intake 60)	2016-2017		56	0.93
		2015-2016		57	0.95
		2014-2015		45	0.75
		2013-2014		45	0.75
		2012-2013		52	0.87
		2011-2012		54	0.90
4	Mechanical Engineering (Intake 120)	2016-2017		110	0.92
		2015-2016		113	0.94
		2014-2015		111	0.93
		2013-2014		119	0.99
5	Mechanical Engineering (Second Shift) (Intake 60)	2016-2017		52	0.87
		2015-2016		58	0.97
		2014-2015		44	0.73
		2013-2014		57	0.95
6	Electrical Engineering (Intake 60)	2016-2017		48	0.80
		2015-2016		52	0.87
		2014-2015		25	0.42
		2013-2014		45	0.75

PG Programmes:

Sr no.	Program	Year of Admission	No. of Applications (Y)	No. of Students Admitted	Demand Ratio (X/Y)
1	M.E. Computer Engineering (Intake 18)	2016-2017	Admission process in the state is only through CAP and governed by Directorate of Technical Education (DTE), Government of Maharashtra. The Institution	6	0.33
		2015-2016		14	0.78
		2014-2015		13	0.72

		2013-2014	follows the rules, regulation and guidelines set by Savitribai Phule Pune University, Maharashtra State Government and AICTE.	18	1
2	M.B.A. (Intake 60)	2016-2017		53	0.88
		2015-2016		47	0.78
		2014-2015		38	0.63
		2013-2014		59	0.98

Demand Ratio and decrease or increase in admissions is summarized in the graph given below:



While changes in admission policies (NFR) and eligibility criteria (composite score) resulted in a decrease in admissions in 2013-2014 and 2014-2015, removal of NFR, change in eligibility criteria (MH-CET score) and admission process resulted in an increase in admissions in 2015-2016 and 2016-2017.

Reasons for overall decline in admission scenario are due to:

- Demand of Society/Industry
- Global and National employment scenarios

Actions initiated by the Institution to improve the Programme are listed below:

1. Increased focus on skill development by conducting industry relevant value added courses
2. Setting up Corporate Relation Division to strengthen placement opportunities

2.2 Catering to Diverse Needs of Students

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 Institution fully complies with government policies regarding the needs of differently-abled students in following ways:

- The Institution caters to the needs of differently-abled students as per the requirement of individual student
- The Institution gives special concessions, viz. providing extra time during examinations, undergraduate/technical writers in University examinations as per the University guidelines
- The Institution also provides special facilities like lifts, ramp, wheelchair and suitable toilets at appropriate places for the differently-abled students

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

Qualifying marks in CET/AIEEE/GATE exams and overall ranking in the merit list is used to make entry-level analysis of the caliber of an individual student. The Institution addresses the students' needs in terms of knowledge and skills in following ways:

- Institution organizes Orientation Programme for the newly admitted students and their parents to help them understand the engineering curriculum of first year. Eminent personalities are invited to address the students and motivate them
- Preparatory/Introductory lectures for all subjects focus on understanding the special needs of the students in terms of prerequisite knowledge and skills
- Institution has appointed a qualified counselor to address the socio-psychological needs of the newly admitted students
- Institution conducts add-on training on fundamentals of C and C++ programming at the beginning of second year and Java programming for third and final year students

2.2.3 What are the strategies drawn and deployed by the Institution to bridge the knowledge gap of the enrolled students to enable them to cope with the programme of their choice? (Bridge/Remedial/Add-on/Enrichment Courses, etc).

The Institution takes efforts to bridge the knowledge gap of the enrolled students in order to enable them to cope up with the curriculum. These are listed below:

Orientation Programme: Institution organizes orientation programme for the newly admitted students and their parents to help them understand the

engineering curriculum of first year. During the orientation programme, Principal, Heads of Departments and senior faculty apprise incoming students about the academic policies, University examinations and various facilities (library, laboratories etc) provided by the Institution

Soft skill development courses:

The Institution conducts personality development programs for students to enhance their soft-skills, group discussions skills, aptitude capabilities, verbal skills, logical reasoning etc.

Enrichment courses:

The Institution arranges enrichment courses for students to improve their technical knowledge. Additional practice sessions for technical courses like C, C++, JAVA, CATIA V5, Ansys, Microcontroller based System Designing etc. are organized by the respective department. Digital library facility and NPTEL lecture videos are made available to all students

Add-on Courses:

The Institution arranges regular add-on courses in association with industry to bridge the industry-academia gap. Institution conducts workshops on Robotics, Hadoop -Big Data, Bootstrap, KiCAD, PCB designing, Arduino, Raspberry Pi, CCNA, Embedded Linux, Lab VIEW etc.

In addition to the above, the Institution also implements the following:

- Organizes National/State level Conferences and Workshops
- Invites eminent motivational speakers and domain experts to deliver Expert lectures/ Guest lecturers/ Seminars on recent trends in technology
- Encourages students to participate in various intercollegiate, national and international level events like paper presentations , project competitions etc. to enhance self-learning
- Industrial visits are organized to make students aware about the working environment and current trends in the industries

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

The Institution always tries to sensitize its students and faculty about the values of gender equality, inclusive development and environment. This is carried out in following ways:

- Institution gives equal opportunity to all students to participate in various activities like co-curricular, extracurricular, sports and placements
- Faculty members are nominated in functional committees without any discrimination of gender, caste and religion
- Institution arranges special social activities like Blood Donation camps, Swachh Bharat Abhiyaan, Natural Disaster's Relief Fund, Traffic

- Awareness Program etc. All students and faculty, irrespective of their gender, caste and creed actively participate in such events
- In addition to above, NSS organizes seven days camp at Manerwadi every year to create awareness amongst students about their social responsibilities regarding conserving environment. Activities like tree plantation, cleanliness drive etc are organized in Manerwadi village annually
 - To create environmental awareness and promote eco-friendly feelings among students, Institution encourages various activities like:
 - Plastic waste free college campus drive is organized by NCC, through which plastic waste is collected separately and given to Rudra Environmental Solutions for further processing
 - Institution has initiated e – waste collection activity
 - The detailed energy audit of Institution has been conducted by certified energy auditor of Maharashtra Energy Development Agency (MEDA) and initiatives have been taken for replacing conventional tube lights by LED tube lights to save electricity
 - Institution has installed solar water heater system and RO plant to treat drinking water
 - Institution has rainwater harvesting system for accumulation and deposition of rainwater for reuse on-site
 - Institution has conducted Green Audit of campus from Green Water Solutions Provider Pvt. Ltd, Pune which includes solid waste and it's recycling, electricity and use of natural gas, water and waste water, emissions and air quality monitoring and food services which leads to an eco-friendly campus
 - Institution has vermin-composting plant to decompose biomedical waste
 - Institution has department level charity clubs viz. Aadhar Club, Joy of Giving Club to reach out to the less fortunate community
 - Students are encouraged to share their thoughts on the current prevailing social issues by writing articles in college magazine and local newspapers like Sakal Times
 - Institution celebrates Woman's day, Teacher's day and Engineer's day to inspire students and staff
 - Institution has Women's Grievance Cell to deal with problems and issues related to girl students and female staff
 - Cultural events, Gavaksha and Unmesh are organized annually to provide a platform to female and male staff to showcase their talent
 - Institution ensures holistic development of staff and students by organizing special programs related to yoga, meditation and health

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

Advanced learners are identified based on their passing percentage, classroom performance, regularity in submission of class work and assignments,

punctuality, personal interactions and involvement of a student in different activities like projects, paper presentation and industrial visits. The Institution offers opportunities for bright students to augment their talent and meet their learning needs. Institution caters to the special learning needs of advanced learners in the following manner:

- Institution has organized various competitions in domains like Web-designing, Robotics, TI's Analog Circuits where in students get a platform to show case their talent
- A plethora of learning resources like Journals, eBooks, reference books is made available to students in the central library as well as in digital library
- Additionally, Book Bank facility is available for all students
- Employability skills development programme to improve communication and technical skills are organized in campus in collaboration with industry
- Various technical activities are conducted under SAEINDIA, ISTE, ISHRAE, CSI, ISACA, IEEE etc. Through these activities students get exposure to recent trends in the technological field
- Institution has always applauded and felicitated toppers and special achievers to inspire them to scale greater heights
- Different activities like poster presentation, project exhibition, blogging workshop and project development competition are organized under departmental associations like MESA, EESA, BETA, ACES and ITSA
- College promotes advance learners for project training offered by companies like Zensar Technologies, Persistent Systems Ltd., ARAI, Tata Motors, Volkswagen, Vishay Components, Mahindra etc
- Training placement cell organizes Barclays GTT Communication skills training programme every year for BE students to improve their communication skills
- Every department has Center of Excellence to encourage students to do projects and research in emerging and industry relevant technologies
- Institution houses a Center of Innovation cell to promote quality projects in association with Alumni
- Students are motivated to showcase their talent and get appointed as Google Facilitator for Google Applied CS with Android Program
- Intellectually advanced students are encouraged to write and present technical papers. Institution conducts special workshops on technical paper writing to provide students an insight into ethics and other nuances of paper writing
- Industry Institute Interaction Cell helps the advanced learners to get summer internships and industry sponsored projects
- Special expert sessions on GATE and GRE preparation are conducted for students

2.2.6 How does the Institution collect, analyze and use the data and information on the academic performance (through the programme

duration) of the students at risk of dropout (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc.)?

Institution maintains information of the students who are slow learners, economically weak and belong to socially disadvantaged section.

To get information about their performance following procedure is followed:

- The Institution adopts a Teacher Guardian (TG) system wherein a TG is assigned to a batch of students. TGs regularly monitor the students' academic progress, their needs and issues if any faced inside and outside the Institution. This helps the TG to identify slow learners, physically challenged and economically weak students
- Performance Analysis of individual student in Continuous Internal Assessment System comprising of unit tests, mock oral-practical exams, quizzes, University theory exams, In-semester exams, oral-practical exams and online exams helps the TGs to identify the slow learners
- Additionally, Institution has appointed counselors who discuss and counsel students regarding academic or personal problems

Support provided by Institution to disadvantaged sections of the society

- SC/ST/OBC/SBC/VJ/NT/minority students avail benefit of reservation in admission and scholarship / freeship as per the rules of Maharashtra Government
- Institution has separate student section in administrative office to implement rules and regulations related to social welfare schemes and to give guidance to students to avail benefit of the same
- Institution's central library provides book bank facility to all students

Support provided by Institution to physically challenged students

- Institution counsels students about the special facilities offered by government. Teacher guardians also counsel the students to help meet their needs
- Institution ensures the well being and comfort of physically challenged students by providing special facilities like lifts, ramp, wheelchair and suitable toilets at appropriate places
- The Institution makes special arrangements like providing extra time during examinations, under-graduate/non-technical writers for these students in University examination as per the University guidelines

Support provided by Institution to slow learners

- Institution arranges remedial classes, wherein personal attention is given to students
- Extra tutorial sessions are arranged for difficult subjects or numerical based subjects
- Extra lectures are arranged for each subject

- Regular interaction of teacher guardian with parents of slow learners also helps to know the requirements of such students and helps to improve their learning capabilities

Support provided by Institution to economically weaker sections

- Institution gives concession in tuition fees to needy students
- State Government's schemes such as EBC, TFWS etc. are implemented by the Institution
- Institution facilitates earn and learn scheme for students
- Institution provides information about different government and NGO aids and scholarships
- Special scholarships offered by Alumni and good Samaritans are endorsed by the Institution

2.3 Teaching-Learning Process

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

The teaching, learning and evaluation schedules are planned and organized as below:

- Academic year starts in the month of June. The University notifies the academic calendar. Accordingly Academic Monitoring Committee (AMC) prepares academic planner for the Institution every semester.
- Head of the Department along with staff prepares the academic calendar of the department which is in concurrence with the academic planner of the Institution and includes co-curricular activities, add-on courses etc.
- The students are informed about time table and academic calendar well in advance through Google apps, website and notice boards.
- At the onset of each semester the requirement of faculty members according to the additional classes or changes in curriculum is considered and as per need new faculty members are recruited maintaining the student-teacher ratio (STR).
- All departments conduct the meeting of faculty members well in advance before commencement of each semester. Head of Department and senior faculty members discuss the syllabus of each course and call the subject preferences from the faculty members.
- Head of the Department and senior faculty members distribute the teaching load considering faculty specialization, expertise and choice.
- Timetable is prepared by departmental timetable committee in coordination with other departments under the guidance of college level time-table coordinator.
- Extra lectures and tutorials are allocated in the timetable to cover the curriculum in a more elaborated way.

- All faculty members of each department submit list of books required as per the syllabus to the librarian through 'Library Committee' well in advance before commencement of each semester.
- Faculty members prepare course file which includes class time table, individual time table, University syllabus, course objectives and outcomes, session plan with CO-PO mapping, lesson plan, laboratory assignment list, previous year University question papers, unit test question papers with solutions, MCQs, oral question banks with model answers, notes (handwritten notes / handouts of ppts), record of contents beyond syllabus etc.
- Concerned faculty member prepares laboratory manual and also verifies the laboratory setup from maintenance and calibration point of view.
- The course file is audited by Academic Monitoring Committee (AMC) thrice in a semester.
- Continuous assessment is carried out through Unit Tests, Prelim Exam, Mock practicals, Orals and Online Mock Test in a semester as per academic planner. The performance is informed to students and parents through respective teacher guardians.
- Analysis of unit test is carried out and mock Practical and oral examination is conducted, remedial classes are held for failed/weak students.
- Feedback is taken from students twice in a semester through moodle open source software. Parents' feedback is also taken during PTMs. These feedbacks are conveyed to concerned faculty members for further improvements.
- At the end of semester, University conducts examination and evaluates the student's performance. After declaration of results, the analysis is carried out and is used for further improvement in teaching, learning and evaluation process.

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

- IQAC organizes meetings with committee members like Principal, Head of the Department and Deans. It monitors well defined academic policy for the Institution and is revised from time to time to improve teaching learning process.
- It takes review of existing teaching learning process and infrastructure related to it periodically.
- Every Saturday IQAC arranges lectures and discussion on quality in engineering education and TQM in education. All teaching and non-teaching staffs are involved in this process.
- It suggests and promotes faculty members & students to attend relevant seminars, guest lectures and soft-skill development programs.

- As per the suggestion from IQAC, concept of flipped classroom is also implemented for students to enhance thinking skills about problem defining and solving.
- It motivates faculty for doing research work and encourages them to apply in various funding schemes.

2.3.3 How learning is 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?

Student-centric learning focuses on skills and practices that enable lifelong learning and independent problem-solving. Following efforts are being taken to groom the students in this direction:

- Study material which includes syllabus, unit wise power point presentations of the course, assignments, unit wise notes, question banks, multiple choice questions, e-books etc. are provided to the students through Google Apps.
- All classrooms are ICT enabled. Faculty uses these facilities to show animations and videos for better understanding of subject and effective learning.
- Subject teachers plan the lectures/tutorials considering the difficulty level of subject and the time span available. They also provide individual guidance as and when required.
- Based on complexity and result analysis of subject, extra tutorials and lectures are scheduled in Time Table.
- Remedial coaching is provided to academically weak students.
- Teacher guardians regularly counsel and encourage students. Regular meetings with the students are conducted to understand and resolve their problems.
- Central as well as departmental library facility is available to all students and faculty members.
- During exam period, reading room facility is made available for 24 hours on all days.
- Wi-Fi facility is provided in the Hostel premises which enables students to learn independently and promote self learning.
- Students have access to NPTEL lecture series, MIT Open Course-ware etc. to make the subject easy to understand.
- To make students technically strong and equipped, technical magazines, journals, e-resources are made available to them.
- Recently flipped classroom concept is introduced and implemented to enhance independent learning among students.
- Institution has language laboratory to teach grammar, business linguistics, personality development, writing skills, listening skills and comprehension.
- Slots are made available for training and placement lectures.

- The Entrepreneurial Development (ED) cell helps to develop entrepreneurial abilities and personality of the students.
- Expert lectures from industry/senior academician/research organization are conducted for each subject. Industrial visits are organized which help the students correlate theory with practice.
- Additional courses are conducted to bridge the gap between curriculum and industry requirements and also to enrich students with content beyond the syllabus.
- Task based training through workshops are conducted under e -Yantra for faculty empowerment.
- Each department has signed MoUs with industries. This helps in Industry - Institute Interaction.
- Industry liaison activity helps to bridge industry-academia gap, in which faculties visit industries, students get internships, industry resource persons are identified for benefit of students.

2.3.4 How does the Institution nurture critical thinking, creativity and scientific temper among the students to transform them into lifelong learners and innovators?

- Institution motivates and supports the students to participate in National and International activities like BAJA, ROBOCON, Go-Kart, Effi-Cycle, Supra, ISHRAE, e -Yantra etc.
- Institution also encourages and guides students to participate in National, State Level, Zonal and Inter Collegiate competitions organized by University and other Institutions like "Avishkar", IIT TechFest, Mind spark, Utkranti etc.
- Institution organizes National Level technical event "Dexterity" which includes paper presentation competition, programming competition, poster competition, Make Mind, Robo-Rampage, Robo-Race, Super Users, Creatronics etc. for developing creativity and critical thinking among the students.
- Intra-college and Inter-college technical events are arranged frequently by various student associations such as MESA, EESA, ITSA, ACES and BETA.
- Industry Institute Interaction Cell helps students to undergo in-plant training during vacation to understand and tackle the actual problems in the industries.
- Students undergo industry sponsored and research projects which help to make them lifelong learners and innovators.
- Institution organizes student project exhibitions which are reviewed by industry experts and senior academicians from reputed institutes.
- It is a customary practice to invite eminent personalities to share their success stories with students and motivate them.

- Industrial visits rally round to the current trends, new challenges and innovations in industry.
- Regular visits to the exhibitions held by various industrial organizations/societies facilitate increasing awareness about recent trends and emerging areas.
- Students are provided guidance for preparation of competitive exams like GATE, GRE and TOEFL etc.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? e.g.: 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.

Following facilities are used by faculty members to stimulate interest in the subject and motivate students to learn:

- Faculty members use Google Apps regularly to share the teaching material and assignments to students.
- Institution has digital library to access all educational resources like NPTEL.
- On-line courses are done by faculty members to update knowledge. Faculty act as mentors to students for NPTEL courses.
- Virtual laboratory workshops are organized. Institution is recognized as nodal centre for virtual laboratory project of IIT Bombay.
- MyExamo (online education portal) is used for conducting college level mock exams.
- Softwares like MATLAB, LabVIEW, MultiSim, Automation Studio etc. are used to gain hands-on experience.
- Open education resources like open CV, Scilab, e-books are also used.
- Faculty and students regularly access e-resources like free e-journals of AICTE and NPTEL.
- Institution sponsors faculty members for membership of professional societies (IETE, ISTE, ISHRAE, ACM, SAEINDIA, CSI etc.). Informative literature published by these societies is made available to the students.
- Institution has membership of Jayakar Library of Savitribai Phule Pune University and ARAI Library.
- Institution has language laboratory to teach grammar, business linguistics, personality development, writing skills, listening skills and comprehension.
- Webinars are used as a medium for thought-provoking process, ideas and insights while grappling with new challenges, innovations and changes.

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

- Institution motivates students to undergo in-plant training during vacation to tackle the actual problems of the industries thereby updating their knowledge and skills.
- Institution organizes expert lectures, seminars, conferences, workshops, paper presentation, project exhibition and competitions which are assessed by professionals to expose students and faculty to advance level of knowledge.
- Institution deputed faculty for conferences, workshops etc. and takes their feedback of such programs and considers the same while planning the next event.
- Institution consistently conducts add-on courses such as GD&T, CATIA, LabVIEW, CCNA, Robotics, IoT, KiCad, Hadoop etc. which emphasizes enhanced understanding of integrated applications in engineering and exposes the students to advanced level of technology
- Institution has students' chapters of professional bodies like SAEINDIA, ISHRAE, ACM, CSI, ISTE, IETE, ISACA etc. Faculty members have memberships of professional bodies like IETE, ISTE, ISHRAE, ACM, SAEINDIA, CSI, ISRD, IAENG etc. These chapters organize events to expose the students and faculty members to advanced level of technology.
- Nineteen faculty members pursuing Ph.D. degree have in depth knowledge in their area of research. These faculty members share their domain expertise with the students to make them aware of latest advances.
- Regular personality development programs are conducted in the Institution in association with Barclays and Zensar. Resource persons from Institution and professionals from reputed Institutions train the students. Emphasis is given on motivational skills, communication skills, interpersonal relationships, leadership qualities, group discussions etc.
- Alumni actively conducts workshops and lectures for students, thereby giving students an insight into recent technological and industry trends.

2.3.7 Detail (process and the number of students benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/mentoring/academic advise) provided to students?

Following processes are executed to support and guide the students:

- Remedial Classes are conducted for academically weak students.
- Student Grievance Cell, anti ragging committee helps to resolve problems and to build morale of the students.
- To have one to one interaction with students, one faculty member is nominated as Teacher Guardian for group of 20-25 students. He / She maintains record with all personal details, contact details etc. of the students.

- Teacher guardian scheme is helpful to familiarize new students to the campus, provide academic counseling, enlighten the students on professional ethics and conduct and communicate with the parents.
- Head of Departments also counsel the students and give them advice from time to time on personal, academic and career aspects.
- Institution has appointed two professional counselors to counsel students on various grounds for providing psycho-social support and guidance to students.
- NSS, NCC activity arouse the social conscience of the students, provoke the social and ethical responsiveness among students.
- Activities like YES+ help to improve overall development of the students.
- Earn and learn scheme helps to embed dignity of work among the students.
- Institution arranges health check up camp for newly admitted and all Hostel students.
- Professional counseling, mentoring and academic advice by industry experts, renowned personalities and academicians proves beneficial for student. Placement cell provides guidance and constant support for career advancement and professional development through regular training sessions and interaction with alumni.
- Consistent Professional counseling and mentoring from alumni.

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 faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

Faculty members continuously do involve in developing innovative teaching methodologies:

Innovative teaching approaches/methods:

- Recently flipped classroom concept is introduced.
- Use of digital library, online journals and internet.
- Advance concepts in curriculum are explained by using models, graphs, Power Point presentations, computer simulation and animations.
- NPTEL lectures are made available to all faculty members and students.
- Online mock tests are conducted using software tools such as MyExamo.
- Techniques like quiz, puzzles, case studies, group discussion are frequently used for better understanding of subject.
- MBA and E&TC department has the 'Movie Club' which organizes movie fest boosting prudence for the achievement of professional goals and to gain more insights into the technical world.
- Institution on regular basis organizes teaching learning programs like Mission 10X for faculty members.

- Institution provides financial aid for e-Yantra – an initiative to spread education in Embedded Systems and Robotics by IIT Bombay. e-Yantra provides an opportunity of getting expert guidance on advanced technology and support of faculty from IIT Bombay to learn recent developments.
- Industry Liasioning helps faculty members to enhance their technical or subject matter expertise.
- Students are taken to the industrial exhibitions held by various industrial organizations/societies to make them aware about recent trends, emerging areas, economic and industrial environment.
- Industry Institute Interaction Cell organizes industrial visits to core industries to help students understand the applications and implementation of theoretical concepts.

Impact of innovative practices on students learning:

- Harness the learner to not only enjoy learning, but acquire skills that empower him/her to keenly engage in the intensification of his personal skills and competences and improve their performance and achievement.
- Improvement in performance in the University examinations.
- Acquiring internship opportunities in reputed companies / industries
- Clearing qualifying tests in placement processes and selection
- Undertaking and completing innovative projects
- Participation and awards in the State, National level paper presentations, project competitions, technical symposiums etc.
- Significant strides over the years in higher education

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

- Library is the hub of information and it is the treasure of knowledge. Teacher uses the library resources like reference books, text books, hand books, journals and educational CDs to develop the teaching material.
- Teachers regularly refer library resources to understand the topics in the curriculum, recent advancements and ongoing research work.
- Book bank scheme is provided for the students, so that they can avail books for a longer time period.
- Students have access to reference section and digital library. They can study, prepare for seminars, papers and projects using the library.
- Departmental library also issues books to students.
- A reading room is available to all students for studies and is open for longer duration during exam period.
- News papers and magazines are made available to have knowledge of current affairs.
- Students are availing additional books and references as per their need to study the regular subject in curriculum, project work, paper presentation, seminars etc.

- Regular practice of organizing book exhibition inculcates reading habit, promote awareness about the availability of books on diverse disciplines and enriches information literacy.

2.3.10 Does the Institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the Institutional approaches to overcome these.

Yes, following are the challenges –

- It is difficult to complete curriculum of few subjects within time frame specified by University.
- University gives uniform time slots for all subjects but certain subjects need more time depending upon complexity and grasping power of students viz. SOM, Mathematics, Analog Communication, TOC, DAA etc.
- Prerequisite of the subject plays an important role in teaching learning.
- Cultural programs like Ganesh Utsav, Wari etc. and natural calamities like Swine flu may affect academics.
- Centralized admission process for 'Direct Second' year engineering may start little late which affects academics.

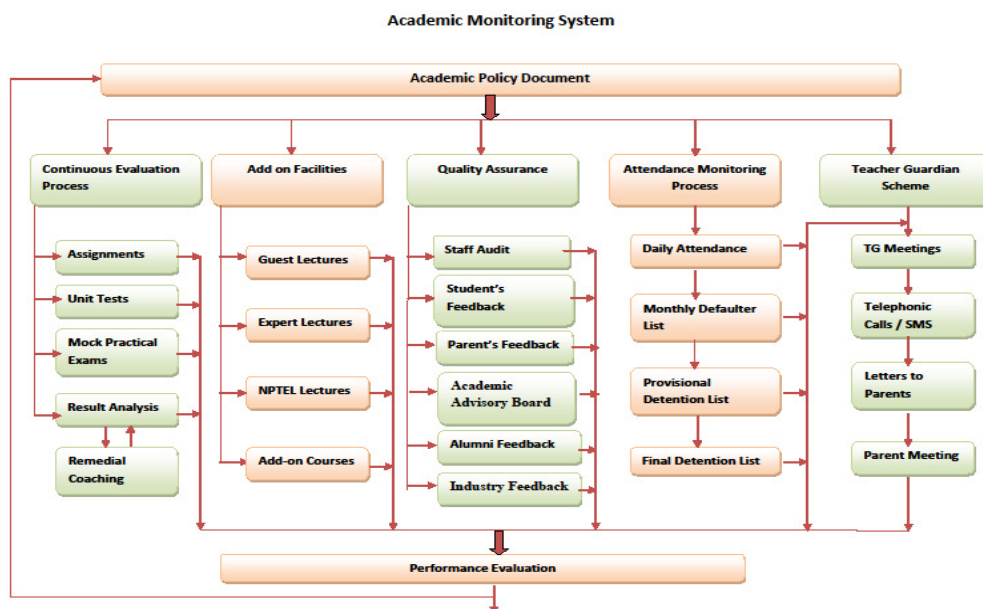
Efforts to overcome the challenges

- Extra lectures and practicals are scheduled by the faculty members before/after regular timings and on weekends to overcome academic loss and to cater for requirements of difficult subjects as and when required.
- Additional teaching hours for difficult subjects are provided to cover curriculum.
- Learning material is made available to students on Google Apps so that they can put additional efforts after college hours.
- Students eligible for direct second year admission are allowed to attend regular classes prior to completion of admission process.
- Institution allows students to pay fees in installments so that students are encouraged to attend the lectures from first day, without financial botheration.
- Comprehensive utilization of resources in Institution aids in completing the curriculum.
- Separate division for direct second year students is formed to overcome academic loss due to late admission .

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

- Academic Monitoring Committee is centralized (Institutional level) committee responsible for drafting, regulating and implementing different academic policies. It is meant for smooth and uniform conduction of

academics throughout the Institution. The system is categorized as shown in following figure:



- Dean Academics plays a vital role in guiding all departmental Academic Monitoring Coordinators to work towards maintaining quality.
- IQAC takes review of existing teaching learning process and related infrastructure periodically.
- Academic Monitoring Committee (AMC) and senior faculty members attend lectures and give suggestions for improvement.
- Institution takes feedback from students twice in a semester. Opinions from industry personnel, alumni and parents are also sought.
- Institution arranges unit test/weekly class test, online tests, mock practical exam and preliminary examination and analyses its results.
- Institution analyses University examination results regularly.
- Institution evaluates the projects prepared by students periodically.
- **Continuous Evaluation Process** –Performance of a student is evaluated by assignments, unit tests, surprise tests, mock practical exams, and presentation/group discussion.
- **Add-on facilities** - To cope up with rapid changes in technologies and continuous changes in the industries, add-on courses are arranged to bridge the industry and academia gap.
- **Quality Assurance in Academic Monitoring System** - Quality in academics is ensured by conducting staff audit and feedbacks of different stakeholders such as students, parents, alumni, Industry etc.

- **Attendance Monitoring Process** - Daily attendance of every student is maintained and monitored.
- **Teacher Guardian Scheme** - The Teacher Guardian scheme is developed to closely monitor every students' academic performance and ensure that his/her performance improves. TG scheme also ensures that parents are regularly updated about their ward's progress.

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

Recruitment Strategies:

- Institution calculates the requirement of faculty as per the University/AICTE norms.
- As per requirement, advertisement is given in reputed newspapers. Applications for recruitment are screened as per the norms. Technical and personal interviews of the candidates are carried out by the selection committee appointed by University. Qualified candidates are selected and appointment letters are issued for the same. List of selected candidates is submitted to the University for approval.
- In case of necessity, for catering the need of curriculum, Institution organizes 'Walk In Interviews'. Written tests, demo lectures followed by personal interview of the shortlisted candidates to recruit well qualified and competent faculty on merit basis is carried out.
- Institution takes efforts in identifying qualified senior and experienced professionals from various research Institutions, academic organizations and industries.
- The senior and experienced professionals are invited to work as Adjunct Faculty in respective programs.

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	1	-	2	1	1	1	6
M.Phil.	-	-	-	-	-	-	-
PG			1	1	7	29	38
Temporary teachers							
Ph.D.	-	-	-	-	-	1	1
M.Phil.	-	-	-	-	-	-	-

PG	-	-	-	-	47	54	101
Part-time teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	2	2
GRAND TOTAL	01	00	03	02	55	87	148

Retention Strategies: Institution has promotional policies to retain the faculty such as:

- Institution sponsors faculty for higher studies.
- Institution is always keen in giving regular salary, increments updated DA from time to time.
- Institution sponsors the membership fees of faculty for professional bodies.
- Faculty members are encouraged to write and publish articles, books as well as research papers which are financially supported by the Institution.
- Regular Practice of conducting programs like FDPs, conferences, workshops which gives opportunities to adopt changing requirements of the curriculum and recent advances in the particular areas of engineering and technology.
- Faculty members are deputed for FDPs, conferences, workshops organized by other organizations which are fully/partly financially supported by the Institution.
- Achievements and significant contributions of staff members are well appreciated time to time.
- Regular run through Industrial Training Programs brings in continuous improvement in thoughts and processes which elevates competitiveness.
- Ideal and conducive working environment encourages the faculty members to pursue an enriching career in academics, as a result of which Nineteen faculty members are pursuing their PhDs in various emerging technologies.
- The faculty members are having winter and summer vacations, Casual Leave, Medical Leave, Maternity Leave and Earned Leave.
- Annual performance analysis is done considering student feedback, peer feedback, subject results, qualification up-gradation, research work, contribution in administrative work at departmental and Institution level. Based on this, faculty can avail the promotions.
- Institution follows norms laid by AICTE/DTE/University for the welfare of Staff.

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.

- Institution takes consistent efforts in identifying the qualified senior faculty from various research Institutions, academic organizations and industries to teach emerging areas.
- The eminent persons from research organizations and industries are appointed as Adjunct Faculty in respective programs.
- Institution invites the senior and experienced persons from research organizations, industries, National and International Universities, academic Institutions and organizes their expert lectures to enhance the knowledge of the students in latest technologies and emerging areas.
- Deputes faculty members to participate in International/ National Conferences/ Training Programs, Workshops/ Seminars/ STTP/FDP.
- Various MoUs are executed with reputed organizations and their expertise is utilized to cope up with the demand/scarcity of qualified senior faculty to teach modern areas.

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.

a) Nomination to staff development programmes

Academic Staff Development Programmes	Number of faculty members nominated
Refresher courses	66
HRD programmes	22
Orientation programmes	141
Staff training conducted by the University	48
Staff training conducted by other Institutions	124
Summer / winter schools, workshops, etc.	04

Faculty members are nominated for attending FDPs, Workshops and Conferences at National and International level. Institution motivates members for active participation in such kind of staff development programs by providing financial assistance.

b) Faculty Training programmes organized by the Institution to empower and enable the use of various tools and technology for improved teaching-learning as below:

Teaching learning methods/approaches

- Orientation programs for the new faculty by experienced professors.
- Training by the use of modern teaching aids.

Handling new curriculum

- Regular Practice of conducting programs like FDPs, seminars, workshops which gives opportunities to adopt changing requirements of the curriculum and recent advances in the particular areas of engineering and technology.

- Faculty members are deputed for FDPs, seminars, workshops organized by University and other Institutions.
- Seeking guidance from senior faculty members helps to get the blown up view of the subject.

Content/knowledge management

- Employment of modern teaching aids such as LCD Projectors, Laptop, OHP's, PowerPoint and Automation Studio.
- The faculty members and students are encouraged to access e-resources and reference books available in the college library.
- Learning through demonstration and experimentation.

Selection, development and use of enrichment materials

- Access to top class study materials developed by Institutions such as IIT's, MIT open courseware etc.
- Faculty prepares notes by referring various sources.
- Enrichment courses are designed and imparted by experienced faculty members and external consultancy organization.

Assessment

- Assessment of students and faculty members is a regular practice for understanding and avoiding consequences if any.
- Assessment of students is carried throughout the semester through tests, tutorials, mock practical examination and in-semester orals.
- Feedback is collected from students twice in a semester regarding instruction delivery.
- Self appraisal report filled by the faculty members is referred for improvement, appreciation, promotion of the faculty members.

Cross cutting issues

- To address the cross cutting issues for improving in teaching learning process expert lectures from industry/senior academician/research organization are conducted recurrently.
- Students are sensitized about social issues through various activities conducted under the banner of NSS.
- Programs to exchange knowledge and experience to bring awareness about the gender equality, empowerment of women and upliftment of socially and economically weaker elements of the society.

Audio Visual Aids/multimedia

- Faculty members are trained to use audio visual aids and multimedia in the classroom. All departments are provided with audio visual aids and teaching learning aids.
- Use of audio visuals is resorted to for special topics and information.

OER's -Open Educational Resources

- The Institution library has a digital section where e- journals can be accessed by the students and faculty. Awareness is spread among students in identifying and using open source software.
- Facility of open educational resources like online tests, course materials, e-books, e-journals, magazines, periodicals are used to augment use of open educational resources.

Teaching learning material development, selection and use

- Free access of internet facility is available to faculty members to develop the teaching learning material. Institution library has an enviable collection of reading material with sufficient titles and volumes of reference and text books.
- Teachers and students are encouraged to access information from e-resources like IEEE – ASPP, Springer, ASME, J-Gate (Engineering and Management), ASTM, McGraw Hill Reference, Elsevier, EBSCO and NPTEL.
- Institution organizes and deposes the faculty for teaching learning programs like Mission 10X.

Percentage of faculty:

(* invited as resource persons in Workshops / Seminars /Conferences organized by external professional agencies participated in external Workshops / Seminars / Conferences recognized by national/international professional bodies presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies)

Following is the list of faculty members:

No. of Faculty	Total number						
	Comp Engg	E&TC	IT	Mech. Engg	Elec. Engg	DES	MBA
Invited as resource person in workshop/seminar/conference	01	02	04	04	03	01	02
Participated in external workshop/seminar/conference	18	10	21	22	12	17	25
Presented papers in conferences	37	43	04	48	11	19	07

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

To recharge the Teacher the Institution has following policies:

- Institution provides seed money for in house projects based on the ideas put forth by the faculty members.

- Institution has developed a culture to promote research oriented activities, projects which are generously supported by management grants.
- Institution provides financial support for BAJA, Robocon, CSI etc. activities.
- Institution motivates and pays the membership fees of faculty members for memberships of the professional organizations like ISHRAE, SAEINDIA, CSI, QCFI, ASHRAE etc.
- Institution frequently sponsors faculty members for seminars, conferences and industrial trainings.
- For developing teaching skills, competencies in a comprehensive and practical manner, Teacher Capacity Building Programs are well thought-out.
- Institution organizes National Conferences, FDPs, and workshops for the faculty.
- Institution has membership of CII, MCCIA, DICCI, Indo-German etc. Faculty members are encouraged and sponsored for various Industries organized programs which envisage development of faculty members.
- Study Leave / Duty Leave is sanctioned for faculty doing research or involved in any type of training activity outside the Institution.
- All staff members are motivated for higher studies.

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.

Sr. No	Name of Faculty	Award received by faculty	Awards / recognition received at the state, national and international level	Year
1.	Mrs. R. M. Chopade	Distinguished HOD Award	TechNext India 2017 Computer Society of India	2017
2.	Dr. K. R. Patil	Best Research Paper	ICAT-2014	2014
3.	Dr. K. R. Patil	Best Teacher Award	NCERT award-2007	2007
4.	Mr. M. R. Tarambale	Recognized as a member BoS	Electrical Engineering at SPPU, Pune	2016
5.	Mr. M. R. Tarambale	Recognized as Keynote Speaker	2nd International conference on Bioinformatics and Biomedical Science- ICBBS, Thailand	2015
6.	Mr. M. R. Tarambale	Awarded a Honor of conference chair	1 st International Congress on Environmental, Biotechnology and Chemistry Engineering, at Pune, India,	2014

7.	Mr. M. R. Tarambale	Excellent Research Paper Award	2nd International conference on Bioinformatics and Biomedical Science- ICBBS (Round-III) held at Kuala Lumpur, Malaysia	2013
8.	Mr. M. R. Tarambale	Young Investigator Award, and Inter Scholastic certificate	International conference on Computer Science and Information Technology at Goa, organized by Inter-science Research Network, Bhubaneswar, Odisha, India.	2012
9.	Mr. P. K. Tamkhade	Appreciation for Sincere efforts in Teaching	SCOE, Pune	2012
10.	Mr. P. K. Tamkhade	Appreciation for outstanding performance	SCOE, Pune	2008
11.	Mr. P. K. Tamkhade	Appreciation for Sincere efforts in Teaching	SCOE, Pune	2007
12.	Mr. R. S. Yadav	Best research paper award	NCTR, APCOER, Pune	2016
13.	Mr. S. B. Chavan	Best research paper award	NCTR, APCOER, Pune	2016
14.	Mr. A. V. Chavan	Class "A" Award in Competition held at VIT, Pune	e-Yantra, IIT Bombay	2015
15.	Ms. Chaitrali Nalawade	3 rd rank in M.Tech (CAD/CAM)	VIT, Vellore	2015
16.	Ms. Chaitrali Nalawade	1 st Prize in Robot racing	Quest-2K11, KBP COE, Satara	2011
17.	Ms. Chaitrali Nalawade	2 nd Prize in Paper Presentation	REBEL-11, College of Engineering, Malegaon(Bk)	2011
18.	Mrs. S. A. Joshi	Task based training completion awarded as class A team	IIT, Powai, Mumbai	2016
19.	Mrs. H. N. Burande	Appreciation by Texas Instruments	MMCOE & Edgate Technology-Academic partner, Texas Instruments	2014
20.	All E&TC Faculty	Texas Instruments Innovation Challenge India Design Contest 2015	MMCOE & Edgate Technology-Academic partner, Texas Instruments	2015
21.	Mrs. M. A. Dudhedia	Selection for Mission 10X meet of VCs and Academic leaders	National level	2010
22.	Ms S. D. Sapkal	Best paper award	cPGCON 2014 Sponsored by SPPU	2014
23.	Ms. D.S. Sawant	Sixth Rank	Shivaji University during Bachelor of Engineering	2012
24.	Mrs. P.S. Mehta	Second Rank	SPPU during Master of Engineering	2013

25.	Mr. N. S. Dhavase	Third Best Poster	In iPGCON-2013, Post Graduate Conference	2013
26.	Mr. P. R. Choube	Award of appreciation for a project	Dipex- 2014	2014
27.	Ms. A. A. Shaikh	Best paper Award	cPGCON, Matoshri College of Engg, Nasik	2014

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. The Institution has well defined performance appraisal system to evaluate the performance of the teacher.

- Students give online feedback of the concerned teachers in the specially designed format.
- This feedback is communicated to concerned faculty along with suggestions for further improvement and necessary action.
- Senior faculty members give suggestions to concerned faculty for improvement in teaching and Outcome Based Education.
- The 360 degree evaluation procedure provides feedback on the Teaching-Learning process.
- To improve the quality of teaching learning process the sessions on teaching methodologies like MISSION 10X are organized.
- The Institution also deputed the faculty members for teaching methodologies programs organized by other Institutions.

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?

Evaluation process plays important role in teaching learning process. The Institution is affiliated to Savitribai Phule Pune University; hence all the rules and regulations laid down by the University are followed for the evaluation of students. Our stakeholders such as students, faculties, parents, society, industry, management etc. are timely informed regarding evaluation process through various ways mentioned as follows:

- The Institution follows continuous evaluation scheme monitored by academic monitoring committee (AMC). At the beginning of each semester based on the University calendar, AMC prepares academic calendar and academic planner of the Institution which includes tentative dates of University exams, internal unit tests and mock exams. Same is displayed on the notice board of each department and uploaded on the Institution website.
- University circulars regarding evaluation process are timely notified to the students on the college and departmental notice board.

- At the start of each semester, subject teacher notifies the criteria for allocation of term work, seminar and project marks. Any changes in the evaluation or marking scheme by the University are timely notified to the students.
- Parents are informed about evaluation criteria through Parent Teacher Meetings.
- Departmental staff meetings are conducted regularly for discussing student evaluation process.
- Institution encourages faculty members to attend syllabus revision and implementation workshops conducted by BoS of respective programmes to get to know the latest updates on evaluation of subjects.

In this way the stakeholders are informed regarding various Institution level and University level exams and evaluation schemes at the start of the semester.

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?

Various evaluation reforms initiated by the University that are adopted by the Institution are as follows:

- Online exams for first and second year students; In-Semester exam for third and final year students; Practical, oral, TW & theory exams at the end of the semester as per the University schedule and time table
- As per the requirement of the University, the Institution has deputed approved faculty at the post of College Examination Officer (CEO) for better co-ordination among the Institution and the varsity for various University exams
- Paperless submission of marks i.e. online submission of TW, practical/oral marks to the University
- The Institution has adopted credit based system for UG & PG programmes
- Online appointment of internal examiners for TW, practical/oral, In-semester exams etc.

In addition to this, various evaluation reforms initiated by the Institution on its own are:

- Prelim examination for FE students
- Mock online examination
- Weekly unit test
- Mock practical/oral examinations
- Project reviews by industry experts
- Technical and aptitude skills assessment using pariksha.co portal
- Institution encourages students to use reputed research papers for seminars and projects to inculcate research culture among students

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?

Online examinations, In-Semester and End-Semester examinations are major evaluation reforms initiated by the University. Measures taken by the Institution for ensuring effective implementation of the evaluation reforms of the University are as follows:

Online Examinations

- Functional committee for University Online Examination is formed at Institution level to conduct online exam successfully. This committee works as per guidance of the CEO.
- This committee appoints supervisor, displays schedule and time table of the exam on the notice board of each department, identifies location to conduct the exam without hampering academics, and submits grievances to the University etc.
- The Institution has sufficient IT infrastructure, CCTV cameras to effectively conduct and monitor online examinations.

In-Semester and End-Semester Examinations: CEO is a functional head for In-Semester and End-Semester University examination committee. CEO in consultation with the Dean (Academics) & Principal does following activities for smooth conduction of exam:

- Prepares office order to appoint internal senior supervisor, custodian, internal vigilance squad and other members for overall conduction of In-Sem and End-Sem examination
- Monitors and ensures proper display of examination time table, allocation of examination blocks and appointment of junior supervisors for invigilation
- Appoints members to organize Central Assessment Programme (CAP) for internal assessment of TE & BE In-semester examination papers
- Communicates with the University for any grievances in In-Semester and End-Semester examination

Term work/Practical/Oral Examinations

- Head of each department appoints internal examiner for term work, practical, oral, seminar and project examination through University examination portal
- Term work is evaluated by the internal faculties based upon the uniform criteria given by the academic monitoring committee.
- Final year term work marks are jointly evaluated by internal and external faculty
- Along with this the Institution is keen to implement various evaluation reforms by its own. Initiatives taken by the Institution for ensuring effective

implementation of the evaluation reforms initiated by its own are as follows:

- Functional committee for Institution examination is formed for successful conduction of internal unit test, mock practical, mock oral, mock online etc. exams. It contains members from each department for co-ordination.
- Institution examination committee prepares schedule for unit test, mock practical and mock oral, mock online examination and it ensures that the examinations are conducted successfully.
- Institution has taken subscription of myexamo portal to conduct mock online examinations for FE and SE students.

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 assessment is used to monitor students learning to improve their learning. Following parameters are considered in formative assessment.

- Solving theory assignment based on every unit
- Mock practical/oral and mock online examination
- Unit test and prelim tests
- Conducting Surprise tests, puzzles, quizzes, presentations etc.
- Participation in various curricular, co-curricular, extra-curricular and sports activities
- Writing report on Industrial visits
- Development of mini projects
- Technical and aptitude skill assessment

Students enthusiastically take part in various sports, curricular, extra-curricular events organized at college, State and National level and get recognition for their performance.

Summative assessments are used to evaluate student learning and academic achievement at the conclusion of a semester. As per the schedule and time table of the University examination, the Institution assists the University for summative assessment of students at the end of each semester by following means:

- Conducting Online, In-Semester examinations and End-Semester (Theory) examinations
- Conducting Practical/Oral examination
- Conducting Seminar and Project work examination
- Assessing students term work based on uniform criteria given by academic monitoring committee

Above summative and formative evaluation methods have positively impacted our system in improvement in results and placement.

2.5.5 Detail 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 (weightages for behavioral aspects, independent learning, communication skills etc.)

Faculties of the Institution have complete belief in ensuring transparency in the assessment of internal marks for term work, seminars and projects. Following are the efforts taken by the Institution:

- Displaying monthly attendance of students on the notice board
- Timely submission of lab assignments and theory assignments
- Giving model answers of Unit test to students for review; students can discuss their performance with subject teacher
- Incorporating continuous evaluation scheme for evaluation of term work marks of students. It is based on overall development of the students such as attendance, communication, behavior, independent learning etc. shown in fig 2.1.

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COLLEGE OF ENGINEERING
Karvenagar, Pune - 52

DEPARTMENT OF -----

ACADEMIC YEAR 2015-16 SEM - I
Student Evaluation Sheet

Class		Subject						Total (50 Mks)
Roll No.	NAME OF STUDENT	Assignments (Average of all assignments scaled to 30 Mks)		Exams (Average of All exam marks scaled to 10 Mks)		General (10 Mks)		
		Lab Assignments (25Mks)	Theory Assignments (5 Mks)	Unit Test (5 Mks)	Mock Exam (5 Mks)	Cumulative Attendance (5 Mks)	Overall Performance (5 Mks)	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Performance: It is for overall performance of students in co-curricular and extra curricular activities, independent-learning and overall behavior

Course Co-ordinator HOD

Fig. 2.1 Student evaluation sheet

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

Graduate Attributes (GA's) are the necessary and required skills required to work in any organization. It is required that, the graduates after conclusion of the programme should achieve the graduate attributes. Following are the twelve GA's adopted by our Institution:

- **Engineering knowledge:** Ability to apply the knowledge of mathematics, and engineering fundamentals for the solution of engineering problems
- **Problem analysis:** Ability to identify, formulate, do literature survey and analyze engineering problems
- **Design or Development of solutions:** Ability to design solutions for engineering problems and design system components or processes that meet the specified needs.
- **Conduct investigations of complex problems:** Ability to use research-based knowledge and research methods for analysis and interpretation of data, and synthesis of the information to provide valid conclusions on complex engineering problems.
- **Modern tool usage:** Ability to select, and apply appropriate techniques, resources, and modern engineering and IT tools to complex engineering problems.
- **The engineer and society:** Ability to assess societal, health, safety, legal, and cultural issues while designing solution to problems.
- **Environment and sustainability:** Ability to understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **Ethics:** Ability to apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **Individual and team work:** Ability to function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **Communication:** Ability to communicate effectively on complex engineering activities with the engineering community and with the 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
- **Life-long learning:** Ability to 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
- **Project management and finance:** Ability to 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.

Institution ensures attainment of graduate attributes by following means:

- Every department defines Programme outcomes (PO's) based on twelve graduate attributes. Departmental programme outcomes reflect required Graduate Attributes (GA's). These are necessary attributes/skills that student should acquire within his/her study of the entire programme.
- Faculty members define Course Objectives and Course Outcomes (CO's) for the assigned course based on syllabus given by the University. Course Outcomes directly fulfill the relevant PO's of the department.

- CO and PO attainment is measured using direct and indirect assessment tools such as result of student and course end survey respectively.
- Attainment of CO's directly reflects attainment of PO's.

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

Following are the mechanisms adopted by the Institution to address grievances of students with respect to University and Institution examinations:

Grievances at University level:

- Institution has deputed CEO as per the requirement of the University. Students can communicate with the CEO for any grievances in the evaluation process of the University. CEO then forwards such grievances to the University.
- For grievances of examinations at University level, students can apply for photocopy of answer sheet, verification and revaluation through University examination portal. CEO keeps track of such applications to the University.
- The University addresses these grievances by providing photocopy, re-verification and re-evaluation. The revised marks, if any, are sent to the Institution which are communicated to the students and respective department.

Grievances at Institution level:

- For grievances of examinations at Institutional level students can contact their respective HOD.
- HOD listens their grievances and takes appropriate decision. HOD may contact CEO for any suggestion or query
- Students can even contact subject teacher for grievances on internal marks of any subject. Subject teacher addresses such grievances by showing them their answer sheet and explaining the evaluation process.
- Subject teacher discusses model answer in the classroom. Since model answers for the question paper, are shared with the students, very less grievances are there for internal marks evaluation.

2.6 Student Performance and Learning Outcome

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 Institution has clearly stated learning outcomes. The learning outcomes in general are defined through vision and mission of the Institution and each department. The learning outcomes specifically are defined through programme outcomes of each department, course objectives and course outcomes of every course.

Learning outcomes formed by above process are disseminated to all the students and staffs by following means:

- The Vision and Mission statement of the Institution and of every department are highlighted on the Institution website and at all the prominent places in the Institution.
- Head of Department along with senior faculty members defines programme outcomes of the department based on twelve graduate attributes. Subject Teacher defines Course Objectives and Course Outcomes of the subject based on the syllabus of the subject given by the University.
- Course objectives and course outcomes are discussed during introduction lecture given by the faculty of concerned subject
- Programme outcomes and its mapping to course outcomes are discussed in departmental staff meetings
- Students discuss and mention course objectives and course outcomes in their respective lab journals

2.6.2 Enumerate on how the Institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the student's results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.

The Institution monitors and communicates the progress and performance of students by following means:

- The Institution has continuous evaluation process which incorporates Unit Test, Mock PR/OR Exam and monthly attendance. Same is notified to students and parents through letters and phone calls regularly
- University conducts the written/theory/practical examination at end of semester. Result analysis is done by each department after declaration of the University examination results. This analysis report is compared with previous result analysis to monitor the progress of each department and to take corrective measures. The result of same are communicated to the student and parents. The result analysis report is shared with the faculty members to plan remedial for failed students and to take corrective measures to improve the results
- Teacher guardian keenly track the progress and performance of students assigned to them. Performance of students in University exam, curricular, co-curricular activities is noted in TG booklet.
- The performance of students is informed to parents time to time by e-mail, SMS and letters. Institution organizes Parent Teacher Meet (PTM), in this meeting parents or guardians can meet respective class teacher and teacher guardian to discuss progress of their ward
- Every department motivates students to perform well by following means:
 - Felicitations of overall and subject topper students during PTM
 - Felicitations of students who have won in contest at National and International level
 - Felicitations of best outgoing student during annual social gathering

Fig. 2.2 shows final year University results of all programmes of the Institution of last 4 years

Course/Branch	2015-16	2014-15	2013-14	2012-13
Computer	92.1	89.51	96.09	92
E & TC	92.5	93.15	89.84	96.12
IT	100	94.28	90.66	92.06
Mechanical	88.24	87.5	92.85	88.61
Electrical	Branch is introduced in the year 2013			
MBA	85.34	88.89	78.95	87
ME (Comp)*	58.34	81.25	66.67	--

* - ME Computer Engineering started from AY 2012-13

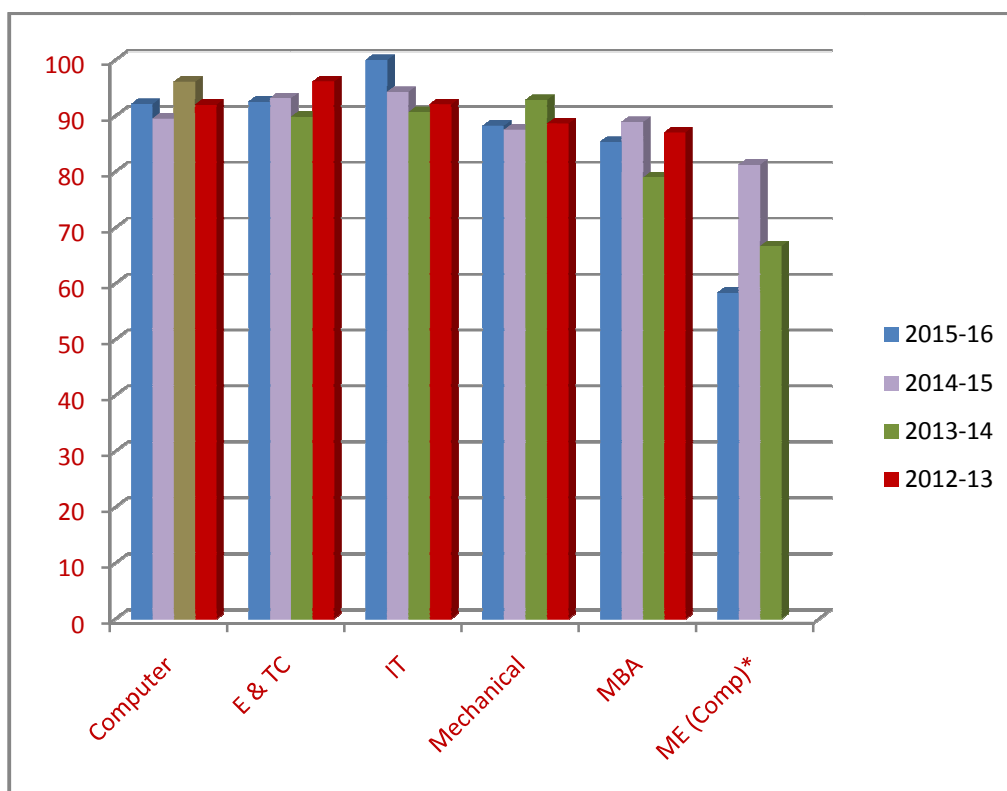


Fig. 2.2 Final Year University results of all the programmes for last four years

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

Teaching, learning and assessment strategies of the Institution are structured as follows:

Teaching strategies: To enhance teaching and academic environment following strategies are adopted by the Institution:

- First step in teaching strategy is to prepare academic calendar of the Institution consisting of start and end date of rigorous academics, internal unit test, mock exams, University exams etc. The Institution academic calendar is in accordance with the academic calendar of the University
- Head of Department allocates subject to subject teacher based on uniform criteria
- Subject teacher after assignment of subject by HOD forms course objectives and course outcomes based on the syllabus of the subject given by the University
- Subject teacher then maps course outcomes to programme outcomes of the department
- Subject teacher prepares course file which contains lesson plan, session plan, lecture notes, assignments to be given etc.
- Academic monitoring committee takes monthly review of coverage of syllabus by faculty members. Based on coverage of syllabus corrective actions are taken by the committee.
- Extra lectures and tutorials for difficult subjects are allocated beyond the University prescribed load of the subject
- Guest/Expert lecture by industry experts are planned for each subject to get to know career opportunities & latest industry trends in the subject
- Quizzes, Cross-words, group discussion, role play to be conducted in the classroom are planned to encourage involvement of students and to enhance their inter-personal skills
- Mock orals and practicals are planned to get to know the understanding of students and to enhance effectiveness of the course delivered

Learning strategies: To promote active and independent learning among students the Institution has adopted following strategies:

- Innovative and novel home assignments on all the Units of the subject
- Flipped classroom, in which contents are shared with the students and queries and problems of students are solved in the classroom
- Motivating students to participate in paper presentations, workshops and technical events
- Writing report on industrial visits
- Seminars and project work

In addition to regular teaching and learning methods:

- Various e-resources like NPTEL, EDX courses, IITB spoken tutorials, Virtual Labs, MIT Courseware, Swayam, NDL etc. is made available to the students.

- After completion of the program in final year, students are expected to get employment or go for higher studies. To improve upon employability, Employability Tests on Pariksha.co are conducted.

Assessment Strategies: The Institution adopts both direct and indirect assessment strategies for evaluating the learning outcomes of the courses and programme.

Direct Assessment

- Internal Unit Test and University examinations in theory subjects
- Mock and University Online examinations
- Mock and University Oral/Practical Examinations, seminars, tutorials and assignments
- Term work assessment

Indirect Assessment

- Alumni feedback
- Course End Survey after completion of the course
- Student Exit survey
- Employer feedback

2.6.4 What are the measures/initiatives taken up by the Institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?

Institution regularly takes following initiatives with respect to students' training, placement, entrepreneurship, innovation, research aptitude and social awareness:

- **Formation of Corporate Relations Division Cell:** Institution has formed central Corporate Relations Division Cell (CRD), which looks after training and placement of the students
- **Employability Skill Development Programme (ESDP):** This program is organized in two parts. Part-I is on enhancement of communication skills and Part-II is on enhancement of technical skills. Zensar conducts this activity in our Institution every year.
- **Organizing Training Programme:** To improve student performance in placement, Institution organizes various soft skill programmes and workshops on personality development and enhancement of aptitude skills
- **Employability Test:** Institution has an MoU with Pariksha.co. Through this, Institution conducts employability test of students
- **Orientation programme for engineering aspirants:** Institution has contributed to its social responsibility by organizing orientation programme for engineering aspirants to give information on Engineering admission process and future prospects in various engineering disciplines. This is organized in association with various leading News papers.

- **National Service Scheme cell:** As per the guidelines of the University, our Institution has NSS cell for various social activities. Through NSS cell Institution has contributed in transforming socio-economic conditions of people.
- **National Cadet Corps:** Institution has NCC cell, under which various social activities are conducted like Blood donation camp etc.
- **Social Activities:** Institution has initiated various social clubs through which donations are made to needy members in society. Through such club students are motivated towards their social responsibility through various activities such as collection of funds for the people affected by earth quake, medical difficulties etc. Recently Institution has donated Rs. 2.51 lacs to NAAM Foundation, which works for betterment of draught affected farmers.
- **Student Associations:** Every department has formed student associations such as ACES, BETA, MESA, EESA etc. The aim of student associations is to groom student in technical and social fronts. .
- **Workshops /Trainings/ Paper presentation quiz activities** - These activities are organized by all the departments of the Institution on regular basis to inculcate innovations and research culture.
- **College Magazines / Departmental newsletters:** Institution has magazine and all the departments of the Institution have departmental newsletters where students are actively taking part in collection, editing, coordinating and printing of newsletter. This activity enhances the students' written communication and coordination skills along with leadership qualities.
- The Institute motivates and if needed sponsors students to participate in various research projects, project competitions and National and International conferences.
- The students are encouraged to take up sponsored projects from industry or projects in collaboration with Institutes of national repute. The Institute has signed several MoUs with industries and research Institutes. In addition, the students are encouraged to participate in University level competitions like AVISHKAR.

2.6.5 How does the Institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?

Every department collects student performance data through following means:

- University result analysis of students
- Student Exit Feedback taken from the outgoing students
- Alumni feedback taken during alumni meet

Then Learning outcomes are assessed based on result analysis and various feedbacks. The gaps between the curriculum and technological needs are found out. Institution has recently established IQAC which periodically monitors attainment of Learning Outcomes of each department and suggests improvement in the Teaching-Learning Process

Institution has following methods to overcome barriers in learning outcomes:

- Addressing student grievances on teaching learning and evaluation
- Taking faculty feedback twice a semester for reviewing effective learning in teaching-learning
- Preparing quality lab manuals for making students learn by themselves
- Taking remedial classes for failed students
- Taking guest lectures by industry experts and renowned faculty
- Discussing performance of students with their parents or guardian during Parent Teacher Meet (PTM)

2.6.6 How does the Institution monitor and ensure the achievement of learning outcomes?

Institution has following mechanism to monitor and ensure the achievement of learning outcomes:

- Institution has developed necessary infrastructure as per the requirement of each subject to ensure achievement of learning outcomes
- Monitoring student attendance in theory lectures and labs
- Unit tests are conducted in a semester. Performance of students in unit tests are closely monitored for evaluation of academic progress and learning of students
- Remedial classes are conducted for failed students
- Faculty members are encouraged to give innovative assignments, to conduct surprise test, quizzes etc.

2.6.7 Does the Institution and individual teachers use assessment/evaluation outcomes 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. Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include

- While planning a course, subject teacher formulates course objectives, course outcomes as per the guidelines of the University.
- Course objectives also fulfills mission and vision of the Department and the Institution
- Institution regularly monitors the attainment of program outcomes by taking course end surveys. If required, the academic processes are modified to achieve the program outcomes.

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

3.1.1 Does the Institution have recognized research center/s of the affiliating University or any other agency/organization?

The Institution does not have a recognized research center of the affiliating University (SPPU). The Institute has established a Research & Development (R&D) Cell comprising of senior faculty, academicians and scientists from reputed industries for technology transfer.

3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Yes, the Institution has established a Research Committee named as R&D cell comprising of senior faculty, academicians and scientists from reputed industries to plan, address and monitor research activities. The composition of R&D cell is as shown as follows:

Sr. No.	Name of committee members	Position	Designation / Department
1.	Dr. S. M. Deshpande	Chairman	Principal
2.	Dr. Ms. M. T. Jadhav	Functional Head	E&TC
3.	Dr. S. S. Thipse	Member	ARAI, Pune
4.	Dr. Yogesh Aghav	Member	Kirloskar Oil Engines Ltd., Pune
5.	Dr. Vitthal S Bandal	Member	COEP, Pune
6.	Dr. Parag Kulkarni	Member	Eklat Solutions, Pune
7.	Dr. K. R. Patil	Member	Dean R&D
8.	Ms. S. N. Deshmukh	Member	Dean Admin
9.	Dr. V. R. Deulgaonkar	Member	Dean Student Affairs
10.	Mr. M. R. Tarambale	Member	HOD, Electrical
11.	Mr. Vinayak Kulkarni	Member	Computer

Recommendations of Research Committee:

- To encourage faculty for Doctoral and Post Doctoral research
- To motivate faculty for publishing papers in reputed Conferences/Journals
- To encourage and support faculty in applying for research projects under various funding agencies
- To encourage faculty and students for interdisciplinary research
- To create awareness amongst all stakeholders about intellectual property rights and publications

- To enhance research awareness by organizing conferences, workshops, seminars
- To increase interaction with various research laboratories and industries

Impact of Recommendations of Research Committee:

- Number of papers published in conferences and journals have increased.
- Faculty members submitting funding proposals under various schemes of government agencies have increased.
- Interaction between different departments for interdisciplinary research has improved.
- Interaction with Eminent persons/Professors through conduction of international conferences and other academic activities.
- At present 27 faculty members of the Institution are actively involved in research activities.

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

- **Autonomy to the principal investigator** – Yes
- **Timely availability or release of resources-** Yes
- **Adequate infrastructure and human resources-** Yes
- **Support in terms of technology and information needs-** Yes
- **Time-off, reduced teaching load, special leave etc. to teachers** – Yes, the Institution gives special leave to the research scholars as per the requirement of the research work.
- **Support in terms of technology and information needs-** Yes
- **Facilitate timely auditing and submission of utilization certificate to the funding authorities-** Yes

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

To develop scientific temper, research culture among students, the Institution has adopted the policy of creating Centre of Excellence in various advanced domains like Automation and Robotics, High Performance Computing, Advanced Embedded Systems & Signal Processing, Computational Intelligence, High Voltage Engineering. The Institution provides financial support to students working on projects under Centre of Excellence.

All departments of the Institution organize different activities to create interest in research for students and staff.

- Adjunct faculty with rich industry/ core experience is appointed by the Institution to promote research culture.
- e-Yantra laboratory in collaboration with IIT Bombay has been set up in the Institution in which various activities are carried out for students.

- The students are encouraged to participate in different activities like workshops, seminars, paper presentation (National and International), technical quizzes and puzzles.
- The students are encouraged to participate in state and national level project competitions to foster the creation of innovative ideas.
- The Institution organizes different training programs, workshops and seminars for students.
- The Institution plans industrial visits frequently for the students to know industry environment.
- In every academic year the Institution organizes National Technical Event “Dexterity” for the students. Under Event “Dexterity” paper presentation, project exhibition, robot competition, software development competition, quizzes, circuit debugging and many technical activities are conducted. Industry persons, eminent personalities are invited as judges for the same.
- Students are also encouraged to participate in University/ National/International level competitions like Avishkar, IIT TechFest, BAJA SAEINDIA, ISHRAE, Robocon, Effi-Cycle, GO-Kart, AICTE Hackathon etc.
- Special training is given to the students participating in Robocon Competition.
- Students do mini projects and BE projects in industry on real time problems.

3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.)

Faculty members are actively involved in research work. They also involve students in research projects and guide their research work. Many research projects are industry sponsored based on real life problem. A good number of research scholars are involved in research activity. Please refer point number 3.1.7 for the details.

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 students.

Following list provides details of workshops, training programmes, sensitization programmes organized by the Institution with focus on capacity building in terms of research and imbibing research culture among the staff and students:

Sr. No.	Program Organized	University / State / National / International	Academic Year
Computer Engineering			
1.	A Seminar on High Performance Computing & CUDA programming through NVIDIA GPU Education Center under Center of Excellence on 22nd September 2016	Institution	2016-17
2.	One day workshop on Big Data & Hadoop Ecosystem on 17th- 18th September 2016 in association with Indian Society For Technical Education (ISTE)	Institution	2016-17
3.	Expert Lecture on Research related funding schemes, mathematical modeling and simulation technique by Dr. Aditya Abhyankar, Dean R&D, DOT, SPPU, Pune	Institution	2014-15
4.	Expert Lecture on Funding Agencies by Dr Jaydevan R., AIT, Pune	Institution	2014-15
Electronics & Telecommunication Engineering			
5.	One day Technical Paper Writing Workshop	Institution	2016-17
6.	One week Winter Training Program on networking (CCNA)	University	2016-17
7.	Two days Hands on FDP on Arduino Microcontroller	University	2016-17
8.	One Day Hands-on Training on LabVIEW with NI-ELVIS Board under ISTE chapter	Institution	2016-17
9.	Two days Workshop on Raspberry Pi	Institution	2016-17
10.	Workshop on Latex for Effective Professional Project and Seminar Report Writing	Institution	2016-17
11.	Expert Lecture on Research initiatives and directions by Mr. Jayanta Mukhopadhyay, IIT Kharagpur	Institution	2015-16
12.	Two days workshop on Research Paper Writing and Publication	Institution	2015-16
13.	One day Knowledge Dissemination Program on Research Areas in Image Texture Analysis	University	2015-16
14.	Poster presentation competition for B.E.students, Review by Mr. Girish Khilari, Vice – Chairman, IEEE Chairman Computer Society	Institution	2015-16
Information Technology			
15.	ISTE Approved STTP on Recent Trends in Cyber Security and Forensics	National	2015-16
16.	Expert Lecture on How to read and write research paper by Dr. Sudeep Thepade	Institution	2015-16
17.	Seminar on “Cloud concepts overview”	Institution	2015-16
18.	Workshop on “Android”	Institution	2014-15
Mechanical Engineering			
19.	Utkranti 2k17(Vehicle dynamic and Ansys)	National	2016-17
20.	Faculty Development programme on 5S, Kaizen and TQC	National	2016-17
21.	Faculty development programme on Automation Studio	National	2015-16
Electrical Engineering			
22.	One day workshop on Research Paper Writing	Institution	2016-17

23.	Two days national level workshop on " Solar & Smart Energy " organized in association with ED cell, IIT Delhi	National	2016-17
24.	Three Days workshop on Solar Thermal Systems	Institution	2016-17
25.	One Day workshop on Challenges in Power System Installations and Testing	Institution	2015-16
MBA			
26.	Expert Lecture on Research Methodology by Dr. Amod Markale , Director, Zeal Institute	Institution	2013-14

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

Following are the details of prioritized research areas and the expertise available with the Institution:

Department	Research Domain	Faculty expertise
Computer Engineering	Signal Processing	Dr. S. M. Deshpande
	Information security and forensics	Ms. H. K. Khanuja
	Image Processing and High performance	Mr. R.V. Dagade
	Artificial Intelligence	Ms. S. N. Shekapure
	Computer Networks	Ms. G. S. Chillarge
	Computer graphics and Image processing	Ms. S.S. Shirwale
E & TC Engineering	Image Processing	Ms. S. N. Deshmukh Ms. P. S. Sawant
	Embedded Systems	Ms. A. P. Thakur
	Image Processing	Dr. M. T. Jadhav
	Medical Image Processing	Ms. A. M. Solanke
	Microwave	Ms. A. A. Kunte
	Communication	Ms. M. A. Dudhedia
	Speech Processing	Mr. A. B. Ghule
	Signal Processing	Ms. S. A. Kulkarni
Information Technology	Database, Software Engineering	Ms. R.M. Chopade
	Networking	Ms. S. A. Kakad
	Data Mining	Mr. N. S. Dhavase
Mechanical Engineering	Alternative fuels for IC Engines	Dr. K. R. Patil
	Mechanical Design	Dr. V. R. Deulgaonkar
	Refrigeration and Airconditioning	Mr. V. W. Bhatkar
	Tribology	Mr. A. D. Desale
	Heat Transfer(Thermal)	Mr. P. K. Tamkhade
	CAD /CAM/CAE	Mr. R. S. Yadav
	Production	Mr. A.B. Gholap
	Thermal Engineering	Mr. P. K. Katare

	Metallurgy	Dr. S. Sethi
Electrical Engineering	Bio Medical Image Processing	Mr. M. R. Tarambale
	Electrical Machines	Mr. B. B. Bhure
	Electrical Machines	Ms. S. A. Upasani
Engg. Sciences	Condensed matter Physics	Dr. A. S. Sawaikar
	Nanoscience & Nanotechnology	Dr V. A. Dhumale
	Nanotechnology	Mr. N. S. Pande
MBA	Organizational Management	Dr. N. R. Shaikh

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

- The Institution regularly organizes expert lectures of researchers on various research areas.
- Invites industry experts for lectures and workshops focusing on research in recent research areas.
- Industry Experts/Researchers are invited as judges for various technical events.
- The Institution takes initiative to have tie ups and MoUs with industry and R & D Organizations.

3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

The Institution has provision of sabbatical leave for research work. Over the years, Institution has promoted research culture. The Institute encourages faculty members to pursue research by granting them study leave for pursuing their Ph.D. and research work.

3.1.10 Provide details of the initiatives taken up by the Institution in creating awareness/advocating/transfer of relative findings of research of the Institution and elsewhere to students and community (lab to land)

- Faculty members interact with the industry experts and the students are encouraged to work on the live problems given by industry experts. Students are also encouraged to do projects of social relevance.
- Students are encouraged to participate in various technical programs like Avishkar, Robocon, Effi-Cycle, Go-Kart, Hackathon, e-Yantra, SUPRA, BAJA, Utkranti etc. to demonstrate project work.
- Students use professional society platforms to explore and present the papers and projects in competitions conducted by different Institutions.
- Students are encouraged to become member of professional societies.
- Various activities are conducted under professional societies.

3.2 Resource Mobilization for Research

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

Following tables shows the budget & utilization of funds on research and development activities:

Sr. No	Description (Amount in Rs.)		Year 2013-14	Year 2014-15	Year 2015-16	Year 2016-17
1.	Support for Students/staff research activities	Budgeted	5,00,000	5,00,000	5,00,000	25,20,000
		Actual	3,69,931	6,34,831	8,19,429	12,13,756 *
2.	E Journals & Journals	Budgeted	22,85,000	23,89,000	34,26,000	29,05,000
		Actual	8,79,902	34,79,624	25,82,133	2,27,827 *
3.	Conference / Workshop organized	Budgeted	4,75,000	4,75,000	12,30,000	11,50,000
		Actual	4,58,130	4,91,798	80,979	1,40,329 *
4.	Training & Travel	Budgetd	50,000	50,000	50,000	1,00,000
		Actual	20,228	24,082	76,686	66,967 *

* - Expenditure till 18 March, 2017

3.2.2 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, there is provision in the Institution to provide seed money to the faculty members for research work. The Institution has given full support for starting in house research projects. Efforts are being carried out to get funding from various funding agencies and support from industry.

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

Institution has separate financial provision for students' research projects. In many student centric activities, Institution has given financial support as follows:

Sr. No.	Name of Project	Department Participating	Finance Provided
1.	Go-Kart 2016-17	Mechanical Engineering	1,00,000/-
2.	Effi-Cycle 2016-17	Mechanical Engineering and Electrical Engineering	2,00,000/-
3.	BAJA 2016-17	Mechanical Engineering and Electrical Engineering	5,40,000/-

4.	Robocon 2016-17	Mechanical Engineering and Electronics & Telecommunication Engineering, Computer Engineering	98,469/-
5.	Supra 2016-17	Mechanical Engineering & Electrical Engineering	4,75,000/-
6.	BE Project 2016-17	Mechanical Engineering	15,000/-
7.	BE Project 2016-17	Electronics & Telecommunication Engineering and Mechanical Engineering	69,100/-
8.	Go-Kart 2015-16	Mechanical Engineering	1,70,000/-
9.	BAJA 2015-16	Mechanical Engineering and Electronics & Telecommunication Engineering	2,50,000/-
10.	Robocon 2015-16	Mechanical Engineering and Electronics & Telecommunication Engineering, Computer Engineering	6,40,000/-
11.	e-Yantra 2015-16	Mechanical Engineering and Electronics & Telecommunication Engineering	2,54,573/-
12.	BE Project 2015-16	Mechanical Engineering	65,000/-
13.	Persistent Hackathon 2015-16	Computer Engineering	10,000/-
14.	Robocon 2014-15	Mechanical Engineering and Electronics & Telecommunication Engineering	1,80,000/-
15.	BAJA 2014-15	Mechanical Engineering and Electronics & Telecommunication Engineering	2,10,000/-
16.	BAJA 2013-14	Mechanical Engineering and Electronics & Telecommunication Engineering	1,75,000/-

Financial assistance is extended in connection with project work/field study to the needy students identified by the faculty. The Institution provides laboratory facilities, computer laboratory with internet connections and well-equipped library to support students' research projects. They are also provided with an opportunity of mobile learning through the use of free Wi-Fi facility in the hostel premises.

3.2.4 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.

- R & D Cell identifies interdisciplinary areas.
- Faculty members of different Departments interact regularly.
- The Institution organizes various events under ACM, CSI, IETE, ISHRAE, ISTE etc for students.
- These events trigger the interdisciplinary areas of research.

3.2.5 How does the Institution ensure optimal use of various equipment and research facilities of the Institution by its staff and students?

The Institution ensures optimal use of various equipment and research facilities by taking efforts like:

- Monitoring of research activities and keeping track of research facilities by R & D cell
- Add-on courses for students
- Maintaining record of usage of Journals, Reference books, Proceedings copies of National and International Conferences by library
- Imparting training of equipments/instruments
- Regular maintenance of high-end instruments, computers and adequate budgetary allocation for maintenance of the instruments
- Utilization of research facilities by faculty of the Institution as well as industry & students for research activities during and beyond working hours

3.2.6 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 Institution has received grants from BCUD, SPPU, AICTE etc. for conduction of research.

The Institution has received support in the form of making available equipment setups at no cost or at subsidized affordable cost as follows:

Sr. No.	Department	Industry or other Beneficiary Agency	Created Research Facility / Instruments
1	Computer	NVIDIA, Pune	GPU teaching kit consisting of Tesla K40 (1){active} and Titan X (2) GPUs
2	E&TC	Edgate Technologies, Bangalore	ASLK PRO kits for Analog Laboratory
3	E&TC	NVIDIA, Pune	CUDA Card (GTX480) for Project Laboratory
4	E&TC	Cypress, Bangalore	PSoC 3 & 5 Development Kits for VLSI Laboratory
5	Mechanical	Digital Technology, Pune	MIG/MAG Welding Machine
6	Mechanical	ISHRAE	Refrigeration system with mini channel condenser using R152a
7	Mechanical	BCUD, Pune	Rugged Structure Integrated with Vehicle Chassis
8	Mechanical	BCUD, Pune	Refrigeration system with micro channel condenser using alternative refrigerants
9	Electrical	Subhadra Industries, Pune	Air Circuit Breaker (415 V, 800 A)

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

The faculty is supported and encouraged by the Institution to apply for funds and projects for research work. Institution administrative section and 'Sponsored Research Projects' committee provide information regarding various research schemes to faculty from time to time.

Following are the ongoing and completed research projects:

Nature of Project	Duration Year From To	Title of Project	Name of Faculty (PI)	Name of Funding agency	Amount Sanctioned in Rs.
Department of Computer Engineering					
Minor Project	2016-17	Set up of NVIDIA GPU Education Centre	Ms. H. K. Khanuja	NVIDIA	GPU cards worth Rs. 1,73,783
	2015-17	Devnagri word recognition from bus name route board	Ms. S. S. Shirvale	BCUD, SPPU	60,000
Department of Electronics & Telecommunication Engineering					
Minor Project	2012-14	Dielectric characterization using microstrip resonator sensor by transmission line matrix method	Ms. A. A. Kunte	BCUD, SPPU	3,00,000
Department of Electrical Engineering					
Minor Project	2016-17	9 Kw Solar Grid Tie Inverter System	Dr. S. M. Deshpande Mr. M. R. Tarambale	BCUD, SPPU	5,00,000
Department of Mechanical Engineering					
Minor Project	2016-17	Development of versatile refrigeration Test Rig with mini channel condenser environment friendly alternative refrigerants using solar water heating	Prof. V. W. Bhatkar	ASHRAE	\$4645 (approx 3,11,000)
	2015-16	Performance evaluation of refrigeration system with mini channel condenser using R152a	Mr. V. W. Bhatkar	ISHRAE	95,000
Major Project	2014-15	A condition based maintenance through ferrographic and vibration signature analysis	Mr. A. B. Gholap	AICTE (RPS)	21,17,647
Minor Project	2012-14	Design & development of rugged structure integrated with vehicle chasis subjected to travel on rough road terrain and for peculiar load conditions	Dr. V. R. Deulgaonkar	BCUD, SPPU	1,55,000
	2012-14	Design, development & performance evaluation of refrigeration system with micro channel condenser using alternative refrigerants	Mr. V.W. Bhatkar	BCUD, SPPU	1,75,000
Department of Engineering Science					
Minor Project	2015-17	Synthesis & investigation of structure & antibacterial properties of metal nano particals	Dr. A. S. Sawaiakar & Dr.V. A. Dhumale	BCUD, SPPU	2,30,000

Following table shows grant received for FDPs/Workshops organized:

Duration Year From To	Title of FDPs / Workshops	Name of Coordinator	Name of Funding agency	Grant Sanctioned In Rs.	Total Grant received in Rs.
Department of Computer Engineering					
12 – 13 Feb, 2016	Workshop on Cyber Security Challenges & Opportunities in association with ISACA	Ms. H. K. Khanuja	SPPU	80,000	32,282
24 – 25 Jan, 2015	National level workshop on Recent Advances in BIGDATA & Hadoop Administration	Ms. H. K. Khanuja	SPPU	2.0 Lakh	41,636
Department of Electronics and Telecommunication Engineering					
15 – 16, Dec, 2016	Two days state level Workshop on Internet of Things: Towards a Smart Future	Mr. V. B. Deokamble	SPPU	1.0 Lakh	31,891
Department of Information Technology					
13 – 14 Dec, 2016	National level Workshop on Cloud Computing and Big Data	Ms. R. M. Chopade	SPPU	2.0 Lakh	45,905
Department of Mechanical Engineering					
08 Sept, 2016	Virtual Lab set up for Refrigeration and Air Conditioning lab equipments	Mr. V. W. Bhatkar	Anucol Engineers, Kolhapur	10,000	10,000
16 – 17 Jan, 2015	Workshop on application of Computational Fluid Dynamics	Mr. V. W. Bhatkar	SPPU	1.0 Lakh	63000
Department of Master in Business Administration					
10 Jan, 2012	Workshop on A to Z of Research Writing	Ms. T.A. Lalit	SPPU	20,000	8760

- Mr. M. R. Tarambale has received BCUD, SPPU International travel grant of amount Rs. 60000/- for presenting paper in 2nd International Conference JCBBB 2013, 6th and 7th July 2013 held at Hongkong.

3.3 Research Facilities

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

The Institution has computerized Central Library with books, journals, e-resources and fully equipped laboratories. Research facilities available within the campus are as follows:

Name of The Department	Research Facilities
Computer Engineering	Digital Library, GPU teaching kit consisting of Tesla K40 (1){active} and Titan X (2) GPUs

Electronics & Telecommunication Engineering	Embedded lab setup, LAB VIEW with Elvis-II board (FPGA, Microcontroller), CUDA (GTX480) card, PSoC 3 & 5 development kits, MATLAB, Allen Bradley PLC Trainer, PLC Program Logic Control, Spectrum Analyser, Digital Storage Oscilloscopes, Multi Purpose Lab Station, FPGA Kits,
Information Technology	Skill Gurukul, IITB Spoken Tutorial
Mechanical Engineering	Computerised Numerical Controlled Machine, Fast Fourier Transformer (FFT) Analyzer, Universal Testing Machine (UTM), Vibration measurement with accelerometer, IC Engines test set-up, Ansys 13.0, CATIA V5R20, AUTOCAD 9, Hypermesh, MasterCam X9, Automation Studio, Automsim, Firebird V2560 and Spark V Robot with all accessories, Brinell, Vickers, Rockwell Hardness tester, Torsion, Fatigue and Impact testing machine, Different measuring instruments, Steam power plant - Boiler, calorimeter, Condenser, Domestic refrigeration test rig, Bomb calorimeter, Thermal optimisation of fan assisted heat exchanger (Radiator), Truck chassis frame with longitudinal and cross members, X-Y position control system, Flash point measurement,
Electrical Engineering	High Voltage Engineering Laboratory, Power Quality Analyzer, Thermal Imager, DSO (Dual & Tetra Trace)
Engg. Sciences	UV Spectrophotometer (SL159), Centrifuge (Eltek, 20000rpm with 24no sample holder having capacity 1.5ml)
MBA	SPSS-Statistical Pacakage for Social Service

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?

The Institution follows different policies for planning, upgrading and creating infrastructural facilities like:

- The Institution makes special provision in budget for research in every academic year.
- The R&D Cell and HODs plan the laboratory needs to address the need of new and emerging areas in modern technology. According to requirements, the laboratory and library facilities are upgraded.
- To pursue excellence in emerging areas, the Institution has adopted policy for creating Centre of Excellence. Mechanical Department has formed Center of Excellence in Automation and Robotics, Computer Department in High Performance Computing, E&TC Department in Advanced Embedded Systems and Signal processing, IT Department in Computational Intelligence and Electrical Department in High Voltage Engineering.
- Seed money is granted to supplement the funds received from various apex bodies.

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 Institution has received equipments and also developed laboratory in collaboration with industry. The department wise collaborative research facilities/laboratories developed for the students and research scholars within-campus are given in point 3.2.6

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

- The Institution has Institutional Library membership of Automotive Research Association of India and Jayakar Library of SPPU.
- The Institution encourages students and researchers to visit different research laboratories.
- The Institution arranges industrial visits for faculty members and students.
- The Institution encourages students to participate in research competitions and exhibitions.
- Research Facilities available outside the campus are as follows:

Sr. No.	Name of research facility	Location & Details	Purpose
1	Training	Persistent Systems Ltd, Pune	PCI Summer and Winter Training
2	PLC Training	B. R. Industrial Automation Pvt. Ltd. Pune	Training for faculty members on PLC. Final year projects.
3	Transport utility vehicle design	M.S.R.T.C.'s S. T. Workshop, Dapodi, Pune	Final year projects
4	Engine test bed facility	ARAI, Pune	Testing of alternative fuels used for IC engines.
5	Internship	Cybervault securities solutions private limited, Karve road Kothrud, Pune	Internship in Information Security
6	Training	Sunbeam Institute of information Technology, Pune	DAA, SP,OS,JAVA Training

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

- The Institution has subscribed for various e-Journals and e-learning resources.
- The Institution provides facility of National Program on Technology Enhanced Learning (NPTEL) lectures

Information of Books, Journals & Multimedia available for Students and Research scholars are as follows:

Sr. No.	Items with details		Engineering	MBA	Total
1	Books	Total No. of Titles	6134	1443	7577
		No. of Volumes	19815	4514	28814
2	Journals	National Journals	60	12	84
3	CDs / DVDs	-	-	-	2370

E-Journal Membership & Institutional memberships are as follows:

Sr. No.	Name of the E-Journal Membership & Institutional memberships
1	DELNET : Developing Library Network
2	NDL: National Digital Library
3	ARAI Pune
4	Jayakar Library, SPPU

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 are given in point 3.2.6

3.4 Research Publications 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)
- Original research contributing to product improvement
- Research studies or surveys benefiting the community or improving the services
- Research inputs contributing to new initiatives and social development

Details of patents obtained and filed (process and product) are as follows:

Sr. No.	Name of faculty	Patent Title	Remarks / Details
Electronics & Telecommunication Engineering			
1.	Ms. Anagha Kunte	Apparatus and Process for Measurement of Ethanol Percentage Content in Blended Gasoline	Application number 2084/MUM/2011 and Published on 25/01/2013
Information Technology Engineering			
2.	Ms. Rupali Chopade	Next Generation Biometric Keyboard	Patent ID: 329/MUM/2015 Published on 5/8/2016
Mechanical Engineering			
3.	Dr. V. R. Deulgaonkar (Application submitted)	Chassis integrated specialized structure designed for concentrated load uniformly and randomly	Application number: 1566/MUM/2013 Reference number: E-2/1892/2013/MUM CBR No.: 8250
4.	Mr. R. S. Yadav (Application submitted)	Eco friendly water hybrid vehicle system	Application number: 382/MUM/2013
5.	Mr. P. K. Katare (Application submitted)	Conical shape single rotor compressor	Application number: 2740/MUM/2009

Patents by Mechanical Engineering Students are as follows:

Sr. No.	Name of Student	Patent Title	Remarks / Details
1	Rohan Ravindra Gugale	Blind zone assist in outer rear view mirrors	Application number: 4627/MUM/2015 Reference number: E-2/2969/2015-MUM
2	Shreyas Naikade	Anti-locking braking arrangement for an elevator and method for controlling same	Application no. – 15180814.4-1705

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?

The Institution has published National Conference Proceedings of “Internet of Things Towards a Smart Future” in association with IJIERT with ISBN No.978-93-5258-629-5 in the year 2015-16. However there is no separate research journal publication of the Institution.

3.4.3 Give details of publications by the faculty and students:

Publications by the faculty and students are as shown below:

Sr. No.	Department	No. of Paper published in peer reviewed journals	No of paper published in conferences	No. of publications listed in International DB	Mono-graphs	Chapter in Book	Books Edited	Books with ISBN International Database	Citation Index	SNIP	SJR	Impact Factor	H-index
1	Computer Engineering	99	37	58	0	4	0	1	142	–	–	Min 0.7 Max 4.7	Max 4
2	E & TC	34	43	35	2	1	0	2	38	–	–	Min 0.18 Max 4.02	Max 2
3	IT	31	04	28	0	0	0	0	8	–	–	Min 0.21 Max 1.68	Max 1
4	Mechanical	74	47	67	0	4	2	3	192	–	–	Min 1.1 Max 4.58	Max 5
5	Electrical	22	11	6	0	0	0	2	35	–	–	Max	Max

												1.17	2
6	Engg. Sciences	45	19	24	0	2	0	2	175	-	-	Min 1 Max 1.86	Max 6
7	MBA	0	7	0	0	0	1	0	-	-	-	-	-
Publications by students (UG/PG):													
1	Computer (UG)	50	4	49	-	-	-	-	-	-	-	-	-
	Comp (PG)	37	13	38	-	-	-	-	-	-	-	-	-
2	E & TC	-	24	24	-	-	-	-	-	-	-	-	-
3	IT	18	1	18	-	-	-	-	1	-	-	Min 0.265 Max 0.763	Max 1
4	Mechanical	16	13	-	-	-	-	-	-	-	-	-	-
5	Electrical	1	1	-	-	-	-	-	-	-	-	-	-

3.4.4 Provide details (if any) of

- **Research awards received by the faculty**
- **Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally**
- **Incentives given to faculty for receiving state, national and international recognitions for research contributions.**

Award /Recognition received by faculty are as shown below:

Sr. No.	Name of faculty	Award /Recognition received by faculty	Recognition received from reputed professional bodies and agencies nationally and internationally	Year
Computer Engineering				
1.	Ms. Harmeet Kaur Khanuja	Reviewer	IEEE International Conference CAST 2016	2016-17
2.	Ms. Harmeet Kaur Khanuja Mr. R. V. Dagade	Reviewer	IEEE sponsored second International Conference on Computing , Communication, Control & Automation – ICCUBEA 2016	2016-17
3.	Ms. H. K. Khanuja Ms. S. B. Jadhav	Reviewer	cPGCON SPPU	2016-17 2015-16 2014-15
4.	Ms. Shubhada Mone	Editorial Committee member	International Journal-IJERCSE	2016-17

5.	Ms. Shubhada Mone	Advisory Committee member	International Conference on Recent trends, Emerging issues in Science Engineering, Environment & Technology	2016-17
6.	Ms. Shubhada Mone	Review Committee member	International Journal - ASTEG	2016-17
7.	Ms. Harmeet Kaur Khanuja	Resource person	ISTE approved STTP 'Digital Identity and Security' in CSE Department, Jhulelal Institute of technology (JIT) Nagpur	2013-14
8.	Ms S. D. Sapkal	Best paper award	cPGCON 2014 Sponsored by "Savitribai Phule Pune University"	2013-14
9.	Ms. D.S. Sawant	Sixth Rank	Shivaji University during Bachelor of Engineering	2012-13
Electronics & Telecommunication Engineering				
10.	Dr. Ms. M. T. Jadhav	Resource person for ISTE approved STTP "Recent trends in research in E&TC Engineering"	Sanjay Ghodawat Group of Institutes, Shivaji University, Kolhapur	2016-17
11.	Dr. Ms. M. T. Jadhav	Reviewer	IEEE conference CASP at CCOEW, Pune	2016-17
12.	Dr. Ms. M. T. Jadhav	Reviewer	WIECON conference at AISSMs, Pune	2016-17
13.	Ms. M. A. Dudhedia	Resource person for inaugural session at SPPU's SE subject detailing workshop for "Analog Communication"	SPPU's, Maharashtra Institute of Technology, Pune	2016-17
14.	Ms. A. A. Dixit	Awarded Excellent Grade for two weeks course on "An introduction to modern method of brain exploration with Focus on Functional Magnetic Resonance Imaging (FMRI)"	Ministry of HRD under Global Initiative of Academic Network (GIAN), IIT, KGP	2016-17
15.	Ms. A. A. Kunte	Summer faculty research fellowship program-2016 (Microwave)	IIT, Delhi	2016-17
16.	Ms. M. R. Pangaonkar	Awarded Elite Grade for NPTEL course in 'Introduction to Research'	IIT, Madras	2016-17

17.	Ms. M. A. Dudhedia	Reviewer	IEEE conference ICEI at PICT, Pune	2016-17
18.	Ms. A. A. Kunte	Reviewer	International Journal of Microwave and Wireless Technologies	2016-17
19.	Ms. A. A. Kunte	Reviewer	ACE International Journal	2015-16
20.	Ms. A. A. Dixit	Reviewer	Elsevier Journal 'Infrared Physics & Technology'	2015-16
21.	Ms. S. A. Joshi	Awarded class A team for "Task Based Training"	e-Yantra, IIT, Bombay	2015-16
22.	Ms. A. M. Solanke	Reviewer	IEEE conference on Image information at VIT, Pune	2015-16
23.	Dr. Ms. M. T. Jadhav	Reviewer	IEEE INDICON conference at Yashada, Pune	2014-15
24.	Ms. H. N. Burande	Appreciation by Texas Instruments	Marathwada Mitra Mandal's College of Engineering & Edgate Technology- Academic partner, Texas Instruments	2014-15
25.	Ms. A. M. Solanke	Session chair & Reviewer	Conference NCMDC at VIT, Pune	2014-15
26.	All E&TC Faculty	Appreciation for mentoring projects submitted to "Texas Instruments Innovation Challenge India Design Contest 2015"	Marathwada Mitra Mandal's College of Engineering & Edgate Technology- Academic partner, Texas Instruments	2014-15
Information Technology				
27.	Ms. R. M. Chopade	CSI TechNext'17, Distinguished HOD Award	CSI Chapter Mumbai	2016-17
28.	Ms. R. M. Chopade	Reviewer	ISRD Allied International Journals	2016-17
29.	Mr. N. S. Dhavase	Third Best Poster	In iPGCON-2013, Post Graduate Conference for the paper titled "User adaptive perfecting of maps for Interactive web GPS application"	2013-14
30.	Ms. Rashmi Bhattad	Editorial Board and Reviewer	IJETAE International Journal	2013-14
Mechanical Engineering				
31.	Dr. K. R. Patil	Reviewer	ELSEVIER's Energy Conservation and Management Journal	2014-17
32.	Mr. S. N. Belsare	Reviewer	ASTESJ Journals	2017
33.	Mr. V. W. Bhatkar	CWC member and student chair	ISHRAE Pune Chapter	2016-17

34.	Mr. R. S. Yadav, Mr. S. B. Chavan	Best research paper award	NCTR, APCOER, Pune	2016
35.	Mr. V. W. Bhatkar	Reviewer	ELSEVIER's International Journal of Refrigeration	2016
36.	Mr. V. W. Bhatkar	Reviewer	Journal of Thermal Engineering, Turkey	2016
37.	Mr. P. K. Tamkhade	Reviewer	PG-CON, SPPU	2016
38.	Mr. C. K. Dave	Reviewer	PG-CON, SPPU	2015
39.	Mr. V. W. Bhatkar	Reviewer	PG-CON, SPPU	2015
40.	Dr. K. R. Patil	Reviewer	International Energy Journal, Asian Institute of Technology, Thailand	2015
41.	Dr. V. R. Deulgaonkar	Technical Committee member for Transport Utility Vehicle Design	Association of State Road Transport Undertakings, New Delhi	2016
42.	Dr. V. R. Deulgaonkar	Reviewer	Defence Science Journal	2015
43.	Dr. K. R. Patil	Reviewer	Journal of Engineering & Technology (JETR)	2015
44.	Mr. A. V. Chavan	Secured Class "A" Award	eYantra, IIT Powai	2015
45.	Dr. K. R. Patil	Best Research Paper	ICAT-2014	2014
46.	Mr. S. N. Belsare	Reviewer	WJES, Online	2014
Electrical Engineering				
47.	Mr. M. R. Tarambale	Recognized as a member BoS	Recognized as a member for Board of Studies (Electrical Engineering) at SPPU, Pune	2016
48.	Mr. M. R. Tarambale	Recognized as Keynote Speaker	2nd International conference on Bioinformatics and Biomedical Science- ICBBS, June 25-26, 2015 Bangkok, Thailand	2015
49.	Mr. M. R. Tarambale	Awarded a Honor of conference chair	1 st International Congress on Environmental, Biotechnology and Chemistry Engineering, at Pune, India, February 21-22, 2014.	2014

50.	Mr. M. R. Tarambale	Excellent Research Paper Award	For a paper entitled “A Computer based Feature Extraction of Lung Nodule in Chest X-ray Image” 2nd International conference on Bioinformatics and Biomedical Science- ICBBS (Round-III) held at Kuala Lumpur, Malaysia on 8-9 June 2013.	2013
51.	Mr. M. R. Tarambale	Young Investigator Award, and Inter Scholastic certificate	Research paper entitled “Computational tool developed for extraction of various parameters of lung tumor from chest X-ray Image” at International conference on Computer Science and Information Technology at Goa,	2012
52.	Mr. P. R. Choube	Award of appreciation for a project	Dipex- 2014	2014
53.	Mr. P. R. Holambe	First Rank	Roboversity, National level Workshop, organized by COEP, Pune	2014
54.	Mr. M. R. Tarambale	Editorial Chief	International Journal (IJIERT)	2015
55.	Mr. P. R. Choube	Reviewer	International Journal (IJRPET)	2015
56.	Mr. P. R. Choube	Reviewer	International Journal (IJRPET)	2015
57.	Mr. S. C. Jadhav	Reviewer	International Journal (IJRPET)	2015
Engineering Science				
73.	Dr. Vinayak Dhumale	Reviewer	Research Scripts International Journal	2016-17
74.	Dr. Vinayak Dhumale	Reviewer	International Journal (IJMTES)	2016
75.	Dr. Vinayak Dhumale	Reviewer	Elsevier Material Science & Engineering C	2014

3.5 Consultancy

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

The Institution always believes in liaison with the industry to give students a more practical exposure. In view of this Institute Industry Interaction cell is established. The Institution follows specific system for healthy industry institute interaction.

System

- To invite resource persons from industry to deliver talk
- To acquire more live projects from the industry
- To bridge the gap between Institution and Industry through effective communication and collaborations
- To sign MoU between Institution and the Industry

Strategies

- Arrange FDP/SDP in collaboration with Industry
- Arrange industrial training
- STTP for students and faculty
- Organize conferences/ workshops/seminars with industry collaboration
- Identify the domain specific expertise from industry and call them to interact with students and faculty.
- The Institution has established Academic Advisory board (AAB) in all Departments
- Adjunct faculty with rich industry/ core experience are appointed

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

Knowledge and skill has to be spread through consultancy. Consultancy can cover a wide range of activities. The faculty can be benefited through experience and future growth in terms of research projects and grants.

Policies to promote consultancy

- Faculty is promoted for training and development programs including STTP, webinars, FDPs etc. The Institution sponsors all these activities.
- Study leave or duty leave is sanctioned for faculty doing research or involved in any type of training activity outside the Institution.
- Income generated by the consultancy is distributed to respective faculty members and used for the development of the Institution.

Use of existing expertise

- Domain of expertise in each department is identified. Industries are approached through positive propaganda and good rapport is maintained with them.
- Available knowledge is used in organizing workshops, conferences, seminars as per their specialization in and out of the Institution.

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

The Institution supports faculty by providing latest facilities required for consultancy. Available facilities for consultancy services are:

- 24x7 High speed internet
- Well equipped laboratories

- Latest configuration computers/ software
- 24x7 UPS backup

Appreciation for consultancy

- Faculty is benefited in terms of annual appraisals.
- Faculty is encouraged for consultancy by giving duty leave and financial assistance for attending skill development programs.
- Institution organizes programs on product development, design and research methodology which encourages the faculty for consultancy.

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

Following table shows the details of revenue generated through various consultancy services:

Sr. No.	Academic Year	Name of Department/ Faculty	Name of Industry	Revenue generated/ Savings Rs.	Income source
Computer Engineering					
1.	2016-17	Ms. Abhilasha Kulkarni	In-house	5,000/-	Operating Systems workshop
2.	2016-17	Ms. Neha Padgilwar	In-house	9,600/-	IoT using RaspberryPi
3.	2016-17	Mr. Abhay Chagedia & Mr. Raju S. M.	In-house	88,528/- (Notional Savings)	In-house Networking & Printer Maintenance (2010 onwards)
4.	2015-16	Ms. Abhilasha Kulkarni	In-house	60,000/-	Value added course on Java
5.	2015-16	Ms. Abhilasha Kulkarni	In-house	1,57,500/-	Workshop on Recent Advances in Bigdata & Hadoop Administration
6.	2014-15	Mr. Prashant Dhakad	Gate Coaching	17,000/-	GATE coaching
7.	2014-15	Mr. Prashant Dhakad	TCS iON Pvt. Ltd.	6,52,559/-	TCS iON Pvt. Ltd, Pune (For Conduction of Online Examination in association with iON Pvt. Ltd, Pune)
Electronics & Telecommunication Engineering					
8.	2016-17	E & TC Engg	Azure Skynet Sol. (P) Ltd, & IIT, Hyderabad	7,200/-	Two days Workshop on Networking

			ad		
9.	2016-17	E&TC Engg	Pantech ProEd. Pvt. Ltd., Chennai	3,360/-	Two days hands-on FDP on Arduino
10.	2016-17	Ms. M. A. Dudhedia Ms. S. A. Kulkarni	In-House	4,305/-	Workshop on Latex for Effective Professional Report Writing
11.	2016-17	Technical Assistant	In-house	68,154/- (Notional savings)	Digital trainer Kits for MMCOE
12.	2015-16	E & TC Engineering	Prof. M. R. Khodake, VIT, Pune	5,000/-	6 and ½ digit DMM
13.	2015-16	Technical Assistant	In-house	1,50,483/- (Notional savings)	Analog and digital electronics kits for MMCOE
14.	2013-14	E & TC Engineering	Maven Systems Pvt Ltd.	-	Spectrum Analyzer
Information Technology					
15.	2016-17	Information Technology	Institution	500/-	FDP on “NS2 and Cisco Packet Tracer”
16.	2015-16	Information Technology	Finland Labs & IIT Roorkee	9,300/-	NWTP, Finland Labs & IIT Roorkee
17.	2015-16	Information Technology	Cyber Vault Securities Solutions Pvt. Ltd.	5,460/-	Workshop on Cyber Security
18.	2015-16	Information Technology	Tata Consultancy Limited	1,73,797/-	Conduction of Various exams
19.	2014-15	Information Technology	University	23,474/-	FDP on SL-II and Seminar of TE IT Course
Mechanical Engineering					
20.	2016-17	Dr. V. R. Deulgaonkar	-	25,500/-	Value added course on CATIA
21.	2016-17	Dr. V. R. Deulgaonkar	-	12,500/-	Value added course on Ansys
22.	2016-17	Mr. H. C. Pisal Mr. C. K. Dave	NMIT Talegaon, Flora ITE, Sasewadi, Cummins COEW.	43,000/-	Boiler trials using Steam Power Plant Test Rig
23.	2016-17	Ms. Mayuri	Vidharbha	20,000/-	Technical guidance &

		Rode	Plastics Company, Palghar, MH		technical contingency regarding design of gear & gear types etc.
24.	2015-16	Mr. V. W. Bhatkar	Cosmic Refrigeration Pvt. Ltd., Pune	-----	Calculation of heat losses in air conditioning duct
25.	2015-16	Mr. V. W. Bhatkar Mr. H. C. Pisal	NMIT Talegaon, Flora ITE, Sasewadi	41,000/-	Boiler trials using Steam Power Plant Test Rig
26.	2013-14	Mr. V. W. Bhatkar Mr. Nilesh Singh	NMIT Talegaon, Flora ITE, Sasewadi	32,000/-	Boiler trials using Steam Power Plant Test Rig
Electrical Engineering					
27.	2016-17	Mr. S. C. Jadhav	Water Resource Department, Regional training centre(Mech), Pune	4,000/-	Consultancy
28.	2016-17	Mr. S. C. Jadhav	Fortune Solar Energy, Pune	10,000/-	Testing using Solar grid tie inverter
29.	2015-16	Mr. S. C. Jadhav	In-house	6,00,000/- (Notional Saving)	Supervising electrification of MMCOE campus new building (Classroom complex & Hostel)
30.	2014-15	Mr. M. R. Tarambale	In-house	90,000/- (Notional Saving)	Design and manufacturing of kits for the subject analog and digital electronics & power electronics.

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?

Institution has Consultancy Policy in place for sharing of income generated through consultancy.

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?

The Institution has a clear objective and vision towards each and every enrichment programme, initiated or to be initiated. The biggest strength of any Institution is its students and our Institution believes that it is its prime responsibility to ensure the service orientation, contribution as good citizens and holistic development of students. In view of this, the Institution regularly organizes different events to create awareness among the students.

- Lecture delivered by Brig. (Retd) Hemant Mahajan on the topic 'The involvement of Indian Youth in Terrorism and Naxalism; Causes and Effects' in which he shared his views which helped to increase students' awareness towards socio-economic realities.
- Participation of students in activities like, Rashtriya Ekta Divas, Swachh Bharat Abhiyan, Azadi 70 and developing among them a sense of unity towards various segments of the society.
- The Institution is very successful in enhancing students' awareness in helping neighbours and other states in critical situations.
- Youth Empowerment and Skill development courses are regularly organized for MMCOE & neighboring institutes which help in service orientation & holistic development of students.
- The Institution participates in International Yoga Day conducted on 21st June every year.

The Institution's vision towards neighborhood-community network is to fulfill its motto of services to the community. Various bodies like NSS, NCC, staff-student associations work cohesively to reach the Institution's goals.

Students' engagement and contribution towards good citizenship is reflected through the following activities:

- Organization of Blood donation camps in collaboration with Acharya Anand Rishi Ji, Pune Blood Bank and Janakalyan Rakht Pedhi, Pune regularly.
- Organization of frequent Tree Plantation Programmes.
- Donation of Rs. 2,51,000/- was given to NAAM Foundation (Mr. Nana Patekar, Founder President) to help draught affected farmers and of Rs. 2,47,301 to ASSEM Foundation for J & K Flood disaster.
- Help to visually-challenged students from "Indian Association of Blinds", Madurai by donating amount of Rs. 10,130/-.
- PAN Card Drive organized by Institution through BETA association, to provide PAN cards to students at nominal cost. Objective behind this drive is to teach students the importance of PAN card and its benefit to the country.
- Students and faculty of the Institution have also provided financial support to Mr. Ganesh Shivaji Ramshette, a student of Third Year Mechanical Engineering Department for Brain Surgery. Total amount of Rs. 1,85,764 was handed over to Mr. Ganesh for his treatment.
- Students' Association (ITSA) initiated fund raising activity along with all other departments for 7-year-old girl Sanjana Biradar who was suffering from blood cancer.

- Students are sharing their thoughts by writing articles in the local newspaper Sakal times. These articles are based on the current prevailing social issues in India.
- Students have opened foundation named “Approach helping hands”. Members of this foundation take money from their own pockets and donate it to the various needy segments.
- NSS unit conducted "Helmet Drive" in the campus for creating awareness regarding traffic rules.
- PRO committee and NSS unit of the Institution conducted "Traffic Awareness Program" on the occasion of Engineer's Day (15th September 2015). The drive was implemented on traffic signals in the vicinity of the Institution.

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

The Institution has NSS and NCC cell, functioning in the campus all round the year to promote socially-responsible roles. The NSS and NCC cell regularly organize various activities and ensure the active participation of students in these social activities. Every department has its own students' association which organizes social activities. The faculty and student coordinators ensure involvement of all students in these activities.

3.6.3 How does the Institution solicit stakeholder perception on the overall performance and quality of the Institution?

The Institution gives due importance to the stakeholders' perceptions on the performance and quality of the Institution. Attempts have been made to measure the stakeholders' perception of service quality provided, by assessing the gap between their expectations and their perception of what they have really received from the Institution. To solicit the views and expectations of the stakeholders and their feedback on the performance of the Institution following steps are taken:

- Questionnaires are developed for feedback from students on the scales of service quality rendered by the Institution and the level of their satisfaction.
- As a continuous mechanism to solicit students' perceptions and their problems regarding the performances of the Institution, there is the Academic Monitoring system (AMS).
- Feedback from parents through parents-teachers meet.
- Feedback from alumni through meeting with alumni association or through alumni meet
- Remedial actions for suggestions given by stakeholders are implemented in consultations with HOD & Principal.

3.6.4 Planning and Organization of Extension and Outreach Programmes for Students and the Impact. ? Providing the budgetary

details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

Extension and outreach activities are organized at Institution as well as department level. At the Institute level these activities are initially planned by the respective units entrusted with the task of organizing extension activities in consultation with the student representatives. The impact of all these activities can be illustrated with the following examples:

- Women's day is celebrated every year. Self defence training was given to ladies staff and girl students by SGS Pvt. Ltd. on 8th March 2016. Renowned advocate Ms. Sandhya Gokhale was invited and a small interactive session was arranged on the topic 'Samakalin Atmabhan' for ladies staff and girls of MMCOE in March 2015.
- Blood Donation Camps are regularly organized with the help of Acharya Anand Rishiji Pune blood bank. The motto of this activity is that no one in the society should suffer due to lack of timely availability of blood.
- The Institution has gifted amount of Rs. 57,500/- to students to purchase pranayama, yoga CDs, spiritual books to encourage them for regular yoga practice and to inculcate good moral qualities through reading of books.
- The Institution invited eminent personality Padmashri Shri. Pratap Rao Pawar who shared his views about the young generation and also motivated students for their upliftment.

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?

- Faculty coordinators at Institution and department level for NSS, NCC motivate students to participate in extension and outreach activities.
- Information regarding proposed activities is notified through circulars.
- The Institution organizes many activities through NSS, Student Associations and other forms of community development activities.
- NSS cell of the Institution organizes 7-day residential camp every year. Many social initiatives are undertaken in this 7-day camp in which students and faculty are actively involved.
- Contribution to extension services is also a parameter considered for the best outgoing student award.

Activities conducted by NCC:

Sr. No.	Name of the activity/event	Academic Year
1.	Youth Festival - "Yuva Lakshya"	2016-2017
2.	Trek to Ratangadh	2016-2017
3.	Plastic waste free college campus drive	2016-2017
4.	Eye Checkup camp	2016-2017
5.	Kargil Vijay Diwas	2016-2017

6.	Kargil Vijay Diwas	2015-2016
7.	International Yoga Day	2015-2016
8.	Trek to Raigadh	2015-2016
9.	Kargil Vijay Diwas	2014-2015
10.	Elocution Competition on Birth Anniversary of Swami Vivekanand	2014-2015
11.	Kashmir flood relief fund	2014-2015
12.	Rashtriya Ekta Divas	2014-2015
13.	Trek to Rajgadh	2014-2015
14.	Kargil Vijay Diwas	2013-2014

Activities conducted by NSS:

Sr. No.	Name of the activity/event	Academic Year
1.	Medical Checkup with Thyrocare	2016-2017
2.	NSS Camp	2016-2017
3.	Blood Donation Camp	2016-2017
4.	Blood Donation Camp	2015-2016
5.	NSS Camp	2015-2016
6.	Traffic Awareness Program	2015-2016
7.	Helmet Drive	2015-2016
8.	Blood Donation Camp	2015-2016
9.	Trek & Tree Plantation	2015-2016
10.	Blood Donation Camp	2014-2015
11.	NSS Camp	2014-2015
12.	"Rashtray Ekata Diwas" celebration	2014-2015
13.	Swaccha Bharat Abhiyan	2014-2015
14.	Green Awareness through "Tree Plantation" Inside and outside college	2014-2015
15.	Contribution to J&K Flood disaster	2014-2015
16.	International White Cane Day Contribution 2014 to educate a visually challenged child.	2014-2015

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

The Institution offers fee waiver scheme to the economically weak and bright students. Details of fee waiver scheme is given as below:

Year	Financial aid available	UG		PG		Total (Amt. in Rs.)
		No. of students	Fee waiver (Amt. in Rs.)	No. of students	Fee waiver (Amt. in Rs.)	
2016-17	Yes	5	203778	1	39010	242788
2015-16	Yes	7	150309	-	-	-
2014-15	Yes	5	110056	2	45575	155631
2013-14	Yes	6	149556	2	25600	175156

The Institution has an 'Earn and Learn' scheme to help needy students.

The Institution has organized following activities to promote social justice.

- Special coaching to under-privileged women of neighboring areas.
- Knowledge sharing sessions on various socio-economic topics, like disaster management, women empowerment, youth empowerment and many other in nearby villages.
- The Institution has helped orphanages.
 - Institution donated "Water Tank" and "Food items" to the Orphanage "Matoshri".
 - Students celebrated birthday of children from the orphanage "Srivatsa" and gifted food items.
 - Digital classroom was created by the Institute in the orphanage "Jeevan Vardhini" by donating projector, basic software CDs and speakers.
 - Students visited 'Apala Ghar', an orphanage and donated clothes and toys. They spent quality time with the children of the orphanage.
- "Joy of Giving" club formed by the student association to reach under-privileged and vulnerable sections of society donated toys, books, clothes etc to Sai Seva Mati Mand School.
- Faculty & students initiated a social activity under AADHAAR club, in which students and faculty visited under privileged areas to donate the necessary items.
 - "Charity Activity" was conducted in which Institute donated clothes, toys, etc. to Goodwill India NGO
 - "Share Food, Share Emotions" was conducted on the occasion of New year 2016 in which food items were donated to Matoshri Orphanage and Poona School of Blind
 - "Share Food, Share Emotions" was conducted on the occasion of the New year 2017 in which food items were donated to Poona School of Blind, Punaruththan Samarasata Gurukulam, Chinchwad - run by prominent social worker Shri. Girish Prabhune.
- During annual social gathering "Ensemble 2015" BETA student association set up a stall and collected donations in cash and kind.
- Students delivered a seminar on emerging technologies and their applications in Queen Mary's Technical Institute for Disabled Soldiers.
- Staff & students initiated fund raising campaigns for needy child Ku. Riya Kshirsagar for her heart surgery.

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.

Objectives:

- Inculcate the spirit of a good citizenship in the students.
- To understand the importance of extension activities over their life and its impact on society.

- To apply technical knowledge gained during engineering for the benefit of community, leading to social development.
- To develop values, skills and leadership qualities in the students.
- Enable students to handle social and natural disasters.

Outcomes:

- Underprivileged sections of the society get benefits of these extension activities.
- Leadership Skills of students are improved as they learn to work in a team.
- Team work makes them professionally more ethical and they understand the true meaning of moral values.
- Personality Development and management skills are improved.
- Alumni has started Scholarship for economically weak and bright students.
- Students are working on projects of societal concerns

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?

- NSS cell of the Institution organizes 7-day residential camp. Several initiatives are taken in this 7-day programme, e.g. tree plantation, village cleaning under 'Plastic Free Village Mission', sports competitions, special awareness sessions for girls. Villegers are actively involved in many activities.
- Youth Empowerment and Skill development courses are regularly organized for MMCOE & neighboring institutes in association with NGO "Art of Living" which help in service orientation & holistic development of students. YES!+ course is specifically organised for the students. It is designed to accelerate personal and overall development of the students and helps in personality development through exercises like Yoga, Pranayama, Mediation and Sudarshan Kriya. Volunteers from community are also involved in organization and conduction of these courses.
- The Institution has started Art of Living Skills Development Center and executed Barclay PLC's "Global Youth Employability Initiative" in which National Skill Development Corporation, International Association of Human Values ,LAURUS EDUTECH Skill India are also involved. Goal of this initiative is to make students professionally empowered and employable.
- The Institution has taken an initiative to educate the uneducated sections of society. Faculty of the Institution visited nearby areas and interacted with uneducated women, discussed and understood their skills and suggested affordable training centers to them. Skills like beauty parlour, stitching, cooking were prioritized.

3.6.9 Give details on the constructive relationships forged (if any) with other Institutions of the locality for working on various outreach and extension activities.

- The Institution has a constructive relationship with Acharya Anand Rishiji Blood Bank and Jankalyan Rakht Pedhi, Pune.
- With the help of NGO “Art of Living” the Institution regularly conducts Youth Empowerment Programs for students of the Institution and neighboring institutes.

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.

Certificate of appreciation was awarded to the Institution by Goodwill India for contribution to underprivileged people.

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.

The Institution has signed MoUs with many companies, industries for mutually beneficial relationships that include faculty development programs, guest lectures for students and faculty, project internship, sharing of physical resources etc. Students undergo internship at various industries/institutes like AIR, Pune, BSNL, Realty Automation and Security Systems Pvt. Ltd., Vramp Automation, Pune, Progressive Powercon Pvt. Ltd., etc. The following table shows the details of various activities:

Sr. No.	Name/Details of the activity/Benefits	External agency /participating institute	Year
1.	West Tech Summit	Confederation of Indian Industries (CII)	2016-17
2.	Expert Lecture on Capacity & Capability building for Industry Orientation of Engineering Faculty	CII	2016-17
3.	Faculty Development & Learning Mission to Industry	CII	2016-17
4.	Walkathon for Hygienic Food	CII	2015-16
5.	Practicing ISR-Issues & Challenges	CII	2015-16
6.	CII Innovation Meet	CII	2015-16
7.	Higher Education Summit	CII	2015-16
8.	Workshop on 5S & Kaizan- The Mantras for workplace improvement	Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA)	2016-17

9.	Exhibition & Conference on Renewable Energy	MCCIA	2015-16
Computer Engineering			
10.	"UTKRAANTI 2017 -Android App Development"	Entrepreneurship Development Cell, IIT Delhi	2016-17
11.	Employability Skills Development Program on advanced .NET – Phase III	Zensar Technologies Ltd.	2016-17
12.	Java training course	Sunbeam Institute of Information Technology, Pune	2016-17
13.	PCI Winter School 2016 Shapes & Languages, Laws & Transformations	Persistent Systems Ltd, Pune	2016-17
14.	One week National Summer Training Program (NSTP) on IoT using Raspberry Pi	IIT Roorkee	2016-17
15.	Internship Training Session on Cyber Forensics	Webfence IT Security Pvt. Ltd. Pune	2016-17
16.	Barclays-GTT Youth Employability Initiative for Communication skills Programme	Barclays & GTT	2016-17
17.	Wheebox Employability Skill Test (WEST)	Wheebox	2016-17
18.	Employability Skills Development Program on .NET and Soft skills -Phase I & II	Zensar Technologies Ltd. Pune	2016-17
19.	PCI Summer School 2016 on Program Expression and Program Execution Techniques	Persistent Systems Ltd, Pune	2016-17
20.	Sponsored BE Projects	Persistent Systems Ltd, Pune	2016-17, 2015-16
21.	Spoken tutorial based software course on CPP Programming	IIT Mumbai and MHRD Government of India	2015-16
22.	Spoken tutorial based software course on Java Programming	IIT Mumbai and MHRD Government of India	2015-16
23.	Global Youth Employability initiative by Barclays PLC.	Barclays	2015-16
24.	Training program on Education and Employment enhancing vocational skills for final year students	Zensar Technologies Ltd.	2015-16
25.	Algorithms in machine learning and data mining course	Persistent Systems Ltd, Pune	2015-16
26.	Winter School for Programming (A Course on programming centric integration of various foundational aspects of Computing)	Persistent Systems Ltd, Pune	2015-16
27.	Data Communication & WSN Career counseling on Networking Domain	NITS Global (INDIA), Pune	2015-16
28.	Training program on education and employment enhancing vocation skills	Zensar Technologies Ltd.	2014-15

29.	Training program on IBM COGNOS & Business Intelligence	IBM India Pvt Ltd., Pune	2014-15
Electronics & Telecommunication Engineering			
30.	Workshop cum National Level Championship on Mind Controlled Robotics	Entrepreneurship Development Cell, IIT, Delhi and Wing Fotech Pvt. Ltd.	2016-17
31.	One week Winter Training Program on Networking (CCNA)	Azure Skynet Solution (P) Ltd and in association with IIT, Hyderabad	2016-17
32.	State level workshop on Internet of Things Towards a Smart Future –IoTTSF 2016	Innovians Technologies and in association with IIT, BHU	2016-17
33.	One day Hands - on Hardware Training on PIC Microcontroller	Micro Embedded Technologies, Pune	2016-17
34.	Two days Hands - on FDP on Arduino	Pantech Pro Ed. Pvt. Ltd., Chennai	2016-17
35.	Two days workshop on Networking	Azure Skynet Solution (P) Ltd and in association with IIT, Hyderabad	2016-17
36.	Two days workshop on Raspberry Pi	Pantech Pro Ed. Pvt. Ltd., Chennai	2016-17
37.	Mini project for Third year students	Shalaka Technology, Pune	2016-17
38.	Mini project for Third year students	Microembedded Technology, Pune	2016-17
39.	Mini project for Third year students	Meditronix, Pune	2016-17
40.	Three days Hands - on Training Program on Embedded Linux	Micro-Embedded Technologies, Pune	2015-16
41.	LabVIEW workshop	Thuse Electronics Pvt. Ltd., Pune	2015-16
42.	B.E.Projects	B. & R. Automation	2015-16
43.	Workshop on PCB designing software (KiCAD)	Laconic Solution, Pune	2014-15
44.	LabVIEW and PCB designing workshop	National Chemical Laboratory (NCL), IDG Product Development, Pune	2014-15
45.	Add - on course on KiCAD	IDG Product Development, Pune	2013-14
Electrical Engineering			
46.	Add on course on Basics of AutoCAD and E-AutoCAD	Trance Academy, Pune	2016-17
Information Technology			
47.	Winter Training School	Persistent Systems Ltd., Pune	2016-17
48.	Audit Course in Japanese	Hirameki Solutions, Pune	2016-17
49.	Employability and skill Development Program	Zensar Technologies, Pune	2016-17, 2015-16

50.	DAA, SP, OS training courses	Sunbeam Institute of Information Technology, Pune	2016-17
51.	Cyber Security (Hacking)	Cybervault Securities Solutions Private Limited, Pune	2016-17, 2015-16, 2014-15
52.	Machine Learning	Persistent Systems Ltd. Pune	2015-16
Mechanical Engineering			
53.	FUSION 360	Autodesk Inventor	2016-17
54.	Training on CATIA	Design Tech Systems Ltd., Pune	2016-17
55.	Training on ANSYS	Design Tech Systems Ltd., Pune	2016-17
56.	Application of tool path generation of Turning, milling, multiaxis and Turnmill.	Onward Technology Ltd., Pune	2016-17
57.	Value Added program on Automation Studio Software	India Soft Technologies, India (P) Ltd.	2015-16
58.	Training on geomtric dimensioning and tolerancing	Mechworks Engineering and Consultants, Pune	2015-16
59.	Training on CATIA	Design Tech Systems Ltd.	2015-16
60.	BE Projects	S. T. Workshop Dapodi, Pune	2015-16
61.	BE Projects	KGC Engineering Projects, Pvt. Ltd., Bhosari, Pune	2015-16
62.	Training on geomtric dimensioning and tolerancing	Mechworks Engineering and Consultants, Pune	2014-15
63.	Training on CATIA	EDS Technologies Pvt. Ltd., Pune	2013-14

3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with Institutions of national importance / other universities / industries / Corporate (Corporate entities) etc. and how they have contributed to the development of the Institution.

The Institution has Industry Institute Interaction cell that played a vital role for the benefits of students and faculty members. The Institution has MoUs with different companies listed below:

Sr. No.	MOU Details
Computer Engineering & Information Technology	
1.	Persistent Systems Limited Center of excellence on 1 st July 2015.
2.	Zensar Technologies for Promoting special education and employment enhancing vocational skills on 14 th May 2014.
Computer Engineering	
3.	Animationwala.com, Pune on 1 st Mar 2017
4.	Quickheal Foundation, Pune for conduct training for students for cyber awareness program on 26 th Dec. 2016
5.	Sunbeam Institute of Information Technology, Pune for Student Internship Program,

	Faculty Training/Development Program on 23 rd Dec. 2016
6.	Indiaforensic Consultancy Services, Pune for sponsored PG projects on 20 th Aug 16.
7.	Information systems audit and control association (ISACA) for Research activities in the area of IT security, IT risks & control, IT governance on 30 th Dec 2015.
Electronics & Telecommunication Engineering	
8.	Edgate Technologies for Analog Teaching Laboratory setup on 16 th Sept. 2014
9.	B & R Automation for faculty training & two students projects on 8 th Aug. 2008
Information Technology	
10.	Agilesoft Methodologies for BE projects, FDPs, Guest Lectures, Training sessions on 2 nd Sept. 2015.
11.	Cybervault Securities for BE projects, FDPs, Guest Lectures, Training sessions, Internship & Placements on 10 th Oct. 2015.
Mechanical Engineering	
12.	MSRTC's S. T. Workshop, Dapodi, Pune on 7th July 2016 for BE projects
13.	Ahmednagar Auto and Engineering Association Auto Cluster, Ahmednagar, Mar 2017
14.	KGC Engineering Projects, Pvt. Ltd., Bhosari, Pune on 2 nd June 2016 for BE projects
15.	MechaTol Engineering Solutions, Kothrud, on 3 rd May 2016 for GD&T Add-on courses
16.	MSRTC's S. T. Workshop, Dapodi, Pune on 3 rd April 2015 for BE projects
Electrical Engineering	
17.	Trance Academy, Pune on 01st March 2016 for CAD training
18.	kWatt solution, IIT Mumbai on 15th March 2016 for design & development of solar PV system

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.

The Industry-Institute-Interaction cell of Institution and regular interaction with industry experts helps in understanding the need of the industry and shaping up the students to match the industry needs. Academic Facilities Developed are shown as follows:

Sr. No.	Collaborating Industry	Department	Facility Developed
1.	NVIDIA, Pune	Computer	Set up of NVIDIA GPU Education Centre with Tesla K40 {active} {1 Nos.}, Titan X GPU cards {2 Nos.} cards
2.	NVIDIA, Pune	E & TC	Donated CUDA Card for Project Laboratory
3.	Edgate Technologies	E & TC	Donated 6 Kits of ASLK PRO for Analog Laboratory
4.	Cypress, Pune	E & TC	Donated for VLSI Laboratory PSoC 3 Development Kits – 3 PSoC 5 Development Kit – 1
5.	Agilesoft Methodologies, Pune	IT	A student attendance monitoring system "e-defaulter" is created under this facility by department faculty
6.	Cybervault Securities	IT	Placement of student

7.	Digital Technology	Mechanical	Donated MIG/MAG Welding Machine
8.	M.S.R.T.C.'s S. T. Workshop Dapodi, Pune	Mechanical	Placement of student
9.	Subhadra Industries, Pune	Electrical	Donated Air circuit Breaker

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

Following table shows the details of Conferences organized:

Sr. No.	Name of National/International Conference	Resource Persons	Date/Duration
Computer Engineering			
1.	National conference on Emerging Trends in Computer Application	Dr. Shrirang Karandikar Head of Technology Innovation, Computational Research Lab, Pune. Dr. R. S. Bichkar, G H Raisoni COE, Pune Dr. S. J. Wagh, K J COE, Pune Mr Tushar Samnerkar, Infosys, Pune	15-17 March 2012
E & TC Engineering			
2.	National conference on Internet of Things	Mr Ajay Bhagwat, Managing Director, Renu Electronics, Pune Dr. Judhistir Mahapatro, NIT, Delhi Dr. Maheshkumar Kolekar, Head of Centre of Advanced system Engg, IIT, Patna Mr. Girish Khilari, Chair IEEE Computer Society, Pune Chapter Dr. Himanshu Agrawal, SIT, Pune Dr. Vinaya Gohokar, MIT, Pune	19-20 February 2016

The Institution invites people from reputed academic and R&D Institutions regularly to share their experience. Many eminent personalities visit the campus regularly, details are given Departmental Evaluative Reports.

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 –

The following table shows various activities conducted under MoUs:

Sr.No.	MOU	Activities conducted under MOU
1.	Quickheal Foundation, Pune	Proposed activities to be conducted- ➤ To conduct training for students for cyber awareness program
2.	Sunbeam institute of Information Technology, Pune	Proposed activities to be conducted- ➤ Student Internship Program ➤ Faculty Training/Development Program ➤ Student Development Activities/Program ➤ Guest Lectures ➤ Pre-C-DAC Courses for BE students
3.	Zensar Technologies, Pune	Training provided on- Visual Studio 2010, SQL Server 2008, Google Chrome, Internet and Intranet connectivity. Trainer Name – Ms. Vranda Daga Start Date:- 16 June 2015 End Date:- 4 July 2015 Duration: 103 hrs Audience: BE Students
4.	Information Security Audit & Control Association, Pune Chapter	Activities to be conducted: ➤ Research activities in the area of IT security, IT risks & control, IT governance. ➤ FDPs ➤ Workshops ➤ Certification courses for students & faculties ➤ To explore ISACA design model curriculum for IS audit, IT security & control.
5.	Persistent Systems Limited, Pune	➤ BE projects 5 Projects sanctioned. ➤ Guest Lectures ➤ Faculty Development programs ➤ Industry visit ➤ Algorithms on machine learning and data mining workshop ➤ Digital Hackathon competition.
6.	Indiaforensic Consultancy Sevices, Pune	➤ PG projects ➤ Guest lectures
7.	Animationwala.com, Pune	Proposed activities to be conducted- ➤ Guest Lectures, Internship & Sponsored Animation Projects, Faculty & Resource Exchange, Support for R & D Division
8.	Edgate Technologies, Bangalore	➤ Analog Maker Competition 2014 ➤ Circuit Debugging 2015
9.	B & R Automation, Pune	➤ Final year Projects, Training to faculty.
10.	MSRTC's S. T. Workshop, Dapodi, Pune	➤ BE project ➤ Placement
11.	KGC Engineering Projects, Pvt. Ltd., Bhosari, Pune	➤ BE project

12.	MechaTol Engineering Solutions, Pune	➤ GD&T Add-on courses
13.	Ahmednagar Auto & Engineering Association Auto Cluster, Ahmednagar	Proposed activities to be conducted- ➤ Industrial Visits, Sharing Information Brochure, Service Manuals etc, Sponsored Projects, Deployment & Execution of Government Aided Skill Enhancement Programs
14.	Agile Research Laboratory, Pune	➤ BE projects, FDPs, Guest Lectures, Training sessions.
15.	Cybervault Securities Solution Pvt. Ltd, Pune	➤ BE projects, FDPs, Guest Lectures, Training sessions. ➤ Internship & Placements
16.	Trance Academy, Pune	Conducted E-CAD Workshop during Feb 2016 – April 2016 for all T.E. (Electrical) students
17.	kWatt solution, IIT Mumbai	Proposed activity ➤ Design & implementation of PV system on 4-5/2/2017

3.7.6 Detail on the systemic efforts of the Institution in planning, establishing and implementing the initiatives of the linkages / collaborations. Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.

The Institution has established Industry Institute Interaction Cell for development of industry linkages and collaborations. To improve the interaction there is regular communication between Industry experts and Institution. MoUs are signed between Institution and Industry. Industrial visits, Industry sponsored projects, Industrial internships are focused to have interaction of students with industrial environment. Joint technical programs are organized. Industry experts are invited for Expert lectures, seminars, workshops, conferences. Faculty is encouraged to go for industrial training.

For beneficiaries of faculty and student strategies defined for MoUs are as follows:

- To develop interaction between industry and institute for collaborative work
- To develop interaction with industry for industrial training
- To share the expertise with industry
- To enhance consultancy and research work
- To make students aware of latest trends

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

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 Institution follows all the norms specified by AICTE, New Delhi and Savitribai Phule Pune University (SPPU) to provide the infrastructure to facilitate effective teaching and learning to the students of all the streams.
- Institution always creates modern infrastructure resources beyond the norms of AICTE and SPPU for effective teaching and learning.
- The Institution is providing modern infrastructure like classrooms, laboratories, library with reading room, hostel, 24 x 7 internet facilities for students and staff inside the campus.
- The Institution continuously upgrades infrastructural facilities according to change in the syllabus provided by the Savitribai Phule Pune University (SPPU).

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.

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.

- Institution has created good infrastructure for teaching and learning as per the norms specified by AICTE.
- To facilitate the curricular and co-curricular activities, the Institution has planned and constructed modern infrastructure.

All the departments are fully equipped with the necessary infrastructure and adequate class rooms, laboratories, seminar halls, tutorial rooms etc. The details of class rooms and laboratories are as shown below

Sr.No.	Branch	No of class rooms	No of laboratories	No of tutorial rooms
1.	Mechanical	06	19	--
2.	Computer	04	11	03
3.	E & TC	04	10	01
4.	Electrical	03	10	01
5.	I. T.	02	09	01
6.	Engg. Sciences	05	11	--
7.	MBA	03	--	--
Total		27	70	06

Sr. No.	Infrastructural Facilities	Details	No. Available
1	Administrative area	Principal's office	1
		Board room	1
		Placement office	1
		Office	1
		Central co-operative store	1
		Maintenance	1
		Housekeeping	1
		Security	1
		Pantry for staff	1
		Exam control room	1
		Department offices	8
		Cabins for HODs	8
2	Amenities area	Seminar Halls	5
		Drawing Hall	1
		Workshop	1
		Common Computer Center	1
		Common Library	1
		Boys common room	1
		Girls common room	1
		Stationary stores & Reprography	1
		First Aid cum sick room	1
		Guest house	1
		Cafeteria	1
		Boys Hostel	1
		Girls hostel	1

Classrooms: The Institution has enough number of classrooms, which are spacious, well ventilated and with proper lighting facility. All classrooms are well equipped with LCD projectors with white screen, green board, white board and internet facility to conduct theory classes. Institution has recently constructed the class room complex for 16 class rooms with modern furniture. These classrooms are hexagonal with tiered seating arrangement.

Laboratories / Work shop: There are total 70 numbers of laboratories including one research laboratory. Each laboratory is well equipped for carrying out curriculum oriented laboratory practicals, as well as for research and projects. This is useful for the enhancement of practical knowledge of students. The Institution has a well-equipped workshop for conducting practicals. The list of some major equipment available in various departments is shown in following table, which are used for laboratory work as well as research work.

Sr. No.	Instrument	Qty	Total Cost (Rs.)
Mechanical Engineering			
1.	Single cylinder diesel engine	1	3,99,712
2.	Three cylinder petrol engine	1	3,15,563

3.	A0 HP colour plotter	1	1,77,840
4.	Electro hydraulic trainer	1	1,50,000
5.	Advance pneumatic trainer	1	65,000
6.	Jominy end quench hardness tester	1	66,825
7.	Magnetic partical crack detector	1	72,900
8.	Weakens cum brinell hardness testerVickers	1	1,37,598
9.	Impact testing machine	1	87,480
10.	Application Software-ANSYS 13.0	25 users	2,90,000
11.	Computerised UTM	1	4,48,537
12.	Electronic Extensometer	1	1,49,850
13.	Torsion testing Machine	1	1,45,800
14.	Fatigue testing machine	1	91,125
15.	XY position control system	1	1,26,000
16.	Linear conveyor control system	1	51,187
17.	Flow control using PID	1	72,352
18.	Profile projector	1	50,220
19.	Tool maker Microscope	1	61,560
20.	Auto collimator and angle dekkor	1	97,200
21.	Vapour compression test rig	1	60,750
22.	Air conditioning test rig	1	69,188
23.	ICE plant test rig	1	54,844
24.	Activa 125 DLX (Gokart)	1	56,250
25.	Epicyclic gear train apparatus	1	52,594
26.	Universal vibration apparatus	1	62,156
27.	Slip and creep measurement	1	58,331
28.	Torque transmission capacity of clutch	1	90,844
29.	Two stage reciprocating air compressor	1	54,000
30.	Bomb calorimeter	1	50,400
31.	Pelton turbine test rig	1	1,71,497
32.	Francis turbine test rig	1	2,55,894
33.	Centrifugal pump test rig	1	6,19,43
34.	Reciprocating pump test rig	1	85,172
35.	Gear pump test rig	1	52,652
36.	CNC Lathe Trainer	1	4,83,000
37.	FFT analyzer	1	5,41,025
38.	Steam Power Plant	1	8,73,778
39.	Hydraulic Surface Grinding Machine BMT	1	3,26,503
40.	Activa 125DLX Engine old (GO Kart)	1	56,250
41.	Radial drilling machine	1	55,800
42.	All gear lathe	1	1,53,731
43.	Tig welding machine	1	91,125
44.	Universal milling machine	1	1,93,987
45.	KTM bike	1	1,60,000
Electronics & Telecommunication Engineering			
46.	PLC Trainer	1	78,258
47.	Matlab Software – 10	10 users	7,26,575
48.	Software - MultiSIM + multiMCU ,Ultiboard	10 users	5,72,000
49.	Spectrum Analyser (Agilent Technologies)	1	4,38,874
50.	Multi Purpose Lab Station	1	5,99,024

51.	Measurement of antenna Radiation Pattern for different antennas (Adtron)	1	64,068
52.	D S O (Tektronix 4 Ch., 100 MHz, 1GS/s)	2	1,59,300
53.	D SO(Tektronix 2 Ch., 60 MHz, 1GS/s)	4	2,17,451
54.	PLC (B&R Automation)	1	1,90,363
55.	Spectrum Analyser (GW Instek)	1	3,64,000
56.	Matlab Software 5 user	1	9,31,543
57.	VHF Wobbulator S- 846T (Signet)	1	83,600
58.	Microwave Test Bench	1	1,18,201
59.	Antenna Training Lab Amitec Make	1	2,71,688
60.	AMITEC make 5MHz -2GHz antenna training	2	3,05,157
61.	Digital TV trainer (Sigma Trainers)	1	56,250
62.	HD TV trainer (Sigma Trainers)	1	90,000
63.	3G Mobile trainer (Sigma Trainers)	1	67,500
64.	O T DR(JDSU - MTS4000)	1	2,46,750
65.	LabVIEW Academic Premium Suite - 1 no., NI	1	5,21,663
66.	Microwave Test Bench A (Klystron Based)	1	50,700
67.	Satellite Training Lab Amitec Make 5.8 GHz	1	1,63,125
68.	GMSK Modulation Kit	1	51,750
69.	VHF Wobbulator S- 846T Signet	1	83,600
Electrical Engineering			
70.	Capacitance and tan delta test set	1	2,27,559
71.	Two identical DC shunt motor set	1	64,248
72.	DC series motor ,generator set with control panel for DC series motor	1	62,698
73.	DC series motor, shunt generator set	1	64,248
74.	High voltage transformer 100 kVA	1	2,23,200
75.	Synchronous motor	1	53,000
76.	Hopkinson test set	1	82,900
77.	DC series motor dc series generator control panel for dc series motor series generator	1	80,900
78.	DC series motor coupled with dc shunt generator	1	82,900
79.	Sphere gap arrangement	1	99,000
80.	Numerical distance protection relay	1	3,53,000
81.	Power electronic work station with power scope	1	1,80,411
82.	Low resistance measurement bridge	1	56,800
83.	Switchgear testing kit & testing of ACB	1	1,70,000
84.	Speed control characteristics of 3phase fully converted fed separately excited DC motor	1	51,000
85.	Phase shifting transformer	1	82,500
86.	Integrated control panel system	2	2,78,000
87.	FT view 15 display SCADA runtime s/w	2	1,70,400
88.	Horn gap arrester with high transformer	1	60,300
89.	FT view studio SCADA development S/w	1	1,11,300
90.	Thermal image make Testo model 870-2	1	2,10,015
91.	Weather monitoring system	1	1,74,553
92.	Solar power generation 1KWatt	1	3,03,418
93.	Power quality analyser	1	4,50,000

94.	Transmission line model	2	1,42,000
95.	Cap bank for VAR	1	1,86,000
96.	HV AC transmission		2,88,000
97.	Static measurement of sub transient reactance	2	1,52,800
98.	Cap bank for VAR comp	1	1,30,200
99.	DC power supply 415V 3Ph , 230V 50A	1	1,15,000
Engineering Science			
100.	UV vis spectrometer	1	1,69,340
101.	Centrifuge	1	75,048
102.	Hall effect set up with Gauss meter	1	53,089
Common Facility			
103.	Intel Quad Core 2.20 GHz, 10mb 80 W Upgrade Kit For Ibm Server	1	79,800
	Ibm 16 Gb Ddr3ram For Server	2	
104.	1.Server IBM*3300 Intel Quad Core Processor 2.20 GHz Processor, 32 Gb Ddr3 Ram, 300Gb Hdd, Usb Keyboard & Mouse	1	9,72,099
	2.N-Computing Device-L300	60	
	3. 18.5"Led (Lg)	61	
	4.Logitech Combo Usb	60	

Tutorial rooms: Each department has sufficient number of tutorial rooms. All tutorial rooms are with adequate furniture, proper ventilation and lighting facility to conduct tutorials.

Seminar halls: The Institution has sufficient number of seminar halls. These are used for departmental academics as well as extracurricular activities of the Institution.

Co-curricular activities:

For the development of technical skill of the students, Institution encourages them to participate in various competitions at national and international level such as BAJA, SUPRA, EFFI-CYCLE, Robocon, Go-Kart, Mind Spark, e-Yantra, Utkranti, Dexterity etc. For these activities, the Institution supports students in terms of finance, workshop facility, tools, equipment, internet facility, expert guidance etc.

b) Extra-curricular activities

For teamwork building and personality development of students, the Institution encourages students to participate in various curricular and extracurricular activities and sports activities in different colleges as well as different Universities. Director of physical education looks after all sports activities in the college. Also, a team of faculty members looks after technical and cultural events.

Sports: The Institution has provided enough space for outdoor games having area 60 m x 50 m. This ground is utilized for various games such as cricket, football, volleyball, kabaddi etc. Basket ball ground is available to students, which is having area 25m x 13 m. Students regularly participate in

intercollegiate, Inter Zonal, West Zone and all India Inter University sports competitions.

Our Institution started M M Karandak Sports competition for the Institutions of Marathwada Mitra Mandal's trust. Competitions such as 6 A side football, volleyball and throw ball have been organized under this event. To motivate students, Institution offers incentives like T –shirts, sports trophies, medals etc. Institution publishes the achievements of students in local news papers from time to time.

Indoor games: The Institution also has adequate indoor area for playing table tennis, chess and carrom.

Gymnasium: A well equipped Gymnasium is available for students and staff in the campus.

Auditorium: Management has also approved for construction of separate additional auditorium and for this work funds are allocated.

NCC: The students of our Institution participate in NCC activity. Adequate space is provided for this activity.

NSS: As per the guidelines of SPPU, the Institution has formed NSS cell for students. Enough space and furniture is provided for this unit with proper NSS functional committee.

Cultural Activities: The Institution has separate committee for cultural activities. This committee along with the staff and students of the Institution organizes annual social gathering by the name 'ENSEMBLE'. It comprises of events like dancing, singing, stage performances. For cultural activities, separate stage is provided on the ground of 11m x 8m.

Communication Skills Development: Adequate space is provided for language lab and soft skill training.

Yoga – Yoga sessions are conducted in the seminar hall for rejuvenation of staff and students.

Health and Hygiene

The Institution is maintaining a healthy, safe and hygienic environment with the help of the house keeping staff and also has medical centre with a visiting doctor. Checkup for first year students, direct second year students and PG students is carried out in the campus.

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).

- Institution develops the infrastructure as per the norms provided by AICTE, New Delhi and SPPU.
- The infrastructure requirement is identified by the team of HOD from time to time.
- The Institution is situated in an area of 5.02 Acre. The total built up area of the building is 19215 Sq. m.
- The expansion of infrastructure is in line with the academic growth of the Institution. Master plan of the Institution is attached in Annexure 4.
- The Institution has a six storeyed main building with labs, classrooms, tutorial rooms etc. In addition to the Main building, twelve storeyed class room complex is sanctioned, out of which four floors are completed. On each floor, there are four classrooms of hexagonal shape having tiered seating arrangement.
- The amount spent in last four years is shown below:

Sr. No	Description	Year 2012-2013		Year 2013-2014		Year 2014-2015		Year 2015 -2016	
		Allocated (Lakhs)	Utilized (Lakhs)	Allocated (Lakhs)	Utilized (Lakhs)	Allocated (Lakhs)	Utilized (Lakhs)	Allocated (Lakhs)	Utilized (Lakhs)
1.	Building	5.00	18.26	3.47	0	5.00	9.35	5.00	2.36
2.	Furniture		0		0	1.00	0.299	1.00	0.23
3.	Equipments		0		0	5.30	5.00	2.00	2.49
4.	Computers		0		0				
5.	Vehicles		1.25		0.78	0.00	0.94	1.25	1.20
6.	Any Other		4.44		14.20	3.00	3.63	7.00	15.74
Total		5.00	23.95	3.47	14.99	14.30	19.24	16.25	22.05

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

The Institution ensures that the infrastructure facilities are made available for students with physical disabilities.

The Institution provides lifts, ramp, wheelchair and toilets at appropriate places for students with physical disabilities.

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

- **Hostel Facility – Accommodation available**
- **Recreational facilities, gymnasium, yoga center, etc.**

- **Computer facility including access to internet in hostel**
- **Facilities for medical emergencies**
- **Library facility in the hostels**
- **Internet and Wi-Fi facility**
- **Recreational facility - common room with audio-visual equipments**
- **Available residential facility for the staff and occupancy, Constant supply of safe drinking water**
- **Security**

Hostel Facility – Accommodation available:

Yes. Institution has Boys as well as Girls hostel in the college campus. Hostel has various facilities like solar water heater, indoor game center, TV room, Wi-Fi Internet facility, Canteen, Mess and Gymnasium. Lift facility is provided in the hostels. Safe drinking water is provided to hostel students using water purifiers and coolers. Details of Hostel Facility are as shown below:

Sr. No.	Description	Girls Hostel	Boys Hostel
1	No. of floors	Parking + 7	Parking+7
2	Area of the hostel	2039 Sq. m.	1565 Sq. m.
3	Number of students accommodated	197	239

Recreational facilities, gymnasium, yoga center etc.:

Television sets with DISH TV facility is available in the hostel. A gymnasium with modern exercise equipment is available for boys and girls in the college campus. The essentials for playing Cricket, Volleyball, Football, Basketball, Table Tennis, Badminton, Carrom and Chess are available in the campus.

Computer facility including access to internet in hostel:

Yes, hostel has computer facility with 24 x 7 internet connectivity through WiFi.

Facilities for medical emergencies:

Hostel has facility of first aid cum sick room with visiting medical officer. In case of medical emergencies, the Institution has made tie-up with Shashwat Hospital which is situated at just 0.5 km away from Institution.

Library facility in the hostels:

Hostel is in the premises. Hence central library facility of the Institution can be availed very easily. Reading room facility is open 24 X 7 during examination period.

Internet and Wi-Fi facility:

Yes, Internet facility is available in all labs and classrooms. Wi-Fi facility is made available in the hostel.

Recreational facility-common room with audio-visual Equipments:

Institution has provided common room for Boys as well as Girls with all recreational facilities and audio-visual equipment.

Available residential facility for the staff and occupancy:

Two rector rooms along with guest rooms are provided in the hostel which can be availed by staff members and guests.

Constant supply of safe drinking water:

Drinking water provided by Pune Municipal Corporation is purified using RO water purification system. The Institution has ample number of water coolers for cooling the purified water.

Security: Institution has installed CCTV cameras in the hostel and campus. In addition, Institution has provided security guards for 24 x 7 in the hostel as well as in the campus.

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?

The Institution arranges free medical checkup camp every year for staff, First year, Direct second year engineering, First year MBA and ME students. A medical officer is appointed on the campus to provide medical facility for students. Also for off campus health care, Institution has made tie-up with Shashwat Hospital which is situated just 0.5 km away from the campus.

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.

Following are the common facilities available on the campus:

IQAC - The Institution has provided Board room and coordinators cabin for IQAC Cell.

Grievance Redressal unit - The Institution has Grievance Redressal cell, the chairperson's cabin and board room are utilized for the purpose of the cell.

Women's Cell - The Institution has Women's Grievance cell in the campus to deal with the Women's problems. The cabin of Coordinator of the cell and board room is used for the working of the cell.

Counselling and Career Guidance Cell –Teacher guardians are appointed for group of 20 – 25 students for counseling. Training and placement cell conducts training programmes for students with the help of internal and

external agencies. Adequate space and modern furniture is provided for the cell.

Placement Unit – The placement unit is named as Corporate Relations Division (CRD) which has modern furniture with four cabins and board room on ground floor.

Health Centre - The Institution has health center with one visiting doctor who provides medical facility for students and staff. A separate room for health centre is provided in the campus. Institution arranges free medical checkup camp every year for newly admitted students. Emergency cases are treated at Shashwat Hospital as mentioned earlier.

Canteen - The canteen and mess facility with adequate area is available for staff and students.

Recreational spaces for staff and students - Institution has provided recreational spaces for Boys, Girls as well as Staff.

Safe drinking water facility - R.O. Water purification system is installed with water coolers on every floor of main building, class room complex and in the hostels for safe drinking water to all.

Auditorium: Management has also approved for construction of separate additional auditorium and for this work funds are allocated.

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. The library has an advisory committee comprising of Principal, Librarian, chairman and representatives from all streams. This committee takes significant initiatives to make the library user friendly. The composition of Library Advisory Committee is as shown below:

Sr. No.	Name	Designation
1	Dr. S. M. Deshpande	Invitee
2	Mrs. A. M. Solanke	Chairman
3	Mrs. S.V.Gadewar	Librarian
4	Mr S. S. Raut	Member
5	Ms .Tina Corera	Member
6	Mr. Swapnil Shinde	Member

7	Mr N S Pande	Member
8	Ms. Sonali Utsai	Member
9	Mr. A.M Suryawanshi	Member
10	Ms Seema Hurusnale	Member

The following significant initiatives are implemented by the committee to render the library facilities more user friendly:

- Planning and executing procedures for smooth functioning of the library
- The process of identifying various types of text books, reference books, handbooks and journals
- Budget allocation, policy decisions, forming rules and their implementation based on demands of users
- Preparation of schedule for NPTEL video lectures
- Awareness sessions of National Digital Library, DELNET: (Developing library network), NPTEL Video lectures and on line courses.

4.2.2 Provide details of the following:

- **Total area of the library (in Sq. mts.)**
- **Total seating capacity**
- **Working hours (on working days, on holidays, before examination days, during examination days, during vacation)**
- **Layout of the library (individual reading carrels, a lounge area for browsing and relaxed reading, IT zone for accessing e-resources)**

The Institution has central library located on first and second floor of main building. Library is well furnished with abundant sunlight and ventilation. Area is divided in stack area, circulation counter, reading area, periodicals section, reference section and digital library.

Total Area of the library: 628 Sq. mts.

Total seating capacity: 160

Working hours:

Library Working Hours are shown as follows:

Sr. No.	Days	Timing
1	On working days	8.00 am to 6.00 pm.
2	Holidays declared by University	Closed
3	Before examination days (Reading room)	8.00 am to 12.00 pm
4	During examination days (Reading room)	24 hrs
5	During vacation	8.00 am to 6.00 pm.

Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources):

Individual reading carrels are available in the reading hall of the library. 10 separate computers are available with internet facility. The layout of the library and reading hall is as shown in figure 4.1 and figure 4.2 respectively.

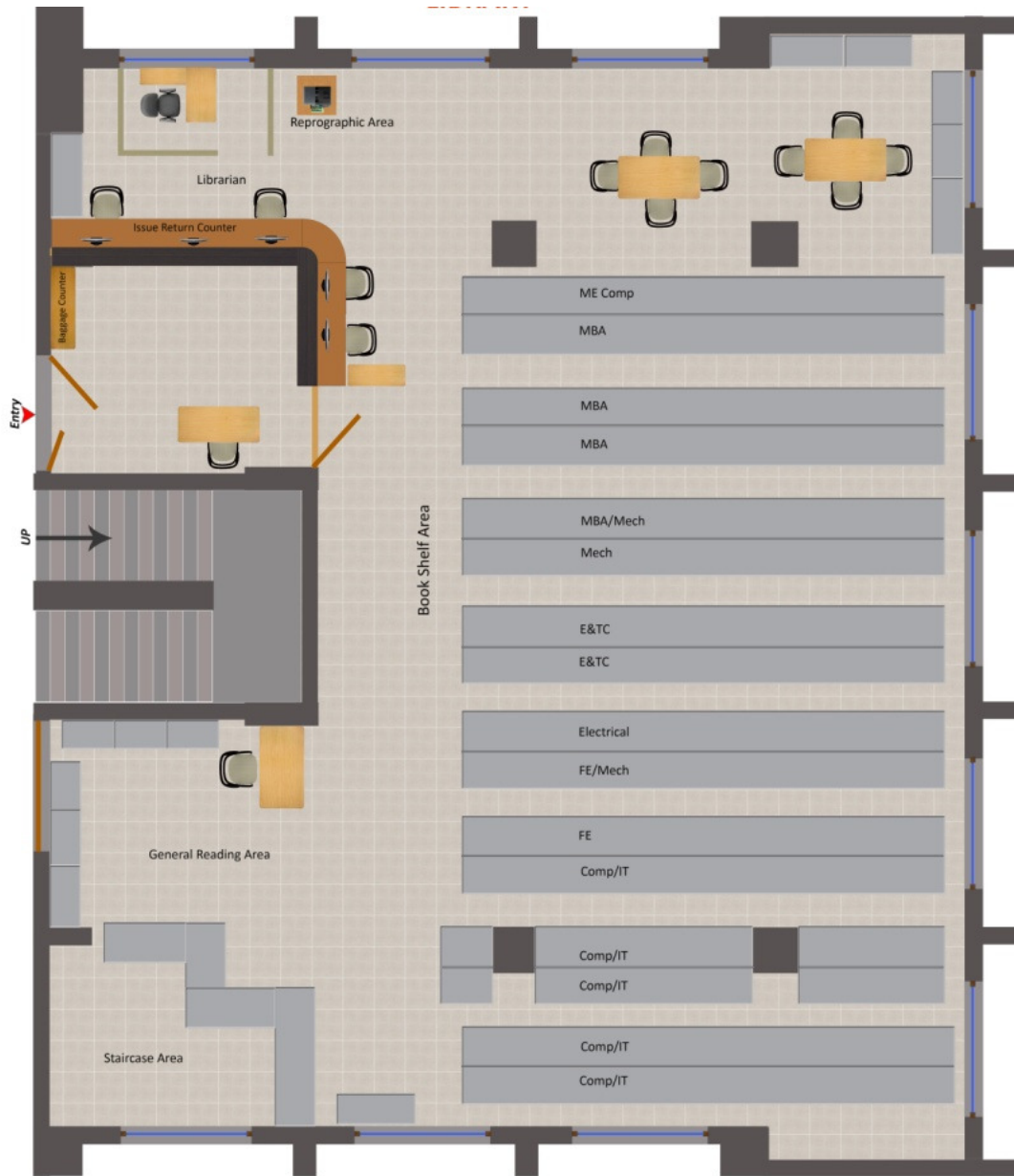


Figure 4.1: Typical library plan of the Institution



Figure 4.2: Typical reading hall plan of the library

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.

The library committee receives requirement of books, journals and other reading materials from each department before starting of every semester. Library committee reviews the requirement considering budget and recommends the same for purchase. Information of new titles, volumes and periodicals is shared to all users through mail.

The amount spent on augmenting various library holdings, in last four years are as shown below:

Year	2013-14		2014-15		2015-16		2016-17	
Library holdings	Vol.	Total cost (Rs.)	Vol.	Total cost (Rs.)	Vol.	Total cost (Rs.)	Vol.	Total Cost (Rs.)
Text books	657	4,12,610	272	1,89,761	673	2,91,198	346	2,65,732
Reference books	535		199		852		358	
Journals / Periodicals	101	2,40,900	82	1,88,950	72	2,10,150	71	2,12,530
e-Resources	9	16,74,961	9	18,49,644	9	21,41,374	7	22,07,003
Any other: stationary, furniture, equipment, maintenance		31,796		3,50,849		39,657		26,693

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

- OPAC
- Electronic Resource Management package for e-journals
- Federated searching tools to search articles in multiple databases
- Library Website
- In-house/remote access to e-publications
- Library automation
- Total number of computers for public access
- Total numbers of printers for public access
- Internet band width/ speed [2mbps 10 mbps 1 gbps]
- Institutional Repository
- Content management system for e-learning
- Participation in Resource sharing networks/consortia (like infolibnet)

Details on the ICT and other tools are as shown below:

Details	Comments
OPAC -Online Public Access Catalogue	Yes HTTP://slim/w27/
Electronic Resource Management package for e-Journals	Science Direct ,IEEE + ASPP ,ASME - 26 e-journals McGraw Hill ,DELNET
Federated searching tools to search articles in multiple databases	Static IP is provided for direct access of online resources
Library Website	No, but Library information is shared through Institution website.
In-house/remote access to e-publication	Yes. Delnet can be accessed remotely
Library automation	Yes. SLIM 21, Web OPAC, Barcode facility
Total number of computers for public access	10 computers
Total numbers of Printer for public access	01 printer
Internet band width / speed	48 Mbps

Institutional repository	Yes
Content management system for e-learning	Yes, Hadoop digital library
Participation in Resource sharing networks/ consortia (like Inflibnet)	Yes

4.2.5 Provide details on the following items:

- Average number of walk-ins
- Average number of books issued/returned
- Ratio of library books to students enrolled
- Average number of books added during last three years
- Average number of login to OPAC
- Average number of login to e-resources
- Average number of e-resources downloaded/Printed
- Number of information literacy trainings organized
- Details of “Weeding out” of books and other materials

Details	Comments
Average number of walk-ins	200 per day
Average number of books issued/returned	152 per day
Ratio of library books to students enrolled	14:1
Average number of books added during last three years	2700
Average number of login to OPAC	10-15 per day
Average number of login to e-resources	9-10 per day
Average number of e-resources downloaded / Printed	12 per day
Number of information literacy trainings organized	02 per year
Details of ‘Weeding out’ of books and other materials	‘Weeding out’ Magazines – Yearly Newspaper – Half Yearly

4.2.6 Give details of the specialized services provided by the library

- Manuscript
- Reference
- Reprography
- ILL (Inter Library Loan)
- Information deployment and notification
- Download
- Printing
- Reading list / Bibliography compilation
- In house / remote access to e-resources
- User orientation and awareness
- Assistance in searching databases
- INFLIBNET/ IUC facilities

Above details are listed in following table:

Details	Comments
Manuscript	No
Reference	Library has good collection of Handbooks, Directories, Dictionaries and Datasheets.
Reprography	Yes : Photocopy machine and scanner is available in library
Inter Library Loan (ILL) Service	Yes: Library has Institutional memberships with ARAI Library and Jaykar Library (SPPU) Pune.
Information deployment and notification	Yes
Download	Yes: E-Books and Journals can be downloaded through NDL, DELNET and digital library.
Printing	Yes
Reading list/ Bibliography compilation	Yes (As per demand)
In house/ remote access to e-resources	Yes
User orientation and awareness	Yes
Assistance in searching databases	Yes: Assistance is provided by library staff to students and staff for searching required information from the database.
INFLIBNET/ IUC/ INDEST FACILITIES	DELNET

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

- Library staff helps all students and staff of the Institution in the following ways.
- Central library issues four books to all students for a period of fifteen days.
- Library staff helps students as well as staff for searching the books on shelves.
- Book bank facility is available for SC, ST students under Social Welfare Department Scheme.
- Students get five books for whole semester under Book Bank Facility.
- Interlibrary loan service is also provided by the central library.
- Reference service is provided to students and staff as per their requirements.
- Reprographic services are provided to students and staff through photocopy and scanning facility.
- Various academic circulars, advertisements and notifications regarding AICTE, DTE, UGC, newspaper clippings etc. are provided and maintained digitally.
- Central Library maintains updated syllabus, University question papers of all departments and the same is shared through Google Apps on demand.
- Updates on new arrivals in the library regarding books and journals are informed to the staff and students through mail.
- Library provides Institutional membership cards to staff and students.

- During the examination period, library reading room is open for 24 x 7 hours.

4.2.8 What are the special facilities offered by the library to the visually / physically challenged persons? Give Details.

The wheel chair is provided by Institution for visually / physically challenged persons. Library staff helps visually / physically challenged persons for issuing the books and for other procedures of the library on priority basis. Table lamp and head phones are also provided to physically challenged students.

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?)

Yes. The feedback from all users is taken online through Moodle server in each semester. The feedback is analyzed by Library Committee and necessary steps are taken to improve the library services to make it more user friendly.

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)
- Computer-student ratio
- Stand alone facility
- LAN facility
- Wi-Fi facility
- Licensed softwares
- Number of nodes / computers with Internet facility
- Any other

Number of computers with Configuration (provide actual number with exact configuration of each available system)

Details of computing Facilities are as shown below:

Sr. No.	Item	Quantity
1	Desktop Computers	817
2	Servers	02
3	Laptops	02
4	Color Laser Printer	02
5	Black & White Laser Printer	39
6	Dot Matrix Printer	29
7	Colour Deskjet	01

8	Plotter	01
9	All In one Printer	06
10	LCD Projector	83
11	Scanner	09
12	Finger Print Scanner	01
13	Barcode Scanner	01
14	Fax Machine	01
15	Digital Copier	03

Server Configuration

Sr. No.	Computer System Description	Qty
1	IBM server X346 series with 2X Xeon EM64T 3.0 GHz / 800MHz (2MB L2 CACHE) CPU, Ultra320 SCSI HDD	1
2	IBM Server X 3300, Intel Quad Core 2.20 GHz(2 Nos.), 64 GB DDR3 RAM, 300 GB HDD	1

Details of Computers

Sr. No.	Description	Qty
1	I5 Computers Systems Intel Core I5 6 th 6402P 2.8 GHz / 6 MB	40
2	Intel Core I3 Desktop	3
3	Intel Core I3 Desktop H81MCS Motherboard, 500 GB HDD	10
4	Intel Core I5 Desktop Intel H85-MK M/b, 500 GB HDD	25
5	Intel Core I3 Gigabyte H61m-S1 M/b 500 GB HDD	16
6	Intel Quad Core 2.20GHz, 10MB 80 W Upgrade Kit For IBM Server IBM 16 GB DDR3RAM For Server	UP GRADE
7	N-Computing Device-L300 18.5"LED (LG)	60
8	Intel Core I-5 SYSTEM Intel DG61CR M/b	18
9	Intel Core I-3Desktop Intel DG61 M/b	7
10	Intel Core I-3 Desktop Intel DG61WW M/b, 500GB HDD	12
11	Intel Core I-5 Desktop Intel DH75ML M/b, 500GB HDD	27
12	Intel Core I-5 System DH75ML M/b 500 GB SATA	2
13	Intel Core I-3 System Intel DH61WW M/b 500GB HDD	40
14	DELL VOSTRO 3450 LAPTOP - Intel Core I-5	1
15	Intel Core I7 Intel DH67CL M/b500GB HDD	1
16	Intel Core I3 3.06 GHz Intel DH55 M/b (SATA) 500 GB HDD	100
17	Intel Core I3 System Core I3 3.6GHz Intel DG 55TC M/b 4GB	40
18	Intel C2D System 2.93 GHz DG41RQ M/b 320 GB HDD	100
19	Intel P-C2D 2.88 GHz DG31PR Intel 160 GB SATA HDD	100
20	Intel C2D 2.9 GHz DG31PR Intel M/b 160GB HDD SATA	20
21	Intel P-C2D 2.80GHz Intel DG31PR M/b 160GB SATA	60
22	Intel P4 C2D 2.53GHz Intel DG31PR 160GB HDD	30
23	Intel P4 C2D 2.40GHz DG31GL (OEM) M/b 160GB HDD	85

24	Intel P4 C2D 2.40GHz Intel DG31GL 160GB HDD	5
25	Intel PIV 3.0 Dual Core 945GCNL M/b 80GB HDD	20
26	Intel PIV Dual Core 3.0 GHz 945GCCRL Intel M/b 80GB HDD	20
27	Intel PIV Dual Core 3.0 GHz 945GCCRL Intel M/b 80GB HDD	20
28	Intel P-IV Dual Core 3.0GHz 945GCFCRL 80GB HDD	40
29	Intel P-IV Dual Core 3.0GHz 945GCCRL Intel 80GB HDD	21
30	Intel PIV 3.0GHz D101 Intel M/b 80GB HDD	30
31	Intel PIV 3.0GHz D101 Intel M/b 80GB HDD	10
32	Intel P IV 3.06/3.00 GHz MERCURY / Intel M/b 80GB HDD	65

Computer-student ratio: 1 : 4

Stand alone facility:- Yes

LAN facility:- Yes

Wi-Fi facility:- Yes

Licensed software: - Yes

Application Softwares:

Sr. No	Software details	Qty / No. of Users	Amount in Rs.
Electronics & Telecommunication Engineering			
1	Application Software- National Instruments MultiSIM + multiMCU + Ultiboard	10 user (1 set)	5,72,000
2	Application Software - Allen Bradley Ladder Programming Software	1 (n user)	29,952
3	Application Software-VLSI Design Xilinx Software	1 (n user)	48,100
4	Application Software - Agilent Technologies - Vector Signal Analysis Provided with Agilent Multi Purpose Lab Station	15	5,99,024
5	Application Software-Agilent Technologies - VEE Pro Provided with Agilent Multi Purpose Lab Station	15	
6	Application Software - LabVIEW 2013	1	5,21,663
7	Application Software-MATLAB (Mathworks) R2009b - 10 user Simulink - 10 user E&TC Tool Box - (Tool Box or Blockset - Simulink-10 user, Control System Tool Box-10 user, Communication Tool Box -10 user, Signal Processing Tool Box -10 user, Signal Processing Blockset -10 user, Communication Tool Blockset -10 user, Simulink Control Design -10 user, Image Processing Tool Box -5 user, Image Acquisition Tool Box-5 user	1 set	7,26,575
8	Mikro C PIC advanced comprehensive compiler	1	11,934
Mechanical Engineering			
9	Mastercam X9 Educational 20 Seats (20 user milling, Turning, Multiaxis & Turn Mill, 4 axis wire EDM, Router, Design with solid module, probing programming) (1 user Robot programming & simulation)	1 set	3,09,400
10	Application Software- MATLAB (Mathworks) Mechanical Tool Box - 5 user each (Statistics, PDE, Curve	1 set	9,31,543

	Fitting, Optimization, Genetic Algorithm & Direct Search, Symbolic Math, Control System, SimScape, Sim Mechanics, Sim Hydraulics, Sim Drive Line), and Updates Matlab, Simulink, Control System, Simulink Control Design, Signal Processing, Signal Processing Block set)		
11	Antivirus QuickHeal 3 year	3	8100
12	Application Software-Auto CAD 2009	20 user	2,80,800
13	Application Software-Autodesk Inventor Professional 11 - Auto CAD 2007	5	1,71,600
14	Application Software- Subscription for Inventor Professional 11 (1 year)	1	3929
15	Application Software-CATIA V5 R20	15	1,26,498
16	Application Software-CATIA V5 R19	5	1,10,000
17	Application Software-CATIA V5 R19	15	3,64,000
18	Application Software-ANSYS 13.0 License 1	25 user	2,90,000
19	Application Software - Automation Studio	10 user	7,23,318
20	Application Software - AUTOSIM	10 user	91,298
21	Application Software - Altair Hypermesh	10	5,20,000
Library			
22	Application Software - Library SLIM – 1	1	1,26,000
23	Application Software - ICard S/W	1	13,125
Computer Engineering & Information Technology			
24	Application Software - IBM Rational Software Architect	30 licenses	3,06,720
Electrical Engineering			
25	Rockwell make FT view 15 Display SCADA Runtime software	2	2,00,566
26	Rockwell make FT view Studio SCADA Development Software	1	1,31,004
27	Weather Monitoring System	1	1,39,642
Common Facility			
28	WinPro 10 SNGL Upgrad OLP NL Acdmc	106	5,14,194
29	WinSvrCAL 2016 SNGL OLP NL Acdmc UsrCAL	60	32,670
30	WinRmDsktpSrvcs CAL 2016 SNGL OLP NL Acdmc DvcCAL	60	1,12,530
31	Office Std 2016 SNGL OLP NL Acdmc	35	1,44,837
32	WnSvrSTDCore 2016 SNGL OLP 2LicNL Acdmc CoreLic PAck of 8NL Acdmc	1	16,347
33	Application Software-Quick Heal Antivirus	100	54,999
34	Acenet 5.1 LAN based Language lab software	1 set	35,000
35	Application Software-Quick Heal Antivirus	175	1,68,000
36	Application Software-Quick Heal Antivirus Internet Security	1	1761
37	Application Software-Intelltest Online Test S/W (For 1126 students)	1 set	1,01,340

38	Online Examination Software System	For FE	9000
39	E - Exam Portal for Online Examination System	750	22,500
40	Microsoft DesktopEdu AllLng License / Software Assurance Pack Academic OLV1 Licence Level Enterprise	75	4,86,300
41	DsktpEdu ALNG LicSAPk OLV 1y Ent (2UJ-00011)	75	7,23,537
42	Win SL 8.1 SNGL OLP NL Academic Legalization Get Genuine (4HR-00400)	90	
43	DreamSpark Premium English 3 YR AE India with New PKC Microcase	01	1,09,720
44	MSDN Academic Alliance 7.0 Win32 English Inl India only CD for 03 years subscription	01	91,520
45	MS-Office Licenses with Office 2003 key + Media CD	60	1,54,856
46	Windows Vista with XP Pro key Windows Vista Business English UPG OLP NL + Media CD for Office XP	60	1,57,352
47	Turbo C / C++ Box Pack	25	50,700
48	Windows XP Professional UPG OLP NL AE + Media for Win XP	65	1,73,450
49	Windows 2003 Server Std R2 OLP NL AE (1)+ Media for Windows 2003 Server(1) + Windows Server CAL (65)	1 set	24,850
50	Oracle 10g Standard One (10) + Media (1)	1 set	53,500
51	Visual Studio 2005 OLP NL AE + Media	25	2,11,200
52	MS Office 2003 OLP NL AE + Media	10	27,200
53	Dell SonicWall NSA4600 Firewall with Dell SonicWall comprehensive GatewaySecurity Suite for 3 years	1	4,56,250
54	Antivirus Quick Heal 3 year	2	4800
55	MacAfee Antivirus Software AVSS + Media	101	1,12,300
Administrative Office			
56	Application Software - Taxbase SW LAN Version Application Software-TALLY 9.0 Rs. 3300/- subscription per year	1	12,600
Master in Business Administration			
57	Application Software-IBM	10 user	2,03,999

Number of nodes / computers with Internet facility: 817

Any other:- The Institution has open source Operating Systems and Application softwares such as Linux, Eclipse, QtCreator, Geany, Wireshark, MongoDB, OpenCV, Hadoop, SciLab etc.

4.3.2 Details on the computer and Internet facility made available to the faculty and students on the campus and off campus?

Institution is providing computer system along with LAN and Internet facility to each and every staff.

- Institution has leased line connectivity of 48 Mbps of Tata Communications Ltd. / Tata Teleservices (Maharashtra) Ltd.
- Hostel students can access Internet through Wi-Fi technology.
- The Institution has provided special 'Computer Center' based on Thin-Client and Server concept, with provision of Internet browsing facility and application software.

- Computer Systems of each department are configured with LAN.
- Faculty members can access e-journals from their cabin using Internet facility.
- Hostel students can access e-journals, conference papers by using 'Digital Library' facility provided by the Institution.

4.3.3 What are the Institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

- Various softwares are installed in the laboratories as per the requirements of University syllabus.
- Department of Computer Engineering has been selected as 'GPU Education Centre' by NVIDIA Corporation. Also as an academic alliance Computer Department has received one Tesla K40 (active) and two Titan X GPU cards.
- Institution timely upgrades the computer systems in terms of software and hardware.
- Respective Laboratory In-charge takes the review of working condition of the computer system and suggests the upgradation to the Head of Department as per necessity.
- Class rooms of the Institution are well equipped with the LCD projectors and computer system with Internet facility.

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)

For the procurement, upgradation, deployment, maintenance of the computers and their accessories, the budget allotted is as shown below:

Details	2012-13	2013-14	2014-15	2015-16	2016-17
Budget Allotted (in Lakhs)	23.12	56.60	33.90	30.47	25.00

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?

- Institution has provided 'Google Apps' facility to the students to refer the study material shared by faculty members. This facility is extensively used by students as well as faculty members for effective teaching / learning.
- Faculty members provide the study material with immense coverage and latest information to the students through lectures and power point presentation wherever necessary.
- Institution arranges lectures by subject experts on specific topic for students. Video lectures of experts are shown to the students in the classrooms.

- NPTEL lectures of various subjects are provided to the students which help them to upgrade their knowledge.
- Institution has provided Computer Centre to students to solve practice test of their subjects using 'MyExamo Application Software'.
- Previous question papers of the University are made available to the students in the form of soft copies in the library.
- Institution has provided the 'Digital Library' facility to students in terms of E-resources.
- Faculty members, staff and students use e-mail ids provided by the Institution to communicate effectively.
- IIT Bombay has recognized the Institution as a Nodal Centre for Spoken Tutorials Certification courses and Virtual Labs.

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.

- Institution identifies time to time advancement and reorientation in knowledge and motivates faculty members to undergo training such as Faculty Development Program (FDP).
- Institution also organizes seminars for departments that help to provide core knowledge about a specific subject.
- Institution conducts State and National Level Workshops for faculties and students.
- Department of Computer Engineering has its own Digital Library build on Apache Hadoop (Open Source distributed computing framework) with 2TB storage capacity with almost 500 users using the digital library.
- Faculty members always show the NPTEL lectures of various subjects to students to upgrade their basics and knowledge.

Following E-resources are provided to all students and faculty members in the campus:

- NDL, DELNET, IEEE, Elsevier, ASTM
- Springer Electrical, Electronics & Computer Science Engineering Collection
- ASME- (American Society for Mechanical Engineering)
- J-Gate for social and management science
- (J-Gate JET) Engineering & Technology
- McGraw Hill Access Engineering Reference e-books
- EBSCO: Business source ELITE e-journal collection
- Digital Library based on Apache Hadoop Framework

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?

Yes

- The Institution avails the National Knowledge Network connectivity directly through the facility provided by NPTEL through video network and spoken tutorials.
- IIT Bombay has recognized the Institution as a Nodal Centre for Spoken Tutorials Certification courses and Virtual Labs.
- Set up of Virtual Class room for GATE Examination preparation in collaboration with Vidyalankar, Mumbai.
- As a member of National Digital Library (Ministry of HRD), the Institution has initiated the National Digital Library pilot project to develop the framework of virtual repository of learning sources, under the National Mission on Education through ICT.
- The audio visual facility is provided to the students with the help of website Swayam which is developed by MHRD. For this purpose some computer and headphones are reserved.

4.4 Maintenance of campus facilities

4.4.1 How does the Institution ensures 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)?

Every year before start of new academic session, the review of the requirements is taken well in advance regarding building, furniture, equipment and computers. Accordingly, the budget provisions are made. Details of the allocated budget for infrastructure and other expenses are as in table below, for the last four years:

Budget for infrastructure and other expenses are as shown in following table:

Sr. No	Description	Year 2012-2013		Year 2013-2014		Year 2014-2015		Year 2015 -2016	
		Allocated (Lakhs)	Utilized (Lakhs)	Allocated (Lakhs)	Utilized (Lakhs)	Allocated (Lakhs)	Utilized (Lakhs)	Allocated (Lakhs)	Utilized (Lakhs)
1.	Building	5.00	18.26	3.47	0	5.00	9.35	5.00	2.36
2.	Furniture		0		0	1.00	0.299	1.00	0.23
3.	Equipments		0		0	5.30	5.00	2.00	2.49
4.	Computers		0		0				
5.	Vehicles		1.25		0.78	0.00	0.94	1.25	1.20
6.	Any Other		4.44		14.20	3.00	3.63	7.00	15.74

4.4.2 What are the Institutional mechanism for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

The Institution has functional maintenance committees. These committees are responsible for maintenance and upkeep of infrastructure, equipment and computer facilities.

- Maintenance of equipment is done by respective Laboratory Assistant / Technical Assistant and its record is maintained, such as formatting of PCs, updation of softwares, greasing of machines etc.
- Electrical repairs and maintenance work is carried out by the electricians.
- Concerned Head of the Department takes corrective action for the repair and maintenance of computers, printers, UPS etc.
- The Institution has given annual maintenance contract (AMC) for
- repair and maintenance of elevators, transformer, DG set, RO plant, Heavy Duty Digital Copier etc.
- The Institution has beautiful garden maintained by gardeners.
- Maintenance of RO plant includes backwash on alternate day and replacement of membrane after 15 days.
- Institution has outsourced the work of campus cleanliness to the agency.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment / instruments?

- Calibration of the instruments is carried out before the start of each semester as per standards and guidelines provided on it.
- Few of the instruments from E &TC department are calibrated from ARAI. Using such calibrated instruments other instruments are calibrated viz. Agilent make 20 MHz Arbitrary Waveform Generator, Agilent make 6 ½ Digital Multimeter, Tektronix make 4 Channel 100 MHz Digital Storage Oscilloscope etc.
- Calibration of electronic measuring instruments of various departments is done in the E&TC department.
- Experimental setups and equipment are tested by faculty and staff members periodically.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

- The electrical sanctioned load of the Institution is 125 kVA. For this, the Institution has a transformer of capacity 200 kVA.
- Institution has a DG set of 100 kVA capacity for power back-up.
- For protection of sensitive equipment against voltage fluctuations, MCCB, MCB, RCCB are provided wherever necessary.
- UPS facility is provided to each computer labs with total capacity of 156 kVA.
- In case of water scarcity from PMC, the water supply is made available through water tankers and borewells.

Any other information regarding infrastructure:

- The Institution provides Gymkhana facilities to the students and has a playground within campus. The Wi-Fi facility is provided to students in hostel.
- Telecom: - BSNLs one line (Telephone No. (020) 25473160 /FAX No. (020) 25470909) is available with 79 intercom lines.
- The Institution has one vehicle for transportation facility. This facility is availed for medical emergency.
- Fire hydrant system is installed throughout all buildings in the campus.
- The fire-extinguishers have been installed at required places and campus buildings are covered with insurance policy.
- The intercom and net facility is provided in each and every department.
- The seminar hall is utilized for indoor games, yoga and various functions.
- Public Address System is installed in corridors for announcement and prayers.
- In case of water scarcity from corporation, the water supply is made available through water tankers and borewells. Numbers of tankers has been reduced because of rain water harvesting, water tank (pit). Bore well water level is seen increased due to rain water harvesting.
- There are ample number of water purifiers and water coolers installed on each floor.
- Total hardness and PH value for drinking water is checked by chemistry lab on monthly basis.

CRITERION 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. The Institution publishes an information brochure annually. The copy of the Information Brochure is given to each student along with the admission form at the time of admission.

It consists information about Executive Committee, Principal, Head of the Departments and staff profile. It has details of every department along with their objectives, future plans, initiatives taken, departmental highlights and prominent laboratories. It includes information about Corporate Relations Division, details about the central facilities such as library, gymnasium, workshop, canteen and hostel facility. The co-curricular and extracurricular activities, faculty achievements and student achievements are stated. Rules of admission, department wise intake and fee structure are mentioned.

The Institution ensures its commitment and accountability by:

- Arranging in plant training for overall development of students
- Inviting various reputed organizations for campus recruitment
- Effective functioning of various committees to look after the central facilities
- Conducting technical, cultural and sports activities
- Taking feedback regarding central facilities and activities conducted thereby making necessary changes.

5.1.2 Specify the type, number and amount of Institutional scholarships/freeships given to the students during the last four years and whether the financial aid was available and disbursed on time?

The Institution offers fee waiver scheme to the needy students who are unable to pay the fees and request for concession. The students are allowed to pay the fees in installments. The details of fee waiver scheme offered by Institution are as follows:

Year	Financial aid available	UG		PG		Total (Amt. in Rs.)
		No. of students	Fee waiver (Amt. in Rs.)	No. of students	Fee waiver (Amt. in Rs.)	
2013-14	Yes	6	1,49,556	2	25,600	1,75,156
2014-15	Yes	5	1,10,056	2	45,575	1,55,631
2015-16	Yes	7	1,50,309	-	-	-
2016-17	Yes	5	2,03,778	1	39,010	2,42,788

5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

The scholarships / free ships are given by Government of Maharashtra on the basis of parental annual income. The details of scholarships and free ships are as follows:

Sr. No.	Type of assistance		Agency Providing Financial Assistance	Number of students received financial assistance			
				*2016-17	2015-16	2014-15	2013-14
1.	GOI PM Scholarship		Social Welfare Dept. and Tribal Development Dept.	538	591	476	400
2.	GOI PM Freeship			284	268	255	307
3.	EBC Concession		Jt. Director of Tech. Education	426	372	318	265
4.	Minority Scholarship		Dept. of Minority Welfare	14	13	9	7
5.	Central sector scholarship		Jt. Director of Higher. Education	2	2	4	6
6.	STC		Zilha Parishad	8	4	7	12
	PTC			3	2	2	2
7.	J & K Special Scholarship		AICTE	0	1	1	0
8.	ST	Scholarship	-	4	4	3	5
		Freeship		8	7	3	1
TOTAL				1287	1264	1078	1005
Total no. of students admitted in that year				2437	2507	2258	2018
Percentage of students who received financial assistance				52.81	50.42	47.74	49.80

* In Process

- The students are informed about the scholarships by their class teachers, announcements of the same are made in the class, notification is sent on the e-mail of the students and notices are put on the notice board to make them aware of eligibility, latest income limits, rules etc.

5.1.4 What are the specific support services / facilities available for Students from SC/ST, OBC and economically weaker sections

- The Institution makes arrangement for the students from SC/ST, OBC and economically weaker sections to get government scholarships. It also provides fee concession to the students who cannot pay the fees
- The Institution provides 'Earn and Learn scheme' for economically weaker students wherein the students contribute to the work in library and office
- Alumni association has instituted scholarship to the students of economically weaker sections

- Late Gajanan Bhimrao scholarship of total Rs. 10,000/- is set up by Mrs. Rajshree Lingras (Mother of Mrs. P. S. Sawant-HOD, E&TC) for the needy and deserving girl student

Students with physical disabilities

- The Institution provides ramps and wheelchair to the physically challenged students. The Institution also has adequate elevators. Toilet rails are provided to the students. Lamps are provided to the students with visual disabilities.
- Library staff helps physically challenged students for issuing books on priority basis.
- Physically disabled students are given extra time in examination. The seating arrangement of such students is made in separate classrooms during examination. As per the SPPU norms, such students are allowed to use a writer.

Overseas students: Nil

Students to participate in various competitions/ National and International

- The students participate in various State, National and International competitions in huge numbers. They publish materials in National and International conferences and journals. The Institution makes arrangements for the funds required for participating in such competitions. The faculty members provide constant support to the students and encourage them to participate.
- **Co-curricular Activities:** The Institution hosts a national level technical event every year called 'Dexterity'. Students participate in various competitions organized by IIT Bombay through e-Yantra Cell. The departments organize technical events like UTKRAANTI, UDAAN, TECHFEST, APPIN24x7 etc. The students participate in events like Avishkar and Dhruv which are hosted by SPPU. Students participate in National and International technical competitions like BAJA, GO-KART, EFFICYCLE, SUPRA, ROBOCON etc. Intra college technical events are arranged by various student associations such as MESA, EESA, ACME, ACES, ITSA and BETA. The Institution provides financial support for conducting/ participating in co-curricular activities.
- **Extra-curricular Activities:** The Institution conducts an annual gathering called 'Ensemble' in which the students showcase their talents in cultural events like dance, drama, singing, fashion show, mehendi competition, rangoli competition, face painting, fun fair etc. The students also participate in prestigious intercollegiate competitions like Firodiya Karandak, Purushottam Karandak etc.

- **Sports:** Students participate in state and national level sports competitions. Sports equipments are made available to students for practice. The Institution hosts MM Karandak every year. The sports committee provides constant guidance and encouragement to the students for participation. The Institution regularly hosts University level table tennis and chess tournaments.
- **Students participate in various conferences in India / Abroad:** The students present their technical papers in various State, National and International level conferences. Guidance and support is provided to the students to participate in various conferences.

Medical assistance to students: health centre, health insurance, etc.

- The Institution has a tie up with Shashwat Hospital which is located at a distance of half kilometer from the Institution. Also, the Institution arranges for the general annual medical checkup of all newly admitted students and hostel students. It also makes provisions for eye checkup and Haemoglobin checkup of the students. Sanitary napkins vending machine is available for girl students. General medicines and first aid box is available in every department of the Institution. MMCOE Hostel has facility of first aid cum sick room with visiting medical officer.

Organizing coaching classes for competitive exams

- The Institution conducts sessions for students to prepare for exams like GATE, GRE, TOEFL etc. Resources are made available in the library for the students to help in preparation of competitive exams. Awareness sessions are conducted by the Institution for MPSC, UPSC, Army and Navy exams.

Skill development (spoken English, computer literacy, etc.)

- The Institution conducts soft skill training programmes and other skill development programmes on a regular basis. Presentations, Group Discussions, Case Studies, Quizzes, Role Plays etc. are carried out in regular lectures to develop the skills of the students. To enable the students to showcase and enhance their skills, the Extra Curricular Activity Functional Committee organizes various competitions like Extempore, Debate, Group discussions etc.
- To enhance the computer literacy various software training programmes on JAVA, CATIA, ANSYS, PYTHON, ANDROID, HADOOP, IoT etc. are conducted for the students. The Institution has a Digital Library with the provision to download various e-resources. IIT Bombay has recognized MMCOE as a Nodal Center for Virtual Labs. The Institution also has a language lab.

Support for “slow learner”

- Slow learners are identified from regular lectures and additional attention is given to such students. They are given some extra assignments to solve.
- Remedial coaching, extra lectures and test sessions for online, theory and practical exam are a regular practice.
- The Institution has appointed professional counselors to encourage the students.
- The teacher guardian counsels the slow learners on regular basis.

Exposure of students to other Institution of higher learning/ corporate/ business house.

- The Institution has a Industry Institute Interaction Cell through which the students gain knowledge about corporate environment
- Industrial visits are arranged by every department to provide corporate exposure to students. The students participate in seminars, workshops, conferences and technical events conducted by other Institutions
- With the support of faculty members, sponsored projects and internships are carried out by the students
- Eminent personalities from industries and academics conduct expert sessions and guest lectures

Publication of student magazines

- The Institution publishes a college magazine named ‘MISTURA’. The students are encouraged by the faculty members to contribute their articles for the magazine. Also, the Institution has provided a wall magazine to the students to exhibit their creative materials like poems, essays, paintings, articles etc.

5.1.5 Describe the efforts made by the Institution to facilitate entrepreneurial skills among the students and the impact of the efforts.

The Institution has an Entrepreneurship Development Cell which functions to nurture entrepreneurial skills among the students. Expert sessions on entrepreneurship are conducted by the Institution to create awareness and provide knowledge about entrepreneurship.

The cell conducts workshops and seminars on entrepreneurship development for the students. The result of such efforts is that the Institution has been successful in developing a good pool of self employed students.

5.1.6 Enumerate the policies and strategies of the Institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, quiz competitions, debate and discussions, cultural activities, etc.

- The Institution has an extracurricular activity functional committee which conducts different extracurricular activities throughout the year

- The sports committee and the cultural head look after the participation of students in sports and cultural activities at various levels.
- The Institution also provides sports equipments and gymnasium facility to the students. In addition, the Institution has a well maintained play ground for outdoor games
- For smooth functioning, a schedule is prepared for sports practice and gymnasium facility
- Notices and posters of all the activities and events are displayed on the notice board of every department. e-mail notification is sent to all the students and announcements are made in the class by the faculty coordinators
- Financial support is provided to participants for various competitions
- The names of the winners are mentioned in the event report which is further shared with the students and staff of the Institution in order to motivate the students
- Students showing remarkable performances in extracurricular and co-curricular activities are felicitated in the annual gathering 'Ensemble'
- The title of 'Best Outgoing Student' is awarded to one student from each department based on their performance in academic, co-curricular and extracurricular activities.

Additional academic support, flexibility in examinations

- If the dates of competition clash with the dates of exam, the Institution makes arrangement for the students to appear for the exam later
- Students participating at Inter-collegiate level and National level competitions can avail concession in class attendance for the period of competition
- The students approach the faculty members and get their queries solved related to the contents missed in the lecture due to absenteeism. Extra practical sessions are conducted for such students
- Students representing University, State or Nation in various competitions are given support to get additional marks, if required, for passing particular head of exam as per norms of SPPU

Special dietary requirements, sports uniform and materials

- During tournaments, jerseys are provided to the students by the Institution. Sports kits and other materials are made available to the students for practice as well as for participation in competitions.
- Expert Sessions on nutritional diet are organized by the Institution. Posters and banners related to healthy diet are displayed in the canteen.

Any other

- To encourage NSS and NCC activities, Institution extends all the required support to the students. Activities carried out include blood donation, tree plantation, PUC check-up camp, PAN card application submission, Kargil

Vijay Diwas, Jal Pradushan Janjagruti Abhiyan, Police Mitra Activity, Aarogyam, Road Safety and Traffic Awareness, Drink and drive awareness, Yuva Laksha, Swacch Bharat Abhiyan, Plastic Waste Free College Campus, etc.

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, GATE/CAT/GRE/TOEFL/GMAT/Central/State Services, Defense, Civil Services, etc

The Institution motivates the students to opt for higher studies. Seminars are organized to create awareness for competitive exams such as GATE, GRE, TOEFL, Civil Services, CAT, CMAT etc. Expert sessions are arranged to help the aspirants in the preparation of entrance examinations for higher studies and civil services. Sessions are also conducted to enhance the presentation and interview skills of the students.

Sr. No	Year	UGC-CSIR-NET, UGC-NET, SLET, ATE/CAT/GRE/TOEFL/ GMAT/Central /State Services, Defense, Civil Services	No. of Students qualified
1	*2016-17	GATE/ GRE	2
		TOEFL	1
2	2015-16	GATE/ GRE	33
		MBA-CET	9
		TOEFL	6
		CAT	6
		CMAT	1
		GMAT	1
		DEFENCE	1
3	2014-15	GATE/ GRE	29
		MBA-CET	4
		TOEFL	8
		CMAT	1
		IELTS	1
4	2013-14	GATE/ GRE	42
		MBA-CET	3
		TOEFL	12
		CAT	2
		CMAT	1
		AFCAT	1

* In process

5.1.8 What type of counseling services are made available to the students (academic, personal, psycho-social etc.)

The Institution takes utmost care for the counseling of students. In order to fulfill the counseling needs of the students, the Institution has appointed two counselors Ms. Shehnaz Thanawala for FE students and the students staying at MMCOE hostel and Mrs. Sujata Balkawade for all students of SE, TE and

BE. These counselors conduct counseling sessions for the students on regular basis. The academic, personal, career related and psycho-social problems are discussed and resolved in these sessions.

In addition to this, the class teacher and teacher guardian also counsel the students catering their needs to solve the problems.

Counseling provided by teachers:

- 1) **Academic:** The subject teacher addresses the issues of the students related to academics. There is also a grievance redressal cell which fosters to solve the grievances of the students.
- 2) **Personal:** The teacher guardian carries out a regular interaction with the students at one to one level in a friendly environment. The students are encouraged to share their problems. Confidentiality of the personal information is maintained and the problems are solved.
- 3) **Career:** The students are motivated on regular basis to opt for higher studies. Seminars for higher education are conducted by the Institution. Sessions are conducted by Corporate Relations Division to improve the employability skills of the students.
- 4) **Psycho-social:** Teacher guardian system and grievance redressal cell solve psycho-social issues of the students related to personal relations, mental health, religious and ethnic background, cultural issues, family problems etc. The faculty members and the Institution as a whole strive to control and solve the problems.

The counselors and the teachers together help the students to overcome their difficulties and motivate them to have a positive outlook in every aspect of their life.

5.1.9 Does the Institution have a structured mechanism for career guidance and placement of its students? If yes, detail on these 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 programmes.)

Yes. The Institution has a well structured Corporate Relations Division (CRD) which provides career guidance and placements to the students. The structure of CRD consists of Dean Student Affairs, Training and Placement Officer and a faculty member from each department.

The students are informed about the job opportunities and campus interviews by CRD Cell. CRD carries out regular interaction with TE and BE students.

- Expert sessions, workshops and seminars are conducted for career guidance. The students are also guided for pursuing higher education in India and abroad. Industrial visits to renowned organizations are arranged every year. Alumni of the Institution also contribute in career guidance by sharing their experience through the expert sessions.
- Expert CRD arranges pool campuses throughout the year on regular basis
- Companies that participated in the pool campuses are:

- TCS, Infosys, GS Lab, MAQ Software, Tech Mahindra, L&T Infotech, Persistent Systems, Zensar Technologies, Syntel, Bosch, Volkswagen, Bridgestone, KPIT, Forbes Marshall, Symantec, SKF, 3DPLM, Quick Heal, Capgemini, Compassites, Fiserv, Pubmatic, Quinnox, Amuratech, Flextronics, Bitwise, Finolex Pipes, Hitachi Consulting, Vodafone, XL Dynamics, Exusia, Polycab wires, Mahindra & Mahindra, Yazaki, Kirloskar Oil Engine Ltd, ProtoTech Solutions, White Snow, Vyom Labs, Hunar Tekwurks, QED Enabled Services, Epic Research, Tata Communications, Tata Teleservices, TPT ion, Mphasis, Amazon.in, AGS transact, PEOL Technologies, Wooshin Engineering, Xoriant, Bentley, Eaternus, Harbinger, Hettich India, Hotel Oberoi, IMRB, MNGL, Quick Heal, Siemens, Sopra Steria, NTT Data etc.
- CRD has MoU with Zensar Technologies Ltd, Persistent Systems Ltd. and Pariksha.co

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.

Yes. The Institution has a Grievance Redressal Cell in order to redress individual as well as collective grievances of the students. A grievance drop box is placed on ground floor in front of office wherein the students drop in a slip writing their grievances. The box is opened on regular basis and the grievances therein are resolved by the committee members.

No major grievances were reported during the last four years.

5.1.11 What are the Institutional provisions for resolving issues pertaining to sexual harassment?

The Institution has a Women's Grievance Cell which takes care of the issues pertaining to sexual harassment. The committee functions strictly to prevent the occurrence of sexual harassment. Sessions are conducted to create awareness of self defense, sexual harassment- recognition and reaction.

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, Institution has formed an anti-ragging committee and an anti-ragging squad to focus on making the campus ragging free.

- Awareness about Anti-ragging is made through display of 'MAHARASHTRA PROHIBITION OF RAGGING ACT 1999' at all important premises like porch, hostel etc.
- It is made mandatory to students and their parents to submit an affidavit assuring non-participation in any type of ragging activity. The students are made aware of the disciplinary action against involvement in ragging activity.

- Regular monitoring visits and surprise visits are carried out by the authorities at the Girls and Boys Hostel.
- As a policy, a faculty member stays in the hostel. Also, there are resident rectors at both the hostels.
- The rules and regulations for prevention and prohibition of ragging are displayed in the hostel. The phone numbers of anti ragging committee members are also displayed.
- No instances of ragging have been reported till date.

5.1.13 Enumerate the welfare schemes made available to students by the Institution.

The Institution works to ensure social justice through various students' welfare schemes. Following welfare schemes are made available for the students:

- Institution provides fee waiver scheme to economically weaker students
- Payment of fees in installments is allowed to the needy students.
- Institution implements 'Earn and Learn' scheme for the students
- Institution offers prizes to students showing remarkable performances in co-curricular and extracurricular activities
- Institution provides financial support to participate in co-curricular and extracurricular activities such as BAJA, ROBOCON, Firodiya Karandak, Purushottam Karandak etc.
- The Institution has provided a platform to the students to gain scholarship through ISHRAE
- Scholarship is made available to needy and economically weak students by Alumni Association
- The canteen committee ensures the hygiene and quality of food in the canteen on regular basis.

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, the Institution has a registered Alumni Association which strives to develop a strong bond between the alumni, Institution and the students. Every student who completes graduation/post graduation from the Institution can become a member of the association.

Activities carried out by Alumni Association are as follows:

- Annual General Meeting of Alumni Association is organized every year at Institution level
- Alumni Association scholarship is given to needy deserving students from each department as per the departmental intake. Total amount of Rs. 55000/- is disbursed as alumni scholarship for 11 students
- An alumnus of E&TC department has instituted Late P. N. Honap and Late U. S. Anikhindi scholarship of Rs. 10,000/- for needy and deserving student in E&TC department

- Alumni members are involved in conduction of interviews along with faculty members for selection of 'Best Outgoing Student' in each department. Cash prize of Rs. 1000/- is sponsored to each department by Alumni Association
- Alumni members also share their knowledge and experience by conducting guest lectures and add-on courses
- Guidance to projects, seminars and technical events is provided by alumni members
- Alumni members give inputs to the students on carrier guidance which help them to understand their interests and career opportunities
- At the time of designing the curriculum, alumni members contribute by giving feedback

5.2 Student Progression

5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

Details of Student Progression

Student Progression	Year wise % of students			
	*2016-17	2015-16	2014-15	2013-14
UG to PG		8.11	11.50	13.70
Employed	(43 students)	25.66	22.30	24.28
Campus Selection				
Other than campus recruitment		17.36	42.02	40.38
Entrepreneurship/ Self-employment		1.89	3.29	2.88

*In process

5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (course wise / batch wise stipulated by the University). Furnish programme-wise details in comparison with that of the previous performance of the same Institution and that of the Institutions of the affiliating University within the city/district.

Pass Percentage of Under Graduate Programme

Year	No. of students admitted in final year	No. of students passed	Percentage of passed students (%)
Mechanical Engineering			
*2016-17	187	-	-
2015-16	153	135	88.24
2014-15	64	56	87.5
2013-14	70	65	92.85
Computer Engineering			
*2016-17	143	-	-
2015-16	152	141	92.76

2014-15	143	128	89.51
2013-14	128	123	96.09
Electronics and Telecommunication Engineering			
*2016-17	125	-	-
2015-16	160	148	92.5
2014-15	146	136	93.15
2013-14	128	115	89.84
Information Technology			
*2016-17	72	-	-
2015-16	77	77	100
2014-15	70	66	94.28
2013-14	75	68	90.67
Electrical Engineering (Started in A.Y. 2013-14)			
*2016-17	59	-	-
2015-16	-	-	-
2014-15	-	-	-
2013-14	-	-	-

*In process

Pass Percentage of Post Graduate Programme

Year	No. of students admitted in final year	No. of students passed	Percentage of passed students (%)
MBA			
*2016-17	47	-	-
2015-16	35	29	85.30
2014-15	46	40	88.89
2013-14	57	45	78.95
ME Computer Engineering			
*2016-17	14	-	-
2015-16	12	7	58.34
2014-15	16	13	81.25
2013-14	18	12	66.67

*In process

5.2.3 How does the Institution facilitate student progression to higher level of education and/or towards employment?

- The Institution motivates the students for higher studies by providing constant guidance and support. The Institution organizes and conducts preparatory sessions and MCQ tests to help the students to prepare for GATE exam. Information related to GATE exam is shared in regular lectures
- The Institution provides Transcript Certificates to the students who opt for higher studies
- The Institution has a systematic mechanism for the placement of its students. The Corporate Relations Division arranges campus interviews for placement of the students in renowned organizations like Tech Mahindra, Persistent Systems, Syntel, TCS, L&T Infotech etc.

- Sessions on aptitude skills development, soft skill development and career counseling are also conducted by Corporate Relations Division. The Institution has signed an MoU with Zensar Technologies to help in employability skill development of the students
- Sessions are conducted by alumni members who are pursuing higher studies in India and abroad in order to motivate the students for higher education
- The Institution has an Entrepreneurship Development Cell which effectively conducts sessions for the students to make them aware of entrepreneurship opportunities and challenges

5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

Special attention is given to the students who are weak in academics and are at a risk of failure or drop out. The faculty members identify slow learners through observation and class test.

- Institution has appointed professional counselors to counsel the students
- Revision sessions are conducted
- Extra assignments and extra practical sessions are taken
- In case of irregularity in attendance of the students, the teacher guardian conveys it to their parents through phone calls, SMS and letters
- Departments organize Parent Teacher Meet to communicate the student's progress to their parents
- Practice tests are uploaded on MMCOE Myexamo portal which helps the students to practice for University online exams

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.

- The Institution hosts Annual Gathering 'ENSEMBLE' which consists of various sports, cultural and extracurricular activities like Football, Volleyball, Cricket, Chess, Carrom, Table Tennis, Throw Ball, Dodgeball, Basketball, Kabaddi, Tug of War, Dance, Drama, Singing, Fashion Show, and Musical Band which help the students to exhibit their caliber in various fields.
- Apart from ENSEMBLE Sports events, the Institution also conducts various Inter-Departmental sports like Skipping, Sit Ups, Push Ups, Shot put, Pull ups, Running, Badminton etc.
- The Institution hosts a National Level Technical event 'DEXTERITY' wherein various technical events like Roborace, Circuit Debugging, Technical Paper Presentation, Clash of Clans, Mech Mind, Bizzstrike, Biz Quiz etc.

- The Institution hosts MM Karandak in which the students from Marathwada Group of Institutions get a chance to come together and participate in variety of sports
- In addition to this, the Institution conducts a wide range of cultural and extracurricular activities like Rangvarsha (Painting Competition), Drishtikon (Debate and Extempore Competition), Mr. & Miss MMCOE, Kalakatta, Mazi Jadhavghadan, Candle Light Freedom March, Mr. & Miss Radio Mirchi, MATA Carnival, International White Cane Day for the Blind, Engineer's Day, Marathi Bhasha Din, Essay Writing Competition, Debate competition, Shiv Jayanti, Ganeshotsav, Dahi Handi, Dandiya etc.

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.

It is a proud privilege that the students of MMCOE have excelled in sports, technical and music fraternity.

- Shruti Kulkarni was selected as Peace Ambassador 2016 in Leadership Development Programme at ASHA Center, Gloucestershire, UK
- Ankit Kharde secured 'Best Cadet' Trophy in NCC Combined Annual Training Camp, Pune
- Vikram Borade won ETPOI award of Rs. 5,00,000/- from Economic Times
- Arpita Kulkarni made a mark in the Guinness Book for Bharatnatyam and also secured 1st rank in International Dance Competition
- Chandan Chaudhari has presented two technical papers in a conference organized in Hong Kong
- Raj Khanekar secured 1st place in 200 metres and 4x100 metres relay competition in 27th West Zone Junior Athletics Championship organized by Rajasthan Athletic Association at Ajmer
- Team Abhedya, BAJA team of MMCOE, was awarded the 'Go Green' prize worth Rs. 40,000/-
- Team Tachyon, GO-KART team of MMCOE, won the best design award in ISK 2016 held at Hyderabad and also best design and best cost report in TKT Season-1 held at Trinity College, Pune
- Team Rudra, ROBOCON team of MMCOE, won Best Rookie award in ROBOCON 2015 held at Balewadi stadium, Pune
- The project of team e-Yantra titled 'Smart Waste Carrier' was selected in e-Yantra Ideas Competition Regional Finals
- Diksha Virkar was selected as a captain of Pune city zone for Savitribai Phule Pune University Inter Zonal ball badminton competition
- Onkar Waghmare and Anand Dagale won silver medal and bronze medal respectively in drill competition in AIVSC at Jodhpur
- Soham Kulkarni won bronze medal in drill competition in AIVSC, Parade Commander of Pune Contingent in IGC and of Maharashtra in AIVSC and

also won an award from NCC group Pune as one of the Best Air Wing Cadet of the year 2015

- Yashas Bedarkar won All India Best Cadet at AINSC at Vishakhapatnam
- Ranjeet Kolhatkar won gold medal in Scuba Diving Camp

Details of Student's Achievements in Sports, Co-curricular, Extra-curricular and Cultural Activities:

Sports Achievements

Sr. No	Name of student	Name of event	Level	Place	Student achievements
Academic Year 2015-16					
1	Raj Khanekar	Athletics	National	Ranchi	Participated
Academic Year 2014-15					
2	Viraj Hudli	Waterpolo	Zonal	Nashik	1st
3	Akshay Gadikar	Table Tennis	Zonal	Pune	1st
Academic Year 2013-14					
4	Viraj Hudli	Swimming	National	Pune	1st
5	Akhilesh Deshpande Nikhil Pande Viraj Hudli	Waterpolo	Inter-Zonal	Pune	1st
6	Akshay Gadikar	Table Tennis	Inter-Zonal	Pune	2nd
7	Akhilesh Deshpande	Waterpolo	National	Amritsar	Participated
8	Viraj Hudli	Waterpolo	National	Amritsar	Participated
9	Akshay Gadikar	Table Tennis	West Zone	Aurangabad	Participated
10	Diksha Virkar	Ball Badminton	National	Andhra Pradesh	Participated

Cocurricular, Extracurricular and Cultural Achievements

Sr No.	Name of student	Name of event	Level	Place	Student achievements
Academic Year 2016-17					
1	Bhakti Bhikne	Outreachy-free and open source software internships	International	-	Internship with Fedora
2	Tejal Lodha Khyati Choube Akshay Diwakar	Internet of things towards smart future	State	-	1 st Rank
3	Neha Ghatkar, Shravani Jadhav	HR Olympiad	State	Pune	2 nd Prize
4	Sandeep Khade	Project Idea Competition ISHRAE	Pune Chapter	Pune	1 st Prize
5	Rohan Gugale	Jagriti Seva Sansthan	-	-	Travelled throughout India

					with Jagriti Yatra Building
6	Pooja Kad	Purshottam Karandak	Intercollegiate	Pune	2 nd prize for Acting
7	MMCOE Fashion Show Team	Fashion Show-Cummins COE	Intercollegiate	Pune	Consolation prize
8	Samruddhi Khadake	Bharat Karandak & Gadgil Karandak	Intercollegiate	Pune	Consolation prize
9	MMCOE Fashion Show Team	Fashion Show-Spandan	Intercollegiate	Pune	1 st Prize
10	Hrishikesh Pathak	Firodiya Karandak	Intercollegiate	Pune	Consolation prize for Best Acting
Academic Year 2015-16					
11	Gururaj Bakshi	Android boot camp at Google Office	National	Hyderabad	Selected as Google facilitator
12	Sanman Golwalkar	Sakal YIN, Pune	State	Pune	Vice President, Sakal Young Inspirators Network
13	Devashri Gadgil	Suman Karandak	Intercollegiate	Pune	Consolation Prize for Best Vachik Abhinay
14	Bhargav Band	Astitva (Vaadyalankar Instrumental Competition)	Intercollegiate	Pune	2 nd Prize
15	Anagha Nandane and Chaitanya Kulkarni	Astitva (Debate Competition)	Intercollegiate	Pune	1 st Prize
16	Anagha Nandane	Astitva (Essay Competition)	Intercollegiate	Pune	2 nd Prize
17	Sheetal Kate	Vinodottam Karandak	Intercollegiate	Pune	2 nd Prize for Best Actress
18	Kapil Digraskar	Vinodottam Karandak	Intercollegiate	Pune	Consolation Prize for Best Acting
19	Aditya Bidwe	Talentron	Intercollegiate	Pune	Best Instrumentalist
20	Pranav Nalawade	Talentron	Intercollegiate	Pune	3 rd Prize in poetry competition
21	D-Boys Group	Panache 2K16	Intercollegiate	Pune	3 rd Prize in Group Dance
Academic Year 2014-15					
22	Nikhil Savanji, Sonia Ghorpade	ROBORACE	National	Amravati	2 nd Prize
23	Team Rudra (Robocon team)	ROBOCON International Competition	International	Pune	2 nd Prize
24	Arpita Kulkarni	Global Harmony 2015	-	Pune	2 nd Rank
25	Neha Chaskar	Firodiya Karandak	Intercollegiate	Pune	Consolation Prize for Best Set

Academic Year 2013-14					
26	Akshay Patharkar	Chess Tournament	State (Invitational)	Ahmednagar	1 st Rank
27	Nitish Ghare	Drama – ‘Doctor, Mi Veda Nahiye’	Suman Symbiosis Karandak	Pune	Consolation Prize for Vachik Abhinay
28	Nitish Ghare	Drama – ‘Doctor, Mi Veda Nahiye’	Chakri Karandak	Pune	Best Vachik Abhinay(Male)
29	Rajdeep Manjre	Drama ‘Chashma’	Dnyankranti Karandak and Abhivyakti 2014	Pune	Consolation Prize for Acting

5.3.3 How does the Institution seek and use data and feedback from its graduates and employers, to improve the performance and quality of the Institutional provisions?

- **Student’s feedback:** The Institution collects feedback from its students regarding academics which is further used for improving the overall performance.
- **Course End Survey:** At the end of the semester, subject-wise course end survey is collected from the students regarding understanding and learning of the subject
- **Graduate Exit Survey:** Department collects graduate exit survey from the final year students
- **Parents’ Feedback:** Feedback regarding the infrastructure, teaching-learning process, facilities provided to the students etc. is collected from parents in Parent Teacher Meet and the suggestions are implemented.
- **Alumni Feedback:** Feedback is also collected from Alumni members at the time of Alumni Meet and whenever they visit the Institution.
- **Employer Feedback:** CRD collects feedback from the employers of the students. It is helpful to understand the requirements of the industries and thereby make improvements to facilitate overall grooming of the students and overcome the lacunae if any

5.3.4 How does the Institution involve and encourage students to publish materials like catalogues, wall magazines, Institution magazines and other material? List the publications/ materials brought out by the students during the previous four academic sessions?

The Institution publishes a magazine named ‘MISTURA’. The students are encouraged to publish materials in areas like photography, paintings, poems and technical as well as non technical articles. The Institution also has a wall magazine whereon the students display their creative materials. The students are motivated to publish their articles by the cultural incharge and the faculty members. The Institution encourages the departments to publish e-newsletter wherein the activities carried out by the students are published.

5.3.5 Does the Institution have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

Yes, the Institution has a Students Council. The Students Council is constituted every year as per the guidelines given by SPPU.

The selection process includes:

- Nomination – The class teacher in consultation with HOD nominate the deserving students from each department
- Interview – The Principal along with senior faculty members conduct the interviews of the nominated students and the best students are selected

Student Council for 2016-17

Sr. No.	Post/ Designation	Name of the Officer/ Student
1	Gathering Secretary	Mr. Prasad Pawar
2	Joint Gathering Secretaries	Mr. Jameel Khot and Mr. Suraj Khomane
3	Cultural Secretaries	Mr. Maitrey Gogate and Mr. Laxmikant Pathak

Student Council for 2015-16

Sr. No.	Post/ Designation	Name of the Officer/ Student
1	Chairman/ Principal	Dr. Sunil Deshpande
2	Faculty Representative	Mr. Sachin Karche
3	Faculty In charge- NCC	Mrs. Archana Kale
4	Program Officer- NSS	Mr. Kaustubh Kulkarni
5	Director of Sports	Mr. Tushar Gujar
6	Secretary to students Council (UR)	Mr. Rahul Kulhalli
7	Student Representative- Sports	Mr. Akshay Patharkar Mr. Vikas Shirsat
8	Student Representative- NSS	Miss. Anagha Nandani Mr. Aditya Maharaj
9	Student Representative-NCC	Yashsingh Thakur Shubham Belamkar
10	Student Representative- Cultural Activities	Mr. Kunal Dhumal Mr. Nitish Sapre
11	Ladies Representatives	Miss. Rugveda Kulkarni Miss. Mugdha Kulkarni

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

Most of the committees functioning in the Institution has student representatives on them. This ensures participation of students in all activities. It helps to inculcate leadership qualities among the students. Involvement of student representatives helps in maintaining transparency in overall working.

• Academic bodies:

Academic Monitoring Committee

Technical Event Committee

Library Committee

- **Administrative bodies:**

Hostel Committee
Mess and Canteen Committee
Internet Task Committee
ISO Committee
Anti-ragging Committee
Publication – Magazine, Brochure and Newsletter Committee
Extra Curricular Activities Committee
PRO Committee
Student Welfare and Discipline Committee
Sports Committee
Industry-Institute Interaction Committee
Alumni Association Committee
NSS and NCC

5.3.7 How does the Institution network and collaborate with the Alumni and former faculty of the Institution?

Interaction with Alumni:

- Institution organizes Annual General Meeting (AGM) of Alumni Association and invites the members to recall the memories of Alma Mater. Every year, more than 200 alumni attend the AGM
- Alumni members are felicitated for the achievements in AGM
- Alumni members are invited to conduct expert lectures, workshops, interviews for best outgoing student etc.
- They are invited as judge for assessment during technical competitions and as a guest for Induction function.
- Social Networking media like Facebook, WhatsApp and LinkedIn is used to communicate effectively with the alumni of the Institution
- E-mail notification is sent to the alumni on regular basis

Interaction with Former Faculty:

- Former faculty is invited to conduct expert lectures, workshops and provide project guidance to the students
- They are also invited to attend farewell functions and other functions
- They are invited to attend the AGM of Alumni Association and interact with alumni members

CRITERION VI: GOVERNANCE, LEADERSHIP & 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.?

The vision and mission of the Institution is as follows:

Vision

To aspire for the Welfare of Society through excellence in Science and Technology.

Mission

Our Mission is to

- Mould young talent for higher endeavors.
- Meet the challenges of globalization.
- Commit for social progress with values and ethics.
- Orient faculty and students for research and development.
- Emphasize excellence in all disciplines.

The Institution's distinctive characteristic lies in 'welfare of masses' and constructive research culture. Institution tries to impart quality education through continual enhancement and teamwork. Institution focuses on research activities for faculty members and students to keep abreast of knowledge. Faculty members are always encouraged for research and doctoral work (PhD). Similarly, students are motivated to work on research oriented and sponsored projects. Regular interaction with professional trainers makes students technically competent enough. Students are encouraged to take cognizance of their social responsibilities by organizing various programs through NSS, NCC and students' association. The Institution continuously takes effort for over all development of the students.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

Designing and implementation of quality policy is the joint effort by Management, Principal and Faculty.

Our board of trustees is blend of eminent industrialists, medical practitioners and academicians. This like minded group is committed to run the Institution. Management always motivates and supports the development of infrastructure, teaching learning process and research activities. 'Campus Co-ordination

Committee' (CCC) of trustees visits Institution in each semester to discuss and resolve different issues related with academics and Institution development. Table shows the names of CCC members:

Campus Coordination Committee		
Sr. No.	Name of Committee Member	Designation
1.	Mr. A. S. Pawar	Coordinator
2.	Mr. S. S. Garge	Member
3.	Dr. V. S. Patil	Member

Over the period of time, Institution has formulated quality policy to ensure quality process and quality output. Principal is the chairperson of Internal Quality Assurance Cell (IQAC) which has been formed by the Institution in consultation with management. Principal guides the faculty members for teaching learning process & research activities. Principal takes efforts to keep himself updated and suggests improvements to achieve the quality.

New and revised policies are discussed in Campus Development Council (CDC) meeting and after approval; these are communicated by HODs to respective department faculty members.

Designing the quality policy is journey of thought process which involves suggestions collected from faculty members. Faculty plays a major role in quality policy implementation. They undergo various FDPs/workshops /training in every semester to upgrade themselves in terms of quality & research. The Institution has decentralized their activities among all faculty and staff members. Faculty members are motivated to become a member of professional bodies.

6.1.3 What is the involvement of the leadership in ensuring?

- The policy statements and action plans for fulfillment of the stated mission:**

Management takes initiatives to facilitate learning environment and growth of the Institution. Institution provides scholarship schemes, research & development activities and entrepreneurship initiatives for students.

Principal/ HOD's/ Deans/ Faculty members are continuously interacting to plan the following activities:

- Teaching & learning
- Smooth and effective functioning of activities in the campus
- Maintaining discipline
- Creating Social responsibility among the students through extension activities like NSS, NCC etc.

- Formulation of action plans for all operations and incorporation of the same into the Institutional strategic plan:**

Institution prepares detailed academic planner as per University calendar at the start of every semester. Then academic calendar is prepared at department level in line with academic planner which includes various academic, co-curricular and extra-curricular activities. For effective execution of all operations, 38 functional committees are formed that function for fulfillment of stated vision and mission. IQAC supervises and maintains quality in all aspects.

- **Interaction with stakeholders:**

Frequent interaction with all the stakeholders such as students, parents, alumni, industry etc is our source of inspiration. Feedback is collected regularly from them for quality improvement and Institutional development. Amongst all stakeholders, Students are our main stake hence many activities are planned for them and seek their opinion. Alumni are in touch through expert lectures, regular interaction with students, project competitions and alumni meet. Parent teacher meeting is arranged in each semester to interact with the parents and incorporate their suggestions. Industry experts are regularly invited for guest lectures and project competitions. It helps to keep students abreast with recent trends followed by industry.

- **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders:**

Feedback system is developed to provide proactive inputs from stakeholders for improvement in teaching learning system. Feedback from parents is collected in PTM and feedback from Alumni is collected in Alumni meet. Industry resource experts give their valuable opinion to bridge the gap between academics and industry. Institution has also signed MoUs with well known industries to enhance practical knowledge of students. Academic Advisory Board provides suggestions in refinement of outcome based quality policy of Institution.

- **Reinforcing the culture of excellence:**

Development of the Institution lies in the culture of excellence. Excellence is maintained at every stage such as infrastructure development, administration, academics and co-curricular activities. The faculty members contribute in research activities through research projects, paper publications, higher education etc. Faculty members and students are encouraged to participate and organize development programs/ seminars/ workshops and are also appreciated for their achievements.

- **Champion organizational change:**

Institution believes in the philosophy that only thing which is permanent in the world is change. We pro-actively anticipate organizational changes needed by tracking the expectations of stakeholders for growth of the Institution. Institution follows a structured approach for ensuring that changes are

smoothly and successfully implemented. Decentralization of work creates ownership amongst the stakeholders.

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?

Institution has formulated different policies and continuous review of these policies is taken by the members of BOG, CCC and LMC. Regular meetings of these committees are conducted to decide the action plan and the same are communicated to the Institution.

Weekly CDC meeting is conducted by Principal at Institution level. The implementation of policies and action plans recommended by BOG, CCC and LMC are discussed. For better functioning of the departments, suggestions are taken and with due consideration they are positively implemented.

Departmental meetings are conducted by respective HODs to convey minutes of CDC meetings. For effective implementation of all policies, Institution has formed 38 functional committees. These committees are divided into 4 groups headed by Deans. Functional committee heads guide their committee members for effective execution of plans.

Academic monitoring committee provides the policies and guidelines to the faculty members in making Course files/ Teacher Guardian (TG) files/ Class Teacher (CT) files and Google-Apps use. Principal and HOD visit the classes regularly for academic monitoring. Regular academic audit is done by the academic coordinator for Course/ TG/ CT files and Google-Apps utilization. On line feedback is collected from students for further improvements. Inputs are taken from employers and alumni to bridge the gap between industry and Institution.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

Top management has delegated leadership to the staff members that inculcates a sense of belonging and dedication towards work amongst them. Heads of Departments have been given authorities for execution of policies at department level. The faculty members are involved in various activities of the Institution. The suggestions by the faculty members in various issues are given due consideration and implementation. In order to inculcate leadership, 38 functional committees are formed, which are shown in following table.

List of Functional Committees

Sr.No.	Name of the Committee	Functional Head
Dean (Administration): Prof. Ms. S. N. Deshmukh		
1	Library	Ms. A. M. Solanke

2	Permanent Affiliation	Mr. A. B. Ghule
3	Staff Appraisal Committee	Dr. A. S. Sawaikar
4	P.R.O.	Ms. S. S. Tavse
5	Maintenance, House Keeping and Write-off	Mr. A. B. Gholap
6	Internet Task	Mr. A. K. Chandedia
7	Web Development & Updation	Ms. P. R. Kuche
8	Purchase	Ms. D. D. Jambhale
9	Stock Verification	Mr. P. K. Tamkhade
10	Grievance Redressal Cell	Dr. K. R. Patil
11	Women's Grievance Cell	Ms. S. N. Deshmukh
Dean (Academics): Prof. R. V. Dagade		
1	Academic Monitoring Committee	Ms. S. S. Shiravale
2	Time - Table Monitoring Committee	Mr. S. P. Kulkarni
3	University Examination	Mr. V. B. Deokamble
4	Institution Examination	Mr. H. C. Pisal
5	Result Analysis	Ms. S. S. Shiravale
6	I.S.O.	Ms. S. B. Jadhav
7	Institute MIS Software	Mr. N. S. Dhavase
Dean (Student Affairs): Dr. V. R. Deulgaonkar		
1	Training & Placement	Mr. P. P. Muley
2	Hostel	Ms. G. R. Chillarge
3	Mess & Canteen	Ms. S. A. Upasani
4	Sports & Gym.	Mr. T. A. Gujar
5	Technical Events	Ms. H. N. Burande
6	Extracurricular Activities	Ms. A. D. Kulkarni
7	Publication - Magazine, Brochure and News letter	Mr. B. B. Bhure
8	Students Welfare & Discipline	Mr. S. L. Karche
9	Anti Ragging Committee	Dr. S. M. Deshpande
10	Anti Ragging Squad	Mr. M. R. Tarambale
11	Alumni	Dr. M. T. Jadhav
12	NSS & NCC	Mr. A. D. Desale
Dean (R&D): Dr. K. R. Patil		
1	N.A.A.C. Cell	Dr. K. R. Patil
2	NBA	Dr. K. R. Patil
3	R & D Cell	Dr. M. T. Jadhav
4	Center of Excellence	Mr. S. N. Belsare
5	Entrepreneurship Development (ED) Cell	Mr. P. R. Chaube
6	Industry Institute Interaction	Mr. V. W. Bhatkar
7	Sponsored Research Projects	Dr. V. A. Dhumale
8	Professional Bodies Membership	Ms. D. D. Jambhale

6.1.6 How does the college groom leadership at various levels?

Effective functioning of Institution is carried out at different levels such as

Principal, Dean, HOD, faculty and student. Principal encourages Dean and HOD to execute various activities for development of Institution. Dean and HOD identify the strength of the faculty and accordingly assign the specific task.

Staff members are given opportunities to head different co-curricular and extra-curricular events organized in the Institution. They are provided with full autonomy which ensures quick decision making.

Students are given chance to groom their leadership by appointing a University representative, ladies representative and class representative amongst them. Student members are also involved in some of functional committees. Each department has their own student association like EESA, MESA, BETA, ITSA, ACES to conduct various activities.

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?

Decentralized governance system is adapted in the Institution in following manner:

- Principal is the head of the Institution and empowered with sufficient authority and power delegated from the management. Principal delegates necessary administrative and academic authorities to the HODs and Deans in accomplishment of the Institution's vision and mission
- Deans have assigned authority to head 38 functional committees which are categorized as Administration, Academics, Student affairs and R&D
- Each departmental head is empowered with necessary freedom for operational planning and implementation. The academic responsibilities are fairly divided among all the staff members
- Faculty members from all departments enthusiastically contribute as a member in functional committees

6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes. The Institution promotes the culture of participative management.

- The major decisions regarding functioning of the Institution are taken in participative manner. Top management provides autonomy at all the levels like Principal, Deans, HODs, Office Superintendent etc.
- Institution involves faculty and staff to represent different committees such as CCC, LMC, Anti-ragging, Women's Grievance cell, Grievance redressal cell, IQAC etc.

Board of Governance consists of following members:

Sr. No.	Name of Committee Member	Designation
1	Mr. S. D. Ganage	Chairman, Governing Council, President, M. M. Mandal (or his nominee)
2	Dr. S. B. Jadhav	Management Nominee
3	Prin. B. G. Jadhav	Management Nominee
4	Mr. K. H. Mungale	Management Nominee
5	Mr. A. S. Pawar	Management Nominee
6	Mr. S. S. Garge	Management Nominee
7	Mr. S. S. Borade	Management Nominee
8	Mr. U. Ramesh	Ex-Officio Member AICTE Regional Office
9	University Nominee	University Nominee (To be nominated by SPPU)
10	Dr. S. K. Mahajan	DTE Nominee
11	Mr. Mohan Anturkar	Governing Nominee (Industrialist)
12	Mr. Amol Bore	Governing Nominee (Technologist)
13	Mr. G. K. Pathak	Governing Nominee (Educationist)
14	Mrs. S. N. Deshmukh	Teacher
15	Dr. K. R. Patil	Teacher
16	Dr. S. M. Deshpande	Principal of the Institution

In order to ensure academic and administrative improvement, a local managing committee is formed and meets twice in a year.

Local Managing Committee:

Sr. No.	Name of Committee Member	Designation
1	Mr. S. D. Ganage	Chairman LMC, President, M. M. Mandal (or his nominee)
2	Mr. K. H. Mungale	Secretary of the Management (or his Nominee)
3	Prin. B. G. Jadhav	Local Member Nominated by MM Mandal
4	Mr. A. S. Pawar	Local Member Nominated by MM Mandal
5	Mr. S. S. Garge	Local Member Nominated by MM Mandal
6	Mrs. S. N. Deshmukh	Teacher, Elected by the Teachers of the Institution
7	Mr. V. W. Bhatkar	Teacher, Elected by the Teachers of the Institution
8	Mr. R. V. Dagade	Teacher, Elected by the Teachers of the Institution
9	Mr. S. U. Aboti	Non-Teaching Employee, Elected by the Non-Teaching Employees of the Institution
10	Dr. S. M. Deshpande	Member Secretary, Principal of the Institution

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. Institution has established IQAC (Internal Quality Assurance Cell) to ensure quality and higher standards. IQAC has formulated various quality improvement policies related to academics and administration for smooth working.

Quality policy is developed based on vision and mission of Institution. It is driven through the functional committees involving Principal, Deans, HODs,

Faculty members and Students. Quality policy of the Institution is deployed and reviewed through continual feedback from all stake holders.

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 Institution has a perspective plan for development. Management always supports for infrastructure enhancement, quality improvement and boost up student employability.

The Institution has initiated to develop Center of Excellence in all disciplines. Faculty members visit industry to get opportunities like student internship, sponsored projects, expert sessions, training sessions, placements etc. CRD and Industry Institute Interaction Cell are working to strengthen student placement. Faculty members are motivated in terms of higher education, publications, funded research projects etc.

Perspective plan is as follows:

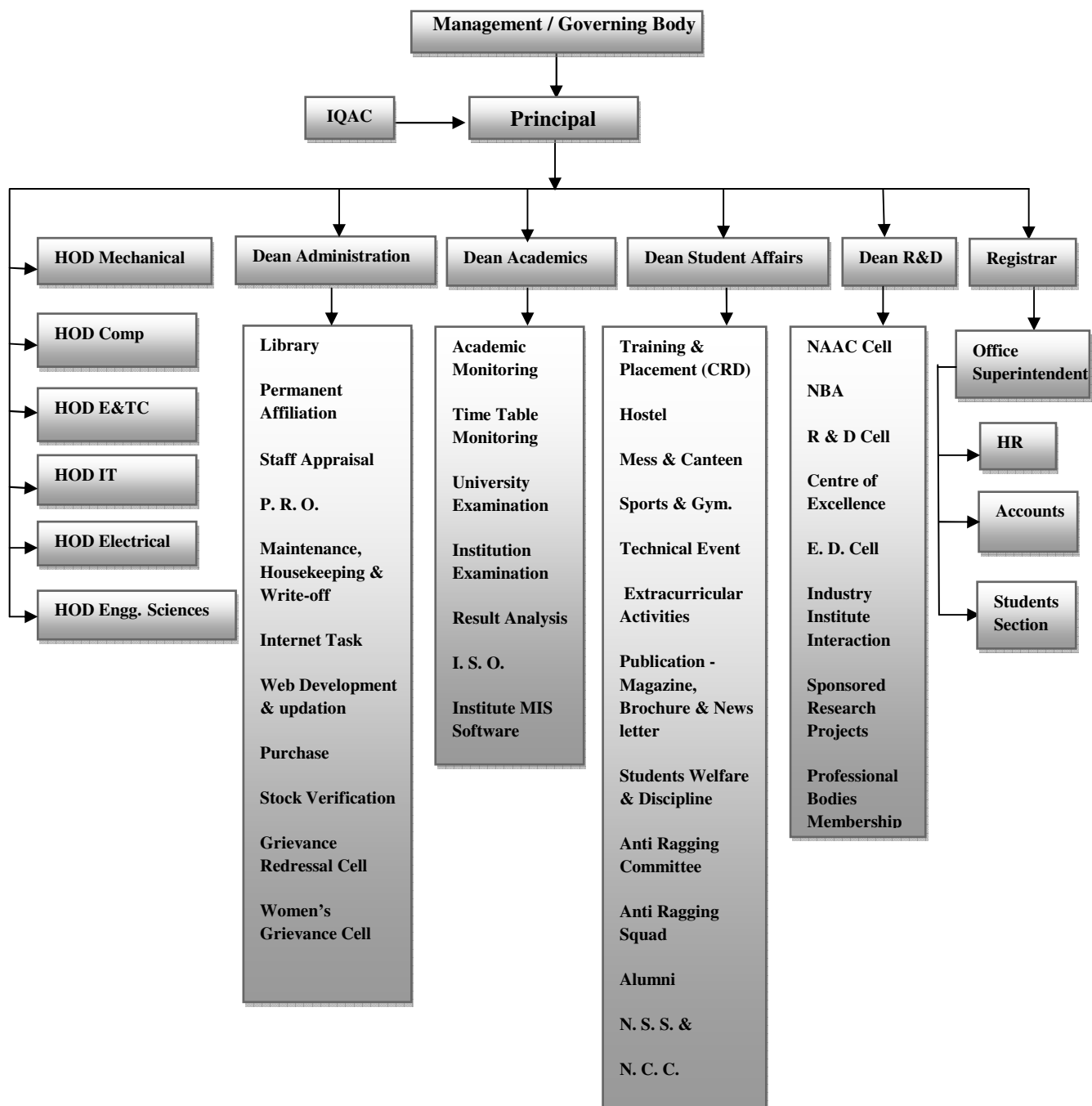
- ISO 9001:2008 certification
- NBA Accreditation, ABET Accreditation
- Establishment of Research center
- Setting up of the Incubation Center for promoting entrepreneurship
- To get recognized as an autonomous Institution

6.2.3 Describe the internal organizational structure and decision making processes.

As per the guidelines given by management, academic and administrative departments are lead by Principal, Deans and HODs. Principal is the chair person of IQAC. Various functional committees consisting of staff members and students are categorized under Administration, Academic, Student affairs and R&D which are headed by Deans. These four categories are taking care of curricular, co-curricular and extra-curricular aspects. HR section, student section and accounts section are headed by the Office Superintendent. Institution has central facilities like CRD, Hostel and Library.

The organization structure is as follows:

ORGANIZATIONAL STRUCTURE



Institutional Decision making process is as follows:

Our proactive management always supports for overall development of Institution. By considering multidimensional growth of students, Institution organizes various activities like industry expert sessions, workshops, seminars, technical events, industrial visits, on-line courses, Add-on courses, sport competitions, social gathering etc.

To organize any event, proper procedure is followed. Committee members discuss and prepare plan of execution along with required budget by involving purchase committee members. Functional Head/ Dean/ HOD review the proposal and forward it to the Principal for approval. With necessary suggestions if any, proposal is further forwarded to management. After approval, proposal is submitted to account section and then next required actions for plan implementation are carried out.

For departmental development, HOD submits annual budget which is verified by Principal in the month of January of every year and same is sanctioned by management.

6.2.4 Give a broad description of the quality improvement strategies of the Institution for each of the following

- **Teaching & Learning**
- **Research & Development**
- **Community engagement**
- **Human resource management**
- **Industry interaction**

• **Teaching & Learning**

Faculty members regularly attend FDPs/workshops to update their knowledge. They share their experiences and promote excellence in teaching within departments. Senior faculty members are assigned to first and second year classes to strengthen basic concepts of the subject. For difficult subjects, tutorials, extra lectures and lab hours are conducted. Subject experts share their knowledge under inter departmental Resource Pooling concept. Teachers also organize remedial coaching for weak students. Students are made aware of contents beyond syllabus and spoken tutorial by IIT Bombay. Institution has been granted the status of nodal center for Virtual Labs by IIT Bombay to conduct hands-on practice sessions. Faculty members and students are motivated for on-line certification courses enrollment. Innovative learning activities such as unit wise quiz competitions, surprise tests, crosswords, Flipped Class room etc. are conducted. CRD sessions are planned in timetable to guide the students. Industrial visits and add-on courses are arranged on regular basis. Institution arranges guest lecture/ Seminar/ Expert lecture/ Group Discussion to develop students' technical and soft skills.

- **Research & Development**

The Institution continuously encourages the teachers for research work. As of now, 19 faculty members are pursuing PhDs and 8 faculty members have been awarded PhDs. Institution has Center of Excellence to channelize the research and development. Few of the faculty members have filed and published patents and are working on BCUD funded research projects. Students have marked their footprints in research oriented technical events. e-Resources are extensively used by students and staff members. R&D committee motivates faculty for research by organizing various sessions like expert lectures.

- **Community Engagement**

Organization works for 'Welfare of masses'. Institution follows this principle and inculcates social responsibilities among staff and students through activities like NSS, NCC, blood donation camps, visit to old-age homes and blind schools, tree plantation activity, traffic awareness and Swachata Abhiyaan. Students and staff actively contribute financially for medical emergencies. Students are also involved in various community engagement activities under the banner of respective student association.

- **Human resource management**

Institution makes conscious efforts to attract and retain faculty members who have acquired higher qualification and adequate experience. Institution recruits competent faculty members on the basis of their qualification and knowledge as per AICTE norms. Industry/subject expert's lectures are arranged for professional development. Birthday celebrations for employees are arranged at department level. Separate cultural programs for ladies (*Gavaksh*) and gents staff (*Unmesh*) are organized. Felicitation of employees for qualification enhancement or achievements is regular practice of appreciation. Timely medical and maternity leaves are granted.

- **Industry interaction**

The Institution has formed Industry Institution Interaction cell. It consults with industries on various issues for the improvement of education system and to bridge the gap between industry and Institution. Industry experts are invited for project competitions, project guidance and to deliver lecture based on contents of syllabus of particular subject. Seminars, workshops, conferences are also conducted in the Institution premises. The Institution also organizes Industrial visits. Students regularly get exposure of industry through sponsored projects. Faculty members visit industry as per their domain to get an opportunity for student internship, training sessions, sponsored projects, placements etc. Academic advisory board provides innovative suggestions to achieve excellence.

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?

Principal conveys the adequate information to the top management by means of CCC meeting, BOG meeting, LMC meeting, Budget meeting, Industrial Advisory Board and CDC meeting. Stakeholders are informed through PTM, Alumni meet, annual report, departmental meeting and interaction with students.

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 promotes staff for following:

- Management encourages staff to participate in Faculty Development Programs, National/International seminars, conferences, workshops and research activities
- Appreciation letters are awarded to faculty for 100% University result of theory subjects
- The Institution has decentralized all activities amongst all the faculty and staff members to ensure the effectiveness and efficiency of the Institutional processes

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

The following are the resolutions made by the Management Council in the last year:

Sr. No.	Resolution	Current Status
1.	To improve existing infrastructure	As and when required
2.	To provide Separate canteen and mess facility	Completed
3.	To construct new hostel building	Completed
4.	To implement various environmental activities in campus	Completed Green Audit and Energy Audit, e-waste management
5.	To start Center of excellence in each department	In Process
6.	To organize national/state level Conferences/ workshops at each department	Regular Practice
7.	To get accredited by NAAC, NBA, ISO, ABET	In Process
8.	Salary revision	DA rise , AGP rise etc.

At present, class room complex of 16 classrooms, electrical dept lab and hostel is ready for utilization. Separate canteen and mess facility is made available for staff and students. Institution is conscious about environmental activities such as Solar water heater system, Solar Power Plant, e-waste management, green audit and energy audit. Center of excellence, NAAC, NBA, ISO, ABET and permanent Affiliation are in the process.

6.2.8 Does the affiliating University make a provision 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 Institution is strongly in favor of autonomy. The Institution has immediate plan to get accredited through NAAC and NBA. Also, the Institution is planning to get permanent affiliation and ISO 9001:2008 certifications. The Institution has future plan for obtaining autonomy.

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 unique nature of the Institution and homely atmosphere ensure that grievances /complaints are attended in an informal manner and are timely resolved.

- Management has formulated CCC which visits Institution in each semester to discuss and resolve the problems
- The Hostel committee deals with all matters relating to the affairs of the hostels. The minor problems of students are solved by respective heads and Principal
- Women grievance cell, Grievance Redressal cell and Anti ragging cell work actively to resolve the issues, cognizance is taken, time frame is made, appropriate steps are taken, grievance and complaints are attended
- Suggestions and feedback are collected from parents in PTM, necessary actions are taken and conveyed to parents in next PTM forming 360⁰ feedback system
- Interaction with staff, students and alumni through staff meeting, TG meeting and alumni meet is regular practice

6.2.10 During the last four years, had there been any instances of court cases filed by and against the Institution? Provide details on the issues and decisions of the courts on these?

No. There is no such a court case.

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 regularly collects the feedback from students regarding Institutional processes.

- Principal, HOD and staff interact regularly with students and get the feedback in formal and informal way regarding academics and amenities provided
- Students' feedback is taken into consideration and necessary amendments are introduced in the system. e.g. library timings are increased, canteen food quality has been improved, frequency of industrial visit etc has been

increased and placement activity has been boosted

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?

Institution makes sincere efforts to enhance the professional development of its teaching and non-teaching staff as follows:

- Faculty members are motivated to become a member of professional bodies like ISTE, IEEE, IAENG, ISRD, IETE, CSI, ACM, ISHRAE, SAEINDIA, ISACA etc.

Professional Membership Details

Sr No	Department	International	National	Total
1	Computer	51	27	78
2	E&TC	32	24	56
3	IT	23	13	36
4	Mechanical	59	60	75
5	Electrical	31	10	41
6	Engineering Science	31	10	41
7	MBA	0	3	3
Total		230	105	335

- Staff members are encouraged for higher education and necessary support is made available for them
- As a part of regular practice, various training programs are arranged for staff members. (e.g. Mission 10X for newly joined staff members, Personality Development Programs, Business English communication 1000 words program)
- Faculty members are encouraged and sponsored to attend faculty development programs, conferences, seminars and workshops at National and International levels
- Interaction between Industry and Institution is facilitated through MoUs. Professional trainings are arranged through CII and industrial visit
- Resources like NPTEL video lectures, e-journals, on-line certification courses are used to improve their teaching skills
- Faculty members are encouraged to apply and execute research projects from external funding agencies e.g. BCUD, AICTE, ISHRAE, ASHRAE, SAEINDIA etc.
- R&D committee organizes sessions to imbibe research culture among faculty members like information regarding research funding agencies, how to write research proposal etc.
- Seed money is provided to faculty members by the Institution to boost their initial phase of research

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?

Institution strongly believes in faculty empowerment so that they positively contribute in growth of Institution and society. The strategies adopted by the Institution are as follows:

- Faculty members are encouraged to attend and organize various programs (e.g. workshops, STTP, FDP, National or International conferences) and corporate training programs (e.g. Mission 10X)
- Value based training such as Art of living Yes+ course (Youth Empowerment Program, Happiness Program), Yoga and SWOT analysis are organized for teaching and non-teaching staff members
- Senior faculty members motivate junior faculty members by attending their lectures and giving essential inputs
- Institution has mechanism of self appraisal of individual faculty member and comprehensive evaluation by HOD and students
- Resource lectures by eminent personalities are arranged for sharing their experience and knowledge
- Faculty members shoulder the responsibilities through their contribution in various functional 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 Staff Appraisal Committee of MMCOE works for collecting students' feedback semester-wise. The process and purpose of collection is summarized as below

- On-line feedback is collected for all courses in each semester twice without disclosing student's identity. All students having attendance more than 75% participate in giving feedback of subject teacher and respective non teaching staff
- Students give feedback on five point scale (i.e. Excellent, Very good, Good, Average and Poor)
- The feedback is communicated by HOD to the staff for corrective action
- The Institution has adopted its own appraisal system from the year 2009 and is known as 'ABCD Analysis' (360⁰ Appraisal System). In this system, total Score of the faculty member is based on parameters and their corresponding weightage as shown in following table.

Parameter	Weightage
Student Feedback	30%
University Result	30%
Class Preparation	10%
Assignment	10%
Peer Feedback	10%
HOD/Principal's Feedback	10%
Total	100%

The total score of each faculty member is arranged in descending order. The categories A, B, C and D are defined as below:

- First 20% of the total number of faculty members - A category
- Next 40% of the total number of faculty members - B category
- Next 30% of the total number of faculty members - C category
- Last 10% of the total number of faculty members - D category

The following points are taken into consideration in this system:

- **Branch-wise difficulty level**—Certain branches have higher merit and hence the score derived using the result of such students cannot be compared with the result derived using lower merit students of other branches
- **Year-wise difficulty level**— Difficulty level decreases generally from FE to BE and also DSE to BE. Thus, generally, FE and DSE results show lower values
- **Subject-wise difficulty level**— In a particular semester, certain subjects are comparatively difficult with respect to other subjects of the same semester
As per the guidelines of UGC, the Institution has also adopted Performance Based Appraisal System to calculate API score from the academic year 2015-16.

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?

Performance appraisal system is a transparent process. HODs individually communicate the performance of faculty members which motivates them to perform well in coming year.

- Principal reviews the performance of staff members. Then, it is conveyed to the management and decisions are further taken jointly about their appraisal and informed to faculty by HOD
- Appreciation letters are awarded to faculty for excellent University result for theory subjects

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?

Following welfare schemes are available for teaching and non teaching staff:

- Financial support for publications (IEEE, Springer, ASME and Elsevier etc), conferences, FDPs and workshops
- Contributory Provident Fund
- Medical leave and Earned Leave (applicable to eligible staff)
- Maternity leave (applicable to eligible staff)
- Appreciation on acquiring higher qualification and excellent University result of theory subject
- Advance payment to staff member to meet their emergencies
- Birthday celebration of staff members at department level
- Gymnasium facility

- **MMM's Sevakanchi Patsanstha Ltd.(Employees Credit Co-operative Society)** The objective of this co-operative society is to provide helping hands to the needy employees of the Institution. It also encourages employees by felicitating them and their family's for noteworthy achievements.

Facilities provided by co-operative society:

- Scholarships for education of employee's children
- Monetary help for medical purposes
- Group insurance
- Loan facility up to Rs. 5,00,000/- within a day.
- In emergency cases, loan of Rs. 40,000/- without interest is availed within couple of hours.

Co-operative society works positively for the welfare of the employees and their family members.

- Sweatshirts for staff members with 50% contribution by Institution/ management

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

Institution is keen to identify eminent personalities from industries and academics.

The measures taken by the Institution for attracting and retaining eminent faculty are as follows:

- Institution offers pay scale as per the norms
- Additional increments are given to experienced faculty
- Institution assigns important/ administrative responsibilities to eminent faculty
- Such faculty members are encouraged for industry liaisoning through MoUs, consultancy and training
- Institution provides conducive environment for research
- Faculty is motivated to apply for funded research projects
- Institution invites experts from industry and academics for delivering expert lecture, guiding projects. Such experts are paid honorarium at par with industry
- Once association is established, they prefer to contribute for Institution on regular basis
- Recreational activities like Gavaksha (ladies staff cultural program), Unmesh (Gents staff cultural program), Yoga sessions, Sports, staff picnic etc. are conducted for healthy environment

6.4. Financial Management and Resource Mobilization

6.4.1 What is Institutional mechanism to monitor effective and efficient use of available financial resources?

Institution has following procedures for utilization of financial resources

effectively:

- Institution has proper budgeting system which includes regular expenses like salary, maintenance and expenses on other facilities like library, hostel, canteen, sports, gym etc.
- Departmental annual budget is formulated in line with revised syllabus requirements, planned co-curricular activities, research work etc. in the month of January every year. Principal reviews the budget of all departments and forwards it to the LMC /finance committee of management
- Then finance committee of management takes a review and allots sufficient finance to carry out activities in the Institution
- At the time of actual purchase, minimum three quotations are collected from vendors. Comparative statement is prepared with the cost, quality and specification details of the product. Purchase committee head puts remark on it.
- Purchase Order is placed with the due consent of the management
- There is a systematic mechanism for release of payments for day to day expenses like payments to vendors, salary and payments to various bodies
- Provision is also made for emergency expenditure
- Principal takes regular review for effective utilization of budget

6.4.2. What are Institutional mechanisms for internal and external audit? When was the last audit done and what are major audit objection? Provide the details on compliance.

- Institution prepares budget well in advance for forthcoming financial year. It is allocated under different heads like lab equipments, consumables, furniture and fixtures, research and development, general / miscellaneous / any other items
- Institution conducts internal audit in every financial year. Last internal audit for the year 2016-17 has been carried out by internal auditor Munde Shah & Co. on 19-20 Jan 2017. There are no major objections
- During audit, it is verified that actual expenses are not exceeded the budgeted amount. Proper procedure and permission of the management is sought time to time
- External audit is conducted in every financial year. External audit of the year 2015-16 has been done on 30th Aug 2016 by Krishna Rawas and Associates. There are no objections during the audit

6.4.3. What are major sources of Institutional receipts/funding and how is deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and reserve fund/corpus available with Institutions if any.

- Internal audit gives information of Institutional funding available to meet the budgeted yearly expenses and deficit arising (if any) for running the system

- The major source of income is tuition and development fees from the students
- The audited income and expenditure statement of academic and administrative activities of the previous four years available is shown in following table.

Details	2015-16	2014-15	2013-14	2012-13
Income	13,84,27,861	12,79,01,475	10,92,60,696	9,79,70,943
Academic Expense	10,28,96,720	11,11,19,181	8,99,03,335	7,78,30,606
Administrative Expense	1,55,57,614	1,88,06,434	1,82,67,176	2,05,71,282

6.4.4. Give details on the effort made by Institution in securing additional funding and the utilization of the same (if any).

- BCUD research grants are sanctioned from the University by the faculty members of the Institution. Total grant obtained from BCUD: Rs. 14,20,000 /- , AICTE: Rs. 21,17,000, ISHRAE: Rs. 95,000/-, ASHRAE: \$4645, NVIDIA: Rs.1,73,783.
- Grants for various faculty development programs, conferences and different workshops are obtained from University under Quality Improvement Program by Planning and Development Department. Total grants received by various funding agencies: Rs. 2,77,322/-
- Institution provides infrastructure for various competitive exams such as GATE, JEE etc. on leased basis. Money earning through this is utilize for updating facilities and their maintenance. Total income generated is Rs. 8,26,356/-.

Sr. No.	Name of The Consultant	Income Generated
1	TCS iON Pvt. Ltd., Pune (For conduction of Online Examination in association with iON Pvt. Ltd., Pune)	Rs. 6,52,559/-(Computer Department)
2	TCS iON Pvt. Ltd., Pune (For conduction of Online Examination in association with iON Pvt. Ltd., Pune)	Rs. 1,73,797/-(IT Department)

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 institutionalizing the quality assurance processes?

Yes. The Institution has an Internal Quality Assurance Cell (IQAC). IQAC was established on 04/01/2016 to enhance quality in teaching. The IQAC is constituted by a team of representatives from Management, Local Societies, Industry, Faculty and Alumni. The Cell prepares and reviews academic and administrative policies. The Internal Quality Assurance Cell (IQAC) is constituted as shown in table.

Chairperson		
1	Principal	Dr. S. M. Deshpande
Members from the Management		
1	Secretary	Mr. Kishor H. Mungale
2	Treasurer	Mr. A. S. Pawar
Nominee from Local Societies		
1	Principal, MM College of Pharmacy	Dr. M. J. Patil
2	Industrialist	Mr. Manoj P. Shirodkar
3	Alumni	Mr. Rohit Patil
Teachers		
1	Member, HOD Computer	Prof.Mrs.H.K.Khanuja
2	Member, HOD E&TC	Prof.Mrs.P.S.Sawant
3	Member, HOD IT	Prof.Mrs.Rupali Chopade
4	Member, HOD Electrical	Prof.M.R.Tarambale
5	Member, HOD Engg. Sci.	Dr.Mrs. Alka Sawaiakar
6	Member, Dean Admin	Prof.Mrs.S.N.Deshmukh
7	Member, Dean Academic	Prof.Rahul Dagade
8	Member, Dean Student Affairs	Dr.V.R.Deulgaonkar
9	Member, Teacher	Dr.V.A.Dhumale
10	Member, Teacher	Mrs.Anagha Kunte
Training and Placement		
1	Member, TPO	Mr. Prasad Muley
Administrative Officers		
1	Member, OS	Mr.S.U.Aboti
2	Member, Accounts	Mr.Milind Mujumdar
3	Member, Hostel Warden	Mr.Vilas Jadhav
Coordinator of IQAC		
1	Coordinator, Dean R&D, HOD Mechanical	Dr.K.R.Patil

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 IQAC evaluates the Institutional practices and provides suggestions for better quality. These suggestions are presented to the Campus Coordination Committee by the Principal and after extensive review, the same has been implemented.

Decisions approved by Management:

- To become member of QCFI (Quality Circle Forum of India)
- To arrange sessions on weekends on Quality policies and Total Quality Management (TQM) for faculty members and students

Decisions implemented by Institution:

Our Institution is now life member of QCFI (Quality Circle Forum of India).
Quality enhancement activity is conducted weekly.

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

- Yes. There are three external members in the IQAC committee namely Dr. M. J. Patil - Principal of sister concern institute, Mr. Manoj P. Shirodkar – Industrialist and Mr. Rohit Patil – Alumni.
- All these members give their recommendations to ensure high quality standards in the Institution.

d. How do students and alumni contribute to the effective functioning of the IQAC?

- Students give the course end survey and alumni provide feedback about industry expectations for continuous improvements.
- Exit survey form is collected from passing out students, which is analyzed for further improvement.
- Alumni meet is conducted every year to build business relationship.
- Alumni gives valuable feedback related to industry need and curriculum improvement.
- The suggestions given by alumni are duly considered and accordingly the policies are reviewed and revised.

e. How does the IQAC communicate and engage staff from different constituents of the Institution?

- All Heads of Departments and deans are members of IQAC committee.
- HODs communicate to the concerned staff in their department by conducting meetings or through official mail ID to ensure the effective functioning and involvement of all staff.
- Deans communicate to concerned functional heads of various committees by conducting meetings.
- The members of IQAC committee motivate faculty for doing research work and encourages them to apply in various funding schemes. They monitor various research proposals. They give suggestion for shortfalls and improve quality of the research proposal.

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 operationalization.

- Yes. The Institution has an integrated framework for quality assurance of the academic and administrative activities.
- The quality assurance of academic and administrative activities is monitored by IQAC committee in consultation with Principal and Governing Council.

The Quality assurance in different categories is as follows:

Quality Assurance in HR

- HR/Leave policy revision
- Staff appraisal-360 degree, Appraisal as per Performance Based Appraisal System for Academic Performance Index (API)

Quality Assurance in Academics

- Academic audit thrice in a semester
- Weekly Class Test Conduction
- Remedial Classes for weak students
- Staff appreciation for 100% theory subject result
- Motivation for higher studies
- Academic Advisory board

Quality Assurance in Feedback System

Institution considers feedback of various stakeholders for overall improvement.

- Student feedback
- Parent feedback
- Industry feedback
- Alumni feedback

Quality Assurance in Calibration and Maintenance

- Periodical Calibration of equipment and machinery
- Regular maintenance of equipments

Quality Assurance in Advisory Board

- QA in Examination
- Internal examination squad
- QA in Campus discipline
- Anti-ragging squad
- Grievance redressal cell
- Women's grievance cell

Quality Assurance in Industry Interaction

- Faculty liaisoning with industry
- Industry Visits, Internships, Project guidance and Expert Lecture
- Guidance for Centre of Excellence, Collaboration for research work

Quality Assurance in Value Education

- Formation of Ten Commandments
- Yes + course
- Mind spa
- Celebration of yoga day

Quality Assurance in Mess and Canteen

- Improvement in food quality
- Proper schedule for mess facility

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. The Institution conducts the various training programs (Mission 10x) for staff members to ensure the effective implementation of teaching learning process.
- Quality assurance training programmes conducted in the Institution are as follows:

Sr. No.	Program	Resource Person	Objective
1	Mission 10x	Senior Mission10x certified faculty.	Improvement of teaching Learning Process
2	Yes+	Mr. Arvind Goyal, Mrs. Neha Goyal	Art of living
3	1000 words	Mr. Jogalekar	Vocabulary of English
4	Personality Development	Dr. Shriram Nerlekar, Director, IMERT, Pune	Improve presentation skills, team work management, leadership qualities
5	S5 & Kaizen	Mr. Madhukar Paranjape Mr. Jyotiram Jadhav	Quality Improvement
6	Personality Development	Ms. Jaya Gophane	Confidence building and positive thinking
7	World Quality Day 2016 Theme: "Quality in the System of Higher Engineering Education, Challenges"	Dr. T. P. Singh, Director, SIT, Lavale Dr. Madhuri Khambete, Principal, CCOEW Dr. Ramesh Kasetwar, Ex-VC, CP University, Kota, Prof. N. Ratnalikar, Founder President, EEF	Quality improvement in teaching-learning process
8	Weekly quality enhancement activity	Internal faculties	Quality assurance

- The staff members are motivated to undergo various audit courses to understand and perform the internal audit effectively.

6.5.4 Does the Institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the Institutional activities?

- Yes. The Institution carries out the periodic academic audit and provides the feedback for improvements. The Institution has been following the procedure of organizing Academic Audits for each semester.
- First academic audit is carried out by academic coordinator in the beginning of semester. In second academic audit, a team consisting of departmental academic coordinator and other department's academic coordinator verify course files, class teacher files and teacher guardian files. Last academic audit is carried at end of the semester.
- Feedback given by audit team is conveyed to respective faculty for taking corrective actions which helps in quality assurance.

6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/ authorities?

- Feedbacks are collected from all stakeholders (Students, parents, alumni, industry).
- LIC of University visit in each academic year for quality inspection.
- Membership of professional bodies like IEEE, ISTE, CSI, SAE BAJA, ISHRAE, QCFI etc.
- The guidelines provided by all stake holders are used for internal quality assurance mechanisms.
- In consultation and association with the stake holders the Institution regularly conducts seminars, workshops and conferences.
- Faculty members are encouraged to get funds for research projects from BCUD/UGC/AICTE/DST etc.
- External quality assurance agency, CII audit

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?

The Institution has Academic monitoring committee to review the teaching learning process regularly.

- Mid-semester & end-semester student feedback is used to improve the teaching learning process.
- Course files are prepared and reviewed by academic coordinator.
- Staff academic audit is conducted three times per semester. Pre audit at the beginning of new semester, mid semester audit at the mid of the semester to verify conduction of academics and end semester audit to summarize academic activities.
- Concept of flipped classrooms is implemented for students.

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 all stakeholders as follows:

- Every semester parent teacher meet is organized in which quality policies are passed on to parents
- Vision & mission statements convey the quality assurance policies
- Quality policies and outcomes are published for external stakeholders through College Website (mmcoe.edu.in)
- Through Alumni meet, which is organized every year
- The Institution has Industry Institute Interaction Cell, which conducts the meeting and shares the information
- Through Institutional prospectus 'CONQUEST'
- Principal's annual report at Ensemble Function
- Through departmental e-newsletter and information brochure

CRITERION VII: INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1 Does the Institution conduct Green Audit of its campus and its facilities?

Yes, the Institution has conducted green audit of campus in association with Green Water Solutions Provider Pvt. Ltd. which is IGBC accredited professionals. In this process audit of various facilities such as Solid waste and recycling, Use of electricity and natural gas, use of electricity and natural gas, water and waste water management, wetlands, store water management and campus ground management, emissions and air quality, food services, hazardous waste management, e - waste management. Many activities like tree plantation, rain water harvesting, and PUC camps are conducted for creating awareness of green campus.

7.1.2 What are the initiatives taken by the Institution to make the campus Eco friendly?

The faculty members, students along with the Management are involved to make the campus Eco friendly. The initiatives taken by the Institution to make the campus environmentally benign are as follows:

➤ **Energy Conservation**

The Institution has conducted energy audit from Enrich Consultants accredited energy auditor of MEDA to analyze the energy consumption in the campus. Various aspects covered in this audit are to measure present level of energy consumption, CO₂ emissions, usage of renewable energy and assessment of various equipments from energy efficiency perspective etc. As per the recommendations given in the audit, conventional tubes and street lights are replaced by 1200 LED tube lights. Instruction boards are displayed in every classroom, staff rooms and laboratories to avoid wastage of electricity.

➤ **Use of renewable energy**

➤ **Solar water heater system –**

The capacity of Institution's hostel is 436 (boys and girls). The Institution has mounted solar water heater system on hostel terrace. The total capacity of installed solar water heater system is 15,750 liters.

➤ **Biomedical Waste Disposal & Vermi - composting –**

Vermi – composting for sanitary napkins and food waste from canteen is set up in the campus.

➤ **Solar Power Plant –**

The Institution has installed solar power plant of 1kW capacity on the terrace of Institution building which fulfills energy consumption of Automation and Control laboratory.

➤ **Rain Water Harvesting**

In our Institution, the bore-well near hostel building is recharged by rain water harvesting. Rainwater from rooftops of main building of the Institution and hostel building is collected in the pit of rainwater.

➤ **Check dam construction**

No dam construction is nearby the Institution.

➤ **Efforts for Carbon Neutrality**

Following efforts are taken to reduce carbon footprint:

1. **Tree plantation:** There are total 395 trees in which we have 41 tree species and 44 herbs/shrubs/climbers species in the campus.
2. Staff and students make use of public transport, car pooling and sharing of two wheelers to save fuel and minimize carbon footprint. PUC camps are organized every year in the Institution.
3. Faculty members and students are habitual with self discipline. They switch off computers, tube lights and other electronics equipment after use.

➤ **E waste Management**

Institution disposes unused or irreparable electronics equipments in association with 'SWaCH – e – waste collecting NGO'.

➤ **Plantation**

On the occasion of 'World Environment Day', students and faculty members participated in tree plantation. Beauty of campus is enlightened due to topological blessings and greenery at surrounding. Colorful flowers in the campus makes mind fresh. Varieties of trees are planted at the fencing of campus. Different types of trees are planted on area of 1000 sq. meter.

➤ **Hazard Management**

1. Smoke Detector, CCTV Surveillance are mounted in college building.
2. **Fire Fighting Training:** The training program on 'Demonstration of Fire Hydrant and Fire Extinguisher' is organized by the Institution. Instruction boards explaining remedial actions to be taken during fire hazards are displayed on every floor in the Institution as well as in the hostel.
3. **Chemical Disposal:** Chemicals and solutions used in laboratories are neutralized and then disposed.
4. **Plastic Waste Free Campus:** 'Plastic Waste Free College Campus' campaign is initiated in association with 'Rudra Environmental Solutions' NGO.

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 Institution.

The Institution is operational since last one decade and developed many innovative ideas. The developed concepts are now an integral part of the system and providing positive impact on the complete functioning of the Institution. Various practices are incorporated in existing systems, some of them are mentioned below:

1. Quality Assurance in Administrative system – Different policies are implemented for quality assurance in administrative system. Various committees are formed and responsibilities are assigned to everyone to harness work culture of the Institution. The Institution has formed 38 committees related to Administration, Academics, Research & Development and Student Affairs under respective Deans. The committees look after the smooth functioning of all activities.

2. Quality Assurance in Academics –

The Institution assures quality in academics by implementing uniform academic policy throughout the Institution.

- Academic audit is conducted thrice a semester .
- Institution level academic planner is prepared which includes schedule of commencement and end of semester, weekly class tests, mock practical and online tests, curricular and extracurricular events, Parent Teacher Meet, University exams and holidays.
- Innovative learning tools like group discussion, puzzles, flipped classroom, cross words and role plays are incorporated in lesson/session plans.
- Senior faculty members of the Institution conduct Faculty Orientation Program for newly joined faculty members regularly.
- A resource pool of interdepartmental subject experts is formed.

3. Corporate Relations Division (CRD) Cell– Objective of CRD is to train students in aptitude, soft skills & technical knowledge through structured trainings. Placement grading process based on different parameters is carried out for all the students. Grade of every student is calculated based on evaluation of various parameters, such as English Test, Group Discussion and Technical Interview by third party experts.

4. Library – The central library is well equipped with unique collection of Encyclopedia, handbooks, textbooks, reference books and Journals. Institution has membership of Jaykar library and ARAI. Book bank facility is provided in which 5 books per student are issued per semester. Digital library

based on Hadoop framework is available to share e-books, Journals, white papers, IEEE papers, BE project synopsis etc.

5. Alumni Association – The purpose of forming alumni association is to maintain healthy relationship between alumni and the Institution. A formal alumni meeting is conducted once in a year but they have frequent interaction with students throughout the year. Alumni motivate students, conduct technical events, guide final year students and deliver expert lectures. Alumni plays important role in quality assurance in teaching learning process. They convey industry requirements, technical up gradations required in academic process. In addition to this, scholarship is made available to needy and economically weak students by Alumni.

6. R & D Committee – R & D committee aims to initiate research activities amongst faculty members. The committee organizes sessions to motivate faculty members to do funded research projects and publish papers in reputed National/International Journals and conferences.

7. Google Apps – All faculty members and students actively utilize the facility of Google Apps (e-mail collaboration tool) for paperless work by sharing notices, assignments and study material.

8. ISR (Institution Social Responsibility) – We need to spread awareness about social responsibilities among students. It is our moral responsibility to give back, what we get. Initiatives taken by the Institution are mentioned below:

- **Blood Donation Camps** – The Institution organizes blood donation camps every year.
- **NSS** – The University has sanctioned NSS unit of 100 students headed by a Program Officer. Institution in association with SPPU organized NSS camp at Manerwadi for last three years to create awareness among villagers about education, career opportunities, self hygiene etc. Activities conducted under NSS are celebration of 'Rashtriya Ekta Diwas', Swachha Bharat Abhiyan, tree plantation, International white cane day , helmet drive, road safety program, passport drive.
- **'Aadhar Club' and 'Joy of Giving club'** are formed to carry out various charity activities for orphanage.
- **Women empowerment** - Institution celebrates International Women's Day every year. Ladies staff members enthusiastically participate in 'Gavaksh - Ek Zaroka', cultural program organized in Ensemble (annual social gathering) to showcase their hidden talent. Self defence programs are organized for girl students.
- **Donations** -

Students and staff members understand the social issues and try to help the needy people. The generous donations of amount Rs. 10,30,245/- is donated till the date.

- Institution participated in 'Plastic Waste free city' campaign on 13th Feb 2016.

9. ECA committee – Extra Curricular Activity committee harnesses hidden talent such as dancing, singing, acting etc. of students. Students enthusiastically participate in intercollegiate competitions like Purushottam Karandak, Firodiya Karandak, Sarpotdar Karandak, Suman Karandak, Moodindigo and various street plays.

10. Sports – Students actively participate in sports organized on every Saturday. Proportional importance is given to the sports along with regular academics. Intercollegiate sports competition 'MM Karandak' and interdepartmental competitions are conducted.

11. Health center tie up – The Institution is having ambulance and emergency hospital facility for staff and students.

12. MMM's Sevakanchi Patsanstha Ltd. (Employees' Credit Co-operative Society) The objective of this cooperative society is to provide helping hands to the needy employees of the Institution. It also encourages employees by felicitating them and their family's for noteworthy achievements. Facilities provided by co-operative society are scholarships for education of employee's children, monetary help for medical purposes, group insurance, loan facility up to Rs. 5, 00,000/- within a day, in emergency cases, loan of upto Rs.40,000/- without interest is availed within couple of hours. co-operative society works positively for the welfare of the employees and their family members.

These incorporated innovative ideas along with regular practices proved supportive for overall development of students and staff members.

7.3 Best Practices

7.3.1 Elaborate on any two best practices as per annexed which have contributed to the achievement of the Institutional objectives and/ or contributed to the Quality Improvement of the core activities of the Institution.

Best Practice – I

Title of the Practice – Professional Skills development through student centric activities and competitions

1. Goal

Objectives of this best practice are to enhance professional skills of student to improve their employability and organize trainings to motivate students for higher education and Entrepreneurship. So as to empower them with current Industry needs and job requirements.

2. The Context

Industry needs are frequently changing, technologies are rapidly updating. Students must be aware about these changes and update their skill sets. Though the students are good in academics few of them are lacking in presentation and technical skills. They are needed to be groomed in technical as well as presentation aspects so that they can fulfill soft skill requirements in Industry. Hence, Technical Event functional committee is formed at the Institution level, in which functional head and faculty representative from each department are actively working to achieve the objectives.

3. The Practice

Enhancing out of box thinking of students is noteworthy point of this practice. Efforts taken for the same are mentioned as follows:

- Organizing University sponsored workshops on emerging technologies for faculty members and students
- Students enthusiastically participate/publish their ideas in National / International Conferences and Journals.
- Expert/Guest lectures are frequently conducted for students by Industry Professionals for imparting knowledge of latest trends in Industries.
- Technical events are organized to improve professional and technical skills of students to enhance their employability.
- Faculty members and students are active members of professional bodies like ACM, CSI, ISTE, SAEINDIA, ISHRAE, ASHRAE, IEI, QCFI, IAENG, ISRD, etc.
- Various student associations such as ITSA, MESA, ACES, BETA and EESA are formed. Technical and non technical events are organized under the dynamic leadership of student co-ordinators of each student association.
- Every department conducts add-on courses/certification courses for students to enhance their technical skills.
- Personality development programs such as Art of Living, Barclays etc. are arranged to groom and enrich presentation skills of students.
- Industrial visits are organized to understand professional work culture of Industries.

4. Evidence of success

- The students of the Institution participated in SUPRA SAEINDIA 2017 , Utkranti' 17 , Digital Hackathon etc.

- Team ABHEDYA participates every year in BAJA SAEINDIA. In 2014 team stood first amongst debut teams and ranked 13th, in 2015 secured 11th rank, won prize of Rs.40,000/- in 2016 and 14th rank in 2017.
- State level workshop on 'Internet of Things Towards a Smart Future – IoTTSF'2016' was organized in association with Innovians Technologies and IIT (BHU).
- Mr. Rohit Patil and Mr. Chinmay Nazare were placed through BAJA SAEINDIA.
- The student team participated in Go-Kart:International Series of Karting 2015 competition and received 'Best Design Approach' award.
- Under 'SAEINDIA Foundation Awards', the scholarship of Rs 4,000 each was awarded to four students of Institution.
- Team RUDRA participated in Robocon-15 and received 'BEST ROOKIE AWARD' at national level.
- The student team participated in 'Winter School for Programming' organized by Persistent Systems Pvt. Ltd.
- CyberVault Security Solutions Pvt. Ltd. selects students under MoU for internship and placement.
- Students are participating in various training programs organized by BSNL.
- Department of Computer and IT conducts Online Spoken Tutorial certification courses for C, C++ and Java organized by IIT, Mumbai.
- Nikhil Savanji secured first prize in National level technical event Techlligent2014 in 'Roborace' and Innovation2k14 in 'Trackobot' organized by PCCOE, Pune and CCOEW, Pune respectively.
- Student of ME Computer Engineering Ms. Asma Shaikh has received best paper award in cPGCON 2014 sponsored by the University.
- Mr. M. R. Tarambale received 'Young Investigator Award' and Inter Scholastic Certificate for research paper entitled at International conference at Goa, in 2012.

5. Problems Encountered and Resources required

- It is difficult to find the right person from the industry who can authoritatively deliver sessions on the latest technologies. It is challenging to maintain a balance between academic activities and technical event activities.
- Some students are from vernacular background and have poor communication skills in English which needs to be improved.

6. Resources Required – Necessary provisions are made in budget allocation, students must be self motivated for availing memberships of professional bodies and student chapters.

Best Practice –II

Title of the Practice: 'Industry Institute Interaction'

1. Goal

Main objective is to establish and maintain relationship with corporate world through MoUs, center of excellence, sponsored projects, industrial visits and in-plant trainings for students and faculty members.

2. The Context

Institution has taken initiative to interact with various industries through Industry Institute Interaction committee that maintains professional relations with industries. Industrial visits are arranged for students and faculty members to gain practical exposure and keep abreast their knowledge. To achieve academic excellence, students are encouraged to interact with industries and research organizations through FDP, industrial visits, sponsored projects, trainings, internships, consultancy etc. Industry professionals are regularly invited for sharing their knowledge with the students. It open up a fresh avenue to young enthusiastic minds and faculty members to develop skills across diverse areas including managerial skills, social responsibilities and Industry liaison.

3. The Practice

To strengthen the Industry Institution Interaction, Institution is a member of reputed Industry professional bodies like MCCIA, CII, DICCI, IGCC etc. Institution is a member of Education Excellence Forum under CII. Including MMCOE, CII has shortlisted three Institutions in SPPU which provides numerous interventions, architected solutions, recommendations and training to academia throughout the year. EEF focuses on faculty development program, student development program, curriculum review, and international linkages. Industrial Liaison program is aimed at developing meaningful relationships with industries to create and strengthen mutual beneficial relationships between Institution and Industry.

- **Faculty Development Program –**

To upgrade professional skills, various FDPs are conducted which includes interactive sessions by Industry experts and Industry workshops/ trainings.

- **Student Development Program –**

For overall development of students, various programs are conducted like personality development, career counseling, technical competitions, industry training programs, industrial visits, add on courses etc.

- **Curriculum Review –**

The Institution has constituted Academic Advisory Board which comprises of experts from various industries. Their suggestions are

incorporated into the curriculum through various add-on courses/guest lectures.

● **International Linkages –**

Institution is trying to build International linkages by availing membership of professional bodies, MoUs with various Industries and partnership between Industry and academia through consultancy. MoUs are signed with various companies and different activities such as project sponsorships, competitions, seminars, workshops and technical events are conducted.

4. Evidence of Success

- Institution has received project grant of US \$ 4645 from ASHRAE and Rs. 95,000/- ISHRAE
- A session on 'Demystifying campus hiring and corporate ethics' was conducted on 07/02/2017 for third year Computer Engineering students.
- Institution has been granted status of nodal center for virtual labs and Spoken Tutorial by IIT Bombay.
- Students participated in TechnoCHILL under ISHRAE, won Rs 19,000/- in 2017, Rs. 24,000/- in 2016 and received scholarship of Rs 20,000/- from Durga Devi Charitable Trust.
- Institution is honored with 'Distinguished College' award and Head of IT department with 'Distinguished HOD' award by CSI TechNext 17 at IIT Bombay on 15th January 17.
- Institution is felicitated by Shri. Vinod Tawade, Hon'ble Minister, Higher and Technical Education, Govt. of Maharashtra by conferring CII Education Excellence Trophy.
- Employability Skill Development (ESD) training program is organized every year in association with Zensar Technologies.
- Institution conducted BARCLAY'S youth employability training.
- Department of Computer Engineering is recognized as a 'GPU Education Center' by NVIDIA and 'Center of Excellence' by Persistent Systems Limited.
- Department of Electronics and Telecommunication Engineering has developed laboratory in collaboration with TEXAS Company.
- Faculty members attended exhibition & conference on 'Renewable Energy' organized by MCCIA on 9th & 10th Dec 15.
- Every year, majority of students get internship and sponsored projects under Industry Institution Interaction and MoUs.

5. Problems Encountered –

- Sometimes it is a hurdle to call speakers from prominent companies for expert sessions because of their busy schedule.
- Lack of sponsored project for final year students.

6. Resources Required – Need Industry sponsorship for in-house projects.

7. Contact Details

Name of the Principal: Dr. S. M. Deshpande

Name of the Institution: Marathwada Mitra Mandal's College of Engineering, Karvenagar

City: Pune

Pin Code: 411052

Accredited Status: Applied for accreditation

Work Phone: 020-25473160

Fax: 020 - 25470909

Website: www.mmcoe.edu.in

E-mail: principal@mmcoe.edu.in

Mobile: 8446447118

5. EVALUATIVE REPORT OF THE DEPARTMENTS

COMPUTER ENGINEERING

1. **Name of the Department:** Computer Engineering
2. **Year of Establishment:** 2006
3. **Names of Programme / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 UG: Bachelor in Computer Engineering
 PG: Master in Computer Engineering

4. Names of Interdisciplinary courses and the departments/units involved

Sr. No.	Beneficiary class	Interdisciplinary Courses	Departments involved
1	SE	Engineering Mathematics –III	Engineering Science
2	SE	Microprocessor Interfacing Techniques	Electronics & Telecommunication
3	SE	Computer Graphics	Information Technology
4	ME	Software Design & Architecture	Information Technology

5. Annual/semester/choice based credit system (programme wise)

UG:-

- I. Semester Pattern up to Academic Year - 2014-2015
- II. Semester Pattern Credit Based System introduced for First Year Engineering from A.Y. 2015-16

PG: - Semester-Pattern Credit Based System.

6. Participation of the department in the courses offered by other departments

Sr. No.	Beneficiary Class	Interdisciplinary Courses	Departments Involved
1.	SE	Object Oriented Programming	Electronics & Telecommunication
2.	TE	Operating System	Information Technology
3.	SE	Numerical Method & Computer Programming	Electrical
4.	FE	Fundamentals of Programming Languages I & II	Engineering Sciences

7. Courses in collaboration with other universities, industries, foreign institutions etc.

Sr. No.	Name of the course	Name of the collaboration	Year
1.	"UTKRAANTI 2017 -Android App Development"	Entrepreneurship Development Cell, IIT Delhi	2016-17
2.	Training on Core Java, Design Analysis of Algorithms and System Programming & Operating Systems	Sunbeam Institute of Information Technology, Pune	2016-17
3.	Employability Skills Development Program on advanced .NET – Phase III	Zensar Technologies, Pune	2016-17
4.	PCI Winter School 2016 on “Shapes & Languages, Laws & Transformations	Persistent Systems Ltd, Pune	2016-17
5.	One week National Summer Training Program (NSTP) on “IoT using Raspberry Pi”	Entrepreneurship Development Cell, IIT Roorkee	2016-17
6.	Internship Training Session on “Cyber Forensics”	Webfence IT Security Pvt. Ltd. Pune	2016-17
7.	GTT-Barclays Youth Employability Initiative for Communication skills Programme	Barclays & GTT	2016-17
8.	Employability Skills Development Program on “.NET and Soft skills”-Phase I & II	Zensar Technologies, Pune	2016-17
9.	PCI Summer School 2016 on “Program Expression and Program Execution Techniques”	Persistent Systems Ltd, Pune	2016-17
10.	Spoken tutorial based software course on C and CPP Programming	IIT Bombay and MHRD Government of India	2015-16
11.	Spoken tutorial based software course on Java Programming	IIT Bombay and MHRD Government of India	2015-16
12.	GTT-Barclays Youth Employability Initiative for Communication skills Programme	Barclays & GTT	2015-16
13.	Training program on Education and Employment enhancing vocational skills for final year students	Zensar Technologies, Pune	2015-16
14.	Course on ‘Algorithms in machine learning and data mining’	Persistent Systems Ltd, Pune	2015-16
15.	"Winter School for Programming"(A Course on programming centric integration of various foundational aspects of Computing)	Persistent Systems Ltd, Pune	2015-16
16.	Training program on education and employment enhancing vocation skills	Zensar Technologies Pune	2014-15
17.	Training program on IBM COGNOS & Business Intelligence	IBM India Pvt. Ltd., Pune	2014-15

8. Details of courses/program discontinued (if any) with reasons:
NIL

9. Number of teaching posts
(Sanctioned: As per AICTE norms)

Sr. No.	Teaching Posts	Sanctioned		Filled	
		UG	PG	UG	PG
1	Professors	3	1	0	0
2	Associate Professors	6	1	0	0
3	Assistant Professors	18	1	24	3

* Recently 4 Adjunct Faculty members are appointed

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 experience	UG/PG	No. of PhD students guided in last 4 years
1.	Ms. H. K. Khanuja	M. E., PhD*	HOD & Asst Prof	Database Forensics	15	PG	0
2.	Ms. S. B. Jadhav	M. E.	Asst Prof	Computer Engg	14.6	PG	0
3.	Ms. R. M. Dalvi	M. E.	Asst Prof	Computer Engg	11.6	PG	0
4.	Mr. R. V. Dagade	M. E., PhD*	Dean (Academics), & Asst Prof	Pattern Recognition	14.6	UG	0
5.	Ms. S. N. Shekapure	M. E. PhD*	Asst Prof	Artificial Intelligence	10.6	UG	0
6.	Ms. A. V. Shinde	M. E.	Asst Prof	Computer Engg	11	UG	0
7.	Ms. S. S. Shiravale	M.E., PhD*	Asst Prof	Image Processing	10.6	UG	0
8.	Ms. J. A. Wagh	M. E.	Asst Prof	Information Technology	10.6	UG	0
9.	Ms. G. R. Chillarge	M. E.,	Asst Prof	Security in MANET	13	UG	0
10.	Ms. S. P. Mone	M.Tech	Asst Prof	Computer Engg	10.5	UG	0
11.	Ms. P. K. Dhule	M. E.	Asst Prof	Computer Engg	10	UG	0
12.	Ms. S. D. Sapkal	M. E.	Asst Prof	Computer Engg	5.10	UG	0
13.	Ms. A. M. Bhugul	M. E.	Asst Prof	Computer Science & Engg	4.6	UG	0
14.	Ms. P. A. Deshmukh	M.E.	Asst Prof	Computer Engg	2.0	UG	0
15.	Ms. I. S. Savant	M. Tech	Asst Prof	Computer Science & Engg	13.6	UG	0
16.	Ms. A.A.Thakar	M.E.	Asst Prof	Computer Engg	6	UG	0
17.	Ms. P. S. Mehta	M. E.	Asst Prof	Computer Engg	11.1	UG	0
18.	Ms. N. K. Padgilwar	M. E.	Asst Prof	Computer Science Engg	7.6	UG	0
19.	Ms. S. R. Utsai	M. E.	Asst Prof	Computer Engg	4.3	UG	0
20.	Ms. P. N. Chanana	M. E.	Asst Prof	Computer Engg	4.4	UG	0
21.	Ms. S. A. Jadhav	M.E.	Asst Prof	Computer Engg	5	UG	0

22.	Ms. U.B. Karanje	M. E.	Asst Prof	Computer Engg	4.6	UG	0
23.	Ms. D.S. Sawant	M. E.	Asst Prof	Computer Networks	0.6	UG	0
24.	Ms.A. Y. Chaudhari	M. E.	Asst Prof	Computer Engg	2.5	UG	0
25.	Ms. H. R. Karande	M. Tech	Asst Prof	Computer Science & Engg	2.2	UG	0
26.	Ms. K. S. Surawase	M. E.	Asst Prof	Computer Engg	4.7	UG	0
27.	Ms. N. V. Jadhav	M. E.	Asst Prof	Computer Engg	1.5	UG	0
28.	Mr. T. S. Samnerkar	M.E.	Adj. Faculty	Computer Engg	21	UG	0
29.	Ms. M. K. Kulkarni	M.Tech.	Adj. Faculty	Computer Science & Engg	17	UG	0
30.	Mr. U. V. Bal	B.E.	Adj. Faculty	Computer Science & Engg	15	UG	0
31.	Ms. P. K. Godbole	M.E.	Adj. Faculty	Computer Engg	18	UG	0

*- Pursuing

11. List of senior visiting faculty: -

Sr. No.	Name	Qualification	Designation	Specialization	No. of years of experience	No. of PhD students guided
1.	Ms. Uma A. Deo	N2 Level in Japanese Language	Trainer	Japanese Language(N2 Level)	8	0

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: - 0.75

13. Student -Teacher Ratio (programme wise)

UG: Computer Engineering: - 12.85:1

PG: Computer Engineering: - 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Filled	Sanctioned
Academic Support staff (Technical)	10	No specific guidelines from University
Administrative staff	-	No specific guidelines from University

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Sr.No	Qualification	No of Faculty
1	Ph D.	0
2	Post Graduate	27
3	Under Graduate	-

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: 02

Sr. No.	Name of Faculty	Name of Project	Funding Agency	Amount of funding	Duration
1.	Ms. H. K. Khanuja and Ms. S. A. Jadhav	Set up of NVIDIA GPU Education Center	NVIDIA	Received GPU teaching kit consisting of Tesla K40 (1 nos.) {active} and Titan X (2 nos.) worth Rs. 1,73,783/-	2016-2017
2.	Ms. S. S. Shiravale	Devnagari word recognition and language translation from Bus Route Name Boards	BCUD, Savitribai Phule Pune University	60,000/-	2014 - 2016

18. Research Centre /facility recognized by the University: No

19. Publications:

I. Faculty Publication

Sr. No.	Name of faculty	No. of papers published in peer reviewed journals (national / international)	No. of papers published in conferences	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1.	Ms. H. K. Khanuja	12	6	5	-	1	-	-	68	-	-	1.32	4
2.	Ms. S. B. Jadhav	4	3	3	-	-	-	-	2	-	-	0.733	1
3.	Ms. R. M. Dalvi	2	-	-	-	-	-	-	4	-	-	0.97	1
4.	Mr. R. V. Dagade	7	2	1	-	-	-	-	21	-	-	1.55	3
5.	Ms. S. N.	4	-	-	-	-	-	-	-	-	-	1.36	-
6.	Ms. A. V. Shinde	3	3	4	-	1	-	-	20	-	-	0.812	2
7.	Ms. S. S. Shiravale	4	2	4	-	1	-	-	2	-	-	0.771	1
8.	Ms. J. A. Wagh	5	1	2	-	-	-	-	4	-	-	2.264	2

9.	Ms. G. R. Chillarge	2	3	4	-	-	-	-	5	-	-	1.22	1
10.	Ms. S.P. Mone	2	3	3	-	-	-	-	2	-	-	4.744	1
11.	Ms. P. K. Dhule	4	2	6	-	-	-	-	1	-	-	4.09	1
12.	Ms. S. D. Sapkal	3	3	3	-	-	-	-	-	-	-	3.43	-
13.	Ms. A. M. Bhugul	6	-	-	-	-	-	-	1	-	-	5.03	1
14.	Ms. P. A.	-	1	1	-	-	-	-	6	-	-	-	1
15.	Ms. I. S. Savant	5	1	1	-	1	-	-	-	-	-	2.5	-
16.	Ms. A. A. Thakar	2	-	-	-	-	-	-	-	-	-	2.39	-
17.	Ms. P. S. Mehta	4	2	1	-	-	-	-	1	-	-	1.54	-
18.	Ms. N. K.	3	-	-	-	-	-	-	1	-	-	1.76	1
19.	Ms. S. R. Utsai	1	-	-	-	-	-	-	-	-	-	0.72	-
20.	Ms. P. N. Chanana	2	-	-	-	-	-	-	2	-	-	4.26	1
21.	Ms. S. A. Jadhav	3	1	-	-	-	-	1	-	-	-	1.74	-
22.	Ms. U. B. Karanje	2	-	2	-	-	-	-	-	-	-	2.39	-
23.	Ms. D. S. Sawant	2	1	-	-	-	-	-	-	-	-	3.06	-
24.	Ms. A. Y.	2	1	2	-	-	-	-	2	-	-	1.13	1
25.	Ms. H. R. Karande	-	1	1	-	-	-	-	-	-	-	-	-
26.	Ms. K. S. Surawase	5	-	5	-	-	-	-	-	-	-	3.9	-
27.	Ms. N. V. Jadhav	1	1	1	-	-	-	-	-	-	-	2.93	-
28.	Ms. M. K. Kulkarni	8	-	8	-	-	-	-	-	-	-	-	-
29.	Ms. P. K. Godbole	1	-	1	-	-	-	-	-	-	-	-	-

II. Students Publication

Sr. No.	Name of student	No. of papers published in peer reviewed journals (national / international)	No. of papers published in conferences	Number of publications listed in Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
UG Students Publications												
1.	Mr. Akshay Kshirsagar et al.	-	1	-	-	-	-	-	-	-	-	-
2.	Mr. Amol Jaybhayae et al.	1	-	1	-	-	-	-	-	-	-	-
3.	Mr. Sourabh Khasbag et al.	1	-	1	-	-	-	-	-	-	-	-
4.	Mr. Aditya Adagale et al.	1	-	1	-	-	-	-	-	-	-	-
5.	Ms. Nikita Deshmukh et al.	1	-	1	-	-	-	-	-	-	-	-
6.	Ms. Payal Raut et al.	1	-	1	-	-	-	-	-	-	-	-
7.	Mr. Onkar Pasfule et al.	1	-	1	-	-	-	-	-	-	-	-
8.	Mr. Pratik Dhotre et al.	1	-	1	-	-	-	-	-	-	-	-

9.	Mr. Swapnil Patil et al.	1	-	-	-	-	-	-	-	-	-	-	-	-
10	Ms. Ruchi Dumbre et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
11	Ms.Sonal Dudhane et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
12	Ms. S. A. Bhure et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
13	Ms. Amruta Narute et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
14	Mr. Gururaj Bakshi et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
15	Mr. Ashita Jain et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
16	Mr. Saurabh Khoje et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
17	Ms. Supriya Bachal et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
18	Ms. Manasi Shinde et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
19	Mr. Rahul Kulhalli et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
20	Ms. Shweta Ghaware et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
21	Ms. Mughada Kulkarni et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
22	Mr. Pritam Dhadve et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
23	Mr. Aniket Kale et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
24	Mr. K. S. Kulkarni et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
25	Mr. Satish Prasad et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
26	Ms. Supriya Gatalwar et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
27	Ms. Chinmayi Borgaonkar et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
28	Ms. Komal Sutar et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
29	Ms. Mayuri Dhaygude et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
30	Ms. Sonali Thonge et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
31	Ms. Madhumita Deshpande et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
32	Ms. Vedvati Kulkarni et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
33	Ms. Shraddha Thorat et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
34	Ms. Priyanka Hendre et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
35	Ms. Anuja Dhotre et al.	-	1	-	-	-	-	-	-	-	-	-	-	-
36	Ms. Apurva Satarkar et al.	-	1	-	-	-	-	-	-	-	-	-	-	-
37	Mr. Chandan Paranjape et al.	-	1	-	-	-	-	-	-	-	-	-	-	-
38	Mr. Akshay Baheti et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
39	Mr. Sushant Kamble et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
40	Ms. Sankat Tadas et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
41	Mr. Rahul M. Sharma et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
42	Mr. Pranav Kelkar et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
43	Mr. Dheeraj Patil et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
44	Ms. Anushree R. Nene	1	-	1	-	-	-	-	-	-	-	-	-	-
45	Mr. Anup Tisgaonkar et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
46	Mr. Tanmay Ghawate et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
47	Mr. Saurabh Shinde et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
48	Ms. Aishwarya S Bote et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
49	Ms. Nireeksha Shetty et al.	1	-	1	-	-	-	-	-	-	-	-	-	-

50	Ms. Falguni Patil et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
51	Ms. Akshaya Tonde et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
52	Ms. Kalyani Bhagwat et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
53	Ms. Uma Karambelkar et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
54	Mr.Chaitanya Sathe et al.	1	-	1	-	-	-	-	-	-	-	-	-	-
PG Students Publications														
1.	Ms. Sarika Hualyalkar	1	-	1	-	-	-	-	-	-	-	-	-	-
2.	Ms. Namita Ranaware	2	-	1	-	-	-	-	-	-	-	-	-	-
3.	Ms. A.S. Kadam	2	-	1	-	-	-	-	-	-	-	-	-	-
4.	Ms. Vrushali Jadhav	1	-	1	-	-	-	-	-	-	-	-	-	-
5.	Ms. Manjushree Sarode	2	-	1	-	-	-	-	-	-	-	-	-	-
6.	Ms. Sayali Joshi	1	-	1	-	-	-	-	-	-	-	-	-	-
7.	Ms. Aparna Dalve	2	-	1	-	-	-	-	-	-	-	-	-	-
8.	Mr. Ajinkya Jiman	1	-	1	-	-	-	-	-	-	-	-	-	-
9.	Ms. Rani Bhor	1	1	1	-	-	-	-	-	-	-	-	-	-
10.	Ms. Pradnya S. Kanhere	1	1	1	-	-	-	-	-	-	-	-	-	-
11.	Ms.Ushir Kishori	2	1	3	-	-	-	-	-	-	-	-	-	-
12.	Ms. Shreya B. Ahire	1	1	1	-	-	-	-	-	-	-	-	-	-
13.	Ms. Archana Chaudhari	1	1	1	-	-	-	-	-	-	-	-	-	-
14.	Ms. Uma B. Karanje	1	-	1	-	-	-	-	-	-	-	-	-	-
15.	Ms. Arti A. Gawade	2	-	-	-	-	-	-	-	-	-	-	-	-
16.	Ms. Komal K. Chhajed	1	1	1	-	-	-	-	-	-	-	-	-	-
17.	Ms. Anuprita N. Nagpure	1	1	2	-	-	-	-	-	-	-	-	-	-
18.	Ms. Dhanashree Parchand	2	-	2	-	-	-	-	-	-	-	-	-	-
19.	Mr. Khushal Khairnar	1	-	1	-	-	-	-	-	-	-	-	-	-
20.	Ms. Pooja Patil	2	-	2	-	-	-	-	-	-	-	-	-	-
21.	Mr. Ketan Raju Kundiya	2	-	2	-	-	-	-	-	-	-	-	-	-
22.	Ms Tejashree Kokate,	2	-	2	-	-	-	-	-	-	-	-	-	-
23.	Ms .Madhuri D. Dhayarkar	1	-	1	-	-	-	-	-	-	-	-	-	-
24.	Ms. Sonali Oval	-	1	-	-	-	-	-	-	-	-	-	-	-
25.	Ms. Suvarna Patil	1	2	3	-	-	-	-	-	-	-	-	-	-
26.	Ms. Abhilasha Kulkarni	1	1	2	-	-	-	-	-	-	-	-	-	-
27.	Mr.Umakant L Tupe	1	1	2	-	-	-	-	-	-	-	-	-	-
28.	Ms.Pradnya S. Mehta	1	1	2	-	-	-	-	-	-	-	-	-	-

20. Areas of consultancy and income generated: -

Sr. No.	Academic Year	Name of Coordinator	Income generated (Rs.)	Income source
1.	2016-17	Ms. Abhilasha Kulkarni	Rs. 5000/-	Workshop on 'How to make your own Operating System'
2.	2016-17	Ms. Neha Padgilwar	Rs. 9,600/-	Workshop on 'IoT using Raspberry Pi'

3.	2016-17	Mr. Abhay Chandedia & Mr. Raju S. M.	Rs. 88,528/- (Notional Savings)	In-house Networking & Printer Maintenance (2010 onwards)
4.	2015-16	Ms. Abhilasha Kulkarni	Rs. 60,000/-	Add-on course on Java
5.	2015-16	Ms. Abhilasha Kulkarni	Rs. 1,57,500/-	Short Term Training Program on Hadoop
6.	2014-15	Mr. Prashant Dhakad	Rs. 17,000/-	GATE coaching
7.	2014-15	Mr. Prashant Dhakad	Rs.6,52,559/-	TCS iON Pvt. Ltd, Pune (For Conduction of Online Examination in association with TCS iON Pvt. Ltd, Pune)

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards:

Sr No.	Committee	No. of faculties
1	National	-
2	International	-
3	Editorial boards	01
4	Reviewer	04

22. Student projects

I. UG:-

a) Percentage of students who have done in-house projects including inter departmental/programme

Sr No.	Academic Year	No. of In-house projects	% of In-house Projects
1.	2016-17	26	72.22%
2.	2015-16	26	63.41%
3.	2014-15	31	81.58 %
4.	2013-14	22	64.70 %

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies

Sr No.	Academic Year	No. of Sponsored projects	% of Sponsored projects
1.	2016-17	10	27.78%
2.	2015-16	15	36.59%
3.	2014-15	07	18.42 %
4.	2013-14	12	35.3 %

II. PG:-

a) Percentage of students who have done in-house projects including inter departmental/programme

Sr No.	Academic Year	No. of In-house projects	% of In-house Projects
1.	2016-17	09	90%
2.	2015-16	10	100%
3.	2014-15	15	100%
4.	2013-14	14	100%

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies –

Sr No.	Academic Year	No. of Sponsored projects	% of Sponsored projects
1.	2016-17	01	10%

23. Awards / Recognitions received by faculty and students

I. Faculty Achievements

Sr. No	Name of faculty	Award /Recognition received by faculty	Recognition received from reputed professional bodies and agencies nationally and internationally	Year
1.	Ms. H. K. Khanuja	Reviewer	IEEE International Conference CAST 2016	2016-17
2.	Ms. H. K. Khanuja & Mr. R. V. Dagade	Reviewer	IEEE sponsored second International Conference on Computing , Communication, Control & Automation – ICCUBEA 2016	2016-17
3.	Ms. H. K. Khanuja Ms. S. B. Jadhav	Reviewer	cPGCON SPPU	2016-17
4.	Ms. S. P. Mone	Editorial Board Committee member	International Journal-IJERCSE	2016-17
5.	Ms. S. P. Mone	Advisory Board Committee member	International Conference on Recent trends, Emerging issues in Science Engineering, Environment & Technology	2016-17
6.	Ms. S. P. Mone	Reviewer Committee member	International Journal -ASTESJ	2016-17
7.	Ms. S.B. Jadhav	Awarded Online Certification on “Text Retrieval and Search Engines”	Course offered by University of Illinois-Urbana Champaign-US	2016-17
8.	Ms. S. P. Mone	Awarded Online Certification on “Foundation of Data Structure”	Course offered by IIT BombayX an online learning initiative of IIT Bombay through edX	2016-17
9.	Ms. S. D. Sapkal	Best paper award	cPGCON 2014 Sponsored by “Savitribai Phule Pune University”	2014-15

10.	Ms. H. K. Khanuja	Resource person	ISTE approved STTP “Digital Identity and Security” at Jhulelal Institute of Technology (JIT), Nagpur	2013-14
11.	Ms. P. S. Mehta	ME second topper	MMCOE, Pune	2013-14

II. UG Student Achievements

Sr. No.	Name of student/group	Award received by student/groups	Recognition received from reputed professional bodies and agencies nationally and internationally	Year
1.	Mr. Pranav Jadhav	First rank in ALACRITY Carrom Competition	AISSMS-IOIT, Pune	2016-17
2.	Mr. Rutwik Chougule and Team, Mr. Harshal Chaudhary and Team, Mr. Pranav Jadhav, and Team	Nominated for Smart India Hackathon 2017	Smart India Hackathon 2017 (organized through -under MYGOV – Initiative)	2016-17
3.	Ms. Sayali Dalke	Certificate ‘B’ Examination in ‘A’ (AYE) Grade	National Cadet Corps under the authority of Ministry of Defense, Government of India	2016-17
4.	Ms. Bhakti Bhikne	Selected for International Internship with Fedora	Outreachy - Free & Open Source Software internships	2016-17
5.	Mr. Phadke Nikhil et al.	Selected for PCI Winter School “Shapes & Languages, Laws & Transformations”	Persistent Systems Ltd. Pune	2016-17
6.	Ms. Anuja Bendre	Selected as a Teaching Assistant for PCI Winter School “Shapes & Languages, Laws & Transformations”	Persistent Systems Ltd. Pune	2016-17
7.	Ms. Shruti Kulkarni	Selected as Peace Ambassador 2016 in Leadership Development Programme	Leadership Development Program at ASHA Center Gloucesterchire-U.K.	2016-17
8.	Mr. Pushkar Bhalerao	Certificate ‘C’ examination in ‘A’ (AYEE) Grade	National cadet Corps under the authority of Ministry of Defense, Government of India	2016-17

9.	Mr. Pushkar Bhalerao	NCC Certificate with 'B' Grade	NCC under the authority of Ministry of Defense, Government of India	2015-16
10.	Mr. Gururaj Bakshi	Selected as a Google Facilitator	Google Office, Hyderabad	2015-16
11.	Ms. Saloni Kajale et al.	Best Paper Award in National Conference on Advancements in Computer & Information Technology	D. Y. Patil COE, Talegoan, Pune	2015-16
12.	Ms. Anagha Nandane	Shortlisted amongst 36 students from India as a speaker in MIT-GOM Bhartiya Chatra Sansad 2016	MITCOE, Pune	2015-16
13.	Mr. Rutwik Choughule	Selected for "Digital Hackathon 2015"	Persistent Systems Ltd. Pune	2015-16
14.	Ms. Nupur Bhagwat, et al.	Course completed in "Algorithm in Machine Learning & Big data"	Persistent Systems Ltd. Pune	2015-16
15.	Ms. Neha Kadam	National Level Scuba Diving Camp	NCC Directorate Maharashtra	2015-16
16.	Mr. Devendra Urad	"ROBOMINTON" conducted by Doordarshan & MITAOE	MITAOE, Pune	2014-15
17.	Mr. Akshay Gadikar	Winner in Table Tennis	SPPU, Pune	2014-15
18.	Mr. Akshay Gadikar	First rank in Table Tennis, Kurukshetra -2015	FLAME college, Pune	2014-15
19.	Mr. Saurabh Kudale	First rank in Counter Strike, 9 th AISSMS Eng. Today 2014	AISSMS COE, Pune	2014-15
20.	Mr. Nitish Sapre	Winner & Best Player in Table Tennis, PENTACLE	MKSSS'S Cummins COE, Pune	2013-14
21.	Mr. Akshay Gadikar	First rank in Table Tennis, Enthusia -2014	MIT Pune	2013-14
22.	Mr. Saurabh Kudale	First rank in Counter Strike 1.6, ACCLIVITY 2014	TSSM's PVPIT, Pune	2013-14

III. PG Student Achievements

Sr. No.	Name of student/group	Award received by student/groups	Recognition received from reputed professional bodies and agencies nationally and internationally	Year
1.	Ms. Sayali Joshi	Winner in Dissertation Presentation, Dexterity2k16	MMCOE, Pune	2015-16
2.	Mr. Mohit Sinjangude, Mr. Ajinkya Jiman	First rank in project competition, National Conference on Digital India: Transforming India	MKKS, Pune	2015-16

3.	Mr. Mohit Sinjangude, Mr. Ajinkya Jiman	Winner in Paper Presentation , Ekalavya 2K15	D.Y.Patil school of engineering , Lohegaon	2014-15
4.	Mr. Ajinkya Jiman	Winner, M-Pulse2015	P.E.S. modern college of engineering, Pune	2014-15
5.	Mr. Ajinkya Jiman	First rank in paper presentation, Jishin 2015	BVCOEW, Pune	2014-15
6.	Mr. Ajinkya Jiman	First rank, MIT Technogenesis 2015	MITCOE Pune	2014-15
7.	Ms. Asma Shaikh	Best paper award in Paper presentation , cPGCON 2014	MCOERCE, Nashik	2013-14

24. List of eminent academicians and scientists / visitors to the department

Sr. No	Name of Visitor	Profile of Visitor	Academic Year
1.	Mr. Pankaj Dhotre	CEO & Co-Founder, Konfirmo, Pune	2016-17
2.	Mr. Vipin Ratnaparkhi	Sr. Director-HR, Vertiv, Mumbai	2016-17
3.	Mr.Aannaaand Deshpande	Privacy & Compliance Council, APAC & Communication Director, ISACA-Pune Chapter, Pune	2016-17
4.	Mr. Vaibhav Gade	Technical Lead, Quick Heal Technologies, Pune	2016-17
5.	Mr. Achyut Ghare	Vice President, ISACA-Pune Chapter, Pune	2016-17
6.	Mr. Yogesh Thanage	Sr. Project Manager, Data Security Council of India, Pune	2016-17
7.	Dr. Parikshit Mahalle	Chairman, BoS, Information Technology, SPPU	2016-17
8.	Dr. Varsha Patil	Chairman, BoS, Computer Engineering, SPPU	2016-17
9.	Mr. Ganesh Mahabala	Head, University & Research Relations, South Asia, NVIDIA	2016-17
10.	Mr. Prakash T. G.	Sr Solution Architect, South Asia, NVIDIA.	2016-17
11.	Mr. Sundaresan N.	Senior research Engineer, Revert Technologies, New Delhi	2016-17
12.	Prof. Tanuja Khatavkar	VLABS Nodal Coordinator, Pune Region	2016-17
13.	Mr. Yashad Deshpande	Director, Techknomatic Services Pvt. Ltd., Pune	2016-17
14.	Prof. Sumitra Pundlik	Principal Investigator, NVIDIA GPU Education Center, MITCOE, Pune	2016-17
15.	Dr. Swati Sardesai	DDG, Scientist G, NIC, Pune	2015-16
16.	Mr. Sachin Sathe	CEO, Bits and Bytes	2015-16

17.	Mrs. Varsha Bhide	President, ISACA-Pune Chapter	2015-16
18.	Dr. Herold D'Cousta	CEO, Intelligent Quotient Security System	2015-16
19.	Mr. A.K.Hirve	Chief General Manager, Dept. of Info. Tech., Reserve Bank of India.	2015-16
20.	Mr. Sandip Godbole	GM, SYNTEL Inc.	2015-16
21.	Mr. Anand Paropkari	Vice Chairman – CSI	2015-16
22.	Dr. Sarang Joshi	Chairman, BoS, Computer Engineering, SPPU	2015-16
23.	Dr. Parag Kulkarni	Chief Scientist and CEO - EKLaT Research	2015-16
24.	Prof. Suresh Naik	Ex-Director, ISRO	2015-16
25.	Dr. S.G. Deshmukh	Data torrent, Pune	2015-16
26.	Dr. B. Desai	Manager, Big Data Analytics, CapGemini ,Pune	2015-16
27.	Dr. Aditya Abhyankar	Dean, Faculty of Technology , Professor, SPPU, Pune	2014-15
28.	Dr. R. K. Joshi	IIT, Bombay	2014-15
29.	Mandar Deshpande	Chanakya Mandal, Pune	2013-14

25. Seminars/Conferences/Workshops organized & the source of funding

Sr. No.	Program Organized	State/National /International	Academic Year	Source of Funding
1.	Two days workshop “Cyber Fest” on 22 nd and 23 rd February 2017	State	2016-17	Self Sponsored
2.	One day Faculty Development Program on “Principles of Programming Languages” on 16 th December 2016	State	2016-17	Institution
3.	One day Faculty Development Program on “Linux Operating System Hands-on” on 30 th November 2016	Institution	2016-17	Institution
4.	One day Faculty Development Program on “Fundamentals of Programming Languages -I” on 14 th October 2016	State	2016-17	Institution
5.	A Seminar on “High Performance Computing & CUDA programming” under NVIDIA GPU Education Center and Center	Institution	2016-17	Institution
6.	Innovative Project exhibition under Center of Innovation on 22 nd September 2016	Institution	2016-17	Institution

7.	One day workshop on "Big Data & Hadoop Ecosystem" on 17 th / 18 th September 2016	State	2016-17	Institution
8.	Four days Faculty Development Program on "MongoDB and R-programming" during 22 nd to 25 th August 2016.	State	2016-17	Institution
9.	Workshop on "Cyber Security Challenges & Opportunities" In association with ISACA on 12 th and 13 th February 2016	State	2015-16	SPPU-BCUD(QIP)
10.	Two days Faculty Development Program on "Advanced Computer Programming" on 28 th & 29 th July 2015	State	2015-16	Institution
11.	Two days National level workshop on "Recent Advances in BIGDATA & Hadoop Administration" on 24 th & 25 th January, 15	National	2014-15	SPPU-BCUD (QIP)

26. Student profile programme/course wise:

UG:

Name of Course Programme	Establishment year	Application received	Selected	Enrolled		Pass Percentage
				Male	Female	
Computer Engineering	2016-17	Admission process governed by Directorate of Technical Education.		71	52	NA
	2015-16			67	55	77.68%
	2014-15			71	56	84.12%
	2013-14			59	54	72.72%

PG:

Name of Course Programme	Establishment year	Application received	Selected	Enrolled		Pass Percentage
				Male	Female	
Computer Engineering	2016-17	Admission process governed by Directorate of Technical Education		1	05	NA
	2015-16			5	09	100%
	2014-15			4	09	83.33%
	2013-14			4	13	94.12%

27. Diversity of Students

Academic Year	% of students from the same state	% of students from other States	% of students from abroad
Undergraduate Programme			
2016-17	99.19	0.81	NA
2015-16	98.36	1.64	NA
2014-15	96.85	3.15	NA
2013-14	96.46	3.54	NA
Postgraduate Programme			
2016-17	100	0	NA

2015-16	100	0	NA
2014-15	100	0	NA
2013-14	100	0	NA

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Exam	No. of Students				
	2016-17	2015-16	2014-15	2013-14	2012-13
GATE	*	5	6	3	9
GRE	3	7	7	10	11
CAT	*	2	--	--	--
C-MAT	*	1	--	--	--
Defense	*	--	--	--	--
SLET	*	--	--	--	--
GMAT	*	1	--	--	--
MBA-CET	*	7	--	2	8
MPSC/UPSC	*	--	--	--	--
Others	*	4	4	3	--

*In process

29. Student progression

Student progression	% Against Enrolled				
	2016-17	2015-16	2014-15	2013-14	2012-13
UG to PG	NA	17.02	13.28	13.95	19.42
PG to M. Phil.	--	--	--	--	--
PG to Ph.D.	--	--	--	--	--
Ph.D. to Post-Doctoral	--	--	--	--	--
Employed					
Campus selection	30.51*	31.58	34.72	30.53	24.52
Other than campus recruitment	NA	7.8	20.31	9.3	43.88
Entrepreneurship/Self-employment	NA	0.64	2.14	0.77	2.87

*In process

30. Details of Infrastructural facilities

a) Library :

I. Departmental Library

Details	Title	Volumes
Number of Books	345	581

II. Digital Library

- Department has its own Digital Library build on Apache Hadoop (Open Source distributed computing framework) with 2TB storage

- capacity with almost 500 users using the digital library.
- ii. The digital library contains the informative eBooks on recent technologies, lab manuals, handouts, textbooks and NPTEL videos.

b) Internet facilities for Staff & Students

Internet Service Provider	- TATA Communications Ltd
Leased Line	- 48 Mbps
Contention ratio	- 1:1
Firewall	- Sonic-wall NSA 4600.
D-Link switches 24/28 port	- 12 nos.
D-Link switches 16 port	- 2 nos.
Cisco/Linksys switches 24/28 port	- 7 nos.
Netgear switch 8 port	- 1 nos
D-Link switches 8 port	- 2 nos
Total Switches	-24 nos

c) Class rooms with ICT facility

i. UG:-

Sr. No.	Room Description	Usage	Shared/ exclusive	Capacity	Rooms equipped with
1.	507	Class room	Exclusive	70+	PC, Internet, LCD Screen with Projector, Black board
2.	609	Class room	Exclusive	70+	PC, Internet, LCD Screen with Projector , Black board
3.	120	Class room	Exclusive	70+	PC, Internet, LCD Screen with Projector, Black board
4.	121	Class room	Exclusive	70+	PC, Internet, LCD Screen with Projector, Black board
5.	405	UG Seminar Hall	Shared	100+	PC, Internet, LCD Screen with Projector, White Board, PA System

ii. PG:-

Sr. No.	Room Description	Usage	Shared/ exclusive	Capacity	Rooms equipped with
1.	508	PG Tutorial Room	Exclusive	20+	PC, Internet, LCD Screen with Projector, Black board
2.	613	PG Tutorial Room	Shared	20+	PC, Internet, LCD Screen with Projector ,White board

d) Laboratories

Sr. No.	Name of the Lab	Shared/ Exclusive	Facilities	Capital Investment in Rs./-
1.	Computer Graphics Lab	Exclusive	Desktop: Intel Pentium C2D – 21, Intel Core I3- 01, HP Laser Jet -1020 – 01, Dot Matrix Epson FX 2175- 01, Switch – 01, UPS	8,95,260/-

2.	Data Structures Lab	Exclusive	Desktop: Intel P Pentium C2D – 22, , HP Laser Jet -1008 – 01, Dot Matrix LQ300-01, Switch – 01, UPS	8,78,282/-
3.	System Programming Lab	Exclusive	Desktop: Intel P Pentium C2D – 21, Intel Core I 3- 01, HP Laser Jet -1008 – 01, Dot Matrix Epson FX 2175- 01, Switch – 01, UPS, BBB Kits – 5	9,45,596/-
4.	Database Lab	Shared	Desktop: Intel Pentium C2D – 23, HP Laser Jet -1008 – 01, Dot Matrix Epson LQ300- 02, Switch – 01, UPS	8,86,606/-
5.	Forensic Lab	Exclusive	Desktop : Intel Pentium C2D-18, Intel Core I3- 06 , HP Laser Jet 1008-01, Dot Matrix Epson Fx 2175- 01, UPS	7,56,224/-
6.	High Performance Computing Lab	Exclusive	Desktop : Intel Core i3 – 23, Intel Pentium C2D -01, Hp Laser Jet :1007 – 01, Dot Matrix Epson Fx2175 - 01, , Asus NVIDIA GEFORCE 210 AGP Cards – 20, Scanner – 01, LCD -01, UPS -01	8,75,323/-
7.	Computer Network Lab	Exclusive	Desktop: Intel P C2D – 24, HP Laser Jet - 1008 – 01, Dot Matrix Fx 2175- 01, Switch – 02, UPS-01	7,67,641/-
8.	Hardware Lab	Exclusive	8086 Microprocessor trainer kit – 20, 8259 kit-01, A To D and D to A kit-07, 8257 kit-02, 8279 kit-05, 8251 kit-02, 8253 kit-05, Stepper Motor- 01, CRO- 04, Desktop: Intel P C2D –19, Intel P IV -02, Dot Matrix Epson Fx 2175- 01, , HP Laser Jet -1008 – 01, UPS-01	9,42,267/-
9.	Project Lab	Exclusive	Desktop: Intel Core I5 – 20, Intel Core I3 – 02, HP Laser Jet -1008 – 01, Dot Matrix Epson LQ300- 01, UPS-01	8,23,300/-
10.	Digital Electronics Lab	Exclusive	Digital IC Trainer kit-38, Desktop:- Intel Core i3-01, UPS-01	2,80,293/-
11.	Post Graduate Lab	Exclusive	Desktop: Intel P C2D – 07, UPS-01	2,58,379/-
CENTRAL FACILITY				
1.	Computer Center	Shared	IBM Server X 3300, Intel Quad Core Processor 2.20 GHz(2 Nos.), 64 GB DDR3 RAM, 300 GB HDD, USB Keyboard Mouse (61 No's), N-Computing Device L300(60 No's), 18.5" LED Monitor (61 No's), LCD Sony projector(1 No), APC SRC 6000UXJC-UPS , Switch: 4 No's	14,20,532/-
2.	Server Room	Shared	IBM Server X346 Series (1No), 42U Server rack (1 No), APC 3 & 6 KVA UPS (1 No Each) with Total 48Batteries, P-IV & C2D Desktop Machines (3Nos), Bluestar Air conditioners (2 Nos), Cisco SG300-28 Giga Switch (2 Nos), Dell SonicWALL NSA4600 Firewall (1 No)	16,30,624/-

31. Number of students receiving financial assistance from college, university, government or other agencies

Sr. No	Type of Assistance	Agency Providing Financial Assistance	Academic Year			
			2016-17	2015- 16	2014-15	2013-14
1	GOI PM Scholarship	Social Welfare Dept.& Tribal Development Dept.	79	98	90	77
2	GOI PM Freeship		55	56	63	76
3	EBC Concession	Govt. Of Maharashtra	51	55	55	51
4	Minority Scholarship (State/Central)	Dept. of Minority Welfare	04	05	04	06
5	Central Sector Scholarship	MHRD, Govt. of India	01	0	0	0
6	STC	Govt. Of Maharashtra	0	0	0	03
7	PTC	Govt. Of Maharashtra	01	0	0	01
8	J & K Special Scholarship	Govt. Of India-AICTE	00	01	01	0
9	Private Scholarship	Lila Poonawalla Foundation	00	04	04	03
		Nagarvasti Vikas Yojana	00	02	01	01
		Rasiklal Manikchand Dhariwal	00	02	00	00
10	MMM Scholarship	Marathwada MitraMandal,Pune	0	01	01	01

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr. No	Name of Expert and Profile	Designation & Work Place	Lecture delivered on	Date	Beneficiary Class
A.Y.2016-17					
1.	Mr. Vipin Ratnaparkhi	Sr. Director-HR, Vertiv, Mumbai	Demystifying Campus Hiring & Corporate Ethics	07/02/2017	TE
2.	Mr. Prashant Pund	Founder , Agilesoft Methodologies, Pune	Agile –The Methodology You must Know	28/01/2017	TE
3.	Mr. Sanket Kelkar	Sr. Software Engineer, Inteliment Tech. Pvt. Ltd.	Business & Data Analytics, ETL Tool, CRM	24/01/2017	BE
4.	Mr. Aftab Shaikh	IIHT, Deccan, Pune	Virtualization & Cloud Computing	06/01/2017	TE
5.	Mr. Yogesh Babar	RedHat, Pune	"How to make your own operating system ?"	31/12/2016 and 1/1/2017	TE and BE

6.	Mr. Gaurav Thorat	Education Director, ISACA Pune Chapter	Information Security	24/09/2016	TE
7.	Mr. Rajesh Chaudhari	Academic Relation, Director, ISACA Pune Chapter	Information Security	22/09/2016	TE
8.	Mr. Kaustubh Hiwarekar	Asst. Prof, SCOE, Pune	High Performance Computing & CUDA programming	22/09/2016	SE, TE and BE
9.	Ms. Akshaya Tonde	Software Engineer at Persistent Systems Ltd.	Standard Template Libraries	17/09/2016	SE
10.	Mr. Gaurav Thorat	Education Director, ISACA Pune Chapter	Information Security	10/09/2016	SE ,TE
11.	Mr. Sushil Bora	Packet Design India Pvt. Ltd.	Optimization & Concurrent Algorithm	03/09/2016	BE
12.	Prof. Tanuja Khataavkar Prof. Manish Nagoshe	VLab, Pune Region Nodal Coordinator VLab, Pune Region System Coordinator	“Virtual Labs” in association with IIT, Bombay	27/08/2016	Staff (All Dept.)
13.	Mr. Yogesh Babar	RedHat	System Boot Process	19/07/2016	TE
14.	Mr. Ashish Dabhikar	TCS, Pune	Importance of smart systems and applications	16/07/2016	BE
A.Y.2015-16					
15.	Mr. Rishikesh Jadhav	Senior Analyst, Nitor Infotech	OOMP	19/03/2016	SE
16.	Mr. Rajesh Khele	Animationwala Pvt. Ltd. Pune	Career Opportunities in Animation and Gaming	19/03/2016	SE
17.	Mr. Digvijay Bhati	Senior Project Leader, Knorr Bremse	Intel i5, VLSI	12/03/2016	SE
18.	Mr. Sanket Kakade	Cognizant, Pune	IDS and VPN	12/03/2016	BE
19.	Mr. Prathamesh Kalamkar	Data Scientist, Capgemini, Pune	R-Language	12/03/2016	BE, ME
20.	Mr. Pradip Waycos	IBM, Pune	Virtualization	04/03/2016	TE
21.	Ms. Jootika Kolatkar	Infosys, Pune	Agile Methodology	30/01/2016 and 06/02/2016	TE ,ME

22.	Dr. Sandeep Deshmukh	Data Torrent, Pune	Adult Learning Theory	10/10/2015	Staff (All Dept.)
23.	Mr. Swanand Gadre	Project Manager, IBM, Software Labs	Searching Technique	12/09/2015	SE
24.	Mr. Vishal Agarwal	IntraEdge Pvt. Ltd. Pune	ACP-Java Framework	25/07/2015	BE
25.	Mr. Pankaj Dighe	Software Developer, Zensar Technologies	JSON and connectivity with Java	17/07/2015	BE
26.	Mr. Anil Raj	Cybervault Securities Solutions Pvt. Ltd, Pune	Forensics and Cyber Applications	20/07/2015	TE
27.	Mr. Ashish Shetkar	Amdocs, Pune	Hadoop	04/7/2015	SE, TE,BE
A.Y.2014-15					
28.	Mr. Suhas Bhise	Assistant Professor, VIT, Pune	Microprocessor & Interfacing Technique	23/03/2015	SE
29.	Dr. Y. D. Deshpande	Professor VIIT, Pune	Cache Memory	17/03/2015	SE
30.	Mr. Ganesh Phatangare	Sr. Developer, GS Lab, Pune	Virtualization & XEN overview	14/03/2015	TE
31.	Dr. R. Jayadevan,	Associate Professor, AIT, Pune	Research funding for projects	7/03/2015	Staff (All Dept.)
32.	Prof. Milind Penurkar	Assistant Professor, MITCOE, Pune	Design Aspects of OS & Data structures Used for Process Management	28/02/2015	ME
33.	Mr Rakesh Patil	i-source infosystems pvt. Ltd, Pune	Storage Area Network & Routing Protocols	27/02/2015	TE
34.	Ms Sarita Narwal	BMC Ltd. Pune	Cloud Computing	7/02/2015	BE
35.	Mr. G. Namjoshi	HSBC, Pune	ASSIM	19/11/2014	ME
36.	Dr. Aditya Abhyankar	Dean, Department of Technology, UoP	Research Funding	26/07/2014	Staff (All Dept.)
A.Y.2013-14					
37.	Prof. Sudarshan Deshmukh	PCCOE, Pune	Advance Computer Network	24/04/2014 and 06/05/2014	ME
38.	Mr. Anil Nagane & Mr. Mandar Deshpande	Chanakya Mandal, Pune	Guidance on Civil services examinations after engineering	16/01/2014	TE, BE
39.	Mr. Shirish Apte	Spiritual Trainer and Philosopher	Philosophy of Swami Vivekananda	13/08/2013	SE,TE,BE

33. Teaching methods adopted to improve student learning

Effective strategies for improving student learning are as follows:

- Guest Lecture
- Crosswords, Role Plays

- Presentation
- NPTEL Lectures
- Surprise Tests : Objective/Subjective, Quizzes, Mock-oral test
- Technical Workshops
- Industrial Visits
- Value Added Courses
- Sharing of Study material using Google Apps
- Pro-remedial Coaching
- Flipped Classroom
- Online Certification courses

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:-

1. Department has successfully completed an activity under "Aadhar club" named "**SHARE FOOD, SHARE EMOTIONS**" on 29th Dec 2016. Department has donated eatables to "The Poona School & Home for Blind Girls, Kothrud" and "Punaruththan Samarasata Gurukulam, Chinchwad"- run by prominent social worker **Shri. Girish Prabhune**.
2. **NSS Camp:** Departmental staff as well as student participated in NSS camp organized at village Manerwadi from 22nd to 28th Dec 2016
3. Department has successfully contributed to **Institutional Social Responsibility**, by providing financial help of Rs. 5000/- to departmental peon (Mr. Mahesh Awaghade) on 13th Sept 2016.
4. Celebration of Marathi Bhasha Din on 27th Feb 2016.
5. Organized lecture on "Dr. Babasaheb Ambedkar" on 27th Jan 2016, on the occasion of 125th Birth Anniversary of Dr. Babasaheb Ambedkar. Speaker was Prof. Devdatta Bhingarkar, Assistant Professor and Coordinator School of media Activity Research and Technology, Pune.
6. Department has successfully completed an activity under "Aadhar club" named "**SHARE FOOD, SHARE EMOTIONS reduce a reason to cry**" on 31st Dec 2015. Department has donated eatables to "The Poona School & Home for Blind Girls, Kothrud" and "Matoshri Orphanage".
7. Through 'Goodwill' (NGO) organization, Department has distributed clothes and Stationary to the deprived people on 23rd September 2015
8. Department has initiated "**Aadhar Club**" under Institutional Social Responsibility on 10th Sept 2015.
9. **NSS Camp:** This activity was initiated in AY 2014-15. Departmental staff as well as student participated in NSS camp organized at village Manerwadi from 3rd Jan 2015 to 9th Jan 2015.
10. **Participation in Natural Disaster's relief fund:** Department has shown tremendous support by contributing, a part of their personal pockets, to Natural Disaster's relief fund. Last year, Jammu & Kashmir had faced huge damage due to floods. Our institute has contributed to this natural

disaster relief fund, by donating respectable amount on 9th September 2014.

11. **Participation in Swacch Bharat Abhiyan:** This activity, being a national revolution is initiated by our institute from the year 2014, and is practiced continuously. (Extension Activity to Swacch Bharat Abhiyan)
12. **Blood donation camp:** This activity is being followed since AY 2011-12 in memory of Shri Shankarrao Chavan (Founder and President of MMCOE) on 26th Feb and on Kargil Vijay Diwas from AY 2013-14. Department faculty and students have shown active participation in all the academic years.
13. Institute students have been sharing their thoughts by writing articles in the local newspapers like Sakal times. These articles are based on the current prevailing social issues in India.
14. Department alumni have opened one Social foundation, named **“Approach... Helping hands”**. This foundation was opened without any political support. Members of this foundation donate money to the various needy segments from their personal pockets.

35. SWOC analysis of the department and Future plans

Strengths:

1. Young and dynamic faculty members in adequate number so as to maintain student teacher ratio.
2. Department is recognized as a ‘GPU Education Center’ by NVIDIA.
3. Development of innovative projects under “Center of Innovation” cell for students’ development.
4. Department has facilitated In-house developed ‘Digital Library’ for all faculty members and students on Apache Hadoop, Open Source distributed computing framework.
5. Strong collaborations with industries like Quick Heal Foundations, Indiaforensic Consultancy Services, Sunbeam Institute of Information Technology, Persistent Systems Ltd., Zensar Technologies, Animationwala.com etc.
6. Well established and active students association ACES, ISACA (Information Systems Audit and Control Association) student group, CSI, ACM and ISTE student chapters.
7. Active conduction of Institute Social Responsibility through ‘Aadhar Club’.
8. Well equipped and furnished labs.

Weakness:

1. More efforts needed to fetch Research Funds
2. Need to improve faculty cadre ratio

Opportunities:

1. To establish Research and Development lab in the department under Center of Excellence.
2. To commence courses on embedded applications and Hi- performance computing.
3. To seek NBA accreditation that will strengthen research opportunities, Campus Placements and International recognition.
4. To encourage Entrepreneurship through the Entrepreneurship Development Cell (EDC).
5. To initiate incubation center through Center of Innovation Cell.

Challenge:

1. Overall decline in engineering admission scenario in Maharashtra state.
2. Adapting to constant change in the technology.

Future plans

1. Establishment of Research center.
2. ISO 9001:2008 Certification
3. NBA Accreditation
4. ABET Accreditation

ELECTRONICS & TELECOMMUNICATION ENGINEERING

1. **Name of the Department:** Electronics and Telecommunication Engineering
2. **Year of Establishment:** Academic Year 2006-2007
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
UG: Bachelor of Engineering in Electronics and Telecommunication Engineering
4. **Names of Interdisciplinary courses and the departments/units Involved:-**

Sr. No.	Beneficiary Class	Interdisciplinary Courses	Department Involved
1	SE – E&TC	Engineering Mathematics III	Engineering Sciences
2	SE – E&TC	Object Oriented Programming	Computer Engineering
3	TE – E&TC	Industrial Management	Management Studies

5. **Annual/ semester/choice based credit system (programme wise):**
 - I. Earlier, all programmes affiliated to SPPU were based on non credit, semester pattern till Academic Year 2014-15.
 - II. Semester Based Credit Based System was introduced for First Year Engineering from Academic Year 2015-2016

6. **Participation of the department in the courses offered by other Departments:**

Sr. No.	Beneficiary Class	Interdisciplinary Courses	Departments Involved
1	SE - Computer	Microprocessor and Interfacing Techniques	Computer Engineering
2	SE – Electrical	Fundamentals of Microprocessor and Microcontroller	Electrical Engineering
3	SE- Electrical	Network Analysis	Electrical Engineering
4	ME - Computer	Digital Image Processing	Computer Engineering
5	FE-Engineering Sciences	Basic Electronics Engineering	Engineering Sciences
6	SE - Mechanical	Electrical and Electronics Engineering	Mechanical Engineering
7	SE - Electrical	Fundamentals of Microcontroller and Applications	Electrical Engineering

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**

Sr. No.	Name of Course	Participating Institution / Industry	Academic Year
1	Workshop cum National Level Championship on Mind Controlled Robotics	Entrepreneurship Development Cell, IIT, Delhi and Wingfotech Pvt. Ltd.	2016-17
2	One week Winter Training Program on Networking (CCNA)	Azure Skynet Solution (P) Ltd & IIT, Hyderabad	2016-17
3	State level workshop on 'Internet of Things Towards a Smart Future – IoTTSF'2016'	Innovians Technologies & IIT, BHU	2016-17
4	One day Hands - on Hardware Training on PIC Microcontroller	Micro Embedded Technologies, Pune	2016-17
5	Two days Hands - on FDP on Arduino	Pantech ProEd. Pvt. Ltd., Chennai	2016-17
6	Two days workshop on Networking	Azure Skynet Solution (P) Ltd & IIT, Hyderabad	2016-17
7	Two days workshop on Raspberry Pi	Pantech Pro Ed.Pvt. Ltd., Chennai	2016-17
8	Three days Hands - on Training Program on Embedded Linux	Micro-Embedded Technologies, Pune	2015-16
9	LabVIEW workshop	Thuse Electronics Pvt. Ltd., Pune	2015-16
10	Workshop on PCB designing software (KiCAD)	Laconic Solution, Pune	2014-15
11	LabVIEW and PCB designing workshop	IDG Product Development, Pune	2014-15
12	Add - on course on KiCAD	IDG Product Development, Pune	2013-14

8. Details of courses/programs discontinued (if any) with reasons:
NIL

9. Number of teaching posts as on 2016-17:

Sr. No.	Teaching Post	Sanctioned	Filled
1.	Professors	3	Nil
2.	Associate Professors	6	2
3.	Asst. Professors	18	21

*Recently department has appointed 4 Adjunct faculty

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. Etc.):

Sr. No.	Name of the faculty	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D. Students guided or the last 4 years
1	Mrs. S. N. Deshmukh	M.E. (Electronics) Ph.D (Pursuing)	Dean Admin, Associate Professor	Medical Imaging	21	-
2	Mrs. P. S. Sawant	M.E (Electronics)	HOD, Assistant Professor	Electronics	26	-
3	Mrs. A. P. Thakur	M.E (Electronics)	Assistant Professor	Electronics	26	-
4	Dr. Mrs. M. T. Jadhav	M.E(Electronics) Ph.D	Associate Professor	Image Processing	17	-
5	Mrs. A. M. Solanke	M.E (E&TC) Ph.D (Pursuing)	Assistant Professor	Medical Imaging	16	-
6	Mrs. M. A. Dudhedia	M.E (Electronics) Ph.D (Pursuing)	Assistant Professor	Wireless Communication	13	-
7	Mrs. A. A. Kunte	M.E. (Electronics) Ph.D (Pursuing)	Assistant Professor	Microwave	22	-
8	Mrs. H. N. Burande	M.E (Electronics)	Assistant Professor	Digital Systems	11	-
9	Mrs. M. R. Pangaonkar	M.E (Electronics)	Assistant Professor	VLSI	10	-
10	Mrs. K. P. Bihade	M.E (Electronics)	Assistant Professor	Biometrics	10	-
11	Mrs. S. S. Tavse	M.E (Electronics)	Assistant Professor	Digital Systems	11	-
12	Mr. V. B. Deokamble	M.E.(E&TC)	Assistant Professor	VLSI & Embedded	10	-
13	Mrs. R. R. Malekar	M.E (E&TC)	Assistant Professor	Microwave	10	-
14	Mrs. S. A. Joshi	M.E (Electronics)	Assistant Professor	VLSI	10	-
15	Mrs. C. H. Dahatonde	M.E (Electronics)	Lecturer	Digital Systems	7	-
16	Mr. A. B. Ghule	M.Tech (ECE) Ph.D (Pursuing)	Assistant Professor	Speech Processing	21	-
17	Mrs. A. A. Dixit	M.E (Electronics)	Assistant Professor	Digital Systems	22	-

18	Mrs. K. U. Gaikwad	M.E.(E&TC)	Assistant Professor	Microwave	8	-
19	Mrs. S. R. Wadke	M.E. (Electronics)	Assistant Professor	Digital Systems	6	-
20	Mrs. D. N. Parkhi	M.E (Electronics)	Assistant Professor	Digital Systems	9	-
21	Mrs. S. A. Kulkarni	M.Tech (Instrumentation) Ph.D (Thesis Submitted)	Assistant Professor	Audio and Signal Processing	7	-
22	Ms. P. S. Deokar	M.E.(E&TC)	Assistant Professor	VLSI & Embedded Systems	4	-
23	Mrs. R. M. Joshi	M.E.(E&TC)	Assistant Professor	Microwave	3	-
24	Mr. A. A. Deshmukh	M.Tech.(Instrumentation)	Assistant Professor	Process Control	0.5	-
25	Mr. C B Joshi	M.E (E&TC) Ph.D (Pursuing)	Adjunct Faculty	Embedded Systems	35	-
26	Mr. S Srinivasan	M.E.(E&TC) MBA (Finance)	Adjunct Faculty	Microwave	35	-
27	Mr. A A Magdum	M.E.(E&TC)	Adjunct Faculty	Internet Of Things	29	-
28	Mr. A R Bhopale	M.Sc (Electronics)	Adjunct Faculty	Embedded Systems	11	-

11. List of senior visiting faculty:

Sr. No.	Name of the faculty	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D. Students guided for the last 4 years
1	Mr. Ashish Joshi	BE (Mech) MS	Director, Skillmart World, Pune	Industrial Engg.	15	-
2	Mrs. Tanmayee Lalit	MBA	Finance Controller, Ensys Engineers Pvt. Ltd., Pune	Finance	10	-

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 2.29%

13. Student -Teacher Ratio (programme wise):

UG: Electronics and Telecommunication Engineering = 12.85:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Support Staff	Filled	Sanctioned
Academic Support staff (Technical)	08	No specific guidelines from University
Administrative staff	-	No specific guidelines from University

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil /PG.:

Qualification	Number of Teaching Faculty
Ph.D	1
PG	23
UG	Nil

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 –

Sr. No.	Name of faculty (PI or CI)	Name of Project	Funding Agency	Sanctioned Amount	Sanctioned Year
1	Mrs. A. A. Kunte	To design, develop and test various micro strip resonators for mathematical analysis and simulation using parallel approach on CUDA C	BCUD (SPPU- Formerly UoP)	3 Lakhs	2012-14

18. Research Centre /facility recognized by the University – NIL

19. Publications:

Sr. No.	Faculty Name	No. of papers published in peer reviewed journals (national / international) by faculty	No. of papers published in conferences	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1	Mrs. S. N. Deshmukh	1	2	1	-	-	-	-	-	-	-	-	-
2	Mrs. P. S. Sawant	1	1	1	-	-	-	-	-	-	-	-	-

3	Mrs. A. P. Thakur	-	3	-	-	-	-	-	-	-	-	-	-
4	Dr. Mrs. M.T. Jadhav	4	6	3	-	-	-	2	7	-	-	0.7	1
5	Mrs.A.M. Solanke	-	2	-	-	1	-	-	-	-	-	-	-
6	Mrs. M. A. Dudhedia	1	-	-	-	-	-	-	-	-	-	-	-
7	Mrs. A. A. Kunte	4	2	4	1	-	-	-	3	-	-	2.78	1
8	Mrs. H. N. Burande	-	2	-	-	-	-	-	-	-	-	-	-
9	Mrs. M. R. Pangaonkar	1	-	-	-	-	-	-	-	-	-	-	-
10	Mrs. S. S. Tavse	3	3	3	-	-	-	-	-	-	-	3.72	-
11	Mr. V. B. Deokamble	-	2	-	-	-	-	-	-	-	-	-	-
12	Mrs. R. R. Malekar	1	2	-	1	-	-	-	-	-	-	-	-
13	Mrs. S. A. Joshi	1	1	1	-	-	-	-	-	-	-	-	-
14	Mrs. C. H. Dahatonde	1	1	1	-	-	-	-	-	-	-	-	-
15	Mr. A. B. Ghule	2	3	5	-	-	-	-	-	-	-	-	-
16	Mrs. A. A. Dixit	1	2	3	-	-	-	-	7	-	0.	0.3	1
17	Mrs. K. U. Gaikwad	1	3	1	-	-	-	-	-	-	-	2.78	-
18	Mrs. S. R. Wadke	-	1	1	-	-	-	-	-	-	-	-	-
19	Mrs. D. N. Parkhi	2	2	2	-	-	-	-	-	-	-	2.77	-
20	Mrs S. A. Kulkarni	1	2	2	-	-	-	-	8	-	-	0.18	1
21	Mrs. P. S. Deokar	6	1	5	-	-	-	-	4	-	-	-	1
22	Mrs. R. M. Joshi	3	-	2	-	-	-	-	9	-	-	-	2
23	Mr. A. A. Deshmukh	-	2	-	-	-	-	-	-	-	-	-	-

Sr. No.	Student Name	No. of papers published in peer reviewed journals (national / international) by students	No. of papers published in conferences	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publications	Citation Index	SNIP	SJR	Impact factor	h-index
1	Rutvij Pathak	-	1	1	-	-	-	-	-	-	-	-	-
2	Pratik Shende	-	1	1	-	-	-	-	-	-	-	-	-
3	Chinmay Mahabal	-	1	1	-	-	-	-	-	-	-	-	-
4	Nagesh Manikdurge	-	1	1	-	-	-	-	-	-	-	-	-
5	Vishakha Said	-	1	1	-	-	-	-	-	-	-	-	-

6	Onkar Kuwadekar	-	1	1	-	-	-	-	-	-	-	-	-
7	Snehal Kurane	-	1	1	-	-	-	-	-	-	-	-	-
8	Hrutuja Harke	-	1	1	-	-	-	-	-	-	-	-	-
9	Anuja Kade	-	1	1	-	-	-	-	-	-	-	-	-
10	Shweta Shete	-	1	1	-	-	-	-	-	-	-	-	-
11	Mrunal Kulkarni	-	1	1	-	-	-	-	-	-	-	-	-
12	Rucha Sandeep Joshi	-	1	1	-	-	-	-	-	-	-	-	-
13	R.Mirnali Tickoo	-	1	1	-	-	-	-	-	-	-	-	-
14	Pramod Singh	-	1	1	-	-	-	-	-	-	-	-	-
15	Madhura Tondare	-	1	1	-	-	-	-	-	-	-	-	-
16	Rugveda Kulkarni	-	1	1	-	-	-	-	-	-	-	-	-
17	Vikas Bhawe	-	1	1	-	-	-	-	-	-	-	-	-
18	Akshay Kolhe	-	1	1	-	-	-	-	-	-	-	-	-
19	Najuka patil	-	1	1	-	-	-	-	-	-	-	-	-
20	Tushar Nagpure	-	1	1	-	-	-	-	-	-	-	-	-
21	Aparna Kumbhar	-	1	1	-	-	-	-	-	-	-	-	-
22	Ashwini Jadhao	-	1	1	-	-	-	-	-	-	-	-	-
23	Avadhoot Gadgil	-	1	1	-	-	-	-	-	-	-	-	-
24	Sayali Sanjay	-	1	1	-	-	-	-	-	-	-	-	-

Patents:

Sr. No.	Name of faculty	Patent Title	Remarks / Details
1.	Mrs. A. A. Kunte (Published)	Apparatus and process for measurement of ethanol percentage content in blended gasoline"	Application number: 2084/MUM/2011 Publication Date: 25/01/2013

20. Areas of consultancy and income generated:

Sr. No	Name of Industry / Institution	Equipment shared with Industry and for research	Revenue Generated
1	Prof. M. R. Khodake, VIT, Pune	6 and ½ digit DMM	Rs. 5000/-
2	Apurva Walunj, Trainee Hardware Engineer, Maven Systems Pvt Ltd.	Spectrum Analyzer	-
3	Kits Developed in-house by Technical Assistant	Analog and digital electronic kits, Power electronics kits, Electronic devices and circuit kits & Tools chart	Rs. 1,50,483/- (Notional savings)
4	Kits Developed in-house by Technical Assistants and Lab Assistants for Computer Department	Digital trainer kits	Rs. 68,154/- (Notional savings)
5	Pantech ProEd. Pvt. Ltd., Chennai	Organized Two days Hands - on FDP on	Rs.3360/-

		Arduino	
6	Mrs. M A Dudhedia and Mrs. S A Kulkarni	Organized Workshop on Latex for Effective Professional Report Writing	Rs. 4305/-
7	Azure Skynet Solution (P) Ltd, & IIT, Hyderabad	Organized Two days Workshop on Networking	Rs.7200/-

21. Faculty as members in - a) National committees b) International Committees c) Editorial Boards

Committee	No. of faculties
International	-
National	-
Editorial boards	-
Reviewer	4

22. Student projects:

a) Percentage of students who have done in-house projects including Inter departmental / programme

Sr. No	Academic Year	No. of In-House Project	Percentage (%)
1.	2016-17	32	80
2.	2015-16	48	87.27
3.	2014-15	34	66.67
4.	2013-14	25	55.56

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Sr. No.	Academic Year	No. of Projects in Organization	Percentage (%)
1.	2016-17	8	20
2.	2015-16	7	12.73
3.	2014-15	17	33.33
4.	2013-14	20	44.44

23. Awards / Recognitions received by faculty and students:

I. Faculty Achievements:

Sr No	Name of the Faculty	Awards Received	Organizing Institute	Year of Award
1	Dr. Mrs. M. T. Jadhav	Resource person for ISTE approved STTP "Recent trends in research in E&TC Engineering"	Sanjay Ghodawat Group of Institutes, Shivaji University, Kolhapur	2016-17
2	Mrs. M. A. Dudhedia	Resource person for inaugural session at SPPU's SE subject detailing workshop for "Analog Communication"	SPPU and Maharashtra Institute of Technology, Pune	2016-17

3	Mrs. A. A. Dixit	Awarded Excellent Grade for two weeks course on “An introduction to modern method of brain exploration with Focus on Functional Magnetic Resonance Imaging (fMRI)”	Ministry of HRD under Global Initiative of Academic Network (GIAN), IIT, KGP	2016-17
4	Mrs. A. A. Kunte	Summer faculty research fellowship program-2016 (Microwave)	IIT, Delhi	2016-17
5	Mrs. M. R. Pangaonkar	Awarded Elite Grade for NPTEL course in ‘Introduction to Research’	IIT, Madras	2016-17
6	Mrs. S. A. Joshi	Awarded class A team for ‘Task Based Training’	e-Yantra, IIT, Bombay	2015-16
7	Mrs. H. N. Burande	Appreciation by Texas Instruments	MMCOE & Edgate Technology- Academic partner, TI	2014-15
8	All E&TC Faculty	Appreciation for mentoring projects submitted to “Texas Instruments Innovation Challenge India Design Contest 2015”	MMCOE & Edgate Technology- Academic partner, TI	2014-15

II. Student Achievements in Co-curricular Activities

a. Co-curricular Activities

S N	Name of the Student	Technical Event	Level	Rank	Details
A.Y. 2016-17					
1	Tejal Lodha & team	Internet of Things Towards a Smart Future	State	First	State level workshop and Competition on ‘Internet of Things Towards a Smart Future –IoTTSF’2016’
2	Mansi Pradhan	Network and Cyber Security Championship	Intercollegiate	Second	Network and Cyber Security Championship ELAN, IIT Hyderabad at MMCOE, Pune
A.Y. 2015-16					
1	Patil Najuka & team	Technical paper writing competition	Intercollegiate	First	Tech Fest -16 at MMCOE
2	Chinmay Mahabal & team	Project Competition (IETE)	Intercollegiate	Third	Project competition at Anantrao Pawar College of Engineering & Research
3	Anushree Mahajan & team	Dexterity 2K16	National	First	Circuit debugging (FE/SE Group) at MMCOE
4	Kedar More, Aishwarya Mantke	Dexterity 2K16	National	Second	Circuit debugging (FE/SE Group 1) at MMCOE
5	Vivek Jadhav, Rohit Jagtap	Dexterity 2K16	National	Second	Circuit debugging (FE/SE Group 2) at MMCOE
6	Sayali Jamdade &	Dexterity 2K16	National	Third	Circuit debugging (TE/BE)

	team				Group 1) at MMCOE
7	Vaibhav Bhalerao & team	Dexterity 2K16	National	Third	Circuit debugging (TE/BE Group 2) at MMCOE
A.Y. 2014-15					
1	Nikhil Savanji & team	Robo Race	National	First	Robo Race, Bharthi Vidyapeeth COE, Pune
2	Nikhil Savanji , Sonia Ghorpade	Robo Race	National	First	Robo Race, P.R.Pote Patil Group of Education, Pune
3	Dileep Gadilkar	Perception-15	National	First	Techno Fest Perception-15 VIIT, Pune
4	Nikhil Savanji	ROBORACE	National	First	Techno Fest Perception-15 -15, VIIT, Pune
5	Nikhil Savanji, Sonia Ghorpade	Robo soccer	National	Second	P. R. Pote Patil Group of Educational Institute
6	Nikhil Savanji	ROBORACE	National	Second	DYNAMECH-15, PVGCOE, Pune
7	Abhijeet Dalvi & team	Analog Maker Competition	Institution	First	Texas Instruments Analog Maker Competition 2015
A.Y. 2013-14					
1	Nikhil Savanji	Roborace	National	First	Techlligent2014, PCCOE
2	Nikhil Savanji	Trackobot	National	First	Innovation2k14, CCOEW
3	Nikhil Savanji, Sonia Ghorpade	RoboRace	National	Second	Technovision 2014 , JSPM & TSSM
4	Nikhil Savanji	Robo Race	National	Second	Tech Manthan 14, JSPM Group Institutes
5	Laxmikant Swami& team	Digital Empire	National	Runner up	BVCOE for Women. Pune
6	Nikhil Savanji	Robo Race	Intercollegiate	First	Robo Club, MES COE
7	Nikhil Savanji	Robotica	Intercollegiate	Second	AISSMS, Pune
8	Nikhil Savanji	Robo Race	Intercollegiate	Second	Texephyr'14, MIT, Pune
9	Nikhil Savanji	Robo Soccer	Intercollegiate	Second	Robo Club, MES COE
10	Nikhil Savanji	Robo Race	Intercollegiate	Third	Tesla, MIT COE

b. Extra Curricular Activities

Sr no	Name of the Student	Event	Level	Rank	Details
A.Y. 2016-17					
1	Pooja Kad	Purshottam Karandak 2016	Intercollegiate	Consolation	Kakaji Joglekar Award
A.Y. 2015-16					
1	Department of E&TC	Ensemble-2K15	Institution	House Cup	House Cup for best overall performance

2	Diksha Virkar	Ball Badminton Competition	Zonal	Captain	Captain, Women Ball Badminton (SPPU)
3	Diksha Virkar	Ball Badminton Competition	State	Third	61 st Senior Maharashtra State Ball Badminton
4	Akash Korke & team	Baseball	National Inter Engineering	Second	Zest – 2016
5	Virat Shirsat	Carrom	Intercollegiate	Second	Sinhgad Karandak
6	Bhargav and Group	Vadyalankar Brjhan	Intercollegiate	Second	BMCC, Pune
7	Sheetal Kate	Vinodattam Karandak 2015	Open	Second (Acting)	Best Actress Award
8	Kapil Digraskar	Vinodattam Karandak -15	Open	Consolation (Acting)	Best Actor Award
A.Y. 2014-15					
1	Nachiket Agashe	Badminton	National Inter Engineering	Third	Sports Competition
2	Mihir Choudhary	Badminton	National Inter Engineering	Third	Sports Competition
3	Kedar Bhusanikar	Basketball Tournament	Inter Collegiate	Second	Sports Competition
4	Ajay Khond	Sport Quiz	Inter Collegiate	Second	Organized by Lions Club & C.A.C.P.E.C
5	Akash Jadhav	Sport Quiz	Inter Collegiate	Second	Organized by Lions Club & C.A.C.P.E.C
6	Kedar Bhusanikar	Basketball Tournament	Inter Collegiate	Second	ZEST 15 COEP, Pune
7	Rajashree Pawale	Scholarship for my child	Inter Collegiate	Scholarship Rs. 15000/-	Ernst & Young Foundation
A.Y. 2013-14					
1	Tondare Madhura	NCC Certificate B Examination	State	B Grade	NCC
2	Virkar Diksha	Sports Ball Badminton	Inter zonal Sports	Runner up	SPPU
3	Niraj Raut	University Board of Sports – Water Polo	Inter zonal	Third	SPPU
4	Kedar Bhunsanikar	Basket ball	Intercollegiate	Second	Elevate14, PICT, Pune
5	Prasad Joshi	Water Polo	Intercollegiate	Third	Organized by SP College
6	Sneha Muley	Suman Karandak	Intercollegiate	Consolation	Reading Competition

7	Pushakraj Bhide	Suman Karandak	Intercollegiate	Consolation	Reading Competition

24. List of eminent academicians and scientists / visitors to the department

Sr. No	Name of Visitor	Profile of Visitor	Academic Year
1	Dr. Dattatraya Bormane	Jt. Director, JSPM Group, Director, NTC, and BoS Coordinator, SPPU, Pune	2016-17
2	Mr. Prateek Gupta	CEO, Innovians Technologies, New Delhi.	2016-17
3	Dr. Mrs. Shaila Apte	Professor, RSCOE, Pune	2016-17
4	Mr. Rohit Vatsa	Senior Domain Expert in Telecom and Media, Persistent Systems Ltd., Pune	2016-17
5	Mr. Avinash Magdum	General Manager- Quality, Harbinger System Pvt. Ltd., Pune	2016-17
6	Mr. Suresh Aundhekar	Sub Divisional Engineer, RTTC, BSNL, Pune	2016-17
7	Mr. Nitin Lokhande	Director, Educate to Automate, Pune	2016-17
8	Dr. Mrs. Vinaya Gohokar	Associate Professor, MIT, Pune	2016-17
9	Dr. Mrs. S. S. Deshpande	Professor and former HOD, Walchand College of Engineering, Sangli.	2015-16
10	Mr. Ajay Bhagwat	Founder, Managing Director Renu Electronics Pvt. Ltd., Pune	2015-16
11	Mr. Girish Khilari	Director of Operations, Engineering and Services, OmnePresent, Pune	2015-16
12	Dr. Dattatraya Bormane	BOS chairman, Principal RSCOE, Pune	2015-16
13	Dr. Mahesh Kolekar	Head of Center for Advanced System Engg, IIT, Patna	2015-16
14	Dr. Judhisthir Mahapatro	Assistant Professor, NIT, Delhi	2015-16
15	Dr. Himanshu Agrawal	Associate Professor, Computer Science Department, Symbiosis International University, Pune	2015-16
16	Dr. Jayanta Mukhopadhyay	Professor, IIT Kharagpur	2015-16
17	Dr. Ramchandra Manthalkar	Professor, SGGS, Nanded	2015-16
18	Mr. Girish Khilari	Vice – Chairman, IEEE Chairman Computer Society, Pune	2015-16
19	Mr. Mangesh Edke	Co founder, FourByte Embedded Solutions. Pune	2015-16
20	Dr. Mrs. Neelima Iyer	Sr. Principal Scientist and Chair, Instrumentation and Communication Unit, CSIR-NCL, Pune	2014-15
21	Mr. Rajesh Pawar	SKF Ltd., Pune	2014-15
22	Mr. Jitendra Kanitkar	Applied Micro Circuits, Pune	2014-15

23	Dr. D. M. Chandwadkar	Professor, K K Wagh, Nashik	2014-15
24	Dr. S. S. Ohol	Professor COEP, Pune	2014-15
25	Dr. Mrs. Shaila Apte	Professor, RSCOE, Pune	2014-15
26	Dr. G. B. Singh	Professor, FTII, Pune	2014-15
27	Prof. G. R. Patil	Associate Professor, AIT, Pune	2014-15
28	Mr. Rajan Shringarpure	Managing Director, Vishay Components India, Pune	2013-14
29	Mr. Archis Bhawe	Proprietor, IDG Product Development, Pune	2013-14
30	Mr. Ajay Nagarkar	MAPYN Technologies, Pune	2013-14
31	Mr. Rajesh Chavan	Jeevan Sanjivani, Pune	2013-14
32	Mr. Amit Nahar	Project Leader, IFM Engg., Pune	2013-14

25. Seminars/ Conferences/Workshops organized & the source of funding:

a) National:

Sr. no.	Seminars/ Conferences/Workshops	National / International	Date	Source of funding
1	National Conference on "Internet of Things: Towards a Smart Future"	National	17/02/2016 to 18/02/2016	SPPU, BCUD- QIP funding and Institution

b) International:- Nil

c) State/ Institution:-

Sr. No	Programs Organized	State / Institution	Date	Source of Funding
A.Y.-2016-17				
1	Workshop cum National Level Championship on Mind Controlled Robotics	Institution	07/02/2017 & 08/02/2017	Institution
2	One day Technical Paper Writing	Institution	27/01/2017	Institution
3	One week Winter Training Program on Networking (CCNA)	Zonal	09/01/2017 to 14/01/2017	Institution
4	Workshop on Latex for Effective Professional Report Writing	Institution	19/12/2016 to 21/12/2016	Institution
5	Two days state level Workshop on Internet of Things: Towards a Smart Future	State	15/12/2016 to 16/12/2016	SPPU, BCUD- QIP funding, Institution
6	One day Hands - on Hardware Training on PIC Microcontroller	Institution	05/12/2016	Institution
7	Two days Hands on FDP on Arduino Microcontroller	Zonal	29/11/2016 to 30/11/2016	Pantech ProEd. Pvt.
8	Two days Workshop on Networking	Zonal	02/09/2016 to	Institution

			03/09/2016	
9	One Day Hands-on Training on LabVIEW -underISTE staff chapter	Institution	06/08/2016	Institution
10	Two days Workshop on Raspberry Pi	Institution	19/07/2016 to 20/07/2016	Pantech ProEd. Pvt.
11	Workshop on Latex for Effective Professional Project and Seminar Report Writing	Institution	15/06/2016 to 20/06/2016	Self Sponsored
A.Y.-2015-16				
1	Two days workshop on Research Paper Writing and Publication	Zonal	08/02/2016 to 09/02/2016	Institution
2	One day Knowledge Dissemination Program on Research Areas in Image Texture Analysis	Zonal	21/08/2015	Institution
3	Three days Hands - On Training Program on Embedded Linux	Zonal	06/08/2015 to 08/08/2015	Institution
4	LabVIEW workshop	Institution	01/07/2015 to 03/07/2015	Institution
A.Y. 2014-15				
1	Workshop on PCB designing software (KiCAD)	Institution	24/02/2015	Institution
2	PCB designing Workshop	Institution	02/08/2014 to 04/08/2014	Institution
3	LabVIEW Workshop	Institution	26/07/2014 to 28/07/2014	Institution
4	T.E. E&TC Syllabus detailing workshop on SPOS	Zonal	12/06/2014 to 14/06/2014	Institution
A.Y. 2013-14				
1	Add on course on KiCAD	Institution	10/01/2014 to 11/01/2014 and 23/01/2014	Institution

26. Student profile programme / course wise:

Name of the Course/programme	Admission Year	Application Received	Selected	Enrolled		Pass percentage
				*M	*F	
Electronics & Telecommunication Engineering.	2016-17	All the rules and regulations are as per the admission process governed by DTE/AICTE.		59	27	NA
	2015- 16			58	30	61.36%
	2014- 15			70	39	73.15%
	2013-14			68	36	81.37%

27. Diversity of Student:

Name of the Course	Academic	% of Students	% of Students	% of
Electronics & Telecommunication Engineering	2016-17	97.70	2.30	NA
	2015-16	97.80	2.20	NA
	2014-15	97.27	2.73	NA
	2013-14	99.04	0.96	NA

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Exam	No of Students			
	2015-16	2014-15	2013-14	2012-13
GATE	3	2	4	2
GRE	5	6	4	4
CAT	4	-	2	-
CMAT	-	1	1	1
TOEFL	1	4	2	2
MBA-CET	2	4	1	3
MPSC	-	-	-	1
AFCAT	-	-	1	-
IELTS	-	1	-	-

29. Student Progression:

Student progression	Against % enrolled			
	2015-16	2014-15	2013-14	2012-13
UG to PG	3.75	12.24	10.93	19.37
PG to M. Phil.	-	-	-	-
PG to Ph.D.	-	-	-	-
Ph.D. to Post-Doctoral	-	-	-	-
Employed				
Campus selection	20	14.96	15.62	5.42
Other than campus recruitment	15.63	52.38	57.81	60.46
Entrepreneurship/Self-employment	-	2.04	4.68	4.65

30. Details of Infrastructural facilities

a) Library

The Department library has a good collection of technical books that are made available to students. These books are magnanimously donated by Faculty and students.

	Titles	Volumes
Total Number of books	226	675
Total Number of Journals (IETE)	2	10

b) Internet facilities for staff & students

Internet Service Provider - TATA Tele services Ltd, Pune.

Leased Line	- 48 Mbps (Institution)
Contention ratio	- 1:1
Firewall	- Sonicwall NSA 4600
D-Link switches 24 port (make)	- 7 nos.
D-Link switches 16 port (make)	- 1 nos.

c) Class rooms with ICT facility:

- Four classrooms with ICT facilities (LCD Projector with screen, white board, Computer, etc.) and one tutorial room
- One seminar hall with ICT facilities (LCD Projector with screen, white board, soft notice board, Computer etc.)

d) Laboratories

Sr. No.	Name of Laboratory	Shared/ Exclusive	Major Equipments	Capital Investment in Rs.
1	Instrumentation and Control Laboratory	Exclusive	PLC Trainer, Function Generator, CRO, Power Supplies, DMM, Satellite Training Lab Amitec Make, Microwave bench, OTDR, Fiber Optic Communication Trainer	Rs. 10,75,135/-
2	Digital Electronics Laboratory	Exclusive	Function Generator, CRO, Power Supplies, DMM, Digital IC tester	Rs. 4,44,032/-
3	Communication Laboratory	Exclusive	Digital TV trainer (Sigma Trainers) – 1 no., HD TV trainer (Sigma Trainers) – 1 no., Spectrum Analyser (Agilent Technologies) 9kHz - 3GHz – 1 no., Spectrum Analyzer (GW Instek) 3GHz -1 no., VHF Wobulator S- 846T (Signet) 1MHz-240 MHz – 1 no., DSO(Tektronix) 4 Ch., 100 MHz, 1GS/s – 2 nos., DSO(Tektronix) 2 Ch., 60 MHz, 1GS/s – 4 nos., Function Generator, CRO, Power Supplies, DMM etc.	Rs. 25,73,771/-
4	Analog Lab Laboratory	Exclusive	Function Generator, CRO, Power Supplies, DMM, I C Kits, six ASLK PRO worth Rs. 75,960/- donated by Texas Instruments under the MoU with EDGATE Technologies	Rs. 7,17,211/-
5	Computer Laboratory – I	Exclusive	CRO, Power Supplies, DMM, ARM (Cortex, LPC 2148), PIC microcontroller	Rs. 16,05,783/-

6	Electronic Design Laboratory	Exclusive	Matlab Software - 10, Software - MultiSIM + multiMCU + Ultiboard 10 user, CRO, Power Supplies, DMM, DSP Kits (TMS320C6713)	Rs. 36,39,635/-
7	Microprocessor Laboratory	Exclusive	CRO, Power Supplies, DMM, FPGA Spartan III Protoboard, CPLD with device XC9572P84, FPGA Virtex XCV50-TQ240	Rs. 11,37,776/-
8	Project Laboratory	Exclusive	Multi Purpose Lab Station (Agilent Technologies), PLC Program Logic Control (B&R Automation) – 1 no., AMITEC make 5MHz -2GHz antenna training system – 2 no., Antenna Training Lab Amitec Make, 5MHz-2GHz+35 SMA– 1 no., Measurement of antenna Radiation Pattern (Adtron) – 1 no., CRO, Power Supplies, DMM	Rs. 18,88,511/-
9	Power Electronics Laboratory	Exclusive	3G Mobile Trainer Kit, GMSK Modulation Kit, PSTN Trainer Kit, CDMA Trainer Kit, Function Generator, Powerscopes, Power Supplies, DMM	Rs. 9,62,112/-
10	Computer Laboratory – II	Exclusive	LabVIEW Academic Premium Suite - 1 no., NI ELVIS II Hardware - 1 no., NI Digital Electronics FPGA Board addon ELVIS II - 1 no., Freescale (HCS12) Microcontroller Prototype Board addon to ELVIS II - 1 no., NI USB multifunction DAQ 6008 card (Complimentary with Lab VIEW) - 1 no., CRO, Power Supplies, DMM	Rs. 19,88,561/-
Total Rs.				1,60,32,528/-

Central Facilities Provided By E&TC Department			
Central Facility	Details	Shared/ Exclusive	Investment (Development cost) in Rs.
Maintenance and Development Cell	i) Design and development of 2 Integrated Circuits Kits for E&TC department– January 2017	Exclusive	Rs. 2128/-
	ii) Design and development of 6 Basic Electronic Lab Kits for E&TC department– January 2017	Exclusive	Rs.4597/-
	iii) Design and development of 6 Analog Communication kits for E&TC department – January 2017	Shared	Rs.4436/-

	iv) Design and development of 20 Digital trainer kits for Computer Engineering department– November 2016	Exclusive	Rs.81,846/-
	v) Repair of 15 Digital Trainer Kits for Computer Engineering department– September 2015	Shared	-
	vi) Design and development of 14 Analog circuit kits for E&TC department – September 2015	Shared	Rs.31,330/-
	vii) 16 Power Electronics Kits for Electrical Engineering department – September 2015	Shared	
	Total Rs.		Rs. 1,24337/-
Calibration Cell	Calibration of electronic measuring instruments. Calibrators calibrated from ARAI, Pune Calibrators: 1. 6 1/2 Digital Multimeter 2. 20MHz Arbitrary Function Generator 3. DSO (Tektronix) 4CH 100 MHz	Shared	Rs. 21,738/-

31. Number of students receiving financial assistance from college, university, government or other agencies:

Sr. No.	Type of assistance		Agency Providing Financial Assistance	Academic Year			
				2016-17	2015-16	2014-15	2013-14
1.	GOI PM Scholarship		Social Welfare Dept. & Tribal Development Dept.	92	123	125	93
2.	GOI PM Freeship			34	56	65	60
3.	EBC Concession		Jt. Director of Tech. Education	107	87	74	73
4.	Minority Scholarship	MOMA	Dept. of Minority Welfare	1	1	1	0
		SGS		1	2	1	0
5.	Central sector scholarship		Jt. Director of Higher. Education	0	0	0	0
6.	STC		Zilla Parishad	1	0	0	1
7.	PTC			0	0	0	0
8.	J & K Special Scholarship		AICTE	0	0	0	0
9.	ST	Scholarship	Adivasi Prakalap Department	0	1	1	1
		Freeship		0	0	0	0
10	Marathwada Mitra Mandal Scholarship		Marathwada Mitra Mandal	0	1	1	2
11	MMCOE Alumni scholarship: Late Shri P		Alumni Jaideep Honap	2	2	2	0

	N Honap and U. S. Anikhindi Scholarship					
12	Lila Poonawalla Foundation scholarship	Lila Poonawalla Foundation	*	1	2	2
13	Cummins India Foundation scholarship	Cummins India Foundation	*	1	0	0
14	Late Gajanan Bhimrao Scholarship	Mrs. R. S. Lingras	1	2	0	0
15	Pawar Private Charitable Trust scholarship	Pawar Private Charitable Trust	*	0	1	0
16	Vesuvius International Scholarship	Vesuvius Americas	*	1	1	0

* Application in process

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

Activities conducted under ISTE

Sr. No.	Name of Visitor	Academicians / Visitors	Designation and work place	Purpose of visit/Activity Conducted	Date	Beneficiary class
1	-	-	-	Brainiac-2K17 Inter and Intra College Quiz Contest	25/01/2017	Student Community
2	Dr. Mrs. Shaila Apte	Academician	Professor, E&TC Dept., RSCOE, Pune,	Expert lecture on "Signals and Systems"	20/06/2016	SE
3	Mr. Avinash Magdum	Visitor	General Manager - Quality, Harbinger Systems Pvt. Ltd.	Workshop on Building "Blocks of IoT" under ISTE Student Chapter	31/08/2016	TE (E&TC, IT), Students, Staff

Activities conducted under IETE

Sr. No.	Name of Visitor	Academicians / Visitors	Designation and work place	Purpose of visit	Date	Beneficiary class
1	Dr. Mrs. Shaila Apte	Academician	Professor, E&TC Department, RSCOE, Pune,	Expert lecture on "Digital Signal Processing"	20/06/2016	TE
2	Mr. C. B. Joshi	Academician	Associate Professor, PVG(Retd.), Pune	Add on course on PIC Microcontroller Project Based Learning	07/02/2016 to 08/02/2016	TE

3	Mr. Gaurav Borade	Visitor	Quality Engineer, Sagar Industries	Technical event "Analog Design"	20/08/2015	SE, TE, BE
4	Ms. Pooja Kulkarni	Visitor	Embedded Engineer, Thuse Electronics, Pune	Workshop on "LabVIEW"	01/07/2015 to 03/07/2015	TE, BE
5	Mr. D. G. Kadlaskar.	Visitor	Retired Divisional Manager, Force Motors, Pune	Expert lecture on "Electronic Product Design"	18/09/2014	BE
6	Mr. Sachin Kadam	Visitor	Director, Sachin M. Kadam and Associates, Pune	Expert lecture on "PLC And Automation"	07/03/2013	BE
7	Mrs. Vandana Salve	Visitor	System Software Developer, NVIDIA, Pune	Expert lecture on "Embedded System"	27/07/2012	BE
8	Mr. Paresh Kulkarni	Visitor	Telecom education consultant, Telecom Learning Center, Bangalore	Expert lecture on "Job opportunities in Telecom Sector"	14/02/2012	BE

Sr. No	Programs Organized	State / National / International	Source of Funding
A.Y.-2016-17			
1	Dexterity-2K17	National	Institution
2	Expert Lecture on Traffic Awareness	BETA, Students' Association	Institution
3	TECH-FEST	Institution	Institution
A.Y.-2015-16			
1	TECHNO-2K16 a Project Exhibition cum Student Poster & Paper Symposium	Institution	Institution
2	Dexterity-2K16	National	Institution
3	Technical Paper writing competition	Intercollegiate	Institution
4	Poster Presentation	Institution	Institution
5	Mini project exhibition on Engineer's Day	BETA, Students'	Institution

		Association	
6	Aptitude exam for SE,TE & BE.,	BETA, Students' Association	Self Sponsored
A.Y. 2014-15			
1	College Level Event TECHNO-2K15	Institution	Institution
2	Texas Instrument's Analog Maker Competition	Institution	Edgate Technology
3	Technical Event – Creatronics	State	Institution
4	Dexterity 14	National	Institution
A.Y. 2013-14			
1	Dexterity 2K14	Institute	Institution

On-site domain-specific training:

Sr no	Name of the Student	Training	Status	Details
1	Adinath Kothari	72 Hours Self Support Employability Enhancement Training Program (SSEETP)	Course completed successfully	RTTC BSNL Training centre, Chinchwad, Pune
2	Aishwarya Gaikwad	4-Weeks Industrial Training	Course completed successfully	Cummins India Ltd.- Power Systems
3	Kshitija Bartakke	6 weeks Training Course – VT-Specialization Data Comm	Course completed successfully	BSNL, Pune
4	Mrinali Tickoo	2 Weeks Industrial training in Intelligent & Broadband Technology	Course completed successfully	BSNL, Pune
5	Uttara Kulkarni	1 week Vocational Training course	Course completed successfully	Prasar Bharti All India Radio, Pune
6	Dipali Tapare, Rajashree Pawale	Internship in PLC Programming	Course completed successfully	V-RAMP AUTOMATION

Special lectures conducted by Alumni:

Sr. No.	Name of Alumni	Activity by Alumni	Date of Activity
1	Mr. Avadhoot Deshpande	Guest Lecture on Masters in Embedded and career opportunities	13/01/2017
2	Mr. Pranav Dharmadhikari	Guest Lecture on Masters in VLSI and future scope	13/01/2017

3	Mr.Omkar Kuwadekar , Ms.Vishakha and Mr.Chinmay Mahabal	Workshop on Proteus	07/01/2017
4	Mr.Ashwin Bharat	Job scenario in Electronics and Telecommunications and higher studies in USA	19/12/2016
5	Mr. Pratik Khodke	Refresher course in Mathematics	08/09/2016
6	Mr.Shreyas Athawale	Expert lecture on Computer Networks	06/09/2016
7	Ms. Uttara Kulkarni	Expert lecture on Data Structures & Algorithms	15/07/16
8	Ms.Vrsuhali Vaidya	Expert lecture on Mobile Communication	13/02/2016
9	Mr. Kaustubh Bandewar	Hands on workshop on Advanced MS- Excel & Power Point presentation	13/02/2016
10	Mr.Mayur Varma	Guidelines for Higher Education	28/01/16
11	Mr.Akash Sancheti	Lecture on Internet Of Things	06/01/16
12	Mr. Vikram Naik	Discussion on job opportunities in industry	30/12/15
13	Mr. Mayur Namjoshi, Mr. Amey Bhat, Ms. Vrushali Vaidya,	How to prepare and face Aptitude Test, Group Discussion, Technical and Personal Interviews	22/07/2015
14	Mr. Pratik Khodke	Basics of Signals & Systems	11/07/2015
15	Mr. Nihan Pol	Opportunities for higher education abroad on GRE and TOEFL	02/07/2015
16	Mr. Mahesh Thite	Expert lecture on Fiber Optics	07/03/15
17	Mr. Prasad Joshi	Mini Project Guidance	15/12/2014 and 4/4/2015
18	Mr. Prasad Joshi	Workshop on FIZZARDUINO	16/09/14 to 17/09/14
19	Mr. Jaideep Honap	Informative Lecture on career opportunities	28/06/14
20	Mr. Atul Byale Mr. Nitin Kale	Project Guidance	15/12/2013 to 30/04/ 2014
21	Mr. Nitin Kale Mr. Atul Byale	Project Guidance	30/07/2013 to 02/10/2013

Industrial Visits:

Sr No	Place	Purpose of Industrial Visit
1.	Power Former's System Pvt. Ltd., Bhosari. Pune	To give exposure to students in Industrial Automation
2.	Prasar Bharti Doordarshan Studio, Pune	To impart practical knowledge of editing and processing of video and audio signal applied before transmission to students.
3.	BSNL Mobile Telephone Switching Office, Pune	To provide exposure to working / live mobile switching equipment

4.	Diotech Electronics India Pvt Ltd, Pune.	To motivate students to take up a career in VLSI domain by exposing them to the live manufacturing process of active semiconductor components.
5.	All India Radio (AIR), Shivajinagar, Pune.	To observe DRM FM transmitter & different antennas and understand the practical significance of AM transmission
6.	MAHATECH 2017- A B2B Industrial exhibition, Pune.	To access real time status of few technologies and to interact with industry leaders
7.	Renu Electronics, Pune.	To provide an insight into the real working environment of electronics industry
8.	BSNL's OCB switch, Pune.	To provide exposure to working/ live telecommunication switching system in a telephone exchange and understand the concepts of telecommunication switching.
9.	GM Enterprises, Pune.	To observe and understand the stepwise process of SMD mounted PCB's.
10.	Geomagnetic observatory, Raigad.	To observe and understand the continuous changes in the magnetic field of the earth.
11.	ITI Limited, Bangalore.	To make students aware of steps for rural automatic exchange and PCB manufacturing (SMT & SMM mounting)
12.	Doordarshan Kendra, Pune	To impart practical knowledge of editing and processing of video and audio signal applied before transmission to students.

*Various Programs listed in Point 25 also contribute towards Student Enrichment

33. Teaching methods adopted to improve student learning

1. Add-on facilities:

To cope up with rapid changes in technologies and continuous changes in industry, we arrange add-on courses to bridge the industry - academia gap. These add-on facilities help to develop employability skills in students. This is accomplished by arranging:

- i) **Guest lectures & Expert lectures:** Students are given an opportunity to interact with the industry experts and senior academicians through Guest lectures & Expert lectures.
- ii) **NPTEL lectures:** IIT level course delivery is brought to the classrooms through NPTEL videos
- iii) **Add-on courses:** To give an insight on technological advancements, hands on training workshops on emerging technologies are conducted by experts
- iv) **Industrial Visits/Tours**
Industrial visits specified in the curriculum viz. Mobile Switching Center Gateway/ PSTN Switching, BSNL and Door Darshan Prasar Bharti are conducted annually. However, with an aim to go beyond academics,

department conducts additional industrial visits and educational tours to various technology exhibitions. These industrial visits provide students a practical perspective of industrial environment and current work practices

Impact of Knowledge Transfer

Faculty periodically ensures effective transfer of knowledge and attainment of learning outcomes. Student performance is evaluated through the following assessment tools:

1. Assignments
2. Unit tests
3. Surprise tests
4. Mock Practical exams
5. Presentation/Group Discussion on a specific topic
6. Quizzes

Based on the result analysis of the various assessment tools, following remedial actions are taken:

i) Remedial coaching

Remedial coaching is delivered on postmortem basis to analyze the failure causes. Key points of the question paper and answering scheme is discussed with the students.

ii) Pro- remedial Tutorials

In addition to the regular tutorials prescribed in the curriculum, Pro remedial tutorials are conducted for mathematical and analytical subjects like Signal and Systems, Network Theory, ETL etc. for extensive practice of numerical problems.

iii) Teacher Guardian Scheme:

Institution's teacher guardian scheme ensures effective counseling of students. Parents are given an update of their ward's performance through regular telephonic call/SMS and Parent Teacher Meet (PTM).

iv) Collaborative and Self learning:

Seminal works are delivered by students on the courseware and also on the topics of interest outside the syllabus. This activity is carried out in groups of three to four students each.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Departmental Participation at Institute Level Activities

1. **NSS Camp:** This activity was initiated in AY2014-15. Departmental staff as well as students participated in NSS camp organized at village Manerwadi from 28th Dec.2015 to 4th Jan.2016 and from 3rd Jan-2015 to 9th Jan -2015. This year too, department staff and students participated in the NSS camp at Manerwadi from 22nd to 28th Dec. 2016.
2. **Blood donation camp:** Blood donation camps have been organized since AY 2011-12 in memory of Shri. Shankarrao Chavan (Founder and President of MMCOE) on 26th February and on Kargil Vijay Diwas from

AY 2013-14. Department faculty and students have actively participated in the blood camps every year. Additionally, students also donate blood in various blood camps held in the city by organizations like Arth Kranti Jansansad & Like Minded Initiative for Empowerment (LIFE).

3. **Participation in Natural Disaster's Relief Fund:** Department has shown tremendous support by contributing a part of their personal pockets, to Natural Disaster's Relief Fund. Last year, Jammu & Kashmir had faced a major disaster and huge damage due to floods. Our Institute donated a respectable amount on 9th September 2014
4. **Participation in Swacch Bharat Abhiyaan:** This activity, being a national revolution is performed by our Institute regularly.
5. **Traffic Awareness Program:** This activity was conducted by Institute to celebrate Engineer's day on 15th September 2015 to create awareness amongst students as well as people about the traffic rules and their social responsibility. Students of E&TC department actively participated in the program
6. **Contributions towards medical treatment of staff kin and students:** Department Faculty has magnanimously contributed towards the medical treatment of ailing student and staff kin

Extension Activities

1. BETA, Students' Association and ISTE organized an intercollegiate Technical Quiz, 'BRAINIAC-2K17' on 25th Jan. 2017. Total 450 students from various colleges in Pune participated in the event. The main objective of this technical quiz was to encourage students to prepare for competitive exams and give an insight into the aptitude tests conducted by MNCs. The proceeds were donated to Shri Sai Seva Residential School for mentally challenged girls and boys.
2. BETA, Students' Association organized a PAN card drive from 5th July to 20th July 2015, in the college campus. To enroll for PAN card is a tedious process. It involves difficult scrutiny of documents, so the main purpose of this drive was to provide facility in college campus. It also helped to create awareness among the students. The event helped to achieve a target of 160+ entries of PAN card. From this students were able to understand the various rules and procedures of Government policies.
3. E&TC students delivered a seminar on emerging technologies and their applications in Queen Mary's Technical Institute for Differentially Disabled Soldiers.
4. E&TC Alumnus, Mr. Jaideep Honap awards an annual scholarship of Rs.10,000/ to needy and deserving students of the department.
5. "Joy of Giving" club: BETA, Students' Association formed a club to reach out to the less fortunate people.
 - a. Activity 1: BETA student members set up donation desks in college and collected donations in cash and kind and subsequently donated them to Shri Sai Seva Residential School for mentally challenged girls and boys.

- Staff and BETA student members visited the school and spend quality time with the children of the school.
- Activity 2: During annual social gathering “Ensemble 2015” BETA student members set up a stall and collected donations in cash and kind and donated the collections to orphans.
 - Activity 3: Under the guidance of E&TC faculty, BETA student members visited ‘Apla Ghar’, an orphanage and donated clothes and toys. They spend quality time with the children of the orphanage.
 - Activity 4: Staff and students generously donated grocery items to ‘Lui Brail Andha Apang Kalyan Sanstha’, Wagholi, Pune.

35. SWOC analysis of the department and Future plans:

Strengths:

- Committed, dedicated, qualified (35% of faculty are pursuing PhD) and experienced faculty with a good retention ratio
- Efficient, experienced and qualified (Graduate) supporting staff, actively involved in maintenance, design and development of Trainer kits, e-waste recycling and management
- Good student mentor system
- Good number of interactive sessions by industry experts & senior academicians
- Active IETE Student Forum, ISTE student Chapter and BETA - Student Association

Weakness:

- Less Research Publications in peer reviewed indexed journal
- Formal collaborations with industry (MOUs) need to be enhanced
- Low Faculty Cadre Ratio
- Research facilities need to be enhanced

Opportunities:

- Proposed electronic cluster in Pune will enhance employability and entrepreneurship opportunities and open up more avenues for student internships
- Participation in significant multidisciplinary events, e.g ROBOCON, BAJA etc. will enhance multidisciplinary activities and research
- Increased Alumni interaction will empower current students

Challenges:

- Rapidly changing technology
- Employment/ entrepreneurship in core E&TC domain
- Interdisciplinary Research needs to be enhanced

- Motivate students for International/ National/State level competitive and entrance examination such as GATE, Civil services, Defense, GRE, TOEFL etc.

Future Plans:

- Increase student employment, industrial internship and entrepreneurship in core E&TC domain
- Establish MOUs with core industries/research organizations
- Set up a Center of Excellence to facilitate research in latest technology
- Increase the effectiveness of Skills Development Center by signing MOUs with industry
- ISO 9001:2008 certification
- NBA Accreditation
- ABET Accreditation

ELECTRICAL ENGINEERING

1. **Name of the department:** Electrical Engineering
2. **Year of establishment:** 2013-14
3. **Names of Programmes / Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
UG: Bachelor in Electrical Engineering

4. **Names of Interdisciplinary courses and the departments involved:**

Sr. No.	Beneficiary Class	Interdisciplinary Courses	Departments Involved
1.	SE Electrical	Engineering Mathematics III	Engineering Sciences
2.	SE Electrical	FMM	E&TC
3.	SE Electrical	NMCP	Computer Engineering
4.	TE Electrical	Industrial and Technology Management	MBA

5. **Annual / semester / choice based credit system (programme wise):**

- I. Semester pattern till 2014-15
- II. Semester based credit based system introduced for First Year Engineering from A.Y. 2015-16

6. **Participation of the department in the courses offered by other departments:**

Sr. No.	Beneficiary Class	Interdisciplinary Courses	Departments Involved
1.	SE Mechanical	Electrical and Electronics Engineering	Mechanical Engineering
2.	F.E.	Basic Electrical Engineering	Engineering Sciences

7. **Courses in collaboration with other universities, industries, foreign institutions etc:**

Sr. No	Name of Course	Participating Institute/Industry	Year
1.	Course on Solar Thermal Systems	SeeGreen Solution LLP, Pune	2016-17
2.	Add on course on Basics of AutoCAD and E-AutoCAD	Trance Academy, Pune	2016-17

8. Details of courses/programmes discontinued (if any) with reasons:

Nil

9. Number of teaching posts as on 2016-17:

Sr. No.	Teaching posts	Sanctioned	Filled
1.	Professors	01	00
2.	Associate Professors	02	01
3.	Assistant Professors	09	10

***In addition to this 02 Adjunct faculties are appointed**

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil. etc.):

Sr. No.	Name	Qualification	Designation	Specialization	Total no. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1.	Mr. M. R. Tarambale	M.E. Elect. (PhD Pursuing)	Assoc. Prof. &	Control Systems	24.5	-
2.	Mr. Balaji B. Bhure	M.E. (Elect.)	Ass. Prof.	Power System	22	-
3.	Mrs. S.A. Upasani	M.E. (Elect.)	Ass. Prof.	Power System	21	-
4.	Mr. S.C. Jadhav	M.Tech (Elect.)	Ass. Prof.	Power System	8	-
5.	Mr. P. R. Choube	M.Tech. (Elect.)	Ass. Prof.	Power System	8.5	-
6.	Mr. A.M. Suryawanshi	M.E. (Elect.)	Ass. Prof.	Control System	2.5	-
7.	Mr. A.G. Dakre	M.E. (E&TC)	Ass. Prof.	Signal Processing	7	-
8.	Mr. S.M. Harite	M.E. (Elect.)	Ass. Prof.	Power System	34	-
9.	Mr.P.R. Holambe	M.Tech (Elect.)	Ass. Prof.	Control System	4	-
10.	Mr. M.D. Raut	M.Tech (Elect.)	Ass. Prof.	Power System	6.5	-

11.	Ms.K.D. Dattani	M.Tech (Elect.)	Ass. Prof.	Power System	2.5	-
12.	Dr. Nitant V. Mate	Ph.D. (Mech.)	Adjunct Faculty	Renewable Systems	34	-
13.	Kiran Telgaonkar	B.E. (Elect.)	Adjunct Faculty	Renewable Systems	32	-

11. List of senior visiting faculty:

Sr. No.	Name	Qualification	Designation	Specialization	Total no. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1.	Mr. N. J. Jogalekar	B.Tech.	Visiting Faculty	Mechanical/ Management	35	-

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

13. Student - Teacher Ratio :

UG: Electrical Engineering – 13.84: 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

	Filled	Sanctioned
Academic Support staff (Technical)	04	No specific guidelines from University
Administrative staff	-	No specific guidelines from University

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Qualification	No. of faculty
Ph.D.	00
PG	11
UG	00

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

Sr. No.	Name of Faculty	Name of Project	Funding Agency	Amount of Funding	Duration
1	Dr. S. M. Deshpande & Mr.	9 Kw, Solar Grid Tie	BCUD, SPPU under	Sanctioned Amount Rs.	2016-18

	M. R. Tarambale	Inverter System	QIP	5,00,000	

18. Research Centre /facility recognized by the University : Nil

19. Publications:

Publications by Faculty Members:

Sr. No.	Name of faculty	No. of papers published in peer reviewed journals (national / international) by faculty and students	No. of papers published in conferences	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1	Mr. M. R. Tarambale	7	6	6	-	-	-	-	35	-	-	1.17	2
2	Mr. B. B. Bhure	1	2	-	-	-	-	-	-	-	-	-	-
3	Mrs. S.A.Upasani	2	-	-	-	-	-	-	-	-	-	-	-
4	Mr.S.C. Jadhav	1	-	-	-	-	-	-	-	-	-	-	-
5	Mr. P. R. Choube	4	2	-	-	-	-	-	-	-	-	-	-
6	Mr.A.M. Surywanshi	3	-	-									
7	Mr. A.G. Dakre	3	-	-	-	-	-	2	-	-	-	-	-
8	Mr. P. R. Holambe	1	1	-	-	-	-	-	-	-	-	-	-

Publications by Students:

Sr. No.	Name of faculty	No. of papers published in peer reviewed journals (national / international) by faculty and students	No. of papers published in conferences	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1	Mr. C.S.Chaudhary	01	-	-	-	-	-	-	-	-	-	-	-
2	Mr. Niramay N. Lingayat	-	01	-	-	-	-	-	-	-	-	-	-

Patents: Nil

20.Areas of consultancy and income generated:

Sr. no.	Academic Year	Faculty	Income generated	Income source
1.	2016-17	S.C.Jadhav	4,000/-	Water Resource Department, Regional training centre(Mech.),New Sangvi, Pune-27
2.	2016-17	S.C.Jadhav	10,000/-	Fortune Solar Energy, Pune
3.	2015-16	S.C.Jadhav	6,00,000/- (Notional Saving)	Approximate charges for supervising the electrification of MMCOE new buildings (Hostel+ Classroom complex), Total cost is approx. 32 lakhs and supervisor charges are approx. 20%.
4.	2014-15	Prof. M.R. Tarambale	90,000/- (Notional Saving)	Design and manufacturing of kits for the subject analog and digital electronics, power electronics.

21.Faculty as members in - a)National committees b) International Committees c) Editorial Boards

Committee	No. of faculties
International	01
National	01
Editorial boards	02
Reviewer	04

22.Student projects

a) Percentage of students who have done in-house projects including

inter departmental/programme:

Sr. No	Academic Year	No. of In-House Project	Percentage (%)
1	2016-17	14	77.77

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies:

Sr. No.	Academic Year	No. of Projects in Organization	Percentage (%)
1	2016-17	04	22.23

23.Awards / Recognitions received by faculty and students:
Faculty:

Sr. No.	Name of Faculty	Award Received by the Faculty	Recognition received from reputed professional bodies and agencies Nationally and Internationally	Year
1	Mr. M. R. Tarambale	Recognized as a member BoS	Recognized as a member for Board of Studies (Electrical Engineering) at SPPU, Pune	2016
		Recognized as Keynote Speaker	2nd International conference on Bioinformatics and Biomedical Science-ICBBS, June 25-26,2015 Bangkok, Thailand	2015
		Awarded a Honor of conference chair	1 st International Congress on Environmental, Biotechnology and Chemistry Engineering, at Pune, India, February 21-22, 2014.	2014
		Excellent Research Paper Award	For a paper entitled "A Computer based Feature Extraction of Lung Nodule in Chest X-ray Image" 2nd International conference on Bioinformatics and Biomedical Science-ICBBS (Round-III) held at Kuala Lumpur, Malaysia on 8-9 June 2013.	2013
		Young Investigator Award, and Inter Scholastic certificate	for one of his research paper entitled "Computational tool developed for extraction of various parameters of lung tumor from chest X-ray Image" at International conference on Computer Science and Information Technology at Goa, organized by Inter-science Research Network, Bhubaneswar, Odisha, India.	2012
2	Mr. P. R. Choube	Award of appreciation for a project	Dipex- 2014	2014
3	Mr.P.R. Holambe	First Place	Roboversity, National level Workshop, organized by COEP, Pune	2014

Students:

Sr. No.	Name of student/group	Award received by student/groups	Recognition received from reputed professional bodies and agencies nationally and internationally	Year
1.	Soham Kulkarni	Gold Medal	2(MAH) Air Squadron NCC, Nagpur	2015
2.	Shantanu Rajebhosale	2 nd Position	ELEVATE' 14 Intercollegiate Basketball Tournament held on 14 th to 16 th 2014 at PICT, Pune	2014
3.	Shantanu Rajebhosale	Runner Up	Hoop IT UP- 2014, held on 28/08/2014, MAEER'S Arts, Commerce & Science College, Pune	2014
4.	Jameel Khot	3rd position	Paper Presentation at DEXTERITY 2K14 held on 26th December 2014 at MMCOE, Karve Nagar	2014
5.	Akshay S. Patharkar	1 st Rank	Chess Tournament held at Ahamadnagar on 30/06/2013	2013

24. List of eminent academicians and scientists / visitors to the department:

Sr. No.	Name of Visitor	Profile of visitor	Year
1.	Dr. Devendra Goyal	Vice President. Solar Energy Business with Kirloskar Integrated Technology LTD, Pune	2016
2.	Mr. Vishwesh H. Pavnasjar	Business Associate, Seegreen Solution LLP, Pune	2016
3.	Mr. Pradip Naamjoshi	Fortun Compuhard Pvt Ltd., Pune	2016
4.	Mr. A.B. Gandhi	AGM (PPPM), Tata Motors Ltd., Pune	2016
5.	Mr. Shantanu Dixit	Co- founder, Prayas foundation(NGO in Power Sector), Pune	2015
6.	Dr. G.A. Vaidya	Chairman BOS, Electrical Engineering, SPPU, Pune	2015
7.	Prof. M. G. Unde	Ex. Chairman, BOS, SPPU, Pune, HOD Electrical, Vikhe Patil COE, Ahamadnagar	2013
8.	Laxminarayan Ramdas	Admiral (retd)., Param Vishisht Seva Mandal awardee, Former Chief of Indian Naval, awarded Ramon Madsaysay Award for peace	2013
9.	Soumya Dutta	Scientist, Researcher and Activist, from Delhi; National-Convenor, Bharat Jan Vigyan Jatha; Convenor of Climate and Energy group, Beyond Copenhagen Collective (India); member, South Asian Dialogue on Ecological Democracy.	2013
10.	Neeraj Jain	Gold Medalist, writer and Activist Associated with Lokayat, an Activist group based in Pune.	2013
11.	Dr. G. K. Kharate	Dean, Faculty of Engg, SPPU, Pune	2013

25.Seminars/ Conferences/Workshops organized & the source of funding:

Sr. no.	Seminars/ Conferences/Workshops	National / International	Date	Source of funding
1.	Two days national level workshop on " Solar & Smart Energy " organized in association with ED cell, IIT Delhi	Departmental level + National Level	13& 14 /01/2017	Students & MMCOE
2.	One day workshop on “Research Paper Writing”	Department Level	09/01/2017	MMCOE
3.	Two Days Faculty Development Program on “Arduino- Basics, Applications and Hands on Practice”	University Level	13/12/2016 to 14/12/2016	MMCOE
4.	One Day Workshop on “Syllabus revision workshop for TE Electrical of SPPU (2015 course)”	University Level	30/08/2016	SPPU, Pune
5.	Three Days workshop on “Solar Thermal Systems”	Institute Level	16/09/2016 to 18/09/2016	MMCOE
6.	One Day workshop on “Challenges in Power System Installations and Testing”	Institute Level	31/08/2015	MMCOE
7.	Faculty Orientation Workshop For Electrical And Electronics Engineering	University Level	13/12/2015	MMCOE
8.	National seminar on “ Sustainable Solutions to India’s Energy Crisis”	National	31/01/2013	MMCOE

26.Student profile programme/course wise:

Name of the Course/programme	Admission Year	Application Received	Selected	Enrolled		Pass %
				*M	*F	
Electrical Engg.	2016- 17	As per admission process governed by DTE, the rules and regulations are followed as per DTE		37	13	NA
	2015- 16			48	09	71.92
	2014- 15			25	4	100.00
	2013-14			21	6	85.18

27.Diversity of Student:

Name of the	Academic	% of students from	% of students from	% of students
Electrical Engineering	2016-17	100.00	0.00	NA
	2015-16	98.25	1.75	NA
	2014-15	96.55	3.45	NA
	2013-14	92.60	7.40	NA

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc?

Not Applicable as the first batch is in Final Year for academic year 2016-17.

29. Student Progression:

Not Applicable as the first batch is in Final Year for academic year 2016-17.

30. Details of Infrastructural facilities:

a. Library:

	Titles	Volumes
Total number of books	102	162

b. Internet facilities for staff & student:

Internet facilities for Staff & Students

Internet Service Provider - TATA Tele services Ltd, Pune.
 Leased Line - 48 Mbps
 Contention ratio - 1:1
 Firewall - Sonic-wall NSA 4600
 D-Link switches 24 ports (make) - 2

c. Class room Facilities:

Room Description	Usage	Shared/ Exclusive	Capacity	ICT Facilities
C118	Class room1	Exclusive	70+	Green board, LCD Projector with white screen, Overhead projector, Computer with Internet facility.
C119	Class room 2	Exclusive	70+	Green board, LCD Projector with white screen, Overhead projector, Computer with Internet facility.
C120	Class room 3	Shared	70+	Green board, LCD Projector with white screen, Overhead projector, Computer with Internet facility.
109A	Tutorial room	Exclusive	20+	Green board, LCD Projector with white screen, Overhead projector, Computer with Internet facility.
406B	Seminar Hall	Shared	125+	Green board, LCD Projector with white screen, Overhead projector, Computer with Internet facility.

d. Laboratories:

Sr. No.	Name of Laboratory	Shared / Exclusive	Major Equipments	Capital Investment in Rs.
1	Electrical Machines Lab	Exclusive	3 Phase Induction Motor, DC Series and Shunt Motor, D.C. Shunt motor coupled to synchronous generator, Alternator.	12,64,802/-
2	Electronics Lab	Exclusive	Kits for various analog and digital electronics equipments, Dual Regulated power supply, CRO, Arduino kits.	10,34,995/-
3	Electronic Measurements Lab	Exclusive	Liquid level measurement Kit, Anderson bridge, Kelvin's Double Bridge	12,38,917/-
4	Material Science and High Voltage	Exclusive	Sphere GAP Assembly unit, Motorized Oil Testing Transformer, High Voltage AC Transformer	8,80,696/-
5	Power Electronics	Exclusive	3 Phase converter and Inverter kits	11,08,908/-
6	Computer Lab	Exclusive	Computers, D-Link switches 24 ports (make), 6 KVA UPS	20,52,813/-
7	Power System	Exclusive	Transmission line model, Capacitor bank for VAR Compensation, Synchronous motor, alternator	6,17,166/-
8	Control System	Exclusive	Servo motor, PID temperature controller system, two tank system model, DC Position control, DSO, Dual trace and Tetra trace Arbitrary function generator	4,79,376/-
9	Switchgear Protection	Exclusive	Infrared sensor, Digital earth resistance measurement meter, Digital insulation resistance measurement meter.	8,03,518/-
10	Automation Lab	Exclusive	PLC and SCADA	11,18,182/-

31. Number of students receiving financial assistance from college, university, government or other agencies:

Sr. No .	Type of assistance		Agency Providing Financial Assistance	Academic Year			
				2016 -17*	2015 -16	2014 -15	2013 -14
1.	GOI PM Scholarship		Social Welfare Dept. & Tribal Development Dept.	60	39	17	NA
2.	GOI PM Freeship			22	12	06	NA
3.	EBC Concession		Jt. Director of Tech. Education	56	31	14	NA
4.	Minority Scholarshi p	MOMA	Dept. of Minority Welfare	01	-	-	NA
		SGS		01	01	-	NA
5.	Central sector scholarship		Jt. Director of Higher. Education	-	-	-	NA
6.	STC		Zilla Parishad	02	-	01	NA
7.	PTC			-	-	-	NA
8.	J & K Special Scholarship		AICTE	-	-	-	NA
9.	ST	Scholarshi p	Adivasi Prakalap Department	03	01	-	NA
		Freeship		-	-	-	NA

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

Sr. No.	Name of Visitor	Academician/ Visitors	Designation and work place	Purpose of visit	Date	Beneficiary class
1	Mr. S. S. Katre	Academician	Retired Professor, Shivaji University, Kolhapur	Applications of Electrical Machines Design	19/01/2017	TE
2	Dr. V.N. Gohokar	Academician	Professor,	Expert Lecture on "Recent trends and	02/09/2016	

			AISSMSCOE, Pune.	present practices in power systems”		TE,BE
3	Mr. S.M.kulkarni	Visitor	Reliance Energy, Mumbai	“Power system analysis-area electrification”	30/08/2016	TE,BE
4	Dr. Parmal Singh Solanki	Visitor	Ministry of Higher Education, Oman	Power System Analysis and Electrical Energy Management	28/07/2016	TE,BE
5	Mr. Rajesh Chavan	Visitor	Jivan Sanjivani Manav Sanshodhan va Vikas Sanstha, Satara	Human Resource and Personality Development	27/07/2016	TE,BE
6	Mr.V.S.Ponksh	Academician	Assistant Professor, AISSMS, Pune	Electrical Power System	02/04/2016	TE
7	Ms. Nilaya Murthy	Academician	MMCOE	Financial Management	29/03/2016	TE
8	Mr.S.S.Katre	Visitor	Retired Professor, Shivaji University, Kolhapur	Applications of Electrical Machines Design	28/03/2016	TE
9	Mr.Mukul Joshi	Visitor	CITEC Engineering India LTD.	Design and Applications of Illumination Engineering	26/03/2016	TE
10	Mr. A.B. Gandhi	Visitor	AGM (PPPM), Tata Motors Ltd., Pune	Expert Lecture on "Design and Development of solar inverter"	05/03/2016	SE, TE
11	Mr. Prashant Mahajan	Academician	Assistant Professor, AISSMS, IOIT, Pune.	Application of Advanced microcontroller in Industries.	03/10/2015	TE
12	Mr. M.P. Bhawalkar	Academician	Assistant Professor, PVG's COET, Vidyanagari, Pune-9	Substation Earthling	30/09/2015	SE, TE

13	Mrs. M.H. Dhend	Academician	Assistant Professor, AISSMS COE	Theory, applications and future trends in material science.	30/09/2015	SE
14	Mr.U.B.Sarode	Academician	Assistant Professor, PVG's COET, Vidyanagari, Pune-9	Electrical Machines	30/09/2015	TE
15	Mr. Arvind Paranjape	Visitor	Ex. AGM, TATA Power Company, Mumbai	Modernization of conventional power plants in India	30/09/2015	SE
16	Mr. A.D. Purandare	Academician	Assistant Professor, PVG's COET, Vidyanagari, Pune-9	Applications of power electronics in Electrical Engineering	29/09/2015	TE
17	Mr. Hottolkar S.J	Visitor	Deputy Engineer, MSEDCL, Pimpri, Pune	Challenges in Electrical Installation and Maintenance	31/08/2015	SE, TE
18	Mr. Shantanu Dixit	Visitor	Co- founder, Prayas foundation(NGO), Pune	Indian Electricity sector landscape and challenges	31/08/2015	SE, TE
19	Dr. S. M. Kelapure	Visitor	General Manager, R&D, PRDC Pvt.Ltd, Bangalore	Power Systems	14/03/2015	SE
20	Prof. Omkar Pawaskar	Academician	Assistant Professor, PVG's COET, Vidyanagari, Pune-9	Orientation of theory, practical and industrial of analog and digital electronics	04/10/2014	SE
21	Mr. S. B. Bandekar	Visitor	Ex. Executive Chief Engineer, Mahageneco, Mumbai	Modern scenario in power system and orientation in power system	29/09/2014	TE
22	Mrs. G. M. Karve	Academician	Asst. Prof, PVG's COET,	Theory and applications	30/09/2014	SE

			Vidyanagari, Pune-9	if electrical materials in the field of engineering.		
23	Mr. S.M. Choudhary	Academicia n	Hod Electrical, AISSMS, IOIT	Theory and application of electrical, electronic and mechanical measuring instruments.	29/09/20 14	SE

33. Teaching methods adopted to improve student learning –

Department of Electrical Engineering is making continuous efforts to make the student learning effective. Department has adopted the following methods to improve teaching learning process.

- Guest Lectures
- Power Point Presentations
- Over Head Projector
- Industrial Tours
- Workshops
- Assignments
- Mock oral test
- Feed back
- Seminars
- NPTEL videos
- Student counseling
- Courses in collaboration with Industry
- e-learning
- Class test
- Technical events
- Remedial coaching

34. Participation in Institutional social responsibility (ISR) and Extension activities –

Institutional social responsibility (ISR):

Department is participating and organizing the various activities for social causes, few of the activities are as below:

- Organizes NSS camp
- Conducts Swachchata Abhiyan
- Participates in Blood donation camp

Extension activities:

- Electrical Basics and safety workshop for non teaching staff of the institution.

35. SWOC analysis

Strength:

The strengths of the department are:

1. Senior, Dynamic, Experienced & Dedicated Faculty members.
2. Well equipped lab with latest technology.
3. Infrastructure
4. Good blend of diversified staff.

Weakness:

1. Less availability of Skilled Technical staff.
2. Lack in the areas of testing and consultancy.
3. Lacking in producing funds by means of services.

Opportunity:

1. Developing state of the art laboratories.
2. Grooming the student to the level of industry.
3. Making the student technically sound & a better human being to serve the society and Nation.

Challenge:

1. Encouraging the student & staff for research.
2. Providing 100% placement to student.
3. Generating funds by means of consultancies & services.

Future plans:

1. MoU's with various reputed Industries and Foreign Universities.
2. Organizing State, National and International level workshops, conferences.
3. Improving the testing, consultancy and research facilities.
4. ISO 9001-2008 certification
5. NBA Accreditation
6. ABET Accreditation

INFORMATION TECHNOLOGY

1. **Name of the department:** Information Technology
2. **Year of Establishment:** 2006
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

UG: Bachelor of Engineering in Information Technology

4. **Names of Interdisciplinary courses and the departments/units involved:**

Sr. No.	Beneficiary Class	Interdisciplinary Course	Department Involved
1.	SE IT	Engineering Mathematics – III	Engineering Sciences
2.	TE IT	Operating System	Computer Engineering
3.	SE IT	Soft Skills	MBA

5. **Annual/semester/choice based credit system (programme wise):**

- I. Semester pattern till A.Y. 2014-15
- II. Semester pattern, credit based system introduced at First Year Engineering from A.Y. 2015-16

6. **Participation of the department in the courses offered by other departments:**

Sr. No.	Beneficiary Class	Interdisciplinary Course	Department Involved
1.	SE	Numerical Methods and Computer Programming	Electrical Engineering
2.	SE	Computer Graphics	Computer Engineering
3.	ME	Software Design Architecture	Computer Engineering
4.	FE	Fundamentals of Programming Languages – I & II	Engineering Sciences

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**

Sr. No.	Name of Course	Participating Institute	Academic Year
1.	Winter Training School	Persistent Systems Ltd.	2016-17
2.	Audit Course in Japanese	Hirameki Solutions & HappySeed India Pvt. Ltd	2016-17
3.	Employability and skill Development	Zensar Technologies	2016-17,

	Program		2015-16
4.	Design and Analysis of Algorithms, System Programming, Operating System	Sunbeam Technology	2016-17
5.	Cyber Security (Hacking)	Cybervault Securities Solutions Pvt. Ltd.	2016-17, 2015-16, 2014-15
6.	Machine Learning	Persistent Systems Ltd.	2015-16
7.	Agile Methodology (Staff training)	Agilesoft Methodologies	2015-2016, 2016-2017

8. Details of courses/programmes discontinued (if any) with reasons:

NIL

9. Number of teaching posts as on 2016-17:

Sr. No.	Teaching Post	Sanctioned	Filled
1.	Professors	01	Nil
2.	Associate Professors	02	Nil
3.	Asst. Professors	09	10

*Recently department has appointed 2 Adjunct Faculty

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 Experience	No. of Ph.D. Students guided for the last 4 years
1.	Mrs. R. M. Chopade	ME (IT)	Assistant Professor	Database , Software Engineering	15	--
2.	Mrs. P. S. Joshi	ME (IT)	Assistant Professor	Networking, Cloud	14	--
3.	Ms. P. R. Kuche	ME (IT)	Assistant Professor	Image Processing	9.2	--
4.	Ms. S. A. Kakad	ME (IT)	Assistant Professor	Networking	9.8	--
5.	Mrs. R. M. Bhattad	ME (CSE)	Assistant Professor	Machine Learning	6.9	--
6.	Mr. N. S. Dhavase	ME (IT)	Assistant Professor	Geo Informatics, Data Mining	3.9	--

7.	Mr. P. B. Kamble	ME (IT)	Assistant Professor	Text Mining, Image Processing	2.6	--
8.	Mr. M. M. More	ME (CSE)	Assistant Professor	Cloud Computing	8.10	--
9.	Ms. R. V. Gawande	ME (IT)	Assistant Professor	Image Processing	3.1	--
10.	Mr. N. S. Patil	ME (IT)	Lecturer	Network Security, Operating System	8.1	--
11.	Ms. V. N. Phaltankar	ME (IT)	Assistant Professor	Networking	4.9	--
12.	Mr. Premkumar Apte	M.Tech (CSE)	Adjunct Faculty	Data Structures, Project Management	35	--
13.	Mr. Kiran Laturkar	M.Tech (CSE)	Adjunct Faculty	Data Structures, Project Management	35	--

11. List of senior visiting faculty:

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D. Students guided for the last 4 years
Mr. Prajwal Channagiri	B. Com, MBA, JLTP N1(National Level, JTEST, JETRO, JCAT, Advanced Diploma	Director – HappySeed India Pvt. Ltd, Head Japanese Language Department, SPPU Pune	Japanese Language Trainer	17	--
Mrs. Shurti Channagiri	B. Com, PGD CRM, JLPT N1 (Native Level) JTEST, JETRO, JCAT, TOEIC, Special Diploma	Founder – Hirameki Solutions, Pune	Japanese Language Trainer	12	--
Mrs. S. Balkawade	MA (English), Business English Certification UK	Senior Faculty. Trainer and Editor	Communication Skill and English	20	--

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

NIL

13. Student-Teacher Ratio (programme wise):

13.84:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Sr. No.	No. of academic technical supporting staff	Filled	Sanctioned
1.	Academic Support staff (Technical)	03	No specific guidelines from university
2.	Administrative staff	-	No specific guidelines from university

15. Qualifications of teaching faculty with D. Sc/D.Litt/Ph.D/MPhil/PG.

Sr. No.	Qualification	Number of Faculty
1.	Ph. D.	-
2.	Post Graduate	11
3.	Under Graduate	NIL

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

NIL

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

NIL

18. Research Center /facility recognized by the University:

NIL

19. Publications:

Publications by faculty

Sr. No.	Faculty Name	No. of papers published in peer reviewed journals (national / international) by faculty	No. of papers published in conferences	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1.	Mrs. R. M. Chopade	04	01	04	--	--	--	--	01	--	--	1.68	1
2.	Mrs. P. S. Joshi	02	--	02	--	--	--	--	--	--	--	0.26	--
3.	Ms. P. R. Kuche	04	--	04	--	--	--	--	--	--	--	0.67	--
4.	Ms. S. A. Kakad	03	--	03	--	--	--	--	--	--	--	0.60	--
5.	Mrs. R. M. Bhattad	04	--	03	--	--	--	--	--	--	--	0.66	--
6.	Mr. N. S. Dhavase	01	01	01	--	--	--	--	02	--	--	--	1
7.	Mr. P. B. Kamble	04	--	04	--	--	--	--	02	--	--	0.62	1
8.	Mr. M. M. More	05	--	04	--	--	--	--	--	--	--	0.97	--
9.	Ms. R. V. Gawande	01	--	--	--	--	--	--	--	--	--	--	--
10.	Ms. V. N. Phaltankar	01	--	--	--	--	--	--	--	--	--	0.45	--
11.	Mr. N. S. Patil	02	02	03	--	--	--	--	03	--	--	0.21	1

Publications by Students:

Sr. No.	Student Name	No. of papers published in peer reviewed journals (national / international) by student	No. of papers published in conferences	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1.	Pallavi Nagtilak, et al	1	--	1	--	--	--	--	--	--	--	0.572	0
2.	Prasad Kolhe, et al	1	--	1	--	--	--	--	--	--	--	0.569	0
3.	Pratima Bhalariao, et al	1	--	1	--	--	--	--	--	--	--	0.621	0
4.	Surabhi Rajshirke, et al	1	--	1	--	--	--	--	--	--	--	0.763	0
5.	Sagar Shah, et al	1	--	1	--	--	--	--	--	--	--	0.652	0
6.	Rucha Sonawane, et al	1	--	1	--	--	--	--	--	--	--	0.261	0
7.	Rupali Shinde, et al	1	--	1	--	--	--	--	--	--	--	0.621	0
8.	Sahdev Bhogil, et al	1	--	1	--	--	--	--	--	--	--	0.763	0

9.	Hempriya et al	1	--	1	--	--	--	--	--	--	--	0.572	0
10.	Kunal Dange, et al	1	--	1	--	--	--	--	--	--	--	0.652	0
11.	Rohan Jadhav, et al	1	--	1	--	--	--	--	--	--	--	0.265	0
12.	Poonam Deshmukh, et al	1	--	1	--	--	--	--	--	--	--	--	0
13.	Aarti Bhandari, et al	1	--	1	--	--	--	--	--	--	--	--	0
14.	Rutuja Jadhav, et al	1	--	1	--	--	--	--	--	--	--	--	0
15.	Priti Panmand, et al	1	--	1	--	--	--	--	--	--	--	--	0
16.	Ameya Kanitkar, et al	1	--	1	--	--	--	--	--	--	--	--	0
17.	Prashik Nagkirti, et al	1	--	1	--	--	--	--	--	--	--	--	0
18.	Shashank Diwan, et al	1	-	1	--	--	--	--	1	--	--	--	1
19.	Geetai Joshi, et al	--	1	--	--	--	--	--	--	--	--	--	--

Patents:

Sr. No.	Name of Faculty	Patent Title	Remark/ Details
1.	Mrs. R. M. Chopade	Next Generation Biometric Keyboard	Filed-2/02/15 Published – 05/08/2016 ID:329/MUM/2015

20. Areas of consultancy and income generated:

Sr. No	Name of Industry / Institution	Course/Workshops/FDP	Revenue Generated (Rs)
1.	Tata Consultancy Services limited iON Assessment	Online Competitive exams like GATE, PGET, CAT, UCEED, JEE Mains etc	1,73,797/-
2.	IIT Roorkee	NWTP on “Big Data & Hadoop”	9300/-
3.	CyberVault Securities Solutions Pvt. Ltd.	Workshop on ‘Cyber Security’	5460/-
4.	University	FDP on SL-II and seminar of TE IT Course	23,474/-
5.	Institution	FDP on “NS2 and Cisco Packet Tracer”	500/-

21. Faculty as members in: a) National committees b) International Committees c) Editorial Boards....

Sr. No.	Committee	Number of Faculty
1.	Editorial Board	01
2.	Reviewer	02

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/program:

Sr. No.	Academic Year	No of In-house Projects	Student in-house project (%)
1.	2016-2017	17	94.44
2.	2015-2016	18	93.68
3.	2014-2015	17	100
4.	2013-2014	11	42.11

b) Percentage of students placed for projects in organizations outside the institution i. e. in Research laboratories/Industry/ other agencies:

Sr. No.	Academic Year	No of Projects in collaboration	Student sponsored project (%)
1.	2016-2017	01	5.56
2.	2015-2016	01	6.32
3.	2014-2015	00	0
4.	2013-2014	08	57.89

23. Awards / Recognitions received by faculty and students:

Sr. No.	Name of Faculty	Awards/Recognition received	Recognition received from reputed professional bodies and agencies nationally and internationally	Year
1.	Mrs. R. M. Chopade	CSI TechNext'17, Distinguished HoD Award	CSI Chapter Mumbai	2016-17
2.	Mr. N. S. Dhavase	Third Best Poster	In iPGCON-2013, Post Graduate Conference for the paper titled "User adaptive perfecting of maps for Interactive web GPS application"	2013-14
3.	Ms. R. V. Gawande	Merit Recognition	National Level rank placed in top 8% out of total candidates	2010-11

Students:

Sr. No.	Name of Student	Awards/Recognition received	Recognition received from reputed professional bodies and agencies national and international	Year
1.	Shrinivas Deshmukh, Rohan Methapalli, Shrishtij Shripad, Sayali Gaikwad, Gauri Gire, Seema Karandikar	Shortlisted for Hackathon 17	AICTE	2016-17
2.	Samruddhi Khadake	Consolation Prize	Dajikaka Gadgil Karandak	2016-17
3.	Samruddhi Khadake	Consolation Prize	Bharat Karandak	2016-17
4.	Swapnanjali Ubale	Semi Finalist	IT Olympiad 2016	2015-16
5.	Dipali Gavhane	Semi Finalist	IT Olympiad 2016	2015-16

6.	Rohan Jadhav	Certificate of Merit – 1 st Position	One week NWTP on “Big-Data and Hadoop” Organized by IIT Roorkee and Finland Labs	2015-16
7.	Shubham Diwase	Certificate of Merit – 2 nd Position	One week NWTP on “Big-Data and Hadoop” Organized by IIT Roorkee and Finland Labs	2015-16
8.	Shabnam Udgatty	Certificate of Merit – 3 rd Position	One week NWTP on “Big-Data and Hadoop” Organized by IIT Roorkee and Finland Labs	2015-16
9.	Pallavi Nagtilak	Certificate of Merit – 4 th Position	One week NWTP on “Big-Data and Hadoop” Organized by IIT Roorkee and Finland Labs	2015-16
10.	Pooja Chavan	Certificate of Merit	One week NWTP on “Big-Data and Hadoop” Organized by IIT Roorkee and Finland Labs	2015-16
11.	Aishwarya Kadam	Certificate of Merit	One week NWTP on “Big-Data and Hadoop” Organized by IIT Roorkee and Finland Labs	2015-16
12.	Shabnam Udgatty, Taher Poonawala, Rohan Jadhav, Dhanashree Nazarkar, Yash Shah	Shortlisted for Hackathon	Hackathon organized by Persistent System I4C.	2015-16
13.	Shabnam Udgatty, Taher Poonawala, Yash Shah	Shortlisted team	IIT Techfest Bombay	2015-16
14.	Rajat Koul	2 nd Rank	Baseball in the event ZEST 15	2015-16
15.	Ajinkya Kumbhar	1 st Chess	Marathwada Karandak - 2015	2014-15
16.	Rishijit Konde	Runner Up	Hoop It Up 2014, MIT Pune	2014-15
17.	Shubham Diwase	Runner Up	Hoop It Up 2014, MIT Pune	2014-15
18.	Vishal Kamble	Runner Up	Hoop It Up 2014, MIT Pune	2014-15
19.	Tejas Wadke	1 st Rank	ZEST-14, Body Building Competition	2014-15
20.	Tejas Wadke	6 th Rank	Progressive Shri	2014-15
21.	Tejas Wadke	4 th Rank	Best Physique Competition, organized by R. V. Fitness Kamshet	2014-15

22.	Tejas Wadke	6 th Rank	Senior Pune Shri 2015 organized by The Hindu Foundation	2014-15
23.	Tejas Wadke	5 th Rank	Modern Shri 2015 organized by Modern College of Arts Commerce and Science	2014-15
24.	Sayali Gaikwad, Neha Ubale, Gauri Gire, Samiksha Mali, Arpita Kulkarni, Khushboo Patil	1 st Rank	Throw Ball, Marathwada Karandak	2014-15
25.	Rashmi Atre, Anushree Deshpande, Kiran Nayak Gaurav Dhamdhare, Sharvari Aurangabadkar	1 st Rank	State level competition AVISHKAR	2014-15
26.	Arpita Kulkarni	Guinness Book World Record	Bharatnatyam Dance	2014-15
27.	Arpita Kulkarni	1 st Rank	International Dance Competition, held at JyotnaBhole, Swargate, ABSS, Pune March 2014	2014-15
28.	Tejas Wadke	2 nd Rank	Body Building (Best Poser) competition held at COEP	2014-15
29.	Kaustubh Shinde, Akshay Phadake and Rajat Koul	2 nd Rank	Baseball in the event ZEST 15	2014-15
30.	Arpita Kulkarni	2 nd Rank	Global harmony 2015 organized by Akhil Bhartiya Sanskrutik Sangh, Pune	2014-15
31.	Arpita Kulkarni	A+ Grade	Oracle DBA OCA track in 10g	2013-14

24. List of eminent academicians and scientists/visitors to the department

Sr. No.	Name of Visitor	Profile of visitor	Year
1.	Mr. Sashank Adgaonkar	Python Analyst, Wingfotech Delhi	2016-17
2.	Dr. G. A. Patil	Ex - BoS Chairman, Shivaji University	2016-17
3.	Mr. Deepak Mane	Performance Big Data and Cloud Consultant, TRDDC Pune	2016-17
4.	Mr. Sumit Kalra	Research Scholar, IIT Kanpur	2016-17
5.	Mr. Saurabh Srivastava	Research Scholar, IIT Kanpur	2016-17
6.	Mr. Krishkant Mane	Director IIT Bombay Spoken Tutorials, Satyamev Jayate Fame	2016-17
7.	Dr. Mandar Karyakarte	SPPU BOS –IT Member	2016-17
8.	Mr. Rajesh Chavan	Founder, Jeevan Sanjeevani Sanstha, Pune	2016-17

9.	Dr. Deepak Singh Tomar	A.P.,MANIT, Bhopal & Co-principal Investigator, ISEA Project, Nodal Officer, Academic TEQIP, Chairman, Cyber Security Centre	2015-16
10.	Mr. Arif Ali Khan	Project Engineer, CDAC Hyderabad	2015-16
11.	Mr. Vikram Kumar	Project Engineer, CDAC Hyderabad	2015-16
12.	Mr. Vinay Jain	Project Engineer, CDAC Hyderabad	2015-16
13.	Mr. Paresh Sahastrabudhe	Advisory Software Engineer, Pitney Bowes S/W	2015-16
14.	Dr. Girish Palshikar	Principal Scientist, TCS	2015-16
15.	Dr. Abhijat Vichare	Senior Consultant, Persistent Systems Pvt. Ltd.	2015-16
16.	Mr. Shekhar Sahastrabudhe	Senior Consultant, Persistent Systems Pvt. Ltd.	2015-16
17.	Mr. Dattatray Deshpande	Program Manager, Persistent Systems Pvt. Ltd	2015-16
18.	Dr. Sudeep Thepade	HOD(IT), PCCOE Pune	2015-16
19.	Dr. Aarti Dixit	Associate Professor, Dept. Of Tech. SPPU	2015-16
20.	Mr. Kedar Tokekar	Principal Mentor, Sanzaru Education, Software Technical Training Pune	2014-15
21.	Mr. Prashant Pund	Founder of Agile soft Methodology	2014-15
22.	Mr. Kedar Deo	Sr. Technology Architect, Accenture Pvt. Ltd.	2014-15
23.	Dr. Nilesh Uke	HOD, IT, SCOE, Pune	2014-15
24.	Dr. G. V. Garje	BoS Chairman , IT, SPPU	2014-15

25. Seminars/Conferences/Workshops organized & the source of funding:

a) National:

Sr. No.	Seminars/Conferences/Workshops	National / International	Date	Source of funding
1.	Two days' Workshop on "Cloud Computing and Big Data"	National	13/12/16 to 14/12/16	BCUD
2.	Faculty Development Program on "Computer Graphics and Computer Graphics Laboratory"	University	08/12/16	Institution
3.	Faculty Development Program on "NS2 and Cisco Packet Tracer"	Institute	29/11/16 to 30/11/16	Institution
4.	Seminar on "Cloud Services"	Institute	17/09/16	Institution
5.	ISTE Approved STTP on "Recent Trends in Cyber Security and Forensics"	National	14/12/15 to 18/12/15	Institution
6.	Seminar on "Cloud concepts overview"	Institute	27/11/15	Institution
7.	Seminar on "Mindmap Creation"	Institute	27/11/15	Institution
8.	Faculty Development Program on "Software Lab – II and Project Based Seminar"	University	16/01/15	Institution

9.	Workshop on “Android”	Institute	20/06/14	Institution

b) International: NIL

26. Student profile programme/course wise:

Name of the Course/ programme	Academic Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
Information Technology	2016-17	As Admission process is governed by DTE, the rules and regulations are followed as per DTE		37	21	--
	2015-16			37	24	75%
	2014-15			23	26	87.75%
	2013-14			19	30	79.59%

*M=Male*F=Female

27. Diversity of Students:

Name of the Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
Information Technology	2016-17	94.82	5.18	NA
	2015-16	95.08	4.92	NA
	2014-15	93.75	6.25	NA
	2013-14	97.95	2.05	NA

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Exam	No of Student			
	2015-16	2014-15	2013-14	2012-13
GATE	-	-	1	-
GRE	1	-	7	3
Defense	-	-	-	-
TOFEL	1	-	7	3
CAT	-	-	-	-
UPSC	-	-	-	-

29. Student progression:

Student progression	Against % enrolled			
	2015-16	2014-15	2013-14	2012-13
UG to PG	1.29	9.85	16.21	12.12
PG to M. Phil.	--	--	--	--
PG to Ph.D.	--	--	--	--
Ph.D. to Post-Doctoral	--	--	--	--

Employed	37.17	11.26	18.91	25.75
Campus selection				
Other than campus recruitment	14.10	30.98	47.29	39.39
Entrepreneurship/ Self-employment	00	2.81	5.40	4.54

30. Details of Infrastructural facilities:

a) Library:

	Titles	Volumes
Total number of books	261	330

b) Internet facilities for Staff & Students: Internet facility available in all Labs

Internet Service Provider: Tata Communications/ Tata Tele Services Ltd, Pune
 Leased Line: 48 Mbps
 Contention Ratio: 1:1
 Wi-Fi facility - Yes
 Firewall – Sonic Wall NSA 4600
 CISCO Linksys Network switch 24 port- 6 No's
 D-Link Network switch 24 port- 1 No's

c) Classrooms with ICT facility: All class rooms are well equipped with projector, Computer with Internet connectivity, black board, white board

Room Description	Usage	Share/ Exclusive	Capacity	ICT Facility
407	Class Room	Exclusive	70+	Green board, LCD projector with screen, white board, computer with Internet facility, sound system
410	Class Room	Exclusive	70+	Green board, LCD projector with screen, white board, computer with Internet facility
408	Tutorial Room	Exclusive	20+	White Board
405B	Seminar Hall	Shared	100+	White board, movable projector, PA system, computer with Internet facility

d) Laboratories: All laboratories are well equipped with computers with necessary software and Internet connectivity, printers, UPS, white board, pin up board and notice board.

Sr. No.	Name of Laboratory	Major Equipments (hardware/software)	Investment capital
1.	Programming Laboratory	Computers, Printers, UPS, LCD Projector, Computer Networking	8,62,883/-
2.	Multimedia Laboratory	Computers, Printers, UPS, LCD Projector Computer Networking	8,32,088/-
3.	RDBMS Laboratory	Computers, UPS, Computer Networking	7,47,178/-
4.	Project Laboratory	INTEL Core I5, I3, 3.06GHz Processor, UPS, Scanner, Computer Networking, Partitioning, Printer	10,73,300/-
5.	Network Laboratory	Computers, Printers, UPS, LCD	9,79,282/-
6.	Research Laboratory	Intel core I7, 8GB DDR, 1TB HDD, LCD Projector, UPS	8,14,239/-
7.	Language Laboratory	Computers, Computer Networking, Software Headphones	2,25,027/-
8.	Hardware Laboratory	Computer Peripherals	4,62,338/-
9.	Digital Laboratory	Printer, UPS, LCD Projector, 8086 Micro-processor kit, Stepper Motor, Digital TC trainer, Mechatronics tester model, 8051 Kit	4,06,244/-

31. Number of students receiving financial assistance from college, university, government or other agencies:

Sr. No	Type of Assistance		Agency Providing Financial Assistance	Academic Year			
				2016-17	2015-16	2014-15	2013-14
1.	GOI PM Scholarship		Social Welfare Dept.& Tribal Development Dept.	62	70	59	48
2.	GOI PM Freeship			19	21	28	43
3.	EBC Concession		Govt. Of Maharashtra	32	43	44	38
4.	Minority Scholarship	MOMA	Dept. of Minority Welfare	--	01	--	--
		SGS		02	01	--	--
5.	Central Sector Scholarship		MHRD, Govt. of India	--	--	--	--
6.	STC		Govt. Of Maharashtra	--	01	--	01
7.	PTC		Govt. Of Maharashtra	--	--	--	--
8.	ST	Scholarship	ST Welfare	--	--	--	--
		Freeship		--	01	--	01

9.	J & K Special Scholarship	Govt. Of India-AICTE	--	--	--	--
10.	Private Scholarship	Lila Poonawalla Foundation	01	01	--	--
11.	MMM Scholarship	Marathwada MitraMandal,Pune	--	--	--	--

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts:

2016-17:

Sr. No	Name of Visitor	Academicians/ Industry Person	Designation and work place	Purpose of visit	Date	Beneficiary class
1.	Mr. Prashik Gaikwad	Industry Person	Counselor	Positive Thinking	20/01/17	SE, TE, BE
2.	Mr. Shekhar Lolage	Industry Person	Team Lead, Sattvarise	Augmented Reality & Virtual Reality	13/01/17	TE
3.	Mr. Shashank Adgaonkar	Industry Person	Wingfotech	Two days workshop on "Python"	12/01/17 to 13/01/17	SE,TE
4.	Mr. Prasad Tasgaonkar	Industry Person	Task CompuSys	Industry expectations from Engineers	12/01/17	TE, BE
5.	Dr. Anagha Kulkarni	Academician	HOD IT, Cummins COE	Probabilistic Models	30/09/16	TE, BE
6.	Mr. Rushikesh Gardade, Mr. Amit Kohakade	Industry Person	Persistent Systems Ltd.	Fastrack – 12 Hours non-stop coding	27/09/16	TE
7.	Ms. Sonali Bhoskar	Industry Person	Associate Consultant, Capgemini	Design Pattern	24/09/16	BE
8.	Mr. Aniket Thanekar	Industry Person	Ripe Inn	Web Technology	23/09/16	TE

9.	Mr. Taher Poonawala	Industry Person (Alumni)	Developer at EXUSIA	Business Intelligence	03/09/16	SE, TE
10.	Mr. Rajesh Chavan	Industry Person	Founder, Jeevan Sanjivani	Quality Improvement and personality development	26/07/16	SE,TE,BE
11.	Mr. Krishnakant Mane	Industry Person	Director-Spoken Tutorials IIT Bombay	Workshop on FOSS	22/07/16 to 23/07/16	SE,TE, BE
12.	Mr. Kiran Chavan	Industry Person	Rainbow Infotech	Problem Solving and Object Oriented Programming	21/07/16	SE
13.	Ms. Shivani Sinnarkar	Industry Person (Alumni)	Persistent Systems Ltd.	Personality Development	15/07/16	SE, TE
14.	Mr. Jitender Singh Gahlot	Industry Person	Customer Service Operations, Cloudera	Workshop on "Cloud Computing"	15/07/16 to 16/07/16	TE, BE
15.	Mr. Anil Raj	Industry Person	Director, Cyber Vault	"Awareness on Cyber Security"	12/07/16	TE, BE

2015-16:

Sr. No	Name of Visitor	Academicians/ Industry Person	Designation and work place	Purpose of visit	Date	Beneficiary class
1.	Mr. Pankaj Singh	Industry Person	Finland Labs	One week NWTP on "Big Data and Hadoop"	11/01/16 to 15/01/16	SE, TE, BE
2.	Mr. Girish Palshikar	Industry Person	Principal Scientist, TCS	Support Vector Machines	01/10/15	TE, BE
3.	Mr. Vaibhav Verma	Industry Person	Trainer & Consultant	Awareness on Information Security	22/09/15	TE

4.	Mr. Anil Raj	Industry Person	Director, Cyber Vault Securities solutions Pvt. Ltd.	Workshop on Cyber Security	14/09/15 to 15/09/15	TE, BE
5.	Dr. Sudeep Thepade	Academician	HOD, IT PCCOE	How to read and write research paper	09/09/15	TE, BE
6.	Mr. Dattatry Deshpande	Industry Person	Project Lead, Persistent Systems Ltd.	AppIn24x7	05/09/15 to 06/09/15	SE, TE
7.	Mr. Dattatry Deshpande	Industry Person	Project Lead, Persistent Systems Ltd.	Shakuntala: Quiz	03/08/15	SE, TE, BE
8.	Mr. Imran Mulla	Industry Person	Director, Wren & Pecker Pvt. Ltd.	Soft Skills	03/09/15	SE, TE, BE
9.	Ms. Dipti Panhalkar	Freelancer	Psychologist & Trainer	Mind Gym	04/08/15	SE
10.	Dr. Aarti Dixit, Mr. Shekhar Sahasrabudhe	Industry Person	A.P, Dept. of Technology, SPPU	ACM Chapter Benefits & Inauguration	03/08/15	SE, TE, BE
11.	Dr. Abhijat Vichare	Industry Person	Consultant, Persistent Systems Ltd.	Mathematical Modeling	03/08/15	TE, BE
12.	Mrs. Prachi Godbole	Industry Person	Free Lancer	Hands on Workshop on Core Java Programming	02/07/15 to 04/07/15	TE, BE
13.	Mr. Amol Bhuibhar	Industry Person	Sr. Software Engineer, Zensar Technologies	Core JAVA	23/06/15	TE, BE

14.	Mr. Girish Nille	Industry Person	U&D Square, Pune	Foundations of Computer Network Technology	23/03/16	SE

2014-15:

Sr. No	Name of Visitor	Academicians/ Industry Person	Designation and work place	Purpose of visit	Date	Beneficiary class
1.	Dr. Yogesh Deshpande	Academician	Assoc. P, VIIT	Processor Architecture & Interfacing	17/03/15	SE
2.	Dr. A. M. Bagade	Academician	PICT	Multimedia System	17/03/15	TE
3.	Dr. Nilesh Uke	Academician	P & HOD, IT SCOE	Computer Graphics	20/02/15	SE
4.	Mr. Shrinivas Kukka	Industry Person	Sai Foods	Creating constructive Carrier	20/01/15	TE, BE
5.	Mr. Ravindra Borhade	Academician	AP, HOD, IT SKNCOE	Mobile Computing	27/09/14	BE
6.	Mr. Kiran Chavan	Industry Person	Electracard services, Pvt Ltd	C Programming: A Must for Programmers	27/09/14	SE
7.	Mrs. Rekha Sugandhi	Academician	AP, MITCOE	Theory of Computation	24/09/14	TE
8.	Mr. Vishal Badak	Industry Person	Cybage Software Ltd.	Object Oriented Programming using C++	21/09/14	BE
9.	Mr. Vishal Harane	Industry Person	SAS solution	Big Data and Hadoop	20/09/14	TE
10.	Ms. Sarika Agadhale	Industry Person	Sindons	Content Management System	15/09/14	TE
11.	Mr. Milind Penurkar	Academician	AP, MITCOE	Poster Presentation	13/09/14	TE, BE
12.	Mr. Krupawaram Nirati	Industry Person	Fundtech Ind. Pvt. Ltd	Software Testing	6/9/14	BE

13.	Mr. Anil Raj	Industry Person	Director, Cybervault Securities Solution Pvt. Ltd.	Workshop on Cyber Security	28/08/14	TE, BE
14.	Mr. Jithin Vikram	Industry Person	BSNL	Routing Protocols OSPF Configuration	27/07/14	TE
15.	Mr. Prashant Pund	Industry Person	Founder, Agilesoft Methodologies	Agile Development, Practices & Scrum	21/07/14	TE

2013-14:

Sr. No	Name of Visitor	Academicians/ Industry Person	Designation and work place	Purpose of visit	Date	Beneficiary class
1.	Dr. S. P. Narote	Academician	AP, Wadiya	Workshop on "Latex"	25/03/14	BE
2.	Ms. Sheetal Soni	Industry Person	IBM	Opportunities on training from IBM	08/03/14	BE
3.	Mr. Swapnil Bhattad	Industry Person	Cybage Pune.	Advance Java Programing	25/01/14	TE

33. Teaching methods adopted to improve student learning:

Following are different course delivery methods.

1. Guest Lecture
2. Video Lecture, NPTEL
3. Seminar
4. Group Discussion
5. Games (snake n ladder, crossword, quiz competition)
6. Industrial Visit
7. Power Point Presentation
8. Workshops
9. Assignments
10. Courses in collaboration with Industry/IIT
11. Class Test
12. Technical events
13. Remedial Coaching
14. Flipped Classroom

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- **Conducted women empowerment activity –**
The main objective of starting this activity is to motivate women for self-employment through which they can contribute to family economically. We thought of not only making them financially capable but changing their mind set, thinking capability and giving proper *sanskar* to their children.
- **Tree Plantation on the occasion of “World Environment Day” -**
On the occasion of world environment day, students and faculty from department participated and planted trees at Warje Hill Pune.
- **“Hour of Code” conducted by MMCOE ACM Student chapter -**
The Hour of Code is a global movement reaching tens of millions of students in 180+ countries. Where students from non-computer science background are taught coding via one-hour tutorials available in over 45 languages. The event was open to all the people from ages 4 to 104. We had invited 47 students of 5th standard from Saraswati Vidya Mandir School, Karvenagar. Along with students of SVM, children of our few staff also participated in the event.
- **Participation of Faculty and students in “Plastic Waste Free City”**
As per the directions of Hon. Prime Minister of India, Mr. Narendra Modi our college conducted “Plastic Waste free city” on 13th Feb 2016. Department of Information Technology along with other departments participated in it along with students and faculty.
- **Participation of Faculty and students in Blood Donation Camp -**
Students and staff actively participated in the blood donation activity to memorize the Death anniversary of Late Shree Shankarrao Chavan, Founder President of our Society, Marathwada Mitra Mandal, Pune.
- **Participation of faculty and students in NSS Camp –**
University has sanctioned NSS cell of 50 units. Three NSS camps of 7 days were organized at Manerwadi to create awareness amongst villagers about education, career opportunities, self-hygiene, etc.
- **Participation of faculty and students in “Swach Bharat Abhiyan”-**
As per the directions of Hon. Prime Minister of India, Narendra Modi our college conducted Swach Bharat Abhiyan on 2nd Oct 2014, 2015 & 2016. Along with other department students and faculty from

IT dept also participated in the event.

- **Participation of students in fund collection for social causes –**
 - IT Students' Association (ITSA) initiated fund raising activity along with all other departments for 7 years old girl Sanjana Biradar who was suffering from blood cancer.
 - Students from department of IT participated in fund raising activity for flood affected Jammu and Kashmir people in association with Aseem Foundation.

Extension Activities:

1. Software Development by Faculty:

e-defaulter application is developed by Mrs. Rupali Chopade, Mrs. Preeti Joshi, Mrs. Rashmi Bhattad and Mr. Nikhil Dhavase, based on Agile Methodology under the guidance of Mr. Prashant Pund, Founder, Agilesoft Methodologies, Pune. This project is an outcome of Research Lab initiative under the MOU between Department of Information Technology, MMCOE and Agilesoft Methodologies. e-defaulter is a student attendance record system. It is developed using html, php, AJAX, jQuery & Mysql.

2. Proposed Solution for faculty UGC advertisement Applications:

Mrs. Rupali Chopade and Mr. Nikhil Dhavase proposed solution for faculty UGC advertisement Applications. Through this process, faculties have filled their applications online and they have received auto generated PDF of their application on their mail-id.

3. E-waste Collection Activity:

The department of Information Technology has initiated an 'e – waste' collection activity. This activity is being conducted by department coordinators in association with 'SWaCH – e – waste collecting NGO'. Identified student volunteers monitors and maintains the bins. This activity helps us in keeping our college campus Eco-friendly in terms of e – waste.

4. Professional Body Membership and Student Association:

Information Technology Student association (ITSA), is a student association formed to conduct various activities under it like technical events, social activities etc. Department has also started ACM (Association of Computing Machinery) professional body student chapter to motivate students towards research activities, reading and writing research papers, organizing various expert talks and events.

5. Appreciation of Faculty and Students:

Appreciation letters are given by the department to all the faculties whose subject result is excellent in university exam. All student toppers are felicitated and appreciated in parent-teacher meet.

6. IITB Spoken Tutorial Certification:

Department has started to conduct online certification courses organized by IIT Spoken Tutorial, Mumbai. First certification course conducted on “C Programming”. More than 80% students cleared that test. In continuation with this, students completed certification courses on “C++”, “Java” and “Python”. Now, MMCOE has been recognized as the Nodal Resource Center- Maharashtra state for IITB spoken tutorial certification courses.

35. SWOC analysis of the department and Future plans:

Strengths:

- Dynamic, cooperative, dedicated, hardworking and young staff
- Recognized as a Nodal Resource Center – Maharashtra State for IITB spoken tutorial certification courses
- ACM student chapter to provide technical exposure to students
- Guidance by eminent persons via guest lecturers from industry and academics on regular basis
- Active MoUs with industries like Cybervault Securities Solutions Pvt. Ltd., Agilesoft Methodologies, Persistent Systems Ltd., Zensar Technologies
- Add-on / certification courses for students
- FDP/STTP/Workshops/Technical events for faculty and students on regular basis

Weakness:

- Lack of publications and patents by staff & students
- Lack of consultancy by staff
- Need to improve faculty cadre ratio

Opportunities:

- Pursue higher studies by faculty and students
- Raising funds from research funding agencies
- To evolve as Center of Excellence in “Computational Intelligence”

Challenges:

- Achieving 100% placement
- Develop Entrepreneurship culture among students
- Establish IT as the most preferred branch among applying eligible students

Future Plans:

- ISO 9001:2008 certification
- NBA Accreditation
- To Start PG Program
- ABET Accreditation

MECHANICAL ENGINEERING

- 1. Name of the department:** Mechanical Engineering
- 2. Year of establishment:** 2006
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
UG = 180 Intake

4. Names of Interdisciplinary courses and the departments involved:

Sr. No.	Beneficiary Class	Interdisciplinary Courses	Departments Involved
1	SE Mechanical	Engineering Mathematics III	Engineering Sciences
2	SE Mechanical	Electrical and Electronics Engineering	Electrical Engineering
3	SE Mechanical	Strength of materials	Engineering sciences

5. Annual / semester / choice based credit system (programme wise):

- I. Semester pattern till 2014-15
- II. Semester based credit based system introduced at F.E. from A.Y. 2015-16

6. Participation of the department in the courses offered by other departments:

Sr. No.	Beneficiary Class	Interdisciplinary Courses	Departments Involved
1	Engineering Sciences	Engineering Graphics I	Mechanical
2	Engineering Sciences	Basic Mechanical Engineering	Mechanical
3	Engineering Sciences	Engineering Graphics II	Mechanical

7. Courses in collaboration with other Universities, industries, foreign institutions etc:

Sr. No.	Name of Course	Participating Institute/ Industry	Year
1	FUSION 360	Autodesk Inventor	2016-17
2.	Virtual class for GATE	Vidyalankar Academy	2016-17
3	Training on CATIA	Design Tech Systems Ltd.	2016-17
4	Training on ANSYS	Design Tech Systems Ltd.	2016-17
5	Application of tool path generation of Turning, milling, multiaxis and Turnmill.	Onward Technology Ltd.	2016-17

6	Value Added program on Automation Studio Software	India Soft Technologies, India (P) Ltd.	2015-16
7	Training on geomtric dimensioning and tolerancing	Mechworks Engineering and Consultants	2015-16
8	Training on CATIA	Design Tech Systems Ltd.	2015-16
9	Training on geomtric dimensioning and tolerancing	Mechworks Engineering and Consultants	2014-15
10	Training on CATIA	EDS Technologies Pvt. Ltd.	2013-14

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts as on 2016-17: SE to BE as per table:

Sr. No.	Teaching posts	Sanctioned	Filled
1	Professor	04	00
2	Associate Professor	08	02
3	Assistant Professor	24	25

***In addition to this 04 Adjunct faculties are appointed**

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.):

Sr. No.	Name	Qualification	Designation	Specialization	Experience (Years)	Ph.D. Students guided for the last 4 years
1	Dr. K. R. Patil	M.E.(Heat Power), M.P.M., Ph.D	HOD-Mech, Dean (R&D), Asso.Prof.	Alternative fuels for IC engine	26	-
2	Dr. V. R. Deulgaonkar	M.E. (Design) Ph.D	Dean (Student Affairs) & Asso.Prof.	Heavy Vehicle design	13	-
3	Mr. V. W. Bhatkar	M.E., Ph.D. Thesis Submitted	Asst. Prof.	Heat Power, Refrigeration	19	-
4	Mr. P. K. Katare	M.Tech. (Ph.D defended)	Asst. Prof.	Compressor used in refrigeration system	18	-
5	Mr. P. K. Tamkhade	M.E., Ph.D*	Asst. Prof.	Heat Power, Heat Exchanger	17	-
6	Dr. Sanghamitra Sethi	Ph.D.	Asst. Prof.	Material Science	1.4	

7	Mr. A. D. Desale	M. Tech., Ph.D*	Asst. Prof.	Automobile Engg., Tribology	9	-
8	Mr. R. S. Yadav	M.E., Ph.D*	Asst. Prof.	CAD/CAM/CAE	9	-
9	Mr. A. B. Gholap	M.E., Ph.D*	Asst. Prof.	Production	12	-
10	Mr. S. N. Belsare	M.E.	Asst. Prof.	Heat Power	20	-
11	Mr. H.C. Pisal	M. Tech.	Asst. Prof.	Thermal Engg.	11	-
12	Mr. S. S. Raut	M.E.	Asst. Prof.	CAD/CAM/CAE	8.5	-
13	Mr. R. U. Patil	M.E.	Asst. Prof.	Design Engg.	7.9	-
14	Mrs. M. P. Rode	M.E.	Asst. Prof.	Design Engg.	5.3	-
15	Mr. A. V. Chavan	M.E.	Asst. Prof.	Mechatronics	5.6	-
16	Mr. C. K. Dave	M.E.	Asst. Prof.	Heat Power	5.5	-
17	Mr. S. R. Dhok	M. Tech.	Asst. Prof.	Design	4	-
18	Mr. R.P. Tadakhe	M. Tech.	Asst. Prof.	Automobile Engg.	2.5	-
19	Mr. N. V. Mohite	M.Tech.	Asst. Prof.	Turbo	2.5	-
20	Mrs. S. S. Jawalkar	M.E.	Asst. Prof.	Design Engg.	2.5	-
21	Miss. R. K. Shastri	M. Tech.	Asst. Prof.	Manufac. & Automation	1	-
22	Mr. P. D. Bhambure	M.Tech	Asst. Prof.	Thermal Engg.	2.5	-
23	Mr. P.V. Sawai	M.E.	Lecturer	Design Engg.	5	-
24	Mr. M. V. Kawade	M.E.*	Lecturer	Design Engg.	3.1	-
25	Miss. P. P. Kachare	M.E.	Asst. Prof	Design Engg.	1.8	-
26	Mr. S. B. Chavan	M.E*	Lecturer	Design Engg.	2.5	-
27	Mr. P. C. Jikar	M.E.	Lecturer	CAD/CAM/CAE	3.3	-
28	Mr.N.N.Korde	M.Tech.	Asst. Prof	Metallurgy	2.0	-
29	Mr.V.A.Mali	M.E.	Asst. Prof	Manu. Science	-	-
30	Mr.R.N.Khachane	M.E.	Asst. Prof	Thermal&Fluids Eng	2.0	-
31	Ms.D.S. Shirke	M.E.	Asst. Prof	Control System	08	-
32	Ms.R.V.Deshmukh	M.E.*	Lecturer	Power System	06	-
33	Mr.M.S.Ranade	M.Tech.	Adj.faculty	Thermal Engg.	36	-
34	Mr.D.A. Derekar	D.M.E.	Adj.faculty	Design	30	-
35	Mr.R.G.Joshi	B.E.	Adj.faculty	Automation	25	-
36	Mr.A.B. Deshpande	D.M.E.	Adj.faculty	Production	20	-

*-Pursuing

11.List of senior visiting faculty: Nil

12.Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 4.3%

13.Student - Teacher Ratio : 15 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

	Filled	Sanctioned
Academic support staff (Technical)	10	No specific guideline from University
Administrative staff	--	No specific guideline from University

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Qualification	No. of faculty
Ph.D	03
PG	26
UG	03

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Sr. No.	Name of the faculty	Name of the Project	Funding Agency	Sanctioned Amount	Sanctioned Year
1	Mr. A. B. Gholap	A condition based maintenance through ferrographic and vibration signature analysis	AICTE (RPS)	Rs. 21,17,647	2014-15

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Sr. No.	Name of the faculty	Name of the Project	Funding Agency	Sanctioned Amount	Sanctioned Year
1	Mr V.W. Bhatkar	Development of versatile refrigeration Test Rig with mini channel Condenser environment friendly alternative refrigerants using solar water heating.	ASHRAE	\$4645 (approx 3,11,000)	2016-17
2	Mr. V. W. Bhatkar (Principal Investigator)	Performance evaluation of refrigeration system with mini channel condenser using R152a	ISHRAE	Rs. 95,000	2015
3	Dr. V. R. Deulgaonkar (Principal Investigator)	Design and Development of Rugged Structure Integrated with Vehicle Chassis Subjected to Travel on Rough Road Terrain and for Peculiar Load Conditions	BCUD	Rs. 1,55,000	2012-14
4	Mr. V. W. Bhatkar (Principal Investigator)	Design, development and performance evaluation of refrigeration system with micro channel condenser using alternative refrigerants.	BCUD	Rs. 1,75,000	2012-14

18. Research Centre /facility recognized by the University: Nil

19. Publications:

Faculty Publications:

Sr. No.	Name of faculty	No. of papers published in peer reviewed journals (national / international) by faculty	No. of papers published in conferences	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1	Dr. K. R. Patil	07	08	09	-	-	-	-	46	-	-	1.4	04
2	Dr. V. R. Deulgaonkar	19	12	25	-	03	02	01	26	-	-	1.83	04
3	Mr. V. W. Bhatkar	11	01	12	-	-	-	01	22	-	-	2.45	02
4	Mr. P. K. Katore	07	02	03	-	-	-	-	01	-	-	1.1	01
5	Dr. Sanghamitra Sethi	08	06	-	-	01	-	01	57	-	-	4.58	05
6	Prof. S. N. Belsare	04	07	11	-	-	-	-	22	-	-	02	03
7	Mr. R. S. Yadav	04	02	02	-	-	-	-	-	-	-	-	-
8	Mr. A. D. Desale	01	-	01	-	-	-	-	-	-	-	-	-
9	Mr. P.K Tamkhade	01	-	-	-	-	-	-	-	-	-	-	-
10	Mr. R. U. Patil	01	-	01	-	-	-	-	10	-	-	-	-
11	Mr. H.C.Pisal	-	01	-	-	-	-	-	-	-	-	-	-
12	Mr. S. R. Dhok	-	01	-	-	-	-	-	-	-	-	-	-
13	Mr. A. B. Gholap	-	01	-	-	-	-	-	-	-	-	-	-
14	Mrs.S. S. Jawalkar	-	01	-	-	-	-	-	-	-	-	-	-
15	Mr. S. S. Raut	01	-	-	-	-	-	-	-	-	-	-	-
16	Mrs. M. P. Rode	03	-	-	-	-	-	-	-	-	-	-	-
17	Mr. A. V. Chavan	02	01	-	-	-	-	-	-	-	-	-	-
18	Mr. C. K. Dave	01	-	-	-	-	-	-	-	-	-	-	-
19	Miss. R. K. Shastri	-	01	-	-	-	-	-	-	-	-	-	-
20	Mr. M. V. Kawade	-	01	-	-	-	-	-	-	-	-	-	-
21	Miss. P. P. Kachare	-	01	01	-	-	-	-	-	-	-	-	-
22	Mr. S. B. Chavan	02	-	-	-	-	-	-	-	-	-	-	-
23	Mr. P. C. Jikar	02	01	02	-	-	-	-	08	-	-	-	02

Student Publications:

Sr. No.	Name of Student	No. of papers published in peer reviewed journals (national / international) by students	No. of papers published in conferences	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1	Chaitrali Salgaonkar	-	01	-	-	-	-	-	-	-	-	-	-
2	Rutuja Kulkarni	-	01	-	-	-	-	-	-	-	-	-	-
3	Dhairyasheel Bhutkar	-	01	-	-	-	-	-	-	-	-	-	-
4	Dinesh Khairnar	-	01	-	-	-	-	-	-	-	-	-	-
5	Retul Pillai	-	01	-	-	-	-	-	-	-	-	-	-
6	Ankit Kharde	01	-	-	-	-	-	-	-	-	-	-	-
7	Mandar Deo	01	-	-	-	-	-	-	-	-	-	-	-
8	Piyush Chavan	01	-	-	-	-	-	-	-	-	-	-	-
9	Varun Chippa	01	-	-	-	-	-	-	-	-	-	-	-
10	Saisha Dalvi	01	-	-	-	-	-	-	-	-	-	-	-
11	Nikhil Chavan	01	-	-	-	-	-	-	-	-	-	-	-
12	Avadhoot Mulay	01	-	-	-	-	-	-	-	-	-	-	-
13	Alka Patole	01	-	-	-	-	-	-	-	-	-	-	-
14	Mandar Auti	01	-	-	-	-	-	-	-	-	-	-	-
15	Shradhha Tarale	01	-	-	-	-	-	-	-	-	-	-	-
16	Jayraj Ligade	-	01	-	-	-	-	-	-	-	-	-	-
17	Parikshit Maggirwar	-	01	-	-	-	-	-	-	-	-	-	-
18	Shafin Attar	-	01	-	-	-	-	-	-	-	-	-	-
19	Rohit Gaikwad	-	01	-	-	-	-	-	-	-	-	-	-
20	Bhagwan Shinde	-	01	-	-	-	-	-	-	-	-	-	-
21	Sandesh Borde	-	01	-	-	-	-	-	-	-	-	-	-
22	Mohit katariya	-	01	-	-	-	-	-	-	-	-	-	-
23	Gajanan Joshi	-	01	-	-	-	-	-	-	-	-	-	-
24	Saurabh Shahapurkar	01	-	-	-	-	-	-	-	-	-	-	-
25	Hemant Pansare	01	-	-	-	-	-	-	-	-	-	-	-
26	Prashant Dhebe	01	-	-	-	-	-	-	-	-	-	-	-
27	Chetan Wagh	01	-	-	-	-	-	-	-	-	-	-	-
28	Priyanka Chincholkar	01	-	-	-	-	-	-	-	-	-	-	-
29	Sachin V.Margaje	01	-	-	-	-	-	-	-	-	-	-	-

Patents:

Patents by Faculty:

Sr. No.	Name of faculty	Patent Title	Remarks / Details
1	Dr. V. R. Deulgaonkar (Application submitted)	Chassis integrated specialized structure designed for concentrated load uniformly and randomly	Application number: 1566/MUM/2013 Reference number: E-2/1892/2013/MUM CBR No.: 8250
2	Mr. R. S. Yadav (Application submitted)	Eco friendly water hybrid vehicle system	Application number: 382/MUM/2013
3	Mr. P. K. Katare (Published)	Conical shape single rotor compressor	Application number: 2740/MUM/2009 Date of Publication- 10/02/2012

Patents by Student:

Sr. No.	Name of Student	Patent Title	Remarks / Details
1	Rohan Ravindra Gugale	Blind zone assist in outer rear view mirrors	Application number: 4627/MUM/2015 Reference number: E-2/2969/2015-MUM
2	Shreyas Naikade	Anti-locking braking arrangement for an elevator and method for controlling same	Application no. – 15180814.4-1705

20. Areas of consultancy and income generated:

Sr. No.	Academic Year	Name/s of Faculty	Income generated	Income source
1	2016-17	Dr. V.R. Deulgaonkar	Rs. 25,500/-	Add-on course on CATIA
2	2016-17	Dr. V.R. Deulgaonkar	Rs. 12,500/-	Add-on course on Ansys
3	2016-17	Prof. H.C. Pisal Prof. C. K. Dave	Rs. 43,000/-	Boiler trials using Steam Power Plant Test Rig
4	2016-17	Mrs. M.P. Rode	Rs 20,000/-	Gear box design, Vidarbha Plastics, Palghar
5	2015-16	Prof. H.C. Pisal Prof. V.W. Bhatkar	Rs. 41,000/-	Boiler trials using Steam Power Plant Test Rig
6	2015-16	Prof. V.W. Bhatkar	-----	Cosmic Refrigeration Pvt. Ltd., Narhe, Pune-41
7	2013-14	Prof. V.W. Bhatkar Prof. Nilesh Singh	Rs. 32,000/-	Boiler trials using Steam Power Plant Test Rig

21. Faculty as members in - a) National committees b) International Committees c) Editorial Boards

Committee	No. of faculties
National	04
International	00
Editorial boards	03
Reviewer	03

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme

Sr. No	Academic Year	No. of In-House Project	Percentage (%)
1	2016-17	17	34.0
2	2015-16	18	40.9
3	2014-15	3	16.67
4	2013-14	1	9.1

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:

Sr. No.	Academic Year	No. of Projects in Organization	Percentage (%)
1	2016-17	33	66.0
2	2015-16	26	59.1
3	2014-15	15	83.33
4	2013-14	10	90.9

23. Awards / Recognitions received by faculty and students:

Faculty:

Sr.No.	Name of Faculty	Award received by faculty	Recognition received from reputed professional bodies and agencies nationally and internationally	Year
1	Prof. V. W. Bhatkar	CWC member and student chair	ISHRAE Pune Chapter	2016
2	Mr. R. S. Yadav, Mr. S. B.Chavan	Best research paper award	NCTR, APCOER, Pune	2016
3	Mr. A. V. Chavan	Secured Class "A" Award	eYantra, IIT Powai	2015
4	Dr. K. R. Patil	Best Research Paper	ICAT-2014	2014
5	Mr. P. K. Tamkhade	Appreciation for Sincere efforts in Teaching to F. E. Classes	SCOE, Pune	2012
6	Mr. P. K. Tamkhade	Appreciation for outstanding performance	SCOE, Pune	2008
7	Dr. K. R. Patil	Best Teacher Award	NCERT award-2007	2007
8	Mr. P. K.	Appreciation for	SCOE, Pune	2007

	Tamkhade	Sincere efforts in Teaching to F. E. Classes		

Students:

Sr. No.	Name of student/group	Award received by student/groups	Recognition received from reputed professional bodies and agencies nationally and internationally	Academic Year
1	Sandeep Khade	Secured 1 st prize in Project Idea competition (Rs.10000/-)	ISHRAE, Pune chapter	2016-17
2	Dinesh Khairnar	Secured 3rd prize in Paper presentation competition (Rs.2000/-)	ISHRAE, Pune chapter	2016-17
3	C.Salgaonkar & Rujuta Kulkarni	Received prize of Rs.5000/- at chapter level	ISHRAE, Pune chapter	2016-17
4	Sanket Barhate	Secured 3rd prize in Quiz competition (Rs.2000/-)	ISHRAE, Pune chapter	2016-17
5	Khanekar Raj	Secured 3rd place in 100m running competition	PANACHE 2017 (MKSSS HNIR college, Pune)	2016-17
6	Omkar Waghmare	Secured Gold Medal in Drill Competition	NCC IGC camp, Nagpur	2016-17
7	Omkar Waghmare	Secured Silver Medal in Drill Competition	NCC All India Vayu Sainik Camp, Jodhpur	2016-17
8	Ankit Kharde	Secured Best cadet trophy	NCC Combined annual training camp Pune	2016-17
9	Satish Thangaraj	Secured 1st place carom competition	PANACHE 2017 (MKSSS HNIR college, Pune)	2016-17
10	Shailaja Jadhav	Secured 2nd place carom competition	PANACHE 2017 (MKSSS HNIR college, Pune)	2016-17
11	Khanekar Raj	Secured 2nd rank in 100m Run in SPPU Pune city zone-Intercollegiate Sports	SPPU	2016-17
12	Khanekar Raj	Secured 3rd rank in 200m Run in SPPU Pune city zone-Intercollegiate Sports	SPPU	2016-17
13	Gugale Rohan	Travelled throughout India with Jagriti Yatra-Building India through enterprise.	Jagriti Seva Sansthan	2016-17
14	Nikhil Shingare	Received Scholarship of Rs. 20000/-	SCR project consultant and Durgadevi Charitable Trust	2015-16
15	Abhedya	Secured 2nd Prize of Go-	BAJA SAE India	2015-16

	(BAJA Team)	Green award of Rs.40000/-	2016	
16	Tachyon (Gokart Team)	Won Best Design award at international series of Karting	ISK-Hyderabad	2015-16
17	Tachyon (Gokart Team)	Won Best Design Presentation award of Rs. 25000/-	TKT 2016, Trinity College, Pune	2015-16
18	Tachyon (Gokart Team)	Won Best cost Report award of Rs.8000/-	TKT 2016, Trinity College, Pune	2015-16
19	Sanman Golwalkar	Vice President, Sakal Young Inspirators Network, Pune	Sakal YIN, Pune Region	2015-16
20	Sopan Jagdale	Selected at University level NSS camp, Pune	SPPU	2015-16
21	Ankit R Chanagediya	Secured 1 st Position in Project Ideas at TechnoCHILL-2016	ISHARAE, Pune Chapter	2015-16
22	Vikram Borade	Winner of ETPOI award of Rs.5lacs	The Economic Times	2015-16
23	Chaitrali Salgaonkar & Rutuja Kulkarni	Secured 1 st Prize in Paper Presentation at TechnoCHILL-2016	ISHARAE, Pune Chapter	2015-16
24	Dhairyasheel Bhutkar & Retul Pillai	Secured 2 nd Prize in Paper Presentation at TechnoCHILL-2016	ISHARAE, Pune Chapter	2015-16
25	Dinesh Khairnar	Secured 3 rd Prize in Paper Presentation at TechnoCHILL-2016	ISHARAE, Pune Chapter	2015-16
26	Retul Pillai & Snehal Phadtare	Secured 2 nd Prize in Technical Quiz at TechnoCHILL-2016	ISHARAE, Pune Chapter	2015-16
27	Base ball Team	Secured 2 nd Prize in ZEST, organized by COEP, Pune	COEP, Pune	2015-16
28	Chaitanya Kulkarni	Secured 1 st Prize in Dwandva(Marathi Debate) in Event-Astitva	DES's BMCC, Pune	2015-16
29	Anand Dagale	Secured Gold Medal in Drill Competition	NCC IGC camp, Nagpur	2015-16
30	Anand Dagale	Secured Gold Medal in Tent Pitching Competition	NCC IGC camp, Nagpur	2015-16
31	Anand Dagale	Secured Bronze Medal in Drill competition	NCC All India Vayu Sainik Camp, Jodhpur	2015-16
32	Abhedya (BAJA Team)	Team has qualified in International Level Virtual BAJA 2015 Competition held at GTU, Ahmadabad, Gujarat on 1 st & 2 nd August 2014.	BAJA SAE India 2015	2015-16
33	Abhedya (BAJA Team)	National level competition held at Pithampur, Indore, Madhya Pradesh from 19th Feb to 23rd Feb 2014 and secured 13th rank in India, 5th rank in Maharashtra and 1st rank in Debut teams.	BAJA SAE India 2014	2014-15
34	Rudra	Achieved "Best Rookie	Robocon	2014-15

	(Robocon Team)	Award” for debut team at ROBOCON International Competition held at Balewadi Pune between 5 th to 7 th March 2015.		
35	Rudra (Robocon Team)	Team “Rudra” secured second position in league matches out of 86 teams at ROBOCON International Competition held at Balewadi Pune between 5 th to 7 th March 2015.	Robocon	2014-15
36	Jayraj Ligade and Parikshit Maggiwar	Won first prize in Techno-CHILL 2015 paper presentation competition held at AISSPMS College of Engineering, Pune	Paper presentation	2014-15
37	Yasser Sayed	3 rd rank in Graduate Excellent Examination conducted at state level organized by Modern Education Society’s Centre for Talent Search and Excellence on 1 st February 2015.	Graduate Excellent Examination	2014-15
38	Yasser Sayed	Secured 1 st Prize in Mandate Manufacture, Quorum 2014-15	Fergusson College, Pune	2014-15
39	Volleyball team	1 st position in MM Karandak 2015	Marathwada Mitra Mandal Pune	2014-15
40	Rushikesh Maheshwari	7 th rank Innovative Research Project Program at PCCOE, Pimpri	Research Project	2013-14
41	Yashas Bedarkar	Awarded Gold Medal for all India best cadet, all India Nausainik camp Vishakhapatnam.	All India Nausainik camp	2013-14
42	Rohit Balghat	3 rd Prize in Western section Project Competition	PES’s Modern COE, Pune	2013-14

24. List of eminent academicians and scientists / visitors to the department:

Sr. No.	Name of Visitor	Profile of visitor	Academic Year
1	Mr. Pradip Alandkar	R&D Engineer, Elevation Technology, Pune	2016-17
2	Mr. Sachin Thor	CAE Analyst, Cummins India, Pune	2016-17
3	Mr. Hrushikesh Dattar	Education Sales Head, Accurate Sales and Services Pvt Ltd, Pune	2016-17
4	Mr. Prasanna Bhatt	General manager, ARAI, Pune	2016-17
5	Mr. Sanjeev Bedekar	CFD Engineer, Cummins India LTD, Pune	2016-17
6	Mr. Durgaprasad Kalyani	Manager, Design Tech Systems Ltd. Pune	2015-16
7	Mr. Prashant	Manager, Design Tech Systems Ltd.	2015-16

	Deshapande	Pune	
8	Mr.Kailas Belekar	Manager, Exoskeleton Robotics technology Pune	2015-16
9	Mr.Kiran Lalsangi	Director, 11 Dot CadTech Pune	2015-16
10	Dr.Merulan Mehta	Professor, East Carolina University, USA	2015-16
11	Mr.Shrikant Bidwai	Manager, CAD CAM Guru Pune	2015-16
12	Mr.Vishwesh Phansalakar	Manager, Autodesk Pune	2015-16
	Mr.Nitin Bombale		
	Mr.Nihit Shrivastawa		
13	Mr.Rahul Naidu	CEO, Dysmech Consultancy Services Pvt. Ltd., Pune	2015-16
	Mr.Sandip Altage		
	Mr.P. Subhash		
14	Dr.A. W. Date,	Professor, IIT Powai, Mumbai	2014-15
	Dr. Pavitran,	Professor, VIT Pune	
	Dr. P. R. Ghanegaonkar	Professor, D.Y.Patil COE, Pimpri, Pune	
15	Mr. S. B. Bhandekar	Chief Engg. Rtd NTPC, Nashik	2014-15
16	Ms. Honey Gupta	Business manager, Six Pi Education Pvt. Ltd, Pune	2014-15
17	Mr. B.P.Kulkarni	Manager, EduTech Catalist, Pune	2014-15
	Mr. R.R. Kulkarni	Manager, Galaxi Counselling services, Pune	
	Mr. U.G. Kulkarni	Manager, Rtd from TATA motors, Pune	
	Mr. Inamdar	Manager, Click in Calibration lab	
18	Mr. Paresh Rege,	Director, 11 Dot CadTech, Pune	2014-15
	Mr. Kiran Lalsangi		
19	Mr. K.G. Purandare	Accredited Energy Auditor, Pune	2014-15
20	Mr. Jayant Wadekar	Sr. Project Manager Cummins India Ltd, Pune	2014-15
21	Mrs. Sheetal Soni	Manager, IBM Career Education, Pune	2013-14
22	Mr. Pravesh Rege	Manager, 11 Dot CAD Tech, Pune	2013-14
23	Mr.A.D.Paranjape	Retired G.M, TATA Auto Components, Ltd., Pune	2013-14

25.Seminars/ Conferences/Workshops organized & the source of funding:

Sr. No.	Seminars/ Conferences/ Workshops	National / International	Date	Source of funding
1.	Utkranti 2k17(Vehicle dynamic and Ansys)	National	16/01/17 to 17/01/17	Wingfotech&ED cell ,IIT Delhi
2.	Technochill	National	17/01/17	ISHRAE Pune Chapter
3	Syllabus revision workshop –	National	10/11/16	SPPU

	Mechatronics (2015 course)			
4	Faculty Development programme on 5S, Kaizen and TQC	National	07/09/16	SPPU
5	Virtual Lab set up for Refrigeration and Air Conditioning lab equipments	National	08/09/16	Anucol Engineers, Kolhapur
6	Faculty development programme on Automation Studio	National	24/08/15 to 25/08/15	SPPU
7	Workshop on application of Computational Fluid Dynamics	National	16/01/15 to 17/01/15	BCUD, SPPU

26. Student profile programme/course wise:

Name of the Course/programme	Admission year	Application received	Selected	Shift and intake	Enrolled		Pass percentage (All clear)	Pass percentage (With ATKT)
					M*	F*		
Mechanical Engineering	2016-17	As per admission process governed by DTE, the rules and regulations are followed as per DTE		180	150	18	-	-
	2015-16			180	159	19	17.59	80.11
	2014-15			180	142	16	48.1	84.17
	2013-14			180	155	21	59.09	82.95
	2012-13			120	110	17	55.95	80.31

27. Diversity of Student:

Name of the	Year	% of students	% of students	% of students
Mechanical Engineering	2016-17	96.5	3.5	NA
	2015-16	98.87	1.13	NA
	2014-15	99.39	0.61	NA
	2013-14	98.91	1.09	NA

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.

Exam	No of Students			
	2016-17	2015-16	2014-15	2013-14
GATE / GRE	-	13	08	13
CAT	-	-	-	-

CMAT	-	-	-	-
Defence	-	01	-	-
SLET	-	-	-	-
GMAT	-	-	-	-
MBA-CET	-	-	-	-
MPSC/UPSC	-	-	-	-

29. Student Progression:

Student progression	Against % enrolled			
	2015-16	2014-15	2013-14	2012-13
UG to PG	8.49	12	19	17
PG to M.Phil.	-	-	-	-
PG to Ph.D.	-	-	-	-
Ph.D. to Post-Doctoral	-	-	-	-
Campus selection	15	18	24	15
Other than campus recruitment	19	50.75	41	45.68
Entrepreneurship/Self-employment	2	1.5	1.4	1.2

30. Details of Infrastructural facilities:

a. Library –

	Titles	Volumes
Total number of books	161	287

b. Internet facilities for staff & student:

Internet Service Provider	- TATA Tele Services, Pune
Leased Line	- 48 Mbps
Contention ratio	- 1 : 1
Firewall	- Sonic-wall NSA 4600
D-Link switches 24 Port (make)	- 3 nos.
D-Link switches 8 Port (make)	- 3 nos.

c. Class room Facilities:

Room Description	Usage	Shared/ exclusive	Capacity	ICT facility
208	Class room	Exclusive	80	Green board, LCD Projector with white screen, CPU, White board, pin-up board
212	Class room	Exclusive	80	Green board, LCD Projector with white screen, CPU, White board, pin-up board
217	Class room	Exclusive	80	Green board, LCD Projector, CPU, White board
218	Class room	Exclusive	80	Green board, LCD Projector, CPU, White board
219	Class	Exclusive	80	Green board, LCD Projector, CPU, White

	room			board
220	Class room	Sharing	80	Green board, LCD Projector, CPU, White board

d. Laboratories:

Sr.No.	Name of Laboratory	Shared / Exclusive	Major Equipments	Capital Investment in Rs.
1	Applied Thermodynamics	Exclusive	Single Cylinder Diesel Engine, Three Cylinder Petrol Engine	7,97,240/-
2	Basic Mechanical Engineering	Exclusive	Bobcox Wilcox Boiler model, Lancashire fire tube boiler model	63,846/-
3	CAD Laboratory	Exclusive	CATIA V5 R20, Hypermesh CAE Software, ANSYS 13.0, Intel Core I5 Desktop, MasterCAM X9	30,21,087/-
4	Center of Excellence in Robotics	Exclusive	FIRE BOARD V2560, INTEL CORE i5 Computer System, SPARK V ROBOT	2,53,073/-
5	Engg.Graphics – I	Exclusive	Dissected rectangular prism, pyramid, cone & cube	2,39,192/-
6	Engg. Graphics – II	Exclusive	AutoCAD 2007, Autodesk Inventor Professional 2008, AutoCAD 2009, CATIA V5 R 19 , Intel P C2D CORE 2 DUO	26,95,738/-
7	Fluid Mechanics	Exclusive	Bernoulli's Theorem Apparatus, Pipe Friction Apparatus	2,24,342/-
8	Heat Transfer	Exclusive	Parallel flow/counter flow heat exchanger, Heat transfer from a pin-fin, Heat transfer in forced convection	1,94,663/-
9	Hydraulics and Pneumatics (Industrial Fluid Power)	Exclusive	Automation Studio Version 6.1, Automation Software Simulation France 10, Electro Hydraulic Trainer, Advanced Pneumatic Trainer with Air Compressor	10,66,935/-
10	Material Science & Engineering Metallurgy	Exclusive	Vickers cum Brinell hardness tester, Universal Testing Machine, Torsion Testing Machine, Fatigue Testing Machine	14,46,278/-
11	Mechatronics	Exclusive	X-Y position control system, Flow control using PID, Linear conveyor control system	4,32,225/-
12	Metrology & Quality Control	Exclusive	Auto collimator and angle dekkor combined unit, Tool Maker's Microscope (GGTM 50), Profile Projector (GGPPT 200),	4,71,421/-
13	Power Plant Engineering	Exclusive	Steam Power Plant – Boiler Calorimeter Steam Turbine Condensor.	9,23,298/-

14	Refrigeration & Air-conditioning	Exclusive	Vapor Compression Test Rig, Air-conditioning Test Rig, Ice Plant Test Rig	2,62,719/-
15	Skill Development	Exclusive	Activa 125DLX, Premire Diesel Engine old, Maruti Petrol Engine old	97,128/-
16	Theory of Machines & Dynamics of Machinery	Exclusive	4 Channel Sound and Vibration Analyzer (FFT ANALYSER), Measurement of torque transmitting capacity of Clutch	10,05,297/-
17	Thermodynamics	Exclusive	Two Stage Reciprocating Air Compressor, Bomb Calorimeter	1,30,850/-
18	Turbo Machinery	Exclusive	Francis Turbine Test Rig, Pelton Turbine Test Rig, Reciprocating Pump Test Rig	6,50,000/-
19	Workshop	Exclusive	CNC Lathe trainer-Model : SS-PT-100, Hydraulic Surface Grinding Machine, Center lathe 4'-6', TIG welding m/c, Universal Milling machine,	31,56,349/-

31. Number of students receiving financial assistance from college, university, government or other agencies:

Sr. No.	Type of assistance		Agency Providing Financial Assistance	Academic Year			
				2016-17**	2015-16	2014-15	2013-14
1	GOI PM Scholarship		Social Welfare Dept. & Tribal Development Dept.	119	129	81	59
2	GOI PM Freeship			83	64	36	32
3	EBC Concession		Jt. Director of Tech. Education	106	91	64	49
4	Minority Scholarship	MOMA	Dept. of Minority Welfare	-	-	-	-
		SGS		2	1	-	-
5	Central sector scholarship		Jt. Director of Higher. Education	1	1	1	3
6	STC		Zilla Parishad	2	3	2	1
7	PTC			2	0	-	-
8	J & K Special Scholarship		AICTE	-	-	-	-
9	ST	Scholarship	Adivasi Prakashap Department	-	2	1	3
		Freeship		6	3	2	-
10	Private scholarship			-	3	1	-

** In process

32.Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

Sr. No.	Name of Visitor	Academics/Visitors	Designation and work place	Purpose of visit	Date	Students
1.	Mr.Apoorv Bapat	Visitor	Founder & CEO elevation Academy, Pune	Fundamentals of FEA and CAE	18/01/17	BE
2.	Mr. Abhishek Kesakar	Visitor	A-square Innovations and research,Pune	Utilisation of software in the system design	20/01/17	BE
3	Mr. Sanjeev Bedekar	Visitor	Cummins India ltd, Pune	Guest lecture on cfd under EEf and CIII	10/02/2017	TE and BE
4	Prof S. C Jog	Academician	Mit COE, Pune	Iron Carbide Equilibrium diagram	13/02/2017	SE
5	Mr A. D. Paranjape	Visitor	Tata power plant, Mumbai	Case study of tata power plant	28/02/2017	BE
6	Mr prasanna Bhatt	Visitor	General manager ARAI, Pune	Recent trends in automobile	16/03/17	BE
7	Mr. Pradip Akolkar	Visitor	Design Engineer, Elevation Industries,Pune	Case Studies Exploring features of ANSYS	05/07/16	BE
8	Mrs. Suvarna Joshi	Visitor	CADD Centre, Kothrud, Pune	CAD/ CAM Applications in various domains	16/07/2016	BE
9	Prof. L. V. Awadhani	Academician	Associate Professor, MMCOE, Pune	Industrial Application of Threaded and welded joints	07/09/2016	TE
10	Mr. Sachin Thor	Visitor	CAE Consultant, Cummins Rsearch and Technology, India	Applications of CAE in Vibration	10/09/2016	BE
11	Mr. Rushikesh Datar	Visitor	Sales Exclusive, Accurate	Quality of gauges, Vernier caliper, Micrometer	10/09/2016	TE
12	Mr. N. J. Joglekar	Visitor	Ret.(Engineering tools and techniques	Manufacturing Processes and exercise on it	14/09/2016	SE
13	Mr. A. Y. Mehendale	Visitor	M.E.D.A. Pune	Energy Audit and Management	21/09/2016	BE
14	Sunil Gogate	Visitor	Ecochill, Pune	HVAC, Refrigeration, Energy	26/09/2016	BE

15	Prof. Bhojwani	Academician	JSPM, Hdapsar	Psychrometry & Psychromatic Processes	27/09/2016	SE
16	Mr. Anand Bhise	Visitor	Geometric Dimensioning, Pune	Geometric Dimensioning & Tolerances course	21/06/16 - 5/07/16	TE
17	Mr. Venkatesh	Visitor	DesignTech Systems Ltd, Pune	Ansys Course (40hrs)	08/07/16 to 06/09/16	TE, BE
18	Mr. Mithilesh Kumar	Visitor	DesignTech Systems Ltd, Pune	CATIA Course (40hrs)	20/07/16 to 25/09/16	SE
19	Mrs Suvarna Deshpande	Visitor	CAD/CAM Engineer CADD Centre, Pune	Lecture on CAD/CAM/CAD E	16/07/2016	BE
20	Prof L.V. Awadhani	Academician	Associate Prof PCCOE, Pune	Lecture on industrial application of threaded and welded joint	07/09/2016	TE
21	Mr. Durgaprasad Kalyani	Visitor	Design Tech Solutions, Pune	CATIA Course (40hrs)	03/08/15 - 30/09/15	SE
22	Mr. Anand Bhise	Visitor	MechTol Engg. Solutions, Pune	Geometric Dimensioning & Tolerances course	01/06/15 - 15/06/15	TE
23	Mr. Prashant Deshapande	Visitor	Design Tech, Pune	Lecture on engineering through CAD (CATIA and NX)	23/06/2015	SE
24	Mr. Kailas Belekar	Visitor	Exoskeleton Robotics technology, Pune	Robotics awareness	08/07/2015	BE
25	Mr. Kiran Lalsangi	Visitor	Director, 11 Dot CadTech, Pune	Lecture on Engineering drawing	10/07/2015	SE
26	Dr. Merwan Mehta	Academician	Professor at East Carolina University, USA	Lecture on Worldclass process improvement principles	13/07/2015	TE, BE
27	Mr. Kushagra Mr. Himenshu	Visitor	Dimensionless Technology, Pune	Lecture on 3D printing	30/07/2015	TE BE
28	Mr. Shrikant Bidwai	Visitor	CAD CAM Guru Pune	Lecture on FEM based simulation	27/08/2015	TE BE

29	Mr. Vishwesh Phansalakar	Visitor	Autodesk Pune	Lecture on 3D Student design challenge	24/06/2015	SE
	Mr. Nitin Bombale					
	Mr. Nihit Shrivastawa					
30	Mr. Rahul Naidu	Visitor	CEO Dysmech Consultancy Services Pvt. Ltd., Pune	Lecture on Skill development under PTC academic grant scheme	30/06/2015	SE TE
	Mr. Sandip Altage					
	Mr. P. Subhash					
31	Dr. Date,	Academician	Prof. IIT Powai, Mumbai	CFD Workshop	03/01/2015 – 04/01/2015	Students, Faculty, industrialists
	Dr. Pavitrnan,		Prof. VIT, Pune			
	Dr. Ghanegaonkar		Prof. at D. Y. Patil, Pimpri, Pune			
32	Dr. K. V. Mali	Academician	Prof. at SCOE, Vadgaon BK., Pune	Lecture on Numerical methods and optimization	01/04/2015	TE
33	Mr. S. B. Bhandekar	Visitor	Chief. Engg. Rtd, NTPS Nashik	Lecture on Electrical instruments used for power plant	20/02/2015	BE
34	Ms. Honey Gupta	Visitor	Business manager, Six Pi Education Pvt Ltd, Pune	Lecture on Improvement in skills for placement activity	12/03/2015	TE
35	Mr. B.P. Kulkarni	Visitor	EduTech Catalyst, Pune	Lecture on Need of industry	24/06/2014	TE, BE
	Mr. R.R. Kulkarni		Galaxi Counselling Services, Pune			
	Mr. U.G. Kulkarni		Rtd from TATA Motors, Pune			
	Mr. Inamdar		Click in Calibration Lab, Pune			
36	Mr. Paresh Rege	Visitor	Director, 11 Dot CadTech, Pune	Lecture on Importance of engg drawing and drawing reading	01/09/2014	TE
	Mr. Kiran Lalsangi					
37	Mr. K.G. Purandare	Visitor	Accredited Energy Auditor	Lecture on Energy audit and	27/08/2014	BE

				management		
38	Mr. Darbar	Visitor	Accurate Engineering, Pune	Lecture on Metrology and quality control	11/09/2014	TE
39	Dr. M.M. Bhumkar	Academician	Prof. PVG COE, Pune	Lecture on QDMT	12/09/2014	BE
40	Mr. Phatak G.K.	Academician	Prof. MIT Pune	Lecture on Thermodynamics	15/09/2014	SE
41	Mr. Kapatkar V.N.	Academician	Prof. SCOE, Pune	Lecture on Hydraulics and Pneumatics	23/09/2014	TE
42	Mr. Jayant Wadekar	Visitor	Sr. Project Manager Cummins India Ltd, Pune	Lecture on Metrology and quality control	26/09/2014	TE
43	Mr. Nikhil Pradhan	Visitor	Design Tech, Kothrud Pune	Lecture on Career and opportunities CAD/CAE	19/12/2014	SE, TE
44	Mr. Vijo Joy	Visitor	Talent Edge, Pune	Lecture on Career Opportunities after Graduation	16/01/2014	TE
45	Mrs. Sheetal Soni	Visitor	IBM Career Education, Pune	Lecture on Career Guidance & Opportunities of Training from IBM	17/01/2014	TE
46	Mr. Pravesh Rege	Visitor	11 Dot CAD Tech, Pune	Lecture on Industrial Expectations form Design Engineers	23/01/2014	TE
47	Mr. Jitendra Tiwari Mr. Ajay Shriwastav	Visitor	Made Easy Education Pvt. Ltd, New Delhi	Lecture on How to prepare for IES, GATE, and PSU's & How to memorize fast and retain for longer duration	07/03/2014	TE, BE
48	Mr. A.D. Paranjape	Visitor	Retired G.M, TATA Auto Components, Pune	Lecture on Scenario of Power Plants in India and electrical instruments used in power plant	24/03/2014	BE
49	Mr. Tejas Pathak	Visitor	Kiros Hospitality Solutions Pvt Ltd,	Lecture on Language skill,	05/08/2013	TE, BE

			Mumbai	soft skill	06/08/2013	

33. Teaching methods adopted to improve student learning –

- Guest Lectures
- Power Point Presentations
- LCD projector
- Industrial Tours
- Workshops
- Assignments
- Mock oral test
- Feed back
- Seminars
- NPTEL videos
- Student counseling
- Departmental library facility
- Courses in collaboration with Industry
- e-learning
- Class test
- Technical events
- Remedial coaching

34. Participation in Institutional social responsibility –

- Organize NSS camp at Manerwadi
- Grocery donation programme
- Swatchata Abhiyan arranged in and around college
- Blood donation camp
- Donation to Matoshree Vrudhashram
- PUC camp
- Road safety and traffic awareness
- Tree plantation
- Don't Drink and drive awareness
- Fund raising campaigning for needy child Ku. Riya Kshirsagar

35. SWOC analysis

Strength :

- Located in automotive and information technology hub
- Excellent infrastructure,
- Strong-Teaching learning process
- Qualified and experienced faculty

- CAD CAM lab equipped with high end computers and software's for modeling, analysis and drafting (CATIA, Ansys, Hyper mesh, Autodesk, Automation studio) and plotter
- Range of guest lectures by industry experts covering current updates in mechanical engineering field
- Prominent Industry-Institute interaction cell. Membership of CII, MCCIA, SAE, ISHRAE
- Faculty liaisoning with 39 industries
- Add-on courses conducted by industry professionals (GD&T, CATIA)
- Enhancement in employability through MOU's with different industries
- Center of excellence in automation and robotics

Weaknesses:

- Lack of consultancy work
- Lack of international interaction
- Need to improve cadre ratio

Opportunities:

- Strengthening industry-institute interaction through entrepreneurship cell
- Enhancing employability of students
- Increasing research funding facilities from state and central government funding agencies

Challenges:

- Improving student placements
- Globally competent academic quality

Future plans:

- Upgradation of center of excellence with advanced instruments
- More number of MOU's with industries
- NBA accreditation
- ABET accreditation
- ISO 9001:2008 certification
- Starting a PG Program

ENGINEERING SCIENCES (FIRST YEAR ENGINEERING)

1. **Name of the department:** Engineering Sciences (First Year Engineering)
2. **Year of Establishment:** 2006
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG, Engineering Sciences (First Year Engineering)
4. **Names of Interdisciplinary courses and the departments/units involved:**

Sr. No.	Beneficiary Classes	Interdisciplinary Courses	Departments Involved
1	FE	Basic Mechanical Engineering	Mechanical Engineering
2		Engineering Graphics 1 & 2	
3		Workshop Practices	
4		Basic Electronics Engineering	Electronics & Telecommunication Engineering
5		Basic Electrical Engineering	Electrical Engineering
6		Fundamentals of Programming Language 1 & 2	Computer & Information Technology Engineering

5. **Annual/ semester/choice based credit system (program wise):**
 - I. Earlier, it was semester pattern till 2014-15
 - II. Credit system Syllabus introduced at First year engineering from A.Y. 2015-16
6. **Participation of the department in the courses offered by other departments:**

Sr. No.	Beneficiary Classes	Interdisciplinary	Departments Involved
1	SE (Electrical Engg.)	Engineering Mathematics - III	Engineering Sciences
	SE (Mechanical Engg.)		
	SE (E&TC Engg.)		
	SE (IT Engg.)		
	SE (Comp. Engg.)		
2	SE (Mechanical Engg.)	Strength of Materials	

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 as on 2016-17:

Sr. No.		Sanctioned	Filled
1	Professors	02	-
2	Associate Professors	02	-
3	Asst. Professors	32	22

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D./M. Phil. etc.,)

Sr. No.	Name	Qualification	Designation	Specialization	Experience in Years	Ph.D. guided for the last 4 years
1	Dr.Mrs.A.S. Sawaikar	M.Sc.(Phy), Ph.D.	HOD, Asst.Prof	Physics	22	-
2	Mrs.D.D. Jambhale	M.Sc,B.Ed	Asst.Prof	Org.Chem.	24	-
3	Ms.V.N.Patil	M.Sc,B.Ed	Asst.Prof	Org. Chem.	13	-
4	Mrs.A.S.Kale	M.Sc.M.Phil, Ph.D*	Lecturer	Physics	14	-
5	Dr. V.A. Dhumale	M.Sc.(Phy), Ph.D.	Asst.Prof	Physics	9.5	-
6	Mr. N. S. Pande	M.Sc., Ph.D*	Lecturer	Inorg. Chem.	9	-
7	Mr.S.P. Kulkarni	M.Sc.	Lecturer	Mathematics	13	-
8	Mrs.S.A. Jagtap	M.Sc.M.Phil.	Lecturer	Mathematics	15	-
9	Mrs.K.K. Kolhatkar	M.Sc.	Lecturer	Mathematics	7	-
10	Mrs..M.S. Sarode	M.Sc.	Lecturer	Mathematics	15	-
11	Mr. A.M.Mohit	M.Sc,B.Ed	Lecturer	Mathematics	7	-
12	Mr.S.R.Tawase	M.Sc,NET	Asst.Prof	Mathematics	0	-
13	Mr.S.L.Karche	M.E.	Asst.Prof	Envir.Tech.	10.5	-
14	Mrs.P.N.Paranjape	M.Tech	Asst.Prof	Envir Sci.&Tech	8.5	-
15	Ms. V. U Dekate	M.E.	Asst. Prof	Struct.Engg	5.5	-
16	Mr.P.M. Walunjkar	M.Tech	Asst.Prof	Struct.Engg	9	-
17	Mrs.S.A.Mashalkar	M.Tech	Asst.Prof	Water Mgmt.	9	-
18	Mrs.S.R. Deshmukh	M.E	Asst.Prof	CAD-CAM	6	-
19	Mrs. N. V. Gore	M.E	Lecturer	Design Engg	4	-
20	Mr.P.Z.Lokhande	M.E.	Asst Prof	Design Engg	3.7	-
21	Mrs.J.U. Marathe	M.E.	Asst.Prof	Design Engg	4	-
22	Mr.D.M.Pawar	M.E.	Asst.Prof	Design Engg	5	-

23	Mr.G.R.Chaudhary	M.E	Asst.Prof	Design	7	-
24	Mrs.A. Dhampalwar	M.E.	Lecturer	Microwave	9	-
25	Mrs.S.S.More	M.E.	Asst.Prof	E & TC	10	-
26	Ms. S..J. Koparde	M.Tech.	Asst.Prof	E & TC	6	-
27	Mrs .R P. Belokar	M.Tech.	Asst Prof	Elect.comm.	8	-
28	Mr. V.R. Sali	M.S.	Asst.Prof	Embed &WT	6	-
29	Mrs.A.D. Kulkarni	M.E.	Asst Prof	Comp. Engg.	5	-
30	Ms.A .A. Gawade	M.E.	Asst.Prof	Comp Engg	3	-
31	Mrs.S Wangikar	M.E.	Lecturer	Computer	10	-
32	Mr.S.S.Shinde	M.E.	Lecturer	I.T.	8	-
33	Mrs. D. A. Potdar	M.E.*	Lecturer	Pow. systems	3	-
34	Ms. C. P. Thottan	M. Tech	Asst.Prof	Ind. D & C	3	-
35	Mr. A. A. Deshmukh	M.E.	Asst.Prof	Elect. C S	4	-

* Pursuing

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: 15.42:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sr. No.		Filled	Sanctioned
1	Academic Support staff (Technical)	2	No specific guidelines from Savitribai Phule University of Pune.
2	Administrative staff	-	

15. Qualifications of teaching faculty with D.Sc/D.Litt/Ph.D/MPhil/PG.

Sr. No.	Qualification	No. of Faculty
1	Ph.D.	02
2	M.Phil.	02
3	P.G.	31
4	U.G.	01

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sr. No.	Name of the Faculty	Name of the Project	Funding Agency	Sanctioned Amount	Sanctioned Year
1	Dr.A.S.Sawaikar & Dr.V.A.Dhumale	Synthesis And investigation of the structural and Antibacterial Properties of metal Nanoparticles	BCUD	Rs.2,30,000	2014-16

18. Research Centre/facility recognized by the University: Nil

19. Publications:

Sr. No.	Name of Faculty	No. of papers published in peer reviewed journals (national / international) by faculty and students	No. of papers published in conferences	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1	Dr. Mrs. A.S. Sawaikar	1	2	1	-	-	-	-	30	-	-	1.71	1
2	Mrs. A.S. Kale	1	-	1	-	-	-	-	2	-	-	1.21	1
3	Dr. V. A.Dhumale	13	-	13	-	-	-	-	135	-	-	1.7	6
4	Mr.N.S.Pande	7	4	7	-	2	-	2	7	-	-	1.26	1
5	Ms.S.R.Deshmukh	-	1	-	-	-	-	-	-	-	-	-	-
6	Mrs. N. V. Gore	-	2	-	-	-	-	-	-	-	-	-	-
7	Mr.P.Z. Lokhande	1	5	-	-	-	-	-	-	-	-	-	-
8	Mrs. J. U. Marathe	2	-	-	-	-	-	-	-	-	-	-	-
9	Mr.D.M.Pawar	2	1	-	-	-	-	-	-	-	-	-	-
10	Mr.G.R.Chaudhary	-	1	-	-	-	-	-	-	-	-	-	-
11	Ms.S.S.More	2	-	-	-	-	-	-	-	-	-	-	-
12	Ms. S.J. Koparde	5	-	5	-	-	-	-	-	-	-	-	-
13	Mrs.R B Belokar	3	-	3	-	-	-	-	-	-	-	-	-
14	Ms.A.D.Kulkarni	1	1	1	-	-	-	-	-	-	-	1.69	-

15	Ms. A.A. Gawade	2	-	2	-	-	-	-	1	-	-	1.73	-
16	Ms.S.S.Wangikar	2											
17	Mr.S.S.Shinde	8	1	-	-	-	-	-	-	-	-	-	-
18	Mrs. D.A. Potdar	1	-	-	-	-	-	-	-	-	-	-	-
19	Ms. C. P. Thottan	-	2	-	-	-	-	-	-	-	-	-	-
20	Mr.A.A.Deshmukh	1	-	-	-	-	-	-	-	-	-	-	-

Publications by students: Nil

20. Areas of consultancy and income generated: - Nil

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards -

Sr. No.	Committee	No. of faculty
1	National	--
2	International	--
3	Editorial Board	01
4	Reviewer	01

22. Student projects: - Nil

23. Awards/Recognition received by faculty and students –

Faculty: Nil

Students:

Sr. No.	Name of student	Award received by student	Recognition received from reputed professional bodies and agencies nationally and internationally	Year
1	Rutuja Kench	2 nd Rank	MIT Alandi,Swarsaaj Event	2016 - 17
2	Hrishikesh Pathak	Consolation	Best Acting for Firodiya Karandak 2017, Pune	
3	Rajnandini Kharat	Consolation*/ First Prize#	Fashion Show, *at Smt. Hiraben Nanavati Institute of Management and Research for Women # Yuva spandan, at Kaveri College Of Arts, Science And Commerce, Pune	
4	Yogini Deshpande			
5	Sneha Kumbhar			
6	Ruchi Joshi			
7	Shubham Kaul			
8	Sawani Ingale			
9	Isha Jakawale			
10	Krutika Bhagwat			

11	Raj Khanekar	1 st rank West Zone Athletics	West Zone level Competitions jointly organized by Indian Athletics Association and Rajasthan Athletics Association at Ajmer (Rajasthan) 11th October to 14th October 2015 200 meter- Gold 4x100 Meter-Gold	2015-16
12		2 nd Athletics	Intercollegiate level Silver medal in 200 Meter Running competition organized by Pune City Zonal Sports Committee on 7th and 8th October 2015	
13	Yasser Sayed	3 rd rank in Graduate Excellent Examination.	State level organized by Modern Education Society's Centre for Talent Search and Excellence on 1 st February 2015.	2014-15
14	Anurag Pangarekar	2 nd rank in Sports quiz	Intercollegiate level Sports Quiz competition jointly organized by Lions Club and C.A.C.P.E college on 07th October 2014.	
15	Pratik Mane			
16	Akhil Sisal			
17	Viraj Hudli	2 nd rank in 200 meter free style event Swimming competition	Intercollegiate level competition organized by S.P College, Pune	2013-14
18		1 st rank in 100 meter Butterfly event Swimming competition	National level competition in SUMMIT 13	2013-14
19		1 st rank in 50 M.Brest S., 100 Meter. Fly, 50 Meter Fly, 100 M. Free S.	Intercollegiate level PENTACLE Swimming Competition organized by MKSSS'S Cummins College of Engineering, Pune	2013-14

24. List of eminent academicians and scientists / visitors to the department -

Sr. No.	Name of Visitor	Profile of visitor	Year
1	Dr. Mrs. Nanda Haram	Science Column Writer	2016-17
2	Mr. Shailendra Goswami	Chairman & MD of Pushkaraj Group, Pune	
3	Dr. Mrs. Shobha Waghmode	Associate Professor, Abasaheb Garware College of Arts and Science, Pune	2015-16

4	Dr.Ranjeet Hawaldar	Scientist, C-Met,Pune	
5	Mr. Vijay Nawale	Career Counselor	2014-15
6	Mr.Sunil Nikhar	Founder & President, Pyxis Systems Pvt.Ltd,Pune	2013-14

25. Seminars/ Conferences/Workshops organized & the source of funding

a) **National:** - Nil

b) **International:** - Nil

26. Student profile programme/course wise: UG *M = Male *F = Female

Name of the Course / programme	Admission Year	Application Received	Selected	Enrolled		Pass percentage
				*M	*F	
First Year Engineering	2016-17	All the rules and regulations specified by DTE/AICTE are followed by the Institution		356	131	NA
	2015-16			339	134	55.08
	2014-15			335	140	81.94
	2013-14			346	151	78.98

27. Diversity of Students: –

Name of the Course	Year	% of students from the same state	% of students from other States	% of students from abroad
First Year of Engineering	2016-17	98.15	1.85	NA
	2015-16	98.24	1.76	NA
	2014-15	96.64	3.36	NA
	2013-14	96.56	3.44	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:** -

	Titles	Volumes
Total number of books	52	106

b) Internet facilities for Staff & Students -

Internet Service Provider	- TATA Teleservices Ltd, Pune.
Leased Line	- 48 Mbps
Contention ratio	- 1:1
Firewall	- Sonicwall NSA 4600
D-Link switch 24 port	- 1 nos.

c) Class rooms with ICT facility – 05

Room Description	Usage	Shared/ exclusive	Capacity	ICT facility
CC - 316	Classroom	Exclusive	70+	White board, Green board, Desk, LCD projector with white pull down screen, Overhead projector, Computer, Internet
CC - 418	Classroom	Exclusive	70+	White board, Green board, Desk, LCD projector with white pull down screen, Overhead projector, Computer, Internet
CC - 419	Classroom	Exclusive	70+	White board, Green board, Desk, LCD projector with white pull down screen, Overhead projector, Computer, Internet
CC - 420	Classroom	Exclusive	70+	White board, Green board, Desk, LCD projector with white pull down screen, Overhead projector, Computer, Internet
CC - 421	Classroom	Shared	70+	White board, Green board, Desk, LCD projector with white pull down screen, Overhead projector, Computer, Internet

d) Laboratories –

Sr. No.	Name of Laboratory	Shared / Exclusive	Major Equipments	Capital Investment (Rs.)
1	Engg. Physics	Exclusive	Spectrophotometer, Centrifuge Machine, Hall Effect Expt. kit etc	8,38,397/-
2	Engg. Chemistry	Exclusive	Oven, Furnace, Digital Colorimeter, PH meter, Conductivity meter etc.	6,97,013/-
3	Basic Civil & Environmental Engg.	Exclusive	Dumpy Level, Digital Planimeter, Auto Level, simply supported beam apparatus etc	1,47,642 /-
4	Engg. Mechanics	Exclusive	Dumpy Level, Digital Planimeter, Auto Level, simply supported beam apparatus etc	1,14,385 /-
5	Basic Electronics Engg.	Shared	Digital trainer kits, Digital IC Tester, CROs, Stabilizer	4,95,001/-

6	Basic Electrical Engg.	Shared	Fabricated & power coated AC supply terminal boards with 16A, 4P, MCB, Indicating Lamp, etc	2,76,488/-
7	EG-I	Shared	Drawing Tables, Drawing boards	2,39,192/-
	EG-II (AUTOCA D)		AutoCAD software, AutoCAD 2009 software, Catia	26,95,738/-
8	Basic Mechanical Engg.	Shared	Window air conditioner model, domestic refrigerator etc.	63,846/-
9	Workshop	Shared	Wooden lathe machine, welding transformer, spot welding machine, etc	30,43,367/-
10	FPL Lab	Exclusive	Desptop- Intel-23, HP Laser Jet 1007-01, LCD projector-1, PA system	8,09,789/-
11	Computer Centre	Shared	LCD, UPS with batteries, Computers, Printer	14,20,532/-

31. Number of students receiving financial assistance from college, university, government or other agencies:-

University, Government or other agencies.

Sr. No.	Type of assistance		Agency Providing Financial Assistance	Academic Year				
				2016-17 (*)	2015-16	2014-15	2013-14	2012-13
1.	GOI Scholarship		Social Welfare Dept. & Tribal Development Dept.	97	120	84	101	94
2.	GOI Freeship			66	58	47	90	52
3	EBC Concession		Jt. Director of Tech. Education	58	50	56	43	48
4	Minority Scholarship	MOMA	-	1	0	0	0	0
		SGS	-	0	1	0	0	0
5	Central sector scholarship		Jt. Director of Higher. Education	-	1	3	3	3
6	STC		Zilha Parishad	3	0	3	5	0
	PTC			0	2	2	1	0
7	J & K Special Scholarship		AICTE	-	-	-	-	-
8	ST	Scholarship	-	1	0	0	1	0
		Freeship	-	0	1	0	0	2

* in Process

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:-

Sr. No.	Name of Visitor	Academician/ Visitors	Designation and work place	Purpose of visit	Date	Beneficiary class
1	Mr. Anant Kale	Counsellor	Applied Knowledge Solutions, Counsellor	Expert lecture on Motivational Training and Counseling	12/11/ 2016	F.E.
2	Mr. K.C. Zende	Academician	Asst. Prof. SKNCOE, Pune	Expert lecture on Basic of Mechanical Engineering	7/04/2015	
3	Mrs. Prachi Godbole	Visitor	Corporate Trainer	Expert Lecture on 'FPL'	23/09/2015 – 24/09/ 2015	
4	Dr. C.G. Kumbhar	Academician	Retired Prof., DIAT	Expert Lecture on 'Polymers'	15/09/ 2015	
5	Mrs. Dipti Panhalkar	Visitor	Counselor	Counseling for positive thinking	17/09/2014 – 26/09 /2014	

33. Teaching methods adopted to improve student learning:-

- Power Point Presentations
- Illustrations using Over Head Projector
- Use of models, charts, audio visuals
- Assignments and puzzles on different topic
- Organizing Seminars, Technical quiz, puzzles by students
- Conducting Unit tests twice in a semester
- Sharing of study material on Google apps
- Use of NPTEL lectures
- Guest Lectures
- One to one counseling/discussion as per using online exam facilities.
- e-learning and practice tests using "Myexamo" application software
- Additional Class-Test for improvement of result
- Remedial coaching

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

❖ Bharat Swachchata Abhiyan

Students of FE participated in Bharat Swachchata Abhiyan and cleaned the campus and surrounding area on the occasion of Gandhi Jayanti.

❖ Blood donation camp

Staff and FE students actively donate blood during the camps organized

1. In the memory of Hon. Late Shri. Shankarraoji Chavan, Former Home Minister, Govt. of India and the "Founder President" of Marathwada Mitra Mandal, on 26th February every year
2. To commemorate the victory over Kargil by celebrating 'Kargil Vijay Diwas' on 26 July every year

❖ Other Extension Activities

- Under the guidance of trained YOGA teachers, every Saturday successful conduction of yoga and mediation sessions for all faculty and staff of MMCOE
- Faculty from this department along with faculty from other departments organizes orientation session based on the concepts of Mission10X training for new faculty members to adopt new teaching – learning methodology.
- Faculty from the department took initiative in establishing vermi-compost and RO (water treatment) setup for MMCOE hostel
- Department organizes Republic Day and Independence Day by inviting eminent personalities in various fields to guide the students

35. SWOC analysis of the department and Future plans:-

Strengths:

- Well equipped labs, modern class rooms
- Qualified and experienced staff
- Continuous monitoring of academics
- E-learning facility
- Effective Teacher Guardian Scheme, parent teacher meet, time to time counseling
- Rigorous efforts on remedial coaching
- Good faculty retention

Weaknesses:

- Participation of faculty members in FDPs, seminars, workshops
- Less publications
- Less funded projects

Opportunities:

- Active staff willing to plan and conduct student activities
- Location of Institution having maximum accessibility with good infrastructure
- Increasing relevance of Engineering

- Open up memberships of Professional bodies to give exposure to contemporary research

Challenges:

- To change the casual approach of students towards regularity in attendance, sincerity in college tests at entry level
- To increase participation of faculty members in FDPs, seminars, workshops
- To motivate the faculty members for research publications and apply for funded projects

Future Plans:

- To Apply for PIO and NRI Quota
- To get ISO 9001:2008 Certification
- To fetch research projects from national funding agencies.

MASTERS IN BUSINESS ADMINISTRATION

1. **Name of the department:** Masters in Business Administration (MBA)
2. **Year of Establishment:** 2007
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** PG: Masters in Business Administration (MBA)
4. **Names of Interdisciplinary courses and the departments/units involved:** - **NIL**
5. **Annual/ semester/choice based credit system (programme wise):**
 1. 2008 Pattern- Semester Pattern
 2. 2013 Pattern- Choice based credit System and Grading system
 3. 2016 Pattern- Choice based credit System and Grading system

6. Participation of the department in the courses offered by other departments:

Beneficiary Class	Interdisciplinary Course	Departments involved	Academic Year
TE Electrical	Industrial Technology Management	MBA	2015-16
BE (Mechanical, E&TC, IT, Comp)	Soft skills	MBA	2014-15

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:

Sr. No.	Name of Course	Participating Institution / industry	Year
1.	Effective Sales and Presentation Skills – Marketing & HR	Dale Carnegie, India	2016-17
2.	Neuro Linguistic Programming (NLP)-HR	Mr. Tejas Toro Founder, Lighthouse Empowerment Consultancy	2016-17
3.	Financial Modeling – Finance	IMS-Pro School	2016-17
4.	Technical Analysis	Precision Investment Technicals	2016-17
5.	Effective Sales and Presentation Skills – Finance & Marketing	Dale Carnegie, India	2015-16
6.	Technical Analysis	Precision Technical Analysis	2015-16

		Pvt Ltd.	
7	Neuro Linguistic Programming (NLP)	Mr. Tejas Toro Founder, Lighthouse Empowerment Consultancy	2015-16
8	Soft skills Training	APART	2013-14
9	Personality Development Workshop	Mrs. Hyacinth Arya, Corporate Trainer	2012-13 2013-14 2014-15

8. Details of courses/programmes discontinued (if any) with reasons : Nil

9. Number of Teaching posts:

Teaching Posts	As per Norms required	Filled
Professor	1	0
Associate Professor	2	0
Assistant Professor	5	7

*- Adjunct Faculty - 01

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 Experience	No. of Ph.D. Students guided for the last 4 years
1	Dr. N. R. Shaikh	MBA (Systems) & MBA	Assistant Professor	Systems & Finance	15	-
2	Ms. N. Murthy	MBA (Finance) & MBA(HR), UGC – NET	Assistant Professor	Finance & HR	5.9	-
3	Ms. T. G. Corera	MBA (HR) & MBA (Operations)	Assistant Professor	HR & Operations	3.3	-
4	Mr.P Muley	MBA (Marketing)	Assistant Professor & Dy. Director Corporate Relation Division	Marketing	7	-
5	Mr. S.Hegade	MBA (Finance) & MBA (Marketing)	Assistant Professor	Finance	6	-
6	Ms.M. Sali	MMM, BBA	Assistant	Marketing	2	-
7	Ms.S.Karande	MBA, B.Sc.	Assistant	HR	1	-
8	Mr. Pravin Tungare	ICWA	Adjunct Faculty	Finance	33	-

11. List of senior visiting faculty

Sr. No.	Name	Qualification	Designation	Specialization	Total no. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1.	Mr.Sudhir Dahptardar	B.Com, M.Com, Pune University, L.L.B	Adjunct Faculty, IMERT	Finance	46	-
2.	Mr.Praveen Late	M.A. (Personnel Management)	Adjunct Faculty, IMERT	Human Resource	45	-

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Nil

13. Student -Teacher Ratio (programme wise)

15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Filled	Sanctioned
Academic & Administrative Support Staff (Technical)	01	No specific guidelines from University

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Qualifications	No. of Faculty
PhD	1
PG	6

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Nil

18. Research Centre /facility recognized by the University

Nil

19. Publications:

Sr.No	Name of the Faculty	No of papers published in Peer reviewed Journals	No of papers published in conferences	No of publication listed in Int. database	Mono Graphs	Chapters and Books	Books Edited	Books with ISBN in Int database	Citation Index	SNIP	S JR JR	Impact Factor	H -Index Average
1.	Mr. N. R.Shaikh	-	4	-	-	-	1	-	-	-	-	-	-
2.	Ms. N. Murthy	-	2	-	-	-	-	-	-	-	-	-	-
3.	Ms. T. G.Corera	-	1	-	-	-	-	-	-	-	-	-	-

20. Areas of consultancy and income generated - NIL

21. Faculty as members in

- a) National committees b) International Committees c) Editorial Boards

Committee	No. of faculties
National	01
International	-
Editorial boards	-
Reviewer	-

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme: NIL

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:

Year	No of Projects in collaboration	% of Projects in collaboration
2016-17	45	97.73%
2015-16	32	93.55%
2014-15	45	89.80%
2013-14	54	94.55%

23. Awards / Recognitions received by faculty and students

A) Awards Received by Faculty Members:- Nil

B) Awards Received by Students:-

Sr. No.	Name of student/ group	Award received by student/groups	Recognition received from reputed professional bodies and agencies nationally and internationally	Year
1	Neha Ghatkar Shravani Jadhav	Runner Up for State level HR Olympiad	State Level HR Olympiad – Vibrant HR Group	2016-17
2	Neha Ghatkar, Shravani Jadhav, Jagjit Gupte , Akshay Bhuvad	Runner Up for Maverick 2016	Inter Collegiate National Management Fest- Vishwakarma Institute Of Management	2015-16
3	Neha Ghatkar, Shravani Jadhav, Jagjit Gupte , Akshay Bhuvad	Runner Up for Maverick 2016	Inter Collegiate National Management Fest- Vishwakarma Institute Of Management	2015-16
4	Shivaji Kale,Mangesh Dhandre, Tejas Rampurkar, Gajanan Shinde,Rahul Dawlpure	2 nd Runner Up for Ad Mad Show –Sinahagad Karandak	Inter Collegiate Management Event- Sinahagad Karandak	2015-16
5	Rohini Pawar	Lila Poonawala Scholarship		2013-14
6	Mrudula Deo	Lila Poonawala Scholarship		2013-14
7	Mr.Akhilesh Deshpande	Participated	All India Inter University Waterpolo Competition at Amritsar	2013-14
8	Mr.Akhilesh Deshpande, Mr.Vikas Dhakate, Mr.Sunil Shinde	Won Third prize in the competition as a part of team MMCOE competition as a part of team MMCOE	Intercollegiate Waterpolo organized by Savitribai Phule Pune University	2013-14
9	Mr.Akhilesh Deshpande	Won First place in Zonal level Waterpolo competition	Zonal level Competition organized by S.P.College, Pune	2013-14

24. List of eminent academicians and scientists / visitors to the department

Sr. No.	Name of Visitor	Profile of visitor	Year
1	Mr.Satish Bala	Dale Carnegie	2016-17
2	Mrs.Anjali Pashankar	Corporate Trainer	2016-17
3	Mr.Ashish Kelkar	Trainer –Technical Analysis – Precision Investment Technicals	2016-17
4	Mr.Tejas Toro	NLP trainer	2016-17
5	Mr.Vinay Nair	Aptitude Trainer	2016-17
6	Ms.Archana Badera	Faculty, IIM	2016-17

7	Mr.SudhirDaphtardar	Core Area- Banking & Finance	2016-17
8	Dr.Sachin Bhide	Core Area- Marketing Research	2016-17
9	Mr.Praveen Late	Core Area- Industrial Relations	2016-17
10	Mr.Prasad Kalbande	Core Area- Finance	2016-17
11	Mr.Sameer Gunjal	Financial Modeling –IMS Pro School	2016-17
12	Mr. Pradeep Thite	Core Area-Finance	2015-16
13	Mr.Prahlad Chabbria	Founder Chairman, Finolex Group	2015-16
14	Mr.Ravichandran	Faculty, IIM Ahmedabad	2015-16
15	Mr.Padmanabhan	Secretary, Case Research Society India	2015-16
16	Mrs.Hyacynth Arya	Corporate Trainer	
17	Mr.Somnath Garge	Dale Carnegie	2015-16
18	Mrs.Anjali Pashankar	Corporate Trainer	2015-16
19	Mr.Shantanu Sen Sharma	CEO & Founder, Ozone Education Consultants	2015-16
20	Dr.Shriram Nerlekar	Director, IMERT	2015-16
21	Ms.Archana Badera	Faculty, IIM	2015-16
22	Mr.Tejas Toro	NLP trainer	2015-16
23	Mr.Ashish Kelkar	Trainer –Technical Analysis – Precision Investment Technicals	2015-16
24	Dr.Radhakrishnan Pillai	Author,Corporate Chanakya	2014-15
25	Dr.Shailesh Kasande	Director, Vishwakarma Institutes	2014-15
26	Mr.Dilip Thosar	Alumnus of IIT Kharagpur and IIM Ahmedabad	2014-15
27	Dr.S.P.Singh	Deputy Director, Indira Institute of Management	2014-15
28	Mr.Narayan Joglekar	Senior Faculty	2014-15
29	Mr. Pradeep Thite	Senior Visiting Faculty	2014-15
30	Mr.Anand Kansal	CGM, Sakal Media Group	2014-15
31	Dr.N.B.Jagtap	Head HR- Thermax (Babcock & Wilcox)	2014-15
32	Mr. Saurabh Pramanick	Financial Analyst TCS	2014-15
33	Mr.Jayanthan Solomon	Director, Oracle University	2013-14
34	Dr.H.D.Thorat	Research Head, S.B.Patil Institute of Management	2013-14
35	Mr. Avinash Kulkarni	CEO, Blue Planet Solutions	2013-14
36	Dr.Mohsin Shaikh	Faculty, SIOM	2013-14
37	Dr.Aftab Alam	Faculty, Poona College	2013-14
38	Dr.Amod Markale	Director,Zeal Institute	2013-14
39	Mr. M.G.Mulla	Senior Visiting Faculty	2013-14
40	Mr. Dilip Oak	Senior Visiting Faculty	2013-14
41	Mr. Rajendra Deshmukh	Senior Visiting Faculty	2013-14
42	Mr. Ravindra More	Senior Visiting Faculty from Industry	2013-14
43	Mr. Nital Vakhariya	Senior Visiting Faculty from Industry	2013-14
44	Mr. Soeb Lakdwala	Senior Visiting Faculty from Industry	2013-14
45	Mrs. Kishori Kasat	Faculty, Symbiosis College	2013-14

25. Seminars/ Conferences/Workshops organized & the source of funding

Date	Event	Funding Agency	Amount (Rs.)
10/01/2012	Workshop on A to Z of Research Writing	SPPU	8760/-

26. Student profile programme/course wise

Name of the Course/ programme	Admission Year	Application Received	Selected	Enrolled		Pass percentage
				*M	*F	
MBA	2016-17	As per admission process governed by DTE, the rules and regulations are followed as per DTE		24	29	-
	2015-16			33	14	56.81%
	2014- 15			24	13	75%
	2013-14			38	15	82.98%

27. Diversity of Students

Dept. Name	Year	% of students from the same state	% of students from other States	% of students from abroad
MBA	2016-17	96.22	3.78	NIL
	2015-16	95.74	4.26	NIL
	2014-15	97.44	2.56	NIL
	2013-14	98.31	1.69	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.

NIL

29. Student progression:

Student Progression	Against % enrolled			
	2015-16	2014-15	2013-14	2012-13
PG to M.Phil.	-	-	-	-
PG to Ph.D.	-	-	-	-
Ph.D. to Post-Doctoral	-	-	-	-
Employed	13.79	7.5	22.22	20
*Campus selection				
*Other than campus recruitment	55.17	65	42.22	34.69

*Entrepreneurship/Self-employment	13.79	7.5	4.44	11.11

30. Details of Infrastructural facilities

a. Library:

	Titles	Volumes
Total number of books	59	59

b. Internet facilities for staff & student:

Internet service provider- Tata Teleservices Ltd.

Leased Line- 48 mbps

Contention Ratio- 1:1

Firewall- Sonic wall NSA 2400

Network Switch – D-Link 24 port

c. Class room Facilities:

Room Description	Usage	Shared /Exclusive	Capacity	ICT Facility
608	Classroom	Exclusive	20+	Computers, White Board(1), Chair, table, Fans (2), Tube (6)
610	Classroom	Exclusive	40+	PC, Internet, LCD Screen with projector, Curtains, Black Board, White Board, Table, Benches, Chair, Notice Board, 6 Fans, 8 Tubes, PA System with speakers
612	Classroom	Exclusive	40+	PC, Internet, LCD Screen with projector, Curtains, Black Board, White Board, Table, Benches, Chair, Notice Board, 6 Fans, 6 Tubes, PA System with speakers
613	MBA SEMINAR HALL	Shared	80+	PC, Internet, LCD Screen with projector, Curtains, White Board, Long Table, Red Chairs, Notice Board, Revolving Chairs, 6 Fans, 8 Tubes, PA System with speakers, Podium

d. Laboratories: - NIL

31. Number of students receiving financial assistance from college, university, government or other agencies -

Sr. No .	Type of assistance	Agency Providing Financial Assistance	Academic Year			
			2016-17*	2015-16	2014-15	2013-14

1.	GOI PM Scholarship	Social Welfare Dept. & Tribal Development Dept.	29	12	10	22
2.	GOI PM Freeship		5	1	2	6
3.	EBC Concession	Jt. Director of Tech. Education	16	15	11	11
4.	Minority Scholarship	MOMA	1	-	1	-
		SGS	-	-	2	-
5.	Central sector scholarship	Jt. Director of Higher. Education	-	-	-	-
6.	STC	Zilla Parishad	-	-	1	1
7.	PTC		-	-	-	-
8.	J & K Special Scholarship	AICTE	-	-	-	-
9.	ST	Scholarship	1	-	-	-
		Freeship	-	-	-	-
10.	Marathwada Mitra Mandals Scholarship (Fee Waiver)		3	3	1	2
11.	Private scholarship		-	-	-	2

*In Process

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr. No.	Name of Visitor	Academicians/Visitors	Designation and work place	Purpose of visit	Date	Beneficiary class
1	Ms. Roheena Nagpal et al.	Visitors	Atelier Homes et. al	Programme on Women Empowerment Through Entrepreneurship	28/1/2017	MBA I & MBA II (Girl students)
2	Mr. Satish Bala	Visitor	Trainer, Dale Carnegie	Workshop on Effective Sales and Presentation Skills	1/9/2016 to 3/9/2016	MBA II – Marketing & HR students
3	Mr. Sameer Gunjal	Visitor	Corporate Trainer- Financial Modeling,	Workshop on Financial Modeling	28/8/2016 to 2/9/2016	MBA II- Finance students

			IMS-Pro-School			
4	Mr. Ashish Kelkar	Visitor	Founder, Precision Investment Technicals	Technical Analysis	7/9/2016 & 8/9/2016	MBA II-Finance students
5	Mr. Vinay Nair	Visitor	Aptitude Trainer	Aptitude Sessions	22/8/2016 to 26/8/2016	MBA II-Finance, HR and Marketing students.
6	Mr. Pranav Nair	Visitor	Corporate trainer	Digital Marketing – Carpedium IIM Calcutta	23/1/2016 & 24/1/2016	MBA I
7	Mr. Shantanu Sen Sharma	Visitor	CEO & Founder, Ozone Education Consultants	Guest Lecture-GD & PI-Do's & Don'ts	25/7/2015	MBA II
8	Ms. Archana Badera	Academician	Faculty IIM	Business Valuation	1/8/2015, 8/8/2015 & 22/8/2015	MBA II
9	Mr. Ashish Kelkar	Visitor	Founder, Precision Investment Technicals	Technical Analysis	10/8/2015 & 11/8/2015	MBA II
10	Mr. Tejas Toro	Visitor	NLP	Neuro Linguistic Programming	10/8/2015 to 14/8/2015	MBA II
11	Mr. Ravi Acharya	Visitor	Senior faculty from Industry	MS Excel & Advanced Excel	20/8/2015 & 21/8/2015	MBA II
12	Mrs. Anjali Pashankar	Visitor	Corporate trainer	Business Communication		MBA I
13	Dr. Sharad Patil	Academician	Senior visiting faculty	Management Information Systems	23/3/2014	MBA II
14	Dr. Sharad Patil	Academician	Senior visiting faculty	Business Applications	23/3/2014	MBA II
15	Prof. D. P. Bhate	Academician	senior visiting faculty	Economic Analysis for Business Development	10/4/2014	MBA I
16	Dr. M. G. Mulla	Academician	senior visiting faculty	Financial Management	11/4/2014	MBA I

17	Mr.Yatin Patwardhan	Visitor	senior faculty from Industry	English proficiency		MBA II
18	Ms.Manjiri Latey	Visitor	NLP, senior faculty from Industry	C.V.writing workshop	18/9/2014	MBA II
19	Mr.Saurabh Pramanick	Visitor	Financial analyst, TCS	Excel & Advanced Excel	14/9/2014, 21/9/2014, 28/9/2014, 12/10/2014	MBA I
20	Mr.Narayan Joglekar	Visitor	Senior faculty from Industry	Campus to Corporate	11/10/2014	MBA II
21	Mr.Nital Vakhariya & Mr.Sueb Lakdawala	Visitor	Senior faculty from Industry	Dexterity 2k14 - Business Quiz & Mad-ads	18/2/2014 & 26/12/2014	MBA I & II
22	Mrs. Hycinth Arya	Visitor	Corporate trainer	Personality Development	19/9/2013 to 26/9/2013, 15/10/2013	MBA I
23	Dr. Aftab Alam	Academician	Senior faculty-Poona College	Economic Analysis for Business Development	13/11/2013	MBA I
24	Dr. M. G. Mulla	Academician	Senior visiting faculty	Management Control Systems	14/11/2013 & 15/11/2013	MBA II
25	Prof. Anthony Thomas	Visitor	Corporate Trainer	English Communication	7/3/2013	MBA I & II
26	Dr. Amod Markale	Academician	Director – Zeal Institute	Research Methodology	26/3/2013	MBA I
27	Avinash Kulkarni	Visitor	CEO, Blue Planet Solutions	National Level Summer Project Competition	4/10/2013	MBA I & MBA II
28	Mrs. Hycinth Arya	Visitor	Corporate trainer	Personality Development	11/10/2012	MBA I
29	Prof.Vivek Kulkarni	Academician	Senior visiting faculty	Direct Taxation	25/10/2012	MBA II
30	Mr.M.G.Mulla	Academician	senior visiting faculty	MCS- Numericals	25/10/2012	MBA II
31	Mr.Nital	Visitor	Senior	Internal	26/10/2012	MBA II

	Vakhariya		faculty from Industry	Expert-Project		
32	Prof. Jayashree Vispute	Academician	senior visiting faculty	Internal Expert-Project	1/11/2012	MBA II
33	Dr. Mohsin Shaikh	Academician	HOD – SKN COE	Internal Expert-Project	1/11/2012	MBA II

33. Teaching methods adopted to improve student learning

- Class room teaching
- Video lectures
- Group Discussions
- Role Play
- Case Studies
- Business News Analysis
- Mad-Ads
- Guest Lectures
- Expert Sessions
- Movie Club
- Book Review
- Business Quiz
- Documentary videos
- Industrial Visits

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Students visited “Jeevan Vardhini” orphanage, contribution from MMM Institutes- faculty, students, staff, etc was donated to purchase projector. Cheque was handed over on 29/7/2015 by Dr. S. M. Deshpande, Principal, MMCOE, to Mr. Balasaheb Zende, Chairman, Jeevan Vardhini.
- Faculty & students actively participated in Blood Donation Camp organized by Marathwada Mitra Mandal’s College of Engineering
- Faculty & students actively participated in Swachh Bharat Abhiyan

35. SWOC analysis of the department and Future plans:

Strengths

- Innovative teaching pedagogy includes Harvard Business Case studies, role plays, audio-video lectures, debates, group discussions, presentations etc.
- Various workshops like Neuro Linguistic Programming, Technical Analysis, Financial Modeling, Dale Carnegie workshops are

- conducted to meet industry requirements
- Well qualified, dedicated, dynamic and result oriented faculty members
- Well equipped infrastructure facilities
- Facility for dual specialization
- Lectures and activities also promote sense of social responsibility among the students.

Weakness

- Less number of Publications in National & International Conferences and journals
- Lack of faculty with PhDs
- Lack of consultancy activities

Opportunities

- Collaboration with Industry
- More career oriented sessions and workshops
- Building on reputation for quality education and placements

Challenges

- Compete against growing Foreign Universities, Private Universities and Distance education MBA
- Improve faculty cadre ratio
- Attracting quality students
- Quality placements in competitive environment

Future Plans

- To establish strong presence in the industry and society
- Arrange National Level Workshop/Conference.
- MOU's with companies
- ISO 9001:2008 certification
- NBA

6. Declaration by the Head of the Institution



Marathwada Mitra Mandal's COLLEGE OF ENGINEERING

S. No. 18, Plot No. 5/3, Near Vandevi Temple, Karvenagar, Pune 411 052
Tel. : 020 - 25473160, 25479811, 25479812 Exten. 202, 203 Fax No. : 25470909

E-mail : mmcoe@mmcoe.edu.in Web Site : www.mmcoe.edu.in

(Approved by AICTE New Delhi, recognised by Government of Maharashtra and
Affiliated to Savitribai Phule Pune University, Id No. : PU/PN/Engg./251/2006)

Ref. No: - MMCOE / Admin / NAAC / 16-17 / 939

6. 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 information provided in this SSR during the peer team visit.


Dr. S. M. Deshpande
Principal

Place: Pune

Date: 27/03/2017



7. Certificate of Compliance



Marathwada Mitra Mandal's COLLEGE OF ENGINEERING

S. No. 18, Plot No. 5/3, Near Vandevi Temple, Karvenagar, Pune 411 052
Tel. : 020 - 25473160, 25479811, 25479812 Exten. 202, 203 Fax No. : 25470909

E-mail : mmcoe@mmcoe.edu.in Web Site : www.mmcoe.edu.in

(Approved by AICTE New Delhi, recognised by Government of Maharashtra and

Affiliated to Savitribai Phule Pune University, Id No. : PU/PN/Engg./251/2006)

Ref.No:- MMCOE / Admin / NAAC / 16-17 / 940

7. Certificate of Compliance

This is to certify that **Marathwada Mitra Mandal's College of Engineering, Karvengar, Pune-52** fulfils all norms

1. Stipulated by the affiliating University and/or
2. Regulatory Council/Body [Such as UGC, NCTE, AICTE, MCI, DCI, BCI, etc.] and
3. The affiliation and recognition is valid as on date.

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.


Dr. S. M. Deshpande
Principal



Date: 27/03/2017

Place: Pune

Annexure - I: Extension of Approval letter for Programmes from AICTE



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. Western/1-2809208241/2016/EOA Date: 05-Apr-2016

To,

The Secretary,
Tech. & Higher Education Deptt.
Govt. of Maharashtra, Mantralaya,
Annexe Building, Mumbai-400032

Sub: Extension of approval for the academic year 2016-17

Ref: Application of the Institution for Extension of approval for the academic year 2016-17

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (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 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	Western	Application Id	1-2809208241
		Permanent Id	1-8323471
Name of the Institute	MARATHWADA MITRA MANDAL'S COLLEGE OF ENGINEERING	Institute Address	SR.NO 18, PLOT NO 5/3,KARVENAGAR, PUNE 411 052, PUNE, PUNE, Maharashtra, 411052
Name of the Society/Trust	MARATHWADA MITRA MANDAL	Society/Trust Address	302/A,DECCAN GYMKHANA, PUNE 411 004, PUNE, PUNE, Maharashtra, 411004
Institute Type	Unaided - Private		

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

To conduct following courses with the intake indicated below for the academic year 2016-17

Application Id: 1-2809208241			Course	Full/Part Time	Affiliating Body	Intake 2015-16	Intake Approved for 16-17	NRI Approval status	PIO / FN / Gulf quota Approval status	Foreign Collaboration/Twinning Program Approval status
Program	Shift	Level								
ENGINEERING AND	1st Shift	POST GRADUATE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	18	18	NA	NA	NA

Application Number: 1-2809208241
Note: This is a Computer generated Report.No signature is required.
Printed By : AE5992401

Page 1 of 3
Letter Printed On:14 April 2016



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

TECHNOLOGY										
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRICAL ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING	FULL TIME	University of Pune, Pune	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	INFORMATION TECHNOLOGY	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	University of Pune, Pune	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
MANAGEMENT	1st Shift	POST GRADUATE	MASTERS IN BUSINESS ADMINISTRATION	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
MCA	1st Shift	POST GRADUATE	MASTERS IN COMPUTER APPLICATIONS	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA

The above mentioned approval is subject to the condition that MARATHWADA MITRA MANDAL'S COLLEGE OF ENGINEERING 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.

Application Number: 1-2809208241

Note: This is a Computer generated Report.No signature is required.

Printed By : AE5992401

Page 2 of 3
Letter Printed On: 14 April 2016



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)
7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation 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

Dr. Avinash S Pant
Vice - Chairman, 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,**
MARATHWADA MITRA MANDAL'S COLLEGE OF ENGINEERING
SR.NO 18, PLOT NO.5/3,KARVENAGAR, PUNE 411 052,
PUNE,PUNE,
Maharashtra,411052
5. **The Secretary / Chairman,**
MARATHWADA MITRA MANDAL
302/A,DECCAN GYMKHANA, PUNE 411 004.,
PUNE,PUNE,
Maharashtra,411004
6. **Guard File(AICTE)**

Application Number: 1-2809208241
Note: This is a Computer generated Report.No signature is required.
Printed By : AE5992401

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Letter Printed On: 14 April 2016



All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg Vasant Kunj, New Delhi-110067

PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. Western/1-3322361614/2017/EOA

Date: 10-Apr-2017

To,

The Secretary,
Tech. & Higher Education Deptt.
Govt. of Maharashtra, 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	1-8323471	Application Id	1-3322361614
Name of the Institute	MARATHWADA MITRA MANDAL'S COLLEGE OF ENGINEERING	Institute Address	SR.NO 18, PLOT NO.5/3,KARVENAGAR, PUNE 411 052, PUNE, PUNE, Maharashtra, 411052
Name of the Society/Trust	MARATHWADA MITRA MANDAL	Society/Trust Address	302/A,DECCAN GYMKHANA, PUNE 411 004.,PUNE,PUNE,Maharashtra,411004
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-versa) Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2017-18

Application Id: 1-3322361614			Course	Full/Part Time	Affiliating Body	Intake Approved for 2016-17	Intake Approved for 2017-18	NRI Approval status	PIO / FN / Gulf quota/ OCI/ Approval status	Foreign Collaboration/Twinning Program Approval status
Program	Shift	Level								
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	18	18	NA	NA	NA

Application Number: 1-3322361614

Note: This is a Computer generated Report.No signature is required.

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Letter Printed On:12 April 2017



All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg Vasant Kunj, New Delhi-110067

PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	ELECTRICAL ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING	FULL TIME	University of Pune, Pune	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	INFORMATION TECHNOLOGY	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	MECHANICAL ENGINEERING	FULL TIME	University of Pune, Pune	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDERGRADUATE	MECHANICAL ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
MANAGEMENT	1st Shift	POSTGRADUATE	MASTERS IN BUSINESS ADMINISTRATION	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA

The above mentioned approval is subject to the condition that

MARATHWADA MITRA MANDAL'S COLLEGE OF ENGINEERING

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.

Course(s) Applied for Closure by the Institute for the AY 2017-18:

Application Id: 1-3322361614			Name of the Course	Full/Part Time	Affiliating Body	Course Closure Status
Program	Shift	Level				
MCA	1st Shift	POSTGRADUATE	MASTERS IN COMPUTER APPLICATIONS : (Last Approved Intake 60)	FULL TIME	University of Pune, Pune	Approved

Application Number: 1-3322361614

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All India Council for Technical Education

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PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

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 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,
MARATHWADA MITRA MANDAL'S COLLEGE OF ENGINEERING
SR.NO 18, PLOT NO.5/3,KARVENAGAR, PUNE 411 052,
PUNE,PUNE,
Maharashtra,411052
5. The Secretary / Chairman,
MARATHWADA MITRA MANDAL
302/A,DECCAN GYMKHANA, PUNE 411 004.,
PUNE,PUNE,
Maharashtra,411004
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: 1-3322361614

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Letter Printed On:12 April 2017



All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg Vasant Kunj, New Delhi-110067
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

Application Number: 1-3322361614
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Printed By : AE5992401

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Annexure - II: Extension of Approval letter from University

दूरध्वनी क्रमांक :

०२०-२५६९१२३३
२५६०१२५७
२५६०१२५८
२५६०१२५९



15120052

सावित्रीबाई फुले पुणे विद्यापीठ
(पूर्वीचे पुणे विद्यापीठ)



टेलिग्राफ : 'युनिपुणे'

फॅक्स : ०२०-२५६९१२३३

वेबसाइट : www.unipune.ac.in

ई-मेल : dyracademic@unipune.ac.in

शैक्षणिक विभाग
गणेशखिंड, पुणे-४११००७.

संदर्भ क्र.: CA/1020

दि.: ०३/०५/२०१६

प्रति,

मा. प्राचार्य,

मराठवाडा मित्र मंडळ मराठवाडा मित्र मंडळाचे

अभियांत्रिकी महाविद्यालय पत्ता: सर्वे नं १८ प्लाट नं ५-

३ सिटीएस-२०५ कर्वेनगर पुणे ता.: पुणे (महानगर

पालिका हद्द) जि: पुणे

विषय:- अटीच्या पूर्ततेच्या पडताळणी अहवालबाबत...

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 संलग्नीकरणाच्या नुतानिकरणास / नैसर्गिकवादीस अखिल भारतीय तंत्रशिक्षण परिषद, नवी दिल्ली व तंत्रशिक्षण संचालनालय, महाराष्ट्र शासन यांचे अभ्यासक्रम व प्रवेश क्षमता मान्यतेच्या अधीन राहून अटी पूर्ततेचा पडताळणी अहवाल स्वीकारण्यात आलेला आहे.

शैक्षणिक वर्ष २०१६-२०१७ करिता अटी पूर्तता अहवालाचे पत्र देत असताना स्थानिक चौकशी समितीच्या अहवालात नमूद 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.

अनु. क्र.	अभ्यासक्रमाचा तपशील	विद्यार्थी संख्या	प्रथमपाळी/द्वितीय पाळी	संलग्नीकरणाचा प्रकार
1	एम.इ. (कॉम्प्युटर)	18	2016-2017 : - वर्ष प्रथम व द्वितीय- Div No.1,,	नूतनीकरण
2	एम.बी.ए.	60	2016-2017 : - वर्ष प्रथम व द्वितीय- Div No.1,,	नूतनीकरण
3	एम.सी.ए.	60	2016-2017 : - वर्ष पहिले ते तिसरे- Div No.1,,	नूतनीकरण
4	बी.ई. (इन्फर्मेशन टेक्नॉलॉजी)	60	2016-2017 : - वर्ष पहिले ते चौथे- Div No.1,,	नूतनीकरण
5	बी.ई. (इलेक्ट्रिकल)	60	2016-2017 : - वर्ष पहिले ते तिसरे- Div No.1,,	नूतनीकरण
6	बी.ई. (इलेक्ट्रॉनिक्स अँड टेलिकम्युनिकेशन)	120	2016-2017 : - वर्ष पहिले ते चौथे- Div No.1,- वर्ष पहिले ते चौथे- Div No.2,,	नूतनीकरण

7	बी.ई. (कॉम्प्यूटर)	120	2016-2017 : - वर्ष पहिले ते चौथे- Div No.1,- वर्ष पहिले ते चौथे- Div No.2,,	नूतनीकरण
8	बी.ई. (मेकॅनिकल)	180	2016-2017 : - वर्ष पहिले ते चौथे- Div No.1,- वर्ष पहिले ते चौथे- Div No.2,- वर्ष पहिले ते तिसरे- दुसरी पाळी Div No. 3,,	नूतनीकरण
9	बी.ई. (इलेक्ट्रिकल)	60	2016-2017 : - वर्ष चौथे- Div No. 1,,	नैसर्गिकवाढ
10	बी.ई. (मेकॅनिकल)	180	2016-2017 : - वर्ष चौथे- दुसरी पाळी Div No. 3,,	नैसर्गिकवाढ

कळावे,

आपला,

for *Hingale*
103/05/16
उपकुलसचिव
शैक्षणिक विभाग

Annexure - III: Approval Letter for NAAC from Affiliating University

Savitribai Phule Pune University (Formerly University of Pune)

Telephone Nos. :
020 - 25691233
25601258
25601259
25601257



ACADEMIC SECTION
Ganeshkhind, Pune - 411007, INDIA
Telegraph : 'UNIPUNE'
Fax : 020-25691233
Website : www.unipune.ac.in
E-mail : dvracademic@unipune.ac.in

Ref. No. : CA/245

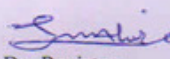
Date : 22/03/2017

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Marathwada Mitra Mandal's College of Engineering, S. No. 18, Plot No. 5/3, Near Vandevi Temple, Karvenagar, Pune 411 052 is affiliated to the Savitribai Phule Pune University, since 2006 (PU/PN/Engg/251/2006) and the following courses are taught in the said college as per approval.

Courses	Duration of the Course	Affiliation (Permanent / Temporary)	Validity Period
B.E. Information Technology	4 Year	Temporary	Upto 2016-17
B.E. Electrical Engineering	4 Year	Temporary	Upto 2016-17
B.E. Electronics and Telecommunication Engineering	4 Year	Temporary	Upto 2016-17
B.E. Computer Engineering	4 Year	Temporary	Upto 2016-17
B.E. Mechanical Engineering	4 Year	Temporary	Upto 2016-17
B.E. Mechanical Engineering (Second Shift)	4 Year	Temporary	Upto 2016-17
M.E. Computer Engineering	2 Year	Temporary	Upto 2016-17
M.B.A.	2 Year	Temporary	Upto 2016-17
M.C.A.	3 Year	Temporary	Upto 2016-17

The said certificate is issued as per the request application received from the Principal of the college Ref. No.MMCOE/SPPU/NAAC/2016-17/906, dated 20/03/2017 so as to submit it to the National Assessment and Accreditation Council (NAAC), Bangalore.


Dy. Registrar
(Academic Section)

Annexure - IV: Master Plan of the Institution

