

Self Study Report (SSR)

Submitted to

**National Assessment and Accreditation Council
Bangalore**



MES College of Engineering, Pune

19, Late Prin. V.K. Joag Path,
Wadia College Campus, Pune - 411001.

Phone No.: 020 - 2616 3831, Fax: 020 - 2616 3831

E-mail - principal@mescoepune.org Website: www.mescoepune.org

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MES College of Engineering, Pune

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Modern Education Society's
College of Engineering, Pune

19, Late Prin. V. K. Joag Path, Wadia College Campus, Pune - 411 001
Tel. / Fax : (020) 26163831 / 26160935 • Website : www.mescoepune.org
E-mail : principal@mescoepune.org • Id. No. PU / PN / Engg./ 136 / 1999
AICTE Approval No. 740-89-337(E)/ET/99
Govt. of Maharashtra Approval No. PEC 2099/53458(269/99)/TS-1

Ref.No.A-64/NAAC/ 841
Date : 09.03.2015

To,
Dr Ganesh Hegde
Assistant Advisor,
National Assessment & Accreditation Council
P.O.Box.No. 1075, Opp: NLSIU
Nagabhavi, Bangalore-5600072

Subject : Submission of Self Study Report(SSR).

Ref: NAAC/WR/GH/MH-602/Profes.-1st Cycle/2013-14 Dated 15th September 2014.

Respected Sir

With reference to your letter No. NAAC/WR/GH/MH-602/Profes.-1st Cycle/2013-14, dated 15th September 2014, regarding approval of LOI and further submission of self-study report for Institute Track ID MHCOGN22651, I have to inform you that we have uploaded the Self-Study Report (SSR) on our institute website www.mescoepune.org on 14/02/2015 for your kind perusal.

Institute is ready for accreditation and assessment by NAAC Peer Team. You are kindly requested to accept the SSR for further processing.

Thanking You,

Yours Sincerely,

Principal,
Modern Education Society's
College of Engineering
Pune 411001



NAAC STEERING COMMITTEE

Chairperson

- Dr. A. A. Keste

Co-ordinator

- Dr. V. N. Raibhole

Co-Coordinator

- Mrs. R. A. Khan

Members

- Mrs. N. F. Shaikh, HoD, Dept. of Computer Engineering
- Mr. P. B. Chopade, HoD, Dept. of E&TC Engineering
- Mr. V. N. Chougule, HoD, Dept. of Mechanical Engineering
- Dr. D. S. Adkar, In charge, First Year Engineering
- Mrs. S. K. Wagh
- Dr. M. P. Dale
- Dr. S. P. Narote
- Mrs. A. R. Prayag
- Mrs. V. S. Galgali
- Dr. S. S. Sarawade
- Mrs. S. R. Khonde
- Mr. S. N. Dharwadkar
- Mr. S. P. Gadewar
- Mrs. S. M. Narsale
- Mr. V. A. Rahane

Published by the Principal, MES College of Engineering,
19, Late Prin. V. K. Joag Path, Wadia College Campus, Pune-411001
(For private circulation only)

A. PREFACE

The Institute is pleased to present this Self Study Report (SSR) to the National Assessment and Accreditation Council, Bengaluru.

Modern Education Society was established in 1932 with a motto 'For the Spread of Light' by the founder Life Member and Secretary Late Prin. V. K. Joag. Modern Education Society's College of Engineering was established on 5th July 1999. The Institute is recognized by All India Council for Technical Education (AICTE) New Delhi, approved by State Government of Maharashtra and affiliated to Savitribai Phule Pune University (SPPU). The Institute is centrally located in the heart of the city where theoretical and professional skills of the students are enhanced by providing an innovative and flexible environment.

The Institute runs three undergraduate courses (Bachelor of Engineering) and three post graduate courses (Master of Engineering). All these courses are affiliated to the Savitribai Phule Pune University.

Under graduate courses:

- Computer Engineering (120 seats)
- Computer Engineering second shift (60 seats)
- Electronics & Telecommunication Engineering (120 seats)
- Mechanical Engineering (120 seats)

Postgraduate courses:

- M.E. (Computer Engineering) (24 seats)
- M.E. (Signal Processing) (24 seats)
- M.E. (Mechanical Design Engineering) (24 seats)

The teaching faculties in the Institute strive hard to impart knowledge to the students to make them competent and motivated engineers, ultimately developing the Institute as a centre of academic excellence. They serve the purpose of inculcating a solid foundation of knowledge, enhancing confidence, creativity and innovation in the students. The existing laboratories in the departments are timely upgraded keeping in mind the revised syllabus structure as and when implemented by the Savitribai Phule Pune University. One such laboratory worth mentioning is the 'BAKER-MESCoE Metrology and Quality Control Laboratory' and 'NI LabVIEW' in the Department of Mechanical Engineering. These are state-of-the-art laboratories where students are exposed to modern and sophisticated instruments and test facilities.

The college has a conducive environment and enormous learning opportunities for the right candidates. It fosters their character building for a bright future so as to ultimately emerge as tomorrow's nation builders.

B. EXECUTIVE SUMMARY

Criterion I: Curricular Aspects

M.E.S. College of Engineering (MESCoE) is affiliated to the Savitribai Phule Pune University. The college is a self-financing institution and follows the curriculum provided by the University. Faculties of the college actively participate in the curriculum design by conducting syllabus revision workshops where members of Board of Studies and senior faculties from various engineering colleges participate. The faculty also attends similar workshops conducted by the University. Academic flexibility and bridging the gap between curriculum and industry is achieved by conducting certificate courses, seminars and tie-ups through MOU's with leading industries. The college encourages self-employability by conducting Entrepreneurship Development Programmes sponsored by DST. The college caters to the needs of slow learners through the B-WOW Programme. Social awareness and community service is inculcated in the students through various NSS activities.

Criterion II: Teaching-Learning and Evaluation

At this Institute excellence in teaching and learning is achieved by recruiting good competent teaching faculty. 80% of the admissions are carried out through government quota. The remaining 20% admissions are carried out through the management quota on merit basis. In order to have smooth conduction of teaching throughout the semester meticulous planning is done prior to the commencement of the semester. Weekly syllabus completion status is maintained. Tests and tutorials are conducted on a regular basis, to ensure that the students grasp the concepts being delivered in the classrooms and laboratory sessions. A feedback mechanism for the faculty by the students facilitates in effective conduction of the teaching learning process.

Criterion III: Research, Consultancy and Extension

The Institute has established a Research and Development cell in the year 2009, by collaborating with reputed industries. The functioning of the cell is monitored by a Research Committee which comprises of a Chairman, Member Secretary and members. Research projects are undertaken by the college on the basis of recommendations by the research committee. The college promotes a research culture by giving complete autonomy to the principal investigators and allocating funds and resources on a regular basis. Faculties are encouraged to participate as resource persons in various workshops and conferences.

Extension activities on the technical front are carried out by the Institute by having MOUs with leading industries. The students are made aware of their

social and moral obligations towards society through active participation in various National Service Scheme (NSS) activities such as blood donation camps, cleanliness drives in adopted villages and so on to name a few.

Criterion IV: Infrastructure and Learning Resources

Well-equipped infrastructure goes hand in hand for imparting quality education. The Institute has adequate number of class rooms, laboratories and tutorial rooms. Each class room is equipped with an LCD projector. The laboratories have state-of-the-art equipment's, machinery and software's. The college has two seminar halls which are used for multiple activities such as seminars, workshops and conferences. The college central library has e-resources and a seating capacity of over 200 students. The library has a huge collection of book titles, references, journals, magazines and a book bank facility in order to promote the teaching learning process. The college is centrally located and has a girls hostel and a boys hostel on the campus. A gymnasium is provided in the college for the overall growth of the students.

Criterion V: Student Support and Progression

The college has an intake of about 1649 students, from diverse backgrounds. In order to cater to the needs of students a parent teacher model is followed in the college. Each parent teacher is assigned 20 students. The parent teacher monitors the academic and personal development of the students. The parent teacher is in constant touch with the students, their parents and local guardians. The Training & Placement cell of the Institute provides career guidance and organizes campus recruitment drives for the students. The T& P cell prepares the students for placement activities through various initiatives such as online assessment tests and soft skills development Programmes. The college arranges special coaching for preparing students appearing for competitive examinations. Development of Entrepreneurial skills is encouraged in the students through various entrepreneurship development activities.

Criterion VI- Governance, Leadership and Management:

The Institute is governed by the Management of the Modern Education Society which is characterized by respect to the teaching profession. The leadership role is played by teachers who are members of the management. Faculty members are actively involved in the decision making process at various levels. The management is in constant touch with the Principal in order to discuss development of the Institute, administration and appointments. The management conducts meetings of the Standing Committee where the Principal represents the college. The College Development Committee that comprises of the Principal, head of departments and senior faculties plan for the progress of the Institute. The college organizes the annual social gathering (Jhankar), workshops, seminars and conferences for the overall development of the students.

Criterion VII- Innovations and Best Practices:

The Institute is committed to adopt environment-friendly policies with regard to plantation, waste management, use of renewable energy sources and water harvesting. The first best practices for improving the teaching learning process is, Practical Exposure to the Students to abreast them with the changing technologies through industrial visits, sponsored projects, seminars, workshops and guest lectures by eminent personalities from the industry. The second best practice is Systemic Academic Monitoring of Students through the Parent Teacher Scheme, BWOW, EAC's, Earn and Learn scheme, conduction of special classes for direct diploma students, so as to help them cope with their academics and the Book bank facility.

SWOC ANALYSIS OF THE INSTITUTE**Strengths**

- The College results are consistently good for all the disciplines. We have produced quite a few University toppers.
- Our college has experienced and highly qualified faculty.
- We follow good teaching learning practices.
- The college possesses a distinguished background which carries the name of the illustrious Wadia family.
- The college conducts entrepreneurship development activities for encouraging development of entrepreneurial skills in the students.
- The Institute has well equipped infrastructure facilities like State-of-the-art laboratories, classrooms, tutorial rooms and hostels.
- A State-of-the-art central library.
- The college is centrally located and is well connected through roads and the railways.
- The college promotes enthusiastic student participation for social causes, through the NSS Programme, with a student receiving the President of India award.
- The Institute has a teacher oriented management through the Board of Life Members.

Weaknesses

- The Institute needs a University Sponsored Research Center.
- The college lacks sufficient patents.
- Industry Institute interaction needs to be strengthened further.
- Consultancy activities need to be enhanced.
- The college needs to strengthen the Alumni Association.

Opportunities

- The college can venture into joint research and Ph.D. Programmes with international universities which will provide a platform for international exposure to both students and faculty.
- There is scope for inter-disciplinary research.

Challenges

- Students' skill need to be enhanced through additional measures as per the continuous changing requirements of the industry.
- Due to the growing number of engineering colleges we need to attract academically good students.
- Increasing the number of placements for slow learners.

C. PROFILE OF THE COLLEGE

1. Profile of the Affiliated/Constituent College

1. Name and Address of the College:

Name:	Modern Education Society's College of Engineering	
Address:	19, Late Prin. V. K. Joag Path, Wadia College Campus	
City: Pune	Pin:411 001	State: Maharashtra
Website:	www.mescoepune.org	

2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. A. A. Keste	O: 020-26163831 R:	9423011128	020-26163831	principal@mescoepune.org
Vice Principal	--	--	--	--	--
Steering Committee Co-ordinator	Dr. V. N. Raibhole	O: 020-26163831 R:	8007937370	020-26163831	vnraibhole@mescoepune.org
Steering Committee Co-Coordinator	Mrs. R. A. Khan	O: 020-26163831 R:	9822119792	020-26163831	rubeena.khan@mescoepune.org

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.

6. Sources of funding:

Government:

Grant-in-aid:2

Self-financing:

Any other

✓

7. a. Date of establishment of the college: 05/07/1999

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

Savitribai Phule Pune University

c. Details of UGC recognition

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

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

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

Under Section /clause	Recognition/Approval details Institution/Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
AICTE	BE-Computer Engineering F. No. 740-89-337 (E)/ET/ 99	02-07-1999	1 year	Approval is extended every year by submitting the required document
	BE- Electronics and Telecommunication Engineering F. No. 740-89-337 (E)/ET/ 99	02-07-1999	1 year	

	BE-Mechanical Engineering F. No. 740-89-337 (E)/ET/ 99	02-07-1999	1 year	s as per AICTE
	ME- Mechanical Design Engineering F.No.Western/1-1471111802/2013/EOA	19-03-2013	1 year	
	ME- Signal Processing F.No.Western/1-1471111802/2013/EOA	19-03-2013	1 year	
	ME- Computer Engineering F. No. Western/1-2014191450/2014/EOA	04-06-2014	1 year	

(Enclose the recognition/approval letter)

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 ☒

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

b. for its performance by any other governmental agency?

Yes ☐ No ☒

If yes, Name of the agencyN.A..... and

Date of recognition:N.A..... (dd/mm/yyyy)

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

Location*	Urban
Campus area in sq.mts.	16652.83

Built up area in sq.mts.	14737
--------------------------	-------

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

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.

- Auditorium/seminar complex with infrastructural facilities ✓
- Sports facilities
 - Play ground ✓
 - Swimming pool
 - Gymnasium ✓
- Hostel
 - Boys' hostel
 - i. Number of hostels 01
 - ii. Number of in mates 181
 - iii. Facilities (mention available facilities)
Mess, 24 hour Security, Lift, CCTV, Attendance (Face Reading) Machine, Water Purifier, Hot Water, Water Coolers, UPS System, Firefighting system, Intercom, Television, Dispensary, House Keeping, Internet, Reading Room, News Papers, Guest Room, Table, Chair, etc.
 - Girls' hostel
 - i. Number of hostels 02
 - ii. Number of in mates 177
 - iii. Facilities (mention available facilities)
Mess, 24 hour Security, Lift, CCTV, Attendance (Face Reading) Machine, Water Purifier, Hot Water, Water Coolers, UPS System, Firefighting system, Intercom, Television, Dispensary, House Keeping, Internet, Reading Room, News Papers, Guest Room, Table, Chair, etc.
 - Working women's hostel
 - i. Number of in mates Nil

ii. Facilities (mention available facilities)

- Residential facilities for teaching and non-teaching staff (give numbers available — cadre wise): 01 – Assistant Professor.
- Cafeteria—Yes
- Health center— Yes

First aid, Inpatient, Outpatient, Emergency care facility, Ambulance.....
Health center staff – 01

Qualified doctor	Full time	01	Part-time	01
Qualified Nurse	Full time	-	Part-time	-

- Facilities like banking, post office - Yes
- Transport facilities to cater to the needs of students and staff - No
- Animal house – No
- Biological waste disposal – Yes
- Generator or other facility for management/regulation of electricity and voltage - Yes
- Solid waste management facility - Yes
- Waste water management - Yes
- Water harvesting - Yes

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

Sr. No.	Program me Level	Name of the Programme / Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved student strength	No. of students admitted
1.	Under-Graduate	Comp. Engg.	4 Years	12 th + JEE	English	180	161
		E&TC				120	105

		Mech. Engg.				120	123
2.	Post-Graduate	Comp. Engg.	2 Years	B.E./B.Tech + GATE	English	24	16
		Mech. Design Engg.				24	17
		Signal Processing				24	18
3.	Integrated Programmes PG	--	--	--	--	--	--
4.	M.Phil.	--	--	--	--	--	--
5.	Ph.D.	--	--	--	--	--	--
6.	Certificate courses	--	--	--	--	--	--
7.	UG Diploma	--	--	--	--	--	--
8.	PG Diploma	--	--	--	--	--	--
9.	Any Other (specify and provide details)	--	--	--	--	--	--

13. Does the college offer self-financed Programmes?

Yes ☐ No ☒

If yes, how many?

N. A.

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

Yes	✓	No		Number	03
-----	---	----	--	--------	----

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	Departments (eg. Physics, Botany, History)	UG	PG	Research
Science				
Arts				
Commerce				
Engineering	Computer Engineering, Electronics & Telecommunication Engineering, Mechanical Engineering	✓	✓	

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

- a. annual system
- b. semester system ☒
- c. trimester system

17. Number of Programmes with

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

NA
NA
NA

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

Yes ☐ No ☒

If yes,

- a. Year of Introduction of the Programme (s).....(dd/mm/yyyy)
and number of batches that completed the Programme

b. NCTE recognition details (if applicable)

Notification No. :

Date: (dd/mm/yyyy)

Validity:

c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?

Yes ☐ No ☐

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

Yes ☐ No ☒

If yes,

a. Year of Introduction of the Programme (s).....
(dd/mm/yyyy) and number of batches that completed the
Programme.

b. NCTE recognition details (if applicable)

Notification No.:

Date: (dd/mm/yyyy)

Validity:

c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?

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 the UGC/University/	13		27		70		38		36	
Recruited	3	-	4	6	58	48	31	6	29	2
Yet to recruit	10		17		-36		01		05	
Sanctioned by the Management/ society or other authorized bodies	NA									

<i>Recruited</i>	NA
<i>Yet to recruit</i>	

*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.	03	-	02	01	02	-	08
M.Phil.	-	-	-	-	-	-	-
PG	-	-	02	05	27	26	60
Temporary teachers							
Ph.D.	-	-	-	-	-	01	01
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	26	18	44
UG Pursuing PG	-	-	-	-	03	03	6
Part-time teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

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

Nil

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

Categories	2011-12		2012-13		2013-14		2014-15	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	66	33	85	43	109	68	119	68
ST	14	3	15	3	17	4	21	06
OBC	126	55	157	81	218	107	233	141
General	438	214	501	262	639	319	696	363
Others	67	38	72	53	95	73	123	73
Total	711	343	830	442	1078	571	1192	651
	1054		1272		1649		1843	

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	1668	95	-	-	1763
Students from other states of India	79	1	-	-	80
NRI students	0	0	-	-	0
Foreign students	0	0	-	-	0
Total	1747	96	-	-	1843

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

UG

1.2%

PG

NA

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. 51178/-

(b) Excluding the salary component

Rs. 26976/-

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

Yes ☐ No ☒

If yes,

a. Is it a registered centre for offering distance education Programmes
a. another University

Yes ☐ - No ☐ -

b. Name of the University which has granted such registration.

NA

c. Number of Programmes offered ☐ -

d. Programmes carry the recognition of the Distance Education Council.

Yes ☐ - No ☐ -

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

Sr. No.	Name of the Programme	Student Teacher Ratio
	UG	
1.	Computer Engineering	15:1
2.	E & TC Engineering	15:1
3.	Mechanical Engineering	15:1
	PG	
4.	Computer Engineering	12:1
5.	E & TC Engineering Signal Processing	12:1
6.	Mechanical Design Engineering	12:1

29. Is the college applying for

Accreditation: Cycle1 ☒ Cycle2 ☐ Cycle3 ☐ Cycle4 ☐

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 Cycle2, Cycle3, Cycle4 and re-assessment only)

Cycle1:.....(dd/mm/yyyy)Accreditation Outcome/Result.....
Cycle2:.....(dd/mm/yyyy)Accreditation Outcome/Result.....
Cycle3:.....(dd/mm/yyyy)Accreditation Outcome/Result.....

*** *Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.***

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

238

32. Number of teaching days during the last academic year
(Teaching days means days on which lectures were engaged excluding the examination days)

150

33. Date of establishment of Internal Quality Assurance Cell (IQAC) IQAC:
13/12/2014 (dd/mm/yyyy)

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

AQAR (i) (dd/ mm/ yyyy)

AQAR (ii) (dd/ mm/ yyyy)

AQAR (iii)..... (dd/ mm/yyyy)

AQAR (iv) (dd/ mm/ yyyy)

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

D. Criterion-wise Analytical Reports

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 groom Motivated, Environment friendly, Self-esteemed, Creative and Oriented Engineers.

Mission of the institution:

To Develop Industry Oriented Manpower to accept the challenges of Globalization by-

- Promoting Value Education through motivated trained faculty.
- Maintaining conducive environment for education at affordable cost.
- Promoting Industry Institute interaction.
- Involving alumni.

Goals and objectives of Institution

1. To ensure all-round development of students by providing co-curricular, extra-curricular and entrepreneurship skills.
2. To impart research culture by encouraging faculty and students, by providing state-of-the-art research facilities and industry Institute interaction.
3. To inculcate moral integrity in students and make them socially responsible, good human beings.
4. To develop leadership qualities and the ability to work as a team among students by encouraging participation in various activities.

Communication to Stake holders:

The vision, mission and objectives of the institution are communicated to students, teachers, staff and other stakeholders.

The mission and vision statements of the Institute are displayed on the college website, at various locations of the college building such as the Principal Office, Head of the Department (HoD) Cabin/Departmental office, Training and Placement cell and library. These statements are communicated to the students through notice boards of all the departments, college brochure and printed on the cover pages of their journals. It is also communicated to FE students through the orientation programme.

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).

The institution meticulously develops action plans for the effective implementation of the curriculum. At the outset, the Principal of the college conducts meetings with the various department heads to develop strategies for effective implementation of the curriculum. Teachers are

encouraged to impart the curriculum through innovative teaching methods such as presentations, assignments, discussions, workshops, seminars and industrial visits besides the regular/traditional chalk and talk methods.

This is carried out through the following ways:

1. Departmental meetings by Heads of the department: These are held periodically by the respective Heads of the Department wherein a review of the syllabus taught is taken regularly.
2. Meetings of the Heads of the Department with Principal: These are called by the Principal every week wherein review of syllabus taught is often one of the points on the agenda.
3. Organization of workshops: The Institute has hosted syllabus revision Programmes in association with Board of Studies under the University (SPPU).
4. Action Plan for effective implementation of the curriculum:
 - Curriculum and academic calendar are prescribed by the University. The departments of the Institute prepare academic calendar in line with the academic calendar prescribed by the University.
 - All the students are informed about the curriculum well before the commencement of term.
 - Students are also informed about the academic calendar and the same is followed with some required changes to cater to the local situations if needed.
 - Subjects are allocated to the faculty taking into consideration, the faculty qualifications, their subjects' specialization, experience and their willingness.
 - Teaching plans are prepared by individual teachers for the subjects they are handling, including the laboratory within the ambit of the academic schedule. The academic schedule is strictly followed as per the almanac.
 - Detailed course files are prepared by the faculty which includes comprehensive class notes, teaching material and OHP transparencies, PPT slides etc.
 - The progress of syllabus coverage is monitored periodically at various levels.
 - In addition to the curriculum, students are educated about the latest developments in their respective fields, by arranging expert guest lectures, industrial and field visits etc.
 - Students of all the departments have gone on at least one industrial visit during the four years of their course.
 - Periodical feedbacks are taken from the students on aspects of teaching-learning during each semester.
 - Staff meetings are held by the head of the departments to review the teaching learning process, academic progress of the students,

grievances if any and suitable remedial measures are taken as and when necessary.

- Resource planning is carried out before commencement of the term. Stock verification of laboratories, need of new instruments and softwares and repair of existing instruments is identified. Quotations are called for and comparative statements are prepared before new purchases are made.

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 institution follows the curriculum as prescribed by the Savitribai Phule Pune University. Being an affiliated institution, the college follows the latest norms and guidelines as and when laid down by the affiliating University. The College encourages its faculties to participate in Orientation/ Refresher Courses/ Workshops/ Seminars organized by the University so as to update their knowledge and to improve the teaching practices. All costs for attending such Programmes are borne by the college. The college provides ample books and other teaching and reference materials like journals, magazines, teaching models and softwares to enable its teachers to ensure effective delivery of curriculum. Faculties are encouraged to attend National and International symposia and conferences and present their research findings. The Institution encourages the faculty to pursue higher studies through the Quality Improvement Programme and to take up research work individually or in collaboration. Study leave is granted to faculty members who are pursuing Masters or Ph. D. Programmes. Faculties are encouraged to apply for research grants from different funding agencies such as AICTE, DST, BCUD-SPPU which helps to enhance their professional competence. All the faculty members of various departments are encouraged to organize Seminars, Training Programmes, and National Conferences.

1.1.4. Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.

The Institute is continuously taking efforts throughout the year to enhance the curriculum delivery quality. In the past few years the Institute has taken a number of initiatives in this direction, which are enumerated as follows.

Effective Practices: The quality objectives and goals are prepared by every department. These are communicated to all staff and students of the department. The action plan to achieve these objectives is prepared and implemented upon. The Institute prepares the academic Calendar for various activities. The academic monitoring committee monitors these activities and

takes corrective actions and preventive measures for achievement of quality objectives and goals.

- The college identifies the training needs of the faculty and supporting staff. Accordingly either the faculty is trained or faculty is identified as per expertise and qualification. Appointing adjunct faculties is a novel idea initiated by the college. The adjunct faculty are professionals who impart to students practical inputs in specific subjects.
- Theory and Practical content analysis are prepared for every course and execution of course delivery is monitored for continuous improvement.
- The In-semester progress of students in theory class is evaluated by conducting, semester tests, and tutorials periodically and corrective action is taken accordingly.
- The evaluation of Laboratory assignments is done on a continuous basis.
- The teaching process is reviewed weekly and specific and general problems are discussed in the departmental meetings.
- The Institute has introduced the Parent-Teacher Scheme. In this scheme 15-20 students are assigned to a faculty. The parent-teacher monitors the progress of the students and helps to resolve student's personal problems.
- The library timings are 8.00 am to 8.00 pm on working days. The reading hall is open 24X7 daily.
- The Language laboratory in the Institute promotes the use of computer applications for teaching various elements of the English language.
- Modern teaching aids like Screen Projectors, PPTs, Webinars, NPTEL videos are used for effective teaching learning process.
- Curriculum delivery is also enhanced by organizing seminars, workshops, guest lectures, interdisciplinary and interdepartmental Programmes.
- Holistic development of students: - The NSS wing of the college engages the students in community development activities which motivate the students for Social Service. The college NSS team regularly visits surrounding areas and villages where people are made aware about various social, moral and ethical issues.

1.1.5. How does the institution network and interact with beneficiaries such as industry, research bodies and the University in effective operationalization of the curriculum?

The College interacts with industry, University and with research people for effective implementation of curriculum. In addition to this resource persons are called or consulted as and when required.

Industry:

The College has a separate well organized training and placement cell that maintains professional relations with industry people. Through this

placement cell, the college students are taken for industrial visits in order to gain practical exposure. The T&P cell organizes campus placements to help students in advancing their careers. Industry professionals are regularly invited for sharing their knowledge with the students.

The Institute has signed Memorandum of Understandings (MoU) with several companies like Texas Instruments-TRIDENT TECH Lab, DIVINE corporation, BAKER Gauges Pvt. Ltd., ZF Steering India Pvt. Ltd., Mitsubishi Electric India Pvt. Ltd., KUKA Robotics, NI lab view, Graceful Growth Pvt. Ltd., SEED technologies, Harbinger Systems Pvt. Ltd., Zensar Technologies, C-DAC, ProActive IT services Pvt. Ltd. and RS Networks. This provides various opportunities for students so as to groom them to face a competitive global market in their respective fields.

Training & Placement Cell has arranged four Job fairs in the last two years and about 2200 students participated in each fair. It has also arranged many pool campuses as we have the facility for conducting “on line” tests.

Various reputed companies participated in the campus drive and in pool campus like, Accurate Gauging, ADWEB, Amura Tech, Atos, Aurin Pro Sena, Bitwise, Bosch, Bridgestone, Crest, HSBC, Ideas, Infosys, Jonam Engg. Tech. Pvt. Ltd., Krawler Infosystems, KUKA Robotics, L&T, Lingua Next, QED, Quick Heal, Sanmar, Quinnox, Siemens, Symantec, Syntel, Talent Beat, Crest Premedia, Deloitte, Enzigma, EQMSOL, Eternus Solutions, Fiserv, Flextronics, MAQ Software, Mithi Software, Mphasis, Navis, Nitor, NTT Data, Optra Systems, Opus Software, Persistent, Pubmatics, TCS, Tech M, Thoughtworks, Vag Valves, Volkswagen, Web Tech Developers, Wirtgen India, Zensar Technologies and Flipkart.

- Tech Mahindra awarded a trophy to the T & P department of the Institute for the Best support to “off campus drives” on 23rd May 2014.
- Zensar awarded a memento to the T & P cell of the Institute.
- T & P cell conducted off campus drives for Zensar, IBM, Tech Mahindra, Infosys, during March 2014 to June 2014.

Research bodies:

Research scholars are regularly invited for guest lectures and seminars to encourage students as well as faculties for undertaking research projects and enhancing their research capabilities.

University:

Professors from the University are invited for discussions, workshops and professional interactions with the faculty members. Faculty members of the college keep regularly in touch with the University to keep themselves updated with the latest trends in their field of study.

1.1.6. What are the contributions of the institution and/or its staff members to the development of the curriculum by the

University?(number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.)

The college has earned its reputation as one of the renowned affiliated colleges under the Savitribai Phule Pune University. Most of the senior faculties of our college have served in the University under various capacities like paper-setters for UG and PG, moderators, examiners and chairman of UG papers . Dr. A. A. Keste is a co-opted member of Board of Studies Mechanical Engineering SPPU. The college offers all possible help to the University in its attempts at framing syllabi, and complying with all requirements of the University. The college displays the spirit of democracy and equality in inviting feedback from all corners. We give utmost importance to student's feedback and our alumni are also involved in the feedback process.

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.

All the courses offered in our college are directly under the affiliation of Savitribai Phule Pune University. Any changes / up gradation in the curriculum are solely handled by the University in consultation with members of Board of Studies and suggestions incorporated from affiliated institutions. In addition to this, the institution strives towards the overall development of students and quality enhancement of learners through various, orientation and life skill enrichment Programmes.

Short term courses other than those offered by the University are conducted, keeping in view of the growing demand and relevance of skill oriented certification. A list of add on courses are:

- CCNA: Cisco Certified Network Associate is an IT certification from Cisco conducted by GNT Infotech Pvt.Ltd, Pune and now handed over to partner firm RS Network, Pune. It was initiated by the Electronics and Telecommunication department in January 2014.
- LINUX: Certificate Course in LINUX (Open Source) conducted by Eaglet gateways Pvt. Ltd. Pune and organized by E&TC Department during January 2014 to March 2014.
- C: Certificate Course in C language conducted by SEED Infotech Pvt.Ltd. Pune and organized by E&TC Department.
- CATIA V6: Certificate Course in CATIA V6 was conducted by EDS Technology, Pune and organized by Department of Mechanical Engineering, during 30th December 2013 to 24th Feb 2014.
- AUTOMOBILE DESIGN & CAD DEVELOPMENT: Certificate Course in Automobile Design & CAD Development conducted by ZEST Technology, Pune and organized by the Department of Mechanical

Engineering. The course commenced on 1st December 2014 and is for duration of 3 months.

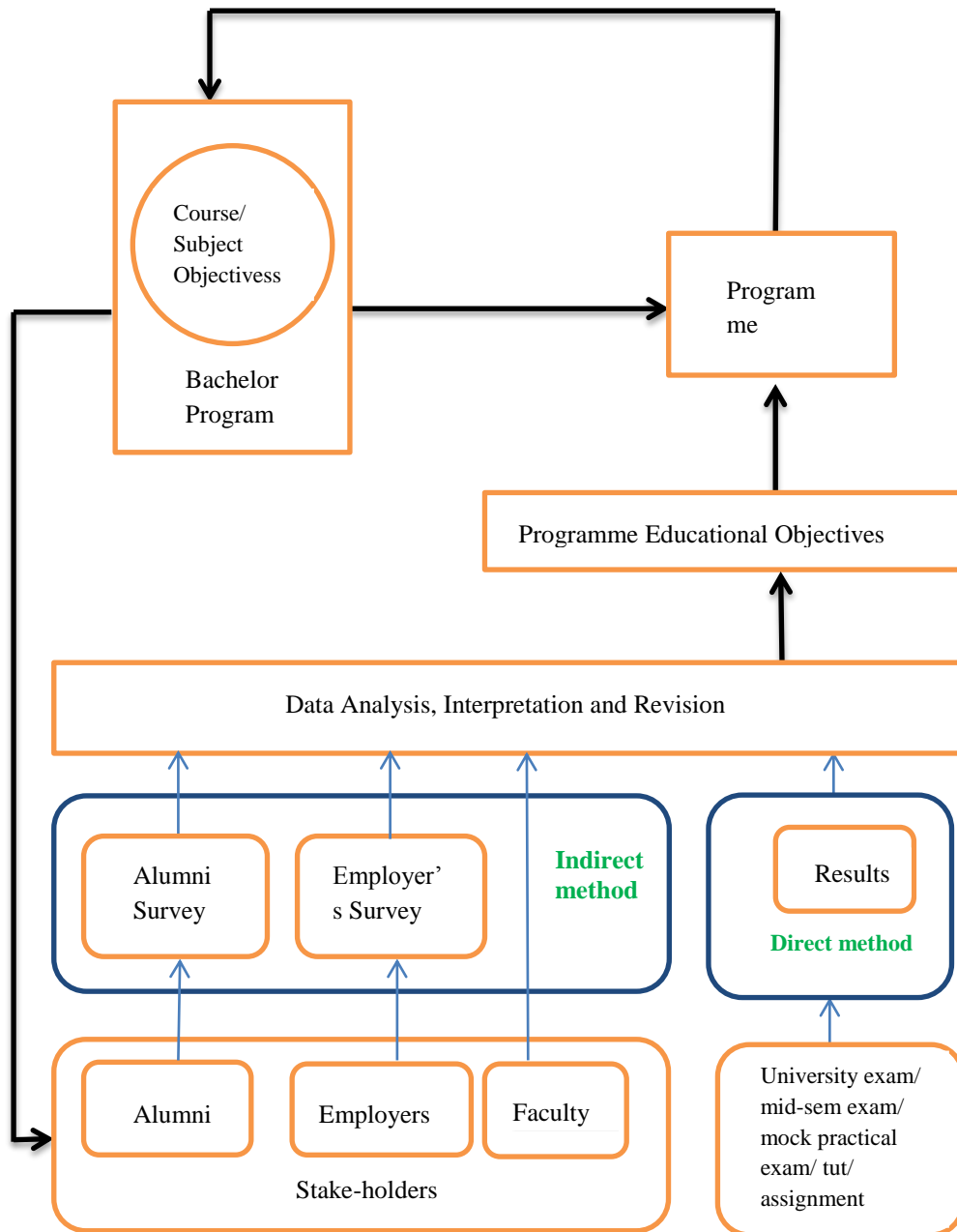
- Java Programmemeing: Certificate course in Java Programmemeing was conducted by SEED technologies, Pune during the period 12th Jan 2013 to 4th March 2013.
- C-DAC Courses: Under the Industry-Academia interaction and to prepare students to be industry ready so as to make them employable, the college has signed a MoU with C-DAC, Pune. C-DAC formulates parallel certificate Programme in domains like VLSI , EMBEDDED and I.T
- Graceful Growth consulting (India) Private Limited is associated with MES College of Engineering as Industry Consultants. In its association since August 2014, it is involved in activities like conducting value added programs for both students and faculty.

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

Every Programme has PEOs and POs

- The Programme Education Objectives (PEO) are achieved by the curriculum course outcomes.
- The Programme Education Objectives (PEO) are revised once in every five years as per the revision in the University syllabus.
- Content beyond syllabus is covered through different activities like guest lecture, industrial visits etc.

PEO Assessment Process



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.

Short term courses other than those offered by the University are designed, keeping in view the growing demand and relevance of skill oriented

certification. The courses serve as value addition thereby enhancing the students' employability skills.

Sr. No.	Title	Goal	Target Students
1.	CCNA: - Cisco Certified Network Associate is an IT certification from Cisco conducted by GNT Infotech Pvt.Ltd, Pune and handed over to partner firm RS Network, Pune. It was started in Jan. 2014.	<ul style="list-style-type: none"> To impart technical skills in the field of Telecomm Infrastructure , Communication and Security Under Industry - Academia Interaction to impart Value Added skills 	TE ,BE (E&TC)
2.	Linux:-Certificate Course in LINUX (Open Source) conducted by Eaglet gateways Pvt. Ltd. Pune and organized by E&TC Department started during Jan. 2014 - March 2014.	<ul style="list-style-type: none"> This course helps student have a better understanding of open source soft wares. Students will get Value added skill and will become Industry Ready and their employment prospects will increase. 	TE,BE (Comp. Engg. , E&TC)
3.	Graceful Growth Consulting (India) Private Limited: - is associated with MES College of Engineering as Industry Consultants. since Aug. 2014.	<ul style="list-style-type: none"> Enhancing student's skills in communication, personality development, academics, projects and R&D in accordance with the Industry. Opportunity to work on Industry sponsored Projects. 	TE, BE (E&TC, Comp. Engg., `Mech. Engg.)

4.	C: - Certificate Course in C conducted by SEED Infotech Pvt.Ltd. during 10 th Aug. - 10 th Sep. 2014.	<ul style="list-style-type: none"> To enable students to have a basic understanding of LOGIC and Syntax in the C language. To enhance the Programmemeing skills of students. 	SE (E&TC)
5.	CATIA V6:- Certificate Course in CATIA V6 was conducted by EDS Technology, Pune and organized by Mechanical Department. This course was conducted on 30 th Dec. - 24 th Feb. 2014.	<ul style="list-style-type: none"> To enhance the software knowledge of students. To improve career development and job opportunity. Enable students to do in-house final year real time projects. 	TE, BE (Mech. Engg.)
6.	Automobile Design and CAD Development Certificate Course in Automobile Design & Cad Development conducted by ZEST Technology, Pune and organized by Department of Mechanical Engg. This course started on 1 st Dec. 2014 and course duration is 3 months.	<ul style="list-style-type: none"> Offer globally recognized certification. Opportunity to get in to core engineering industries. Opportunity to participate in National and International competitions like SAE BAJA, GOKART, etc. due to a MoU between ZEST and the Institute. Career development and job opportunity for students. 	TE, BE (Mech. Engg.)
7.	JAVA Programmemeing: - Certificate course in Java Programmemeing was conducted by	<ul style="list-style-type: none"> To learn the advance concepts and syntax and semantics of the Java language and Programmemeing 	SE,TE (Comp. Engg.)

	SEED technologies, Pune during the period 12 th Jan. 2013 - 4 th March 2013.	environment. • To gain Value added skills	
8.	Courses: - Under the Industry-Academia interaction to conduct parallel certificate Programmes, formulated by C-DAC in specialized domains such as VLSI, EMBEDDED & I.T. since 8 th Aug. 2014.	<ul style="list-style-type: none"> • To prepare students to be industry ready to make them employable. • To conduct specialized courses in domains such as VLSI, EMBEDDED and I.T. • To improve career development and job opportunities. 	SE, TE, BE (E&TC, Comp. Engg.)

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

No. The Institute doesn't provide any dual degree.

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.

- The syllabus and curriculum is designed by the University. However for an enhancement of curriculum, University invites proposals from various affiliating Institutes, which includes review/ modification of existing syllabus, introduction of new subjects of current technological significance. The Institute actively participates in these activities.
- The final year students choose electives from the ones offered by the University. This choice is based on the latest trends in the industry.
- A large number of students opt for higher studies such as M.S, M. Tech. and M.B.A. records of which are maintained in the respective departments.
- The laboratory assignments are conducted as per the University curriculum. In every laboratory practices we include some extra assignments beyond the syllabus which help students to broaden the horizon of understanding.
- Content beyond syllabus is covered by conducting workshops and guest lectures by experts from the industry.
- Industrial visits are arranged for S.E, T.E and B.E students to help them understand the work culture of the industry.

- Under the Industry-Academia interaction and to prepare students to be industry ready and to make them employable, the college has signed MoU with CDAC-Pune to conduct parallel certificate Programmes in the domains like VLSI, Embedded System and I.T.
- DST has sanctioned sponsorship for various Entrepreneurship Development Activities under DST-NIMAT projects in August 2013. Under this Programme one FDP(Faculty Development Programme) ,two EAC's(Entrepreneurship Awareness Camp) and two EDP's (Entrepreneurship Development Programme) were conducted at the college premises,
- Details of the various institutional Entrepreneurship development Programme are as follows:

Sr.No.	Programme Name & Location	Programme Date	Name of the Coordinator	No. of participants	Name of industries visited	Name of resource persons
1.	EAC-1 M.E.S. C.O.E. , Pune	23/01/ 2014 - 25/01/ 2014	Prof. A. J. Hake	79 (Male 64, Fema le 15)	Techno four Electron ics Pvt. Ltd.	Mr. S. Mirashi Mr. V. Dongre Dr. S. Deshpande Mr.Nawathe Mrs K. Bhat Mr A. Dandwate Mr S. Gadewar Mr A. Khemlani
2.	EAC-2 M.E.S. C.O.E. , Pune	20/02/ 2014 - 22/02/ 2014	Prof. A. J. Hake	93 (Male 66, Fema le 27)	Next Generati on Cable Network	Mr. S. Mirashi Mr. V. Dongre Dr. S. Deshpande Mr.Nawathe Mrs K. Bhat Mr A. Dandwate Mr S. Gadewar Mr A. Khemlani
3.	EDP-1 M.E.S. C.O.E. , Pune	7/07/ 2014 - 2/08/ 2014	Prof. A. J. Hake	12 (Male 10 , Fema le 02)	1. Techn o four Electr onics Pvt. Ltd. 2. 3Gen Cons ulting (3Gen	Mr. S. Mirashi Mr. V. Dongre Dr. S. Deshpande Mr. D. Gohad Mr. V. Deodhar Mr. S. Atre Mr. Navathe Mr. S. Datar Mr. S. Gurav Mr. S.

)	Rasalpurkar Mr. Gadewar Mr. Todkar
4.	EDP-2 M.E.S. C.O.E. , Pune	25/08/ 2014 - 23/09/ 2014	Prof. A. J. Hake	30 (Male 14 , Fema le 16)	Next Generati on Cable Network	Mr. S. Mirashi Mr. V. Dongre Dr. S. Deshpande Mr. Nawathe Mr. D. Gohad Mr. S. Rasalpurkar Mr. P. Manurkar Mr. S. Gurav Mr Gadewar Mr. S. Atre
5	FDP M.E.S. C.O.E. , Pune	09/12/ 2013 - 21/12/ 2013	Prof. A. J. Hake	20 (Male -13 , Fema le - 07)	Next generati on Cable Networ k Protoco ntrol Instrume nts (I) Pvt. Ltd.	Mr.V. Dongre Dr.S. Deshpande Mr.A. Antarkar Mrs.K. Bhat Mr.A. Khemlani Mr.S. Mirashi Mr.V. Sinkar Mr.N. Dhaygude Mr. B. Shaikh Mr. S. Belhe

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, and fee structure, teacher qualification, salary etc.

No

1.2.5. Does the college provide additional skill oriented Programmes, relevant to regional and global employment markets? If yes provide details of such Programme and the beneficiaries.

Following skill development initiatives were undertaken over and above the engineering curriculum:

- Technical Programmes such as advance Java were conducted by Seed InfoTech.
- DST had Sanctioned sponsorship for various Entrepreneurship Development activities under DST-NIMAT projects in August 2013. Under this project following Programmes were conducted.

Sr. No	Name of Activity	Date of Conduction
1.	EAC-2	20/02/2014 - 22/02/2014
2.	EDP-1	07/07/2013 - 02/08/2014
3.	EDP-2	25/08/2014 - 23/09/2014
4.	EAC-1	23/01/2014 - 25/01/2014
5.	FDP	09/12/2013 - 21/12/2013

Under these Programmes students interested in Entrepreneurship activities were trained for various business ideas. Students, selected and found competent during the training Programmes were given the opportunity to undergo a certification course.

- B-WOW Programme (Bridging Work Opportunities Worldwide): Under this Programme the students who are not eligible for placements are enrolled and trained according to company requirements and attempts are made to place them in the industry.
- The Robo Club aims at popularizing the field of robotics in the young engineering community. It helps students to work on inter-disciplinary projects and build a team spirit. Activities conducted under Robo Club are as :

Sr.No.	Name of the Activity	Duration
1.	Fastrack Omega 2014	27/01/2014- 28/01/2014
2.	TECHKRITI 2013 - (IIT -KANPUR)	23/03/2013
3.	Robotics Awareness	09/07/2013- 11/07/2013
4.	Manual Robotic Workshop	27/07/2013
5.	Robotics Competition for “Robo Event”	03/08/2013
6.	Robotics Awareness	03/08/2012
7.	Guest Lecture on Robotics	10/08/2012
8.	Manual Robotic Workshop	08/08/2012- 09/08/2012
9.	Zonal Robotics Competition for “ROBOTRYST 2013”	27/09/2012- 28/09/2012

10.	Autonomous Robotic Workshop	29/01/2011 - 30/01/2011
11.	Robotics Awareness	07/08/2011
12.	Manual Robotic Workshop	20/08/2011
13.	Intra college robotics Competition	17/09/2011
14.	Robotics Awareness	03/08/2010
15.	Autonomous Robotic Workshop	04/09/2010
16.	Robotics Awareness	08/08/2009
17.	Fast Track Competition	26/09/2009

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, the institution has taken additional efforts to face the current trends in competitive areas. A series of focused meetings of faculty members at departmental level throws light on the limitations in the syllabus. To make up for any deficiencies, the college supplements the University's Curriculum by

- Arranging guest lectures.
- Organizing workshops and seminars.
- Covering content beyond syllabus in theory subjects during class room teaching.
- Conducting experiments beyond syllabus in practical subjects.
- Conducting C, C++, JAVA, DOT NET, Python classes
- Conducting Soft Skill Programmes
- Conducting Remedial classes for slow learners.

The college ensures that the University curriculum is followed in the best of spirit. The college academic calendar is prepared every semester with the active involvement of the Heads of all the departments and the system monitoring committee. The college authority makes sure that the curriculum

framed by the University is implemented in such a way that it reflects “Vision and Mission” of the college.

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?

The college strictly adheres to the syllabus designed by Savitribai Phule Pune University but while delivering this syllabus content to the students, our faculty enrich it with their own expertise and experience so that the students also gain employable qualities that enable them get jobs in this highly competitive world. The training and placement cell of the college regularly interacts with the HR managers of companies and collects first-hand information about the demands and expectations of the corporate sector regarding required skill sets of students. These demands of the companies are then communicated to the Head of Departments who in turn formulate Add-on courses and extra classes which are then conducted to make up for the deficiencies in the students to make them employable. The task of framing curriculum of the college, as stated earlier, is the responsibility of the parent affiliating University i.e. Savitribai Phule Pune University. The institution can only enrich the curriculum by supplementing it with extra courses so that the students are benefited in the best possible manner. The institution has taken measures to cater to the global market needs based on the true assessment of strengths and services offered in the campus. The Institute had organized a workshop on Personality Development for F.E girls on 6/3/2012, under the Board of Student Welfare Scheme, Savitribai Phule Pune University.

Every department has its students’ association like Association of Computer Engineering (ACE), Mechanical Engineering Student Association (MESA) and Electronics & Telecommunication Student Association (ETSA). These associations supplement the University curriculum by organizing Co-curricular activities which help to develop leadership and managerial skills in the students.

Various activities under the student association are given below.

ACE Activities:-

Sr. No.	Name of the Activity	Duration
1.	Digital Renaissance 2014	27/02/2014 - 28/02/2014
2.	Digital Renaissance 2013	09/03/2013
3.	Ethical Hacking And Information Security Workshop	13/09/2013-

		14/09/2013
4.	SAGA 2012	23/02/2012- 25/02/2012
5.	SAGA -2011	25/03/2011- 27/03/2011
6.	Alumni Panel Interaction	27/08/2011

ETSA Activities:-

Sr. No.	Name of the Activity	Duration
1.	Epsilon 2014 (Inter collegiate)	27/02/2014- 28 /02/ 2014
2.	KLYSTRON(Inter Collegiate)	06/09/2013- 07/09/2013
3.	Epsilon 2013(Intra collegiate)	19/03/2013 & 21/03/2013

MESA Activities:-

Sr. No.	Name of the Activity	Duration
1.	Spirit-2013	07/01/2013 - 11/01/2013.
2.	Technical Quiz -2013”	03/09/2013 - 05/09/2013
3.	Auto-quiz & Ingenuous Solutions	15/09/2012

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?

- The college on its own and with assistance from UGC organizes seminars and conferences at the National level where in the experts from above mentioned areas are invited to share and deliver their experiences. The college regularly organizes seminars on women empowerment.
- Parent teachers are assigned as mentors for a group of students for a period of 3 years.
- Earn and Learn is being implemented in the Institute as per guidelines of SPPU, where students from weaker sections work after college hours and benefit through this scheme.

- Scholarship schemes from Government of Maharashtra are implemented as per the norms.
- The Grievance Redressal Cells such as Women's Grievance Redressal, Students Grievance Redressal meets periodically to address problems of the students/staff.
- The Local Managing Committee communicates to the management issues, if any pertaining to teaching/non-teaching staff.
- The College organises various Programmes under the National Service Scheme (NSS) so as to sensitize students about gender equality.

List of activities conducted by NSS are as follows.

Sr. No.	Activity Details	Duration
1.	Driving Safety Guidance by Police Dept.	03/01/2013
2.	Orientation(sem-II)	04/01/2013
3.	Bomb Diffusion Safety by Police Department, Koregaon Park.	07/01/2013
4.	Rally for awareness about importance of safety of ladies in society.	03/02/2013
5.	Blood Donation Camp was organized in association with Sadhu Vaswani Mission's Budhrani Hospital's Blood bank and Acharya Anandrishiji Hospital's Blood bank.	17/09/2013
6.	Poster Exhibition for Environmental Awareness to celebrate NSS day having more than 50 posters	24/09/2013
7.	NSS- Special Camp organized at Bambarde village near Lonavala Pune. Total 45 NSS student volunteers participated in the camp.	19/12/2013
8.	Group Discussion among students for smooth functioning of NSS	02/03/2012
9.	Women's Day by Prof. Vrushali Randhir	09/03/2012
10.	Rangpanchami Celebration with Aids affected children	12/03/2012
11.	Orientation by S.M.Nawghare	17/08/2012
12.	Friday fever(Video) by Lokayat Group ,Pune for environmental waste product	17/08/2012
13.	Friday fever (Motivational Video) about rules and regulations of issues related to society by police department.	31/08/2012

14.	Teachers Day Celebration	05/09/2012
15.	Engineers Day Celebration	15/09/2012
16.	NSS WEEK Celebration	24/09/2012-30/09/2012
17.	Joy of Giving	01/10/2012-05/10/2012
18.	Blood Donation Camp which provides blood to blood banks like Ruby hall, Jahangir hospitals, Budhrani hospitals	14/10/2012
19.	Medical Check –Up for First year students	01/11/2012-02/11/2012
20.	Visit to Police Station by NSS students	27/12/2012
21.	Workshop on Terrorism was held by Dr. Pandit and Rajendra Dhale (DCP, Pune) at the Pune Commissioner's Office, Pune.	12/02/2011
22.	A Visit to an Ideal Village, Hivare Bazare with 25 students accompanied by 2 staff members	27/02/ 2011
23.	Rangpanchami with AIDS affected children	12/03/2011
24.	Orientation of students towards NSS by S.M.Nawghare	29/07/2011
25.	Value Education by Mr. Jeevan Deshmukh	05/08/2011
26.	Friday fever(Video –First Flight) by Wright Brothers	12/08/2011
27.	Friday fever(Motivational Video) by Vishwas Nangare Patil(IPS)	19/08/2011
28.	NSS WEEK Celebration	24/9/2011-2/10/2011
29.	NSS Camp at Bhambarde	18/12/2011-24/12/2011
30.	Tree Plantation was done in the MESCoE campus	25/08/2010
31.	Poster Making Competition was organized on the topic Environment pollution and Energy crises	24/09/2010
32.	'Joy of Giving' Programme was organized in the college campus.	04/10/2010
33.	Student Orientation Programme Guest speaker: Dr. Sakera Inamdar, Programme coordinator, University of Pune.	06/10/2010

34.	Blood Donation Camp is organized with more than 350 students and staff members.	06/10/2010
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Environmental Education and Climate Change: The College has a Rain water harvesting system in the campus. The subjects related to Energy Audit and Management, Environment and Ecology are included as a part of the curriculum of the University. A detailed energy audit of Institute building is regularly conducted by students as part of curriculum. It is proposed to conduct a detail energy audit by certified energy auditors in the near future.

Human Rights: The College has a handicapped friendly campus. The college has formed an Anti-ragging Committee to ensure a ragging free environment and a Women's Grievance cell that takes care of women related issues.

ICT: All faculty rooms are equipped with desktop computers, furniture, pin boards etc. Besides this Wi-Fi connectivity is also available throughout the campus. All Class rooms are equipped with LCD Projectors and LCD Screens, for effective teaching learning process. A public address system is available on every floor for making important announcements for staff and students.

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:** The NSS wing of the college engages the students in community development activities which motivate the students to take up the cause of Social Service. The college NSS team regularly visits surrounding areas and villages where people are made aware about various social, moral and ethical issues. The Students are also motivated by way of special lectures so as to instill moral and ethical values in them. All departments in the Institute have a wall magazine -"ASTITVA", which is a means for educating students regarding cultural and social values
- **Employable and Life Skills:** The Institute understands that communication skills are vital for students. It is a regular practice of the Institute to invite resource persons to conduct lectures, for developing communication competency among the students. Students are also allotted different responsibilities in organizing various events and activities such as cultural Programmes, competitions, seminars, workshops etc. and this helps them to improve their team building and organizational skills.
- **Better career options:** The institution has signed MoUs with various companies to conduct different value added certification courses such as CCNA, LINUX, C-Programmaming, Network Security, Automobile Design & CAD Development to bridge the gap between education and employment. Students are encouraged to voluntarily enroll for these

courses so as to enhance their employability skills. The following efforts were taken to enhance their skills.

Sr. No.	workshop/courses/seminar	Target Audience	Resource Person	Date of Conduction
1	Campus Recruitment Training Programme	T.E. 2012	Apart Education	July'11- April'12
2	Me and My Career	T.E. 2012	Mr. Sameer Agashe & Mr. Gopal Kamat	26/09/2011
3	Career Guidance	T.E. 2012	Mr. T. G. Param (Sr. Faculty from IIT Chennai and IIM Calcutta	03/10/2011
4	Campus Recruitment Training Programme	T.E. 2013	Apart Education	July'12 – April'13
5	Product Development in Mobile Technology	B.E. Comp& E&TC 2013	Mr. Shishir Vaidya	27/07/2012
6	Product Development in Mobile Technology	B.E. Comp& E&TC 2013	Mr. Shishir Vaidya	27/07/2012
7	Campus Recruitment Training Programme	T.E. 2014	Apart Education	July'13 – April'14
8	Soft Skill Training	S.E. 2014	Ace Corporate Trainings Pvt. Ltd. Pune	August'13 – March'14
9	English Proficiency	F.E. 2014	Ace Corporate Trainings Pvt. Ltd. Pune	August'13 – March'14
10	“How to crack GATE”	T.E. 2014	By Vani Institute, Pune	03/09/2013

Orientation: The Institute organizes personality development sessions, debate competitions and group discussions by the Training and Placement cell for the purpose of community orientation. As a part of community orientation the college NSS team regularly visits surrounding rural areas and villages where people are made aware about various social, moral and ethical issues.

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

The institution has various channels to collect and document responses on curriculum from the stakeholders. The institution collects feedback from the stakeholders in enriching the curriculum in the following manner:

- Mid semester and end semester feedbacks are taken from students
- Alumni feedback is collected every year during alumni meet
- Feedback is collected about project groups from project examiners appointed by SPPU.
- Feedback is taken from recruiters, when they come for campus recruitments.
- Parents and Employer's feedback are collected from time to time.

The inputs are obtained from the stake holders regularly and further used for enriching the curriculum that helps to improvise the overall competency of the students for employability.

The feedback responses are presented before Head of the Department for consideration and decisions are taken accordingly. Thus for instance if the students have expressed displeasure with any of the staff members including faculty (which is very rare), the concerned staff member is given due hearing with the authorities and if found requiring some improvement, is given an opportunity to keep pace with student's expectations.

The Institute has a Student's Council which is another source of feedback for the college authorities. The Council notes areas of concern, if any, from the students' point of view and places them before the Principal for necessary action.

1.3.6. How does the institution monitor and evaluate the quality of its enrichment Programmes?

The institution has a very clear and transparent way to monitor and evaluate the quality of various enrichment Programmes initiated by it. The feedback in the form of interactions, discussions and suggestions are analyzed by a specially constituted committee and a report is submitted to the Head of the department. The Institution makes sure that the Programmes offered in the curriculum include contribution to National development, fostering global competencies among students, inculcating a value system among students, promoting the use of technology and quest for excellence. The College efforts to ensure that the curriculum bears a thrust on these core values include the initiative for Contribution to national development.

Sr.No.	Title	Goal	Target Students
1.	C-DAC Courses: - Under the Industry-Academia interaction the college has a MoU with C-DAC Pune. It's main aim is to conduct parallel certificate Programmes in domains of VLSI, EMBEDDED and I.T.	<ul style="list-style-type: none"> • To prepare students to be industry ready to make them employable. • To conduct specialized courses in domains such as VLSI, EMBEDDED and I.T. • To improve career development and job opportunity 	SE ,TE,BE (E&TC ,COMP)
2.	BAKER- MESCOE METROLOGY LAB: BAKER-MESCOE Metrology lab is a joint venture between Baker Gauges India Pvt.Ltd. Pune and MESCOE Pune. The lab is equipped with all basic metrological instruments and especially with computerized Statistical Gauging Station.	<ul style="list-style-type: none"> • To impart current knowledge of mechanical measurement industry. • To introduce quality environment in measurement. 	UG and PG Mechanical students
3.	NI LabVIEW Academia Lab: The laboratory includes all types of data acquisition systems as per requirement of UG and PG for Mechanical as well as E&TC Department. . It consists of all sort of sensors and Data acquisition module.	<ul style="list-style-type: none"> • Meet curriculum requirements of both UG and PG students and do more hands-on hardware interdisciplinary projects. • Do globally recognized certification. • Competing with 	UG and PG Mechanical students

		globally challenging students with strong knowledge in fundamentals.	
4.	KUKA Robot: Kukaaligiussixx (KR6) Pick and Place Operation Robot	<ul style="list-style-type: none"> • Conduct Robotics training to improve opportunity to get into core engineering industries. • To conduct Robotics Practicals for other colleges so as to generate Revenue. • To arrange KUKA Robot Programmemeing training for Revenue generation. 	UG and PG Mechanical students

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?

Faculty members regularly attend workshops and seminars on revision of curriculum .Some faculty members of the Institute are on the Board of Studies, of faculty of Engineering in the University. They actively contribute to develop the curriculum of the University. The Institute forwards the suggestion of its faculty to the University through the members of Board of studies. The design and development of the curriculum is the responsibility of the University. Institute deposes the faculty for attending curriculum development workshops organized by the University.

Following activities were undertaken during development of curriculum for the University

- Online question bank preparation by faculty.
- Participation in syllabus design workshops.

The institution takes part in the curriculum development process

through appropriate analysis of feedback given by various stake holders from time to time and assimilates the suggestions in the functional style of the institution.

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 changes/new Programmes?

Feedback in the prescribed format is obtained from the students at the end of each semester. The feedback is analyzed by the faculty and sent to the departmental coordinator and a summary of the same is prepared.

Feedback from the stakeholders such as employers, alumni and industry is obtained yearly from which the adequacy of the curriculum is ascertained. Interaction is done with Alumni of the department during alumni meets and through email and telephonic discussion. Alumni are encouraged to interact with the students in the department during their visits on the campus. They are also invited as judges for technical activities, Alumni meet and Annual Social Gathering. There is no procedure available to communicate such feedback directly to SPPU.

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.

When choosing to pursue a graduate degree, many engineers will consider the value proposition of a Master's or PhD for Research or Better Job Perspective. Recognizing this need and in order to expand the horizon of offered courses in tune with the technological advancements; following are the list of new Programmes /courses introduced by the institution during the last four years:

Sr. No.	New Programmes/ Courses Introduced	Year of Introduction	Intake Capacity
1.	ME (MECH) – Design Engineering	2013-14	24
2.	ME (E&TC) – Signal Processing	2013-14	24
3.	ME (COMPUTER) – Computer Engineering	2014-15	24

CRITERION II: TEACHING-LEARNING AND EVALUATION

2.1 Student Enrollment and Profile

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

Director of Technical Education (DTE), Government of Maharashtra, governs the admission to all the branches. The Institute has its own admission cell to provide information regarding the admission procedure to parents and candidates. The Institute follows the quota rules as per the norms for the students in the reserved category and there is total transparency in the procedure. All applications received at the Institute level are processed and filled on merit basis.

The process adopted for publicity and transparency of admission is as follows:

- The Institute prospectus provides all the academic, administrative and fee structure information related to admission process.
- The notification contains detailed information about number of seats, different courses, eligibility for admission, process of admission and academic information on the institutional website.
- The referral of alumnus also helps in admission procedure.
- A rolling display at the entrance of the college is used for displaying the total number of seats in each department.

2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various Programmes of the Institution.

The Institute follows the admission process as per the guidelines given by Director of Technical Education (DTE), Maharashtra State Government. Centralized Admission Process of DTE governs the eligibility criteria for selection of students to first year, direct second year and Master of engineering.

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

The following table shows the minimum and maximum marks of admitted students in CET/ AIEEE score.

Sr. No.	Programme	Year of Admission	Max. Marks of Admitted Students		Min. Marks of Admitted Students	
			CET	AIEEE	CET	AIEEE
1	Computer Engineering	2009-10	157	121	98	113
		2010-11	154	118	84	55
		2011-12	115	110	59	67
		2012-13	124	113	59	55
		2013-14	129	108	72	68
		2014-15	JEE (Composite)		JEE (Composite)	
			84.89		33.73	
2	Mechanical Engineering	2009-10	153	165	109	132
		2010-11	157	126	108	89
		2011-12	141	140	73	59
		2012-13	131	129	69	89
		2013-14	146	128	71	89
		2014-15	JEE (Composite)		JEE (Composite)	
			90.59		12.87	
3	Electronics & Telecommunication Engineering	2009-10	154	151	106	117
		2010-11	144	106	72	70
		2011-12	128	88	66	62
		2012-13	130	88	40	59
		2013-14	112	98	81	61
		2014-15	JEE (Composite)		JEE (Composite)	
			75.53		18.01	

The entry level admissions are only through CAP and are managed by DTE, Government of Maharashtra; hence the comparison of minimum and maximum marks with peer colleges 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?

As Director of Technical Education (DTE) governs the engineering admission process in the state, the Institute follows rules, regulations and guidelines set up by the Government of Maharashtra.

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, Differentially abled, Economically weaker sections, Minority community, Any Other

The Institute follows all the rules and norms laid down by DTE, Government of Maharashtra regarding admission of students in the reservation criteria.

- It offers seats to SC/ST, OBC, women, economically weak students (TFWS- Tuition Fee Waiver Scheme) as per the government norms, rules and regulations.
- There is a special quota for the candidates of Jammu and Kashmir as per DTE norms.

2.1.6 Providing 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.

The following table shows the details for various Programmes offered by the Institution during the last five years.

• **UG**

Sr. No.	Programme	Year of Admission	No of Applications (A)	No of Students Admitted (B)	Demand Ratio B/A
1	Computer Engineering	2009-10	Admission process in the state is governed by Director Technical Education;	49	1.0
		2010-11		107	0.84
		2011-12		126	0.99
		2012-13		127	1.00

		2013-14	The Institute follows the rules, regulation & guidelines set by state government body	126	0.99
		2014-15		122	0.96
	Computer Engineering II shift	2013-14		59	0.99
		2014-15		40	0.66
2	Mechanical Engineering	2009-10		51	1.0
		2010-11		121	0.95
		2011-12		127	1.00
		2012-13		127	1.00
		2013-14		126	0.99
		2014-15		123	0.97
3	Electronics & Telecommunication Engineering	2009-10		52	1.0
		2010-11		47	0.90
		2011-12		125	0.98
		2012-13		122	0.96
		2013-14		121	0.95
		2014-15		106	0.84

• PG

Sr. No.	Programme	Year of Admission	No of Applications (A)	No of Students Admitted (B)	Demand Ratio B/A
1	ME Electronics and Telecommunication (Signal Processing)	2013 – 14	Admission process in the state is governed by Director Technical	22	1.0
		2014 - 15		18	0.75

2	ME Mechanical Engineering (Design Engineering)	2013 – 14	Education; The Institute follows the rules, regulation & guidelines set by state government body	24	1.0
		2014 - 15		17	0.71
3	ME Computer Engineering	2014 - 15		16	0.67

The reasons for the increase or decrease in admissions are as follows:

- Increase in the number of colleges coming up every year and increase in intake for various programmes in Maharashtra.
- Global and National employment scenarios.
- State of the art technology in the area.
- Trends for post graduate courses.

Action initiated for improvement:

- Providing Training and Placement activities.
- Conducting Value Added Courses in consultation with Industry.

2.2 Catering to Student Diversity

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

The Institute caters to the needs of differently-abled students as per the requirements of the individual student. In addition, the Institute makes special arrangements for these students in University examination as per the University guidelines. The Institute is fully adhering to government policies regarding the needs of differently-abled students. The Institute provides four lifts, four ramps at appropriate places and facilities in toilets are made available for such 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.

The CET (Common Entrance Test) is conducted by DTE, Government of Maharashtra for admission to the First Year of Engineering. In addition, the admission process is carried out through AIEEE quota, which is an all India level entrance test. Considering these scores, the Institute assesses the student's needs in following ways:

- The qualifying marks and overall ranking in the merit list of the students gives an idea about the caliber of the students for entry-level analysis.
- Institute organizes orientation Programme for newly admitted students and their parents to help them understand the engineering curriculum.

- Introductory lectures for all subjects are devoted to discuss and understand special needs of the students.

2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/ remedial/ Add-on/ Enrichment Courses, Etc.) to enable them to cope with the Programme of their choice?

The Institute takes efforts for enabling the students to cope up with the fast developments in syllabi of various subjects as well as takes efforts in improvement of their general academic quality. These are listed as follows:

- **Orientation Programme:** The Institute organizes an orientation Programme for newly admitted students and their parents to understand the engineering curriculum of first year.
- **Soft skill development courses:** Training is provided to students to enhance their soft-skills, group discussions skills, aptitude test capabilities as well as interview techniques. The Institute conducts soft skill development Programmes in association with Graceful Growth, Bangalore.
- **Enrichment courses:** The Institute arranges add-on courses in collaboration with industries, such as workshops on Robotics, PCB designing etc. to bridge the knowledge gap. Additional technical courses beyond syllabus like C, C++, CCNA, Linux, CATIA V6, and ANSYS are organized by the Institute. NPTEL lecture videos are made available to all students.
- **Add-on learning:** Every year all departments organize National Conferences, workshops and expert lectures. Students are encouraged to participate in paper presentations and project competitions organized by parent Institutes and other colleges.
- **Industrial Visits:** Industrial visits are organized by every department to make students aware about the current trends in the industries. Visits to technical exhibition like Elecrama, DIPEX, GMRT Khodad, Automation Expo Mumbai and visit to the industries like BARC, MAZIKTECH Solution, C-DAC, Aarey Milk Dairy, Atomic Power station Tarapur, Sugar factory Patas, Jai Jinendra Cold Storage, AC plant Citypride Theater, Baker Gauges India Pvt. Ltd., Vishay Philips, Mapro, Godrej LAWKIM, etc. are arranged to expose the students to practical pursuits.

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

The Institute always tries to create awareness amongst students and faculties about the values of gender equality, inclusive development and environmental conditions. This is carried out in following ways:

- Institute provides equal opportunity for all to participate in administrative, co-curricular and extra-curricular activities. The Institute

also deputed faculties for orientation courses and higher studies (post-graduation and Ph.D.). Faculty members are nominated in committees without any discrimination (gender, caste, religion).

- Institute arranges special social activities to maintain good social environment under National Service Scheme (NSS) such as Blood Donation camps. Every year a special camp of NSS is organized in rural areas. The objectives of such camps are to create awareness among villagers about cleanliness, rainwater harvesting and women education.
- The Institute has made the campus environment friendly by implementing several projects like rainwater harvesting, solar water heaters, usage of low power LEDs and CFLs. Students conduct energy audit of Institute building as part of curriculum. It is also proposed to conduct detailed energy audit by a certified energy auditor.
- The Institute celebrates Woman's day, Teacher's day and Engineer's day.
- The Institute has set up a 'Women's Grievance Cell' to deal with the problems and issues related to girl students and ladies faculty.
- The Institute publishes yearly magazine "Quasar" and wall magazine "ASTITVA" that provides platform to the students and staff to express their views on social awareness, educational issues and promote publication of their literature.

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 works and assignments, punctuality and personal interactions. The college offers opportunities for bright students to augment their talent and meet their learning needs.

- Institute has signed MoU with Texas Instrument. Institute has organized a design competition wherein students get a platform to showcase their talent. In this way, students are exposed to advanced learning.
- Students are encouraged to undertake industry-sponsored projects and mini projects on advanced topics.
- Students are motivated to participate in different project competitions like AVISHKAR, Society of Automotive Engineer (SAE) BAJA etc.
- Advanced learners are facilitated with a well-equipped library provided with latest edition of books, e-Books, online and printed journals and modern labs.
- Book bank facility is available in Institute. Under this scheme books are provided to students by charging only 25% of total cost of books. If a student secures first class in the University Examinations, then deposit amount is refunded.

- Enrichment courses are conducted to fulfill the knowledge thirst of advanced learners.
- Advanced learners are advised to undertake GATE, GRE examinations and are guided for higher studies.
- Meritorious students names are displayed on Institute notice board, LCD and on rolling display. The College topper is rewarded with a gold medal given in the name of former Principal, Prof. M. N. Kondhwekar and a cash prize of Rs. 5500/- in the name of “Nalini and Vishwanath Kulkarni”.

2.2.6 How does the Institute collect, analyze and use the data and information on the academic performance (through the Programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?

The office and respective parent-teachers maintain information of the students who are economically weak, slow learners or belonging to socially disadvantaged section.

To get information about students performances following procedure is followed.

- Every department carries out University result analysis.
- The mid-sem test as well as result of mock test and online exam helps to get information about students at the risk of dropout and slow learners.
- Parent teachers are assigned a batch of students; they regularly interact with these students, from which Institute gets information about slow learners, physically challenged and economically weak students.
- Medical check-up is carried out every year for first year students to check their physical fitness.

Institute uses the data as follows,

- For slow learners the Institute arranges remedial classes where individual attention is given to each student.
- Regular interaction with parents of slow learners also helps to know the requirements of such students and helps to improve their learning capabilities.
- The Institute is running B-WOW (Bridging–Work Opportunities Worldwide) Programme for year down and unemployed passed out students.
- For economically weak students the Institute implements schemes offered by government of Maharashtra and also provide the students information about government and NGO aids, scholarships etc.
- Earn and learn scheme of Savitribai Phule Pune University is implemented by the Institute every year. Some additional remuneration is given to needy students under this scheme.

- The Institute provides a book bank facility at a reasonable cost.
- For disadvantaged section of the society, especially a SC/ST, OBC, Minority, EBC student get the benefit of reservation in admission and scholarships as per government norms.
- The Institute has a separate student section in the administrative office, which is headed by Registrar, who is well versed with the rules and regulations related to Social Welfare Schemes and provide guidance to the students to apply for these schemes in the proper formats as per requirement.
- Institute implements Tuition Fee Waiver Scheme (TFWS) for economically backward students including women and handicapped students, every year.

2.3 Teaching-Learning Process

2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules?

Savitribai Phule Pune University (SPPU) has laid down the number of days that would be available for teaching and evaluation. The subject teacher and the departments take utmost care to complete teaching and evaluation within the stipulated time by following strategies semester-wise.

- At the onset of each semester the requirements of faculty according to the new/current syllabus is considered and if required, new faculties are recruited maintaining the student – teacher ratio of 15:1.
- The requirement for instruments/equipments/software as per the new/current syllabus is taken from faculty and the purchase procedure is carried out.
- Conditions of the existing instruments/equipments are inspected before the commencement of each semester and maintenance work is undertaken.
- At the start of each semester, academic calendar is prepared and Head of Department assigns the responsibility of each activity to the faculty.
- Head of the Department with the help of load distribution committee distributes the workload, after which the timetable is prepared by timetable committee in consultation with other departments.
- Books needed for the current curriculum are updated in the library with the co-operation of library co-ordinator of each department.
- Faculty members update their existing course files which consist of teaching plan, content analysis, subject history, results analysis of subjects, previous years question papers, list of reference books, continuous evaluation sheets and notes.
- The Timetable is displayed on notice boards and the Institute website in advance.
- Class teachers and parent teachers are appointed for each class and

contact details are displayed on notice board and website.

- Once the semester starts, instruction delivery takes place according to the timetable.
- Class teacher and academic monitoring committee ensure smooth instruction delivery.
- Records of lectures delivered as per the time table are maintained and verified by the class teacher and academic monitoring committee.
- The Head of respective departments conduct weekly meetings of faculties to discuss the lacunae/ shortcomings/ problems and possible solutions to overcome them.

▪ **Student Level**

- Student's performances are continuously evaluated by tutorials, mid-sem tests and remedial actions are undertaken.
- Extra lectures are allocated in the timetable to cover the curriculum in more elaborated way as per the subject requirement.
- Mid-sem tests, online results are analyzed and weak students are counseled and provided the necessary help.
- List of students with poor attendance is prepared at the end of each month and the parent teacher mails letters to their parents highlighting the students performance.
- Parent Teachers counsel students having poor attendance and performance. They also conduct meetings with their parents periodically. Thus, parents are kept informed about their ward regularly.
- Revision and remedial classes are conducted towards the end of the course.
- Open house sessions are conducted for students having poor attendance and suitable assignments are given to them.
- Submission is done in the allotted time and term work marks are evaluated based on continuous assessment.
- Savitribai Phule Pune University examination schedule is displayed on notice board and examinations are conducted as per University rules and regulations.
- Result analysis is carried out after declaration of the University result; its record has been kept and seeks the guidelines from it for further improvement.
- Co-curricular and extra-curricular activities are organized to supplement the curriculum.

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

The Institute has setup an IQAC in this year. It is chaired by the Principal. Prior to formation of IQAC the Teaching-learning process was maintained by the Academic Monitoring Committee. Weekly meetings are

conducted to take a review of the teaching-learning process.

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?

Students are the most important stake holders of the Institute. At our Institute, all efforts are being taken to groom them as social engineers. Following major points highlights the same:

- Tutorials are conducted which include proactive teaching learning methods.
- Multimedia teaching aids like animated videos, demo videos, PPT's are incorporated in the day-to-day teaching process enhance the students understanding of the subject.
- Guest lectures by experts from the industry and add-on courses are organized by the respective departments, to cover content beyond syllabus.
- A Language laboratory has been established for students to improve their English proficiency.
- Soft skills training slots were incorporated in the weekly timetable, where experts, guided the students regarding presentation and communication skills.
- Inter-collegiate events are organized to bring out the potential of the students.
- Industrial visits and technical courses are arranged throughout the year to give hands-on experience to students.
- Wi-Fi facility is available in the campus to allow students to access technical resources.
- The college central library is well equipped with technical magazines, journals and NPTEL lecture videos.
- Memorandum of Understanding (MoU) are signed with leading industries to bridge the gap in the curriculum.

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

- The Institute organizes intra and inter-collegiate technical events in respective departments, under various students associations like Mechanical Engineering Students Association (MESA), Association of Computer Engineering (ACE), Electronics and Telecommunication Students Association (ETSA).
- A Robo club is formed in the Institute and students from all three departments are encouraged to participate in intra and inter collegiate competitions in the field of robotics. Students also participate in

Programme writing, modeling of car engines, Go-CARTing organized at University, State and National levels.

- Faculty encourages the students to participate in different technical paper writing and poster competitions.
- Students are encouraged and guided to undertake industry sponsored projects.
- Entrepreneur skill development activities are organized in the college to encourage budding entrepreneurs.

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.

The Institute has made available teaching and learning aids for its faculty. The following resources are made available for effective teaching:

- Faculty members make use of softwares like MATLAB, Lab-view, Multisim, Proteus, Keil, Xilinx, NS3, Rational Rose, CATIA, ANSYS, Autodesk Inventor Professional (AIP) to explain subject concepts.
- Reference books of reputed authors and publications.
- Multimedia teaching aids like projectors.
- State-of-the-art laboratories like NI labs, Bakers Guages Lab, Amitech lab – centre of excellence (under development).
- Transactions and Journals (e-copy) like IEEE, ASME etc.
- Wi-Fi facility for staff and students.
- NPTEL lecture videos for staff and students.

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

Students:

- The Institute organizes various technical competitions such as paper presentations, project competitions, Quizes and poster competitions.
- The faculty encourages students to undertake projects on advanced technologies, industry sponsored projects and Research & Development projects.
- The Institute promotes students to participate in National/International competitions like SAE-BAJA and IIT SHASHTRA Robotics events by providing all technical and financial support.
- Eminent speakers are invited from the industry to deliver lectures so as to expose the students to developments in the field of their study.

Faculty:

- The Institute promotes the faculty to participate in different technical

conferences/ workshops at State, National and International levels.

- The Institute provides faculty the latest available technical information through memberships of reputed journals like Science Direct and IEEE.
- The Institute organizes different faculty development Programmes in collaboration with well-known personalities and organizations.

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?

All the students get academic and personal guidance from the concerned parent-teachers, class teachers and Heads of the Department.

- A parent teacher is assigned 15-20 students of the department.
- Remedial and revision classes are conducted for academically weak students.
- The Institute has appointed consultants (from Graceful Growth) for imparting soft skills to the students.
- The Institute conducts medical check-up of students to ensure that they are medically fit when they are admitted to the college.
- The Institute promotes social awareness in the students through different activities under NSS.
- Different technical events like EPSILON, KLYSTRON, and RESONANCE etc. are organized under student's association ETSA, ACE and MESA.

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?

The Institute always gives full support to the faculty in adopting various innovative teaching practices. Faculties have full freedom with regards to the methods of curriculum delivery. The following practices are followed:

- The Institute encourages the faculty to use proactive teaching methodologies such as role-play; quiz, brain storming, group discussion and NPTEL lecture videos for effective instruction delivery.
- Faculty members make question banks which help students prepare for their examinations.
- Special Webinars are telecast by the Institute.
- The Institute has class rooms with facility of LCD projectors and fully equipped laboratories for effective instruction delivery to students.
- The Wi-Fi system in the Institute enables faculties to access technical resources as and when required.
- Faculty members are deputed for participating in innovative teaching

learning Programmes like WIPRO Mission10X.

- Senior faculty mentors junior faculty by sharing their knowledge about effective teaching.

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

The Institute faculties use the library resources to enhance the teaching - learning process in following ways:

- The Institute library has a collection of reference books, handbooks on different subjects.
- Online journals, hard bound journals and magazines are available in the library.
- The Institute has membership of ARAI and British council library for accessing rare and expensive resources.
- The college central library has NPTEL videos, educational CDs having lectures of renowned Professors.
- Internet and Wi-Fi facility is provided to all students and staff.
- To update themselves with the current news and latest technological developments, students and staff avail the facilities of Newspapers and magazines in the library.
- Students are provided with the book bank facility.
- Question paper sets of all subjects of previous University examination are available in the central library.
- Old project reports of students are maintained in departmental library which are referred regularly by students of the department.
- Institute library is open for a period of 12 hours daily.

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, the Institute faces some minor challenges in completing the curriculum within the planned time frame and calendar. These are elaborated as follows:

Challenges:

- Although lesson plans are prepared by faculty as per teaching scheme mentioned in SPPU syllabus, some subjects require more time depending upon the difficulty level of the subject.
- State Governments procedure for First Year and direct second year admissions affects student's academics.
- University provides ninety days of semester which includes holidays, co-curricular and extra-curricular activities along with regular teaching.

To overcome the Challenges:

- Extra lectures are allocated in regular timetable and on weekends.

- For direct second year students extra lectures are conducted to cover the syllabus.

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

The Institute monitors and evaluates the quality of teaching-learning in the following ways:

- The Institute takes online feedback twice in a semester from students pertaining to each faculty. This feedback is handed over to the concerned faculty for analysis.
- The faculties analyze their feedback and discuss it with the Head of Department and accordingly corrective and preventive measures are carried out if necessary.
- The Institute takes care of academic monitoring through Academic Monitoring Committee. Regular meetings are conducted along with the committee members, Heads of Departments and the Principal to undertake necessary action for smooth conduction.
- Class teachers along with the help of subject teachers ensure that instruction delivery is carried out regularly and uniformly.

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

Faculty and Staff Members are recruited as per the AICTE/ SPP University guidelines. The Institute appoints teachers based on student strength and workload calculated as and when required.

The selection process is as follows:

- The roster is verified by the Assistant Commissioner, Reservation Cell, Pune and Mantralaya Maharashtra State.
- After approval from the Reservation Cell and Savitribai Phule Pune University advertisements are published in leading 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 SPP University.
- Qualified candidates are selected and appointment letters are issued for the same.
- List of selected candidates is submitted to the University for approval.

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	0	0	0	0	0	0	0
Ph.D.	3	0	2	1	2	1	8
M. Phil.	0	0	0	0	0	0	0
PG	0	0	2	5	27	25	60
UG	0	0	0	0	1	0	1
Temporary teachers							
Ph.D.	0	0	0	0	0	1	1
M. Phil.	0	0	0	0	0	0	0
PG	0	0	0	0	26	18	44
UG	0	0	0	0	3	3	6
Part-time teachers							
Ph.D.	0						
M. Phil.	0						
PG	0	0	0	0	0	1	1
GRAND TOTAL	3	0	4	6	58	48	119

• **Retention strategies:** The Institute has always adopted a policy that has aimed at retaining best of its teachers. Following are some of the prominent measures it has taken in this direction:

• **Academic atmosphere:** The Institute makes it a point to maintain an academic atmosphere in the campus. The teachers are encouraged in every way to engage in academic pursuits like attending conferences, writing research papers, books and inviting experts to address the students.

• **Establishment of Research Cell:** In order to inculcate research culture amongst teachers to upgrade their knowledge and technical skills, the Institute has established a Research and Development Cell. This has encouraged faculty not only to do doctoral research but also to be a research guide

themselves.

All these measures have helped the Institute to retain its competent and qualified teachers.

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 (IT, Robotics) Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

In order to cope up with above issues, the Institute takes initiatives like:

- The Institute has appointed highly qualified faculty to handle new and emerging subjects as proposed in the curriculum of Savitribai Phule Pune University to which the college is affiliated.
- To attract qualified faculty, the Institute takes initiative to setup state-of-the-art Laboratories like NI Lab, KUKA Robotics Lab, BAKER-MESCoE Lab and Pearson Test Centre Lab in collaboration with reputed industries.
- The Institute also arranges faculty development Programmes to refine the skills of faculty as per the need of the curriculum.
- Eminent personalities are invited from the industries to deliver expert lectures to the students so as to bridge the gap in the curriculum.

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	No. of Faculties Nominated
Refresher Courses	-
HRD Programmes	3
Orientation Programmes	42
Staff training conducted by the University	49
Staff training conducted by other institutions	51
Summer/winter schools, workshops, etc.	38

b) Faculty Training Programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning

The Management has a positive attitude towards the professional development of the faculty in acquiring knowledge of recent developments and engaging them in research activities. The following are some of the highlights:

- **Teaching Learning methods/approaches**
 - The Institute conducts and deposes its faculty for workshop on proactive teaching learning methods to hone their skills through courses like Wipro Mission 10X.
 - The Institute adheres to the SPP University calendar.
- **Handling New Curriculum**
 - The Institute deposes its faculty members for syllabus revision workshops and seminars organized by SPPU and its affiliated colleges to keep in touch with new syllabus.
- **Content/Knowledge Management**
 - Use of modern teaching aids such as presentations, LCD projectors, OHPs, laptops and NPTEL video lectures.
 - The faculty members and students are encouraged to access e resources in the form of journal and reference books available in the college library.
- **Selection, development and use of enrichment materials**
 - The Institute has a well-equipped library with access to learning materials like NPTEL videos for faculty and students.
 - The Institute also appoints consultants in order to arrange faculty development Programmes and improve industry Institute interaction.
- **Assessment**
 - Assessment of student's understanding is carried out through in semester tests, tutorials, mock practical examination and in semester orals.
 - Feedback is collected from students twice in a semester regarding instruction delivery.
- **Cross cutting issues**
 - Conduction of Entrepreneurship skill development workshops for faculty members and students.
 - Students are sensitized about social issues through various activities conducted under the banner of NSS.
- **Audio Visual Aids/multimedia**
 - All the classrooms in the Institute are equipped with LCD projectors for effective teaching learning process.
 - Faculty members are encouraged to use NPTEL videos.

- **Teaching learning material development, selection and use**
 - Faculty members have access to internet which helps them to refer to latest developments in technology.
 - The college central library is well equipped with reference books, journals and magazines. Besides this the college also has membership of ARAI and British Council library.
- **Details regarding deputation of our faculty as expert speaker**

No. of faculty	Total No.
Invited as a resource person in workshop/ seminar/ Conference	13
Participated in external workshop/ seminar/ conference	35
Presented in Conference	70

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.)

The Institute extends full support for the professional development of the faculty in many ways.

- The Institute organizes seminars, workshops and FDP's for enrichment of faculty knowledge.
- The Institute encourages and supports faculty for pursuing higher studies (M.E. / M. Tech. / PhD) by granting them duty leaves.
- The Institute deputed faculty members to attend short term refresher courses, seminars and workshops for upgrading their skills.
- The Institute subscribes to reputed journals like Science Direct, IEEE for the reference of all faculties.

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.

- Prof. Dr. S P. Narote has been awarded as best teacher under professional category for the academic year 2013-14 with cash prize of Rs. 15000/ from SPPU.
- Prof. Ahmed Khan has received best Teacher award from Government of Pondicherry in 2011.
- Dr. Ms. M. P. Dale received best paper award in National Conference at TPCT's College, Osamanabad and in International Conference at Govt. College of Engineering, Aurangabad in 2010.

- Mrs. P. P. Mane received best paper award in ISTE National Conference at BIT, Tamil Nadu in 2007.
- Dr. V. N. Raibhole received best paper presentation award in ICPEE, Phuket, Thailand in 2012.
- Dr. S. H. Gawande received best paper award in ICCAE at Singapore in 2010
- Dr. S. P. Narote received two best paper awards in International conference on ADCOM 2006 at NIT and in ICSCI 2005 at Hyderabad.
- Mrs. R. A Khan received best paper award in National Conference CISCON at Manipal Institute of Technology in 2004.
- Mrs. S. K Wagh received best paper award in International Conference ICSCI at Hyderabad. Andhra Pradesh in 2008.

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?

The Institute has a well defined central feedback system for the evaluation of faculty on the basis of class interaction, punctuality and delivery of course content for each semester. The self-appraisal forms are filled by respective faculty, and verified by higher authorities.

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?

The Institute is accountable to the stakeholders - students, faculty, parents, alumni and the society. The evaluation processes are brought to the notice of the students and faculty through the followings:

- The Institute notifies the students regarding schedule and structure of internal and SPPU's evaluation system through the college notice board.
- At the commencement of the term students are notified about the criteria for evaluation of term work.

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?

The institution implements all the evaluation reforms as prescribed by the SPPU. In addition, the Institute has introduced measures on its own. Following are the major evaluation reforms introduced by the University-

- **Appointment of CEO-** As per SPPU directives, the Institute has appointed a senior and experienced faculty member as College Examination Officer (CEO). The Examination Committee is a structured with the Principal as the Chairman assisted by CEO who is the member Secretary and senior faculty members from each department.

- **In-sem Examination-** SPPU has introduced concept of in-sem examination for Third year Engineering (TE) and Master of Engineering (ME). The Institute has smoothly adopted all the rules, and procedures laid down by University.
- **Computerization-** SPPU has introduced online examination for evaluation of first and second year engineering students. The Institute conducts online examinations of the SPPU during every semester. The marks of term work, practical/oral examination and those for in-semester (for PG and TE) are submitted online to the University.
- **Appointment of Internal Examiners-** The Institute appoints internal examiners for the practical/oral examinations as per the guidelines of the University.
- **Credit system-** As per the SPPU guidelines credit system has been introduced for the PG Programmes.

The reforms initiated by the Institute are –

- Conduction of mock online examinations, tutorials, mid-semester examination and mock practical/oral examinations.

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?

University evaluation reforms:

The Institute conducts all SPPU examination as per its schedule. To conduct online examination, the Institute has well equipped infrastructure. The examination conduction is effectively monitored as guided by University.

The Institute has taken following measures for the effective implementation of the evaluation reforms introduced by the University:

- The Institute has exam coordinators from each department for smooth conduction of the examination.
- The examination committee meets periodically to discuss all the examination related matters.
- At Institute level, effective implementation of tutorial and mid-sem test takes place and results are declared within eight days. The students can see their evaluated answer sheets and discuss the same with concerned faculty.
- Final year term work is jointly evaluated by internal and external examiners.
- For smooth conduction of University theory examination, an internal squad comprising of senior faculty members is appointed.
- CCTV cameras are used for monitoring the online examinations.

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

Formative Evaluation Process:

The goal of formative evaluation of the students is to monitor their learning, to collect continuous feedback, which is used by faculty to improve their teaching and by students to improve their learning. Formative evaluation is carried out considering the following parameters.

- Mock on-line and practical/oral examinations
- Mid semester tests
- Assignments
- Industrial visits
- Mini projects/Projects
- Workshops and Seminars
- Organizing technical events
- Curriculum based training
- Social activities
- Student's attendance monitoring
- Inter-collegiate competitions

Summative Evaluation process:

The goal of summative evaluation is to evaluate students' performance at the end of semester by comparing it against some standard or benchmark. Summative evaluation helps students to gain confidence and to achieve good results. The Institute facilitates the University to conduct summative evaluation at the end of each semester through the following:

- Written theory examination
- Practical/Oral examination
- Project work
- Online Examinations and In-Sem examination.

The names of meritorious students of every year are displayed on the notice board and these students are felicitated during the annual gathering that motivates all students to improve their performance.

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

The internal assessment system of the students is transparent. The test answers and marking scheme is discussed by the faculty with the students. The attendance record of each student is maintained and due weightage is given for attendance in theory class and practical sessions, performance in tests/tutorials and timely submissions. The Institute encourages independent learning

through project and paper presentations by students. Practical and oral examinations conducted by the University are evaluated by internal and external examiners appointed by SPPU.

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

The following are the graduate attributes specified by the college:

- **Engineering Knowledge:** to apply fundamental concepts of mathematics, science, engineering to solve engineering application problems
- **Problem Analysis:** to analyze a problem, to conduct experiment and interpret data
- **Design / Development of Solutions:** to design and conduct experiments, model and analyze physical system, components or process to meet desired needs
- **Conduct Investigations of Complex Problems:** to conduct independent research for information required in engineering problem solving, identify, formulate and solve engineering problems
- **Modern Tool Usage:** to use modern engineering techniques, skills and computing tools necessary for engineering practice
- **The Engineer and Society:** to predict the impact of engineering solutions in a global and societal context
- **Environment & Sustainability:** to incorporate economic, environmental and safety considerations in design process
- **Ethics:** to execute professional and ethical responsibility
- **Individual and Team Work:** to work on practical assignments, projects to enhance interpersonal and leadership skills
- **Communication:** to communicate effectively through engineering drawing, written reports and oral presentations
- **Project Management and Finance:** to understand engineering and management principals and apply this to own work, as a member and leader in a team to manage project
- **Life-long Learning:** to recognize the need for and an ability to engage in life-long learning

The Institute follows the curriculum prescribed by SPPU, which ensures the attainment of graduate attributes. Co-curricular and extra-curricular activities are also carried out to attain the graduate attributes. These activities are planned at the beginning of each semester and mentioned in the activity calendar of each department. Each department has well defined course objectives, course outcomes, Programme outcomes and Programme education objectives. The Institute has set up a well equipped language laboratory.

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

The concerned faculty looks into redressal of grievances with reference to evaluation at the college level. The faculty discusses the marking scheme and model answers with the students and helps them solve their queries. The Examination Committee meets regularly to discuss matters related to examinations, both internal and external.

The Institute has deputed a CEO who takes care of University evaluation grievances. CEO forwards the grievances to the University. The students can apply for verification, revaluation and for photocopy of answer book. The University examiners re-verify, re-assess the answer books and the revised marks if any, are sent to the Institute which are displayed on the Institute notice board.

2.6 Student Performance and Learning Outcomes

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

The Institute has well defined learning outcomes. The vision and mission of the institution emphasizes on promoting value education through motivated trained faculty to prepare the students to accept the challenges of globalization.

- The vision and mission statements are displayed on the college website and at various key positions in the college building.
- Programme Educational Objectives (PEO), Programme outcomes (PO) and course outcomes (CO) have been defined by every department. Programme Educational Objectives (PEO) and Programme outcomes (PO) are printed in journals and course outcomes (CO) are discussed by faculty in the classrooms.
- Programme Educational Objectives (PEO), Programme Outcomes (PO) are published on the college website.
- At the end of every semester, all the departments evaluate POs and COs by using tools like tutorial and mid-term results, on-line exam results, course end survey and yearly alumni feedback etc.

2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of course/Programme? (Programme/ Course wise for last four years) and explain the differences if any and patterns of achievement across the Programmes / courses offered.

- To monitor the students' progress, the Institute has a continuous internal evaluation system which consists of tutorials, mid-term tests, mock practical, mock online exam and oral examination. These tools are used to find out the progress of the students and as a feedback to improve academic performance.

- The Institute regularly communicates the marks obtained in the internal examination to the students.
- After the declaration of University results, a result analysis report is prepared by every department. This report is compared with the reports of previous years to monitor the progress of department and take corrective actions whenever necessary.

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

Programme	Year	2013-14	2012-13	2011-12	2010-11	2009-10
Computer Engineering	S.E.	90.40	91.66	90.20	86.53	84.48
	T.E.	48.95	75.00	65.88	100	83.90
	B.E.	96.75	100	84.21	94.64	84.31
Electronics and Telecommunication engineering	S.E.	90.00	88.81	65.51	85.71	82.45
	T.E.	92.64	100	89.09	88.67	90.19
	B.E.	95.83	89.75	75	96.15	83.3
Mechanical Engineering	S.E.	86.06	85.51	80.98	94.64	81.66
	T.E.	86.01	99.13	91.80	92.45	94
	B.E.	95.05	98.21	77.19	88.25	76.47
First year Engineering	F.E.	87.14	88.83	81.84	88.86	83.33

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 Strategies:

- Every department in the Institute prepares an academic calendar which is in line with the academic calendar given by the affiliating University.
- The class time tables are prepared in such a way that the required number of periods are assigned for all the theory and practical subjects and also include the periods for soft skills, communication skill and technical training.
- Information and communication technology is effectively used wherever necessary to impart teaching and delivering seminars.
- Special attention is focused on application part of the subject and extra content is delivered wherever necessary to meet the desired learning outcomes. Guest lectures are arranged to give more technical exposure.
- Academic monitoring committee takes care of quality teaching, learning and assessment procedures.
- Interested students are given training for developing entrepreneurial skills through sponsorship received from Department of Science and Technology, Government of India.

Learning Strategies:

- Tutorials are conducted regularly in analytical / design subjects.
- Assignments are made compulsory in all the theory subjects.
- Seminars are arranged for the students on advanced topics.
- Technical quizzes/group discussions/paper presentations/poster competitions are arranged through departmental student's associations.
- NPTEL-learning materials and videos are made available in the central library to enhance learning outcomes.
- Industrial visits are arranged to expose the students to practical pursuits.
- The technical skills of meritorious students are sharpened through BSNL-AICTE Employability Enhancement Training Programme (EETP).
- B-WOW takes care of placement of unemployed students. It supports the students and adds value to their skills set so as to enable them in procuring jobs.

Assessment Strategies:

Direct Assessment:

- Internal and external examinations in theory and practical sessions.
- Online examinations.
- Oral Examinations, seminars, tutorials and assignments.

Indirect Assessment:

- Alumni Feedback
- Programme Exit Feedback
- Course End survey
- Mid-sem and end-sem Feedbacks.

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

- The Institute motivates and if needed sponsors students to participate in various research projects, project competitions such as BAJA and Go-CARTing.
- The Institute organizes research paper competitions and National conferences in different areas.
- Students of UG and PG are encouraged to take sponsored projects.
- Students are encouraged to attend University level competitions like AVISHKAR and other National and State level project competitions.
- The Institute has PG Programmes to support the research activity.
- The Institute has signed MoUs with esteemed companies.
- Few students enhance their technical skills through course conducted by BSNL under the BSNL-AICTE Employability Enhancement Training Programme (EETP).

- T&P Cell conducts expert lectures, pre-placement talks and guidance for higher studies.
- B-WOW center guides and directs students for the betterment of their career.
- Faculty is encouraged to present and publish research papers in conferences.
- The Institute organizes Programmes on Entrepreneurship Development (sponsored by DST, Government of India)
- Organization of various social activities by NSS like blood donation camp, celebrating festivals with orphan, awareness through special NSS camps, river cleaning activity etc.

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

Following procedure is used to collect the data from the stake holders to analyze learning outcomes.

- Faculty feedback is taken twice every semester from students.
- Exit feedback is taken from the outgoing students every year.
- The feedback from the alumni is taken during the Alumni meet.

Corrective Actions

- Special attention is paid to lateral entry students.
- Remedial classes are conducted for subjects where percentage of failure is high.

2.6.6. How does institution monitor and ensure the achievement of learning Outcomes?

The Institute uses following means:

- Regular tutorials and assignments.
- Tests and University examinations.
- Continuous assessment in both theory and lab subjects.
- Monitoring attendance of students.
- Conducting remedial classes for poor performing students.
- Periodic student feedback.
- Involvement of students in co-curricular, extra-curricular activities and social activities.
- The departments prepare academic calendars and implements them effectively to achieve learning outcomes.
- Academic monitoring of teaching learning process is carried out and reports are discussed during meetings held with the Principal and HoDs.

2.6.7. Do 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.

Yes, the Institute uses assessment and evaluation system as an indicator for students' performance. The teacher uses following factors to check fulfillment of objectives:

- Marks in tutorials, performance in mid-sem exam and attendance percentage. Term work marks are calculated based on these assessments.
- General classroom behavior of the students is also kept in mind when evaluation of a student is undertaken.
- Online mock exam results help in knowing the performance and efforts can be taken by faculty to improve performance of student undertaken.
- Considering the performance of students, teachers can modify the teaching learning process for the overall development of students and to achieve the Programme 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 Cell by collaborating with reputed industries for technological 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 a research committee to plan, monitor and address issues of research.

Research and Development Cell (RDC) has been established in the college in 2009 to promote industrial consultation, extend consultancy and R&D services as per industry needs. The composition of the research committee is as follows:

Sr. No.	Name	Position
1	Prof. Dr. A. A. Keste	Chairman
2	Mr. A. J. Hake	Member
3	Prof. Dr. S. S. Sarawade	Member
4	Prof. Dr. S. P. Narote	Member
5	Mr. P. B. Chopade	Member
6	Mr. V. N. Chougule	Member
7	Dr. A. S. Adkar	Member
8	Mrs. R. A. Khan	Member
9	Dr. Mrs. M. P. Dale	Member
10	Dr. S. H. Gawande	Member
11	Dr. V. N. Raibhole	Member
12	Dr. Mrs. K. S. Tiwari	Member
13	Mrs. N. F. Shaikh	Member Secretary

Aims and Objectives of Research and Development Cell:

- To create zeal amongst students and faculty members towards research and innovation.
- To create centers of Excellence in niche areas of research.
- To work closely with the industrial needs that eventually will result in new or improved products, processes, systems or services that could increase the company's productivity.
- To foster collaborations for mutual benefits and to maximize Industrial connectivity.

- To establish collaboration with other universities, public and private sectors and identify R&D projects including consultancy services which could be undertaken at the institution.
- To promote research in various departments of the Institute.
- To ensure smooth functioning and effective Management of R&D at the institution

Roles and Responsibilities:

- Administrate research projects sponsored by various Government and non-Govt., research funding agencies such as UGC, DST, AICTE, BCUD SPPU etc.
- Administrate specialized workshops/ conferences/ seminars sponsored by UGC, AICTE etc.
- Establishing Joint collaborative Inter-Disciplinary Research Laboratories to strengthen collaborative research efforts of both UG and PG students of different departments of the Institute for the benefit of Institute and society.
- Arrange In-Campus workshops for motivating and aiming at triggering creativity and innovativeness amongst the students and faculty particularly in patenting, which results in potential growth.
- Administrate Joint collaborative Programmes: Identifying scope for signing MOUs with National as well as multinational industries and academic/research institutions to strengthen collaborative research efforts.
- Administrate in Promotion of Institute-Industry interactions: It will provide a helping hand in establishing collaborative research partnerships for undertaking creative and advanced research in emerging areas of interest to the industry.
- Administrate in establishing registered Institute Research Centre for eligible departments from the affiliating University (SPPU).
- To assist in matters related to collaborative research with other agencies.
- Implementation, follow-up, progress and monitoring of on-going projects.

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
- Allocation of funds for research and development. - Yes
- Up gradations of existing laboratories in terms of latest technologies. - Yes
- Adequate infrastructure and human resources- Yes
- Reduced teaching load, special leave etc. to teachers- Yes

- Support in terms of technology and information needs- Yes Facilitate timely auditing and submission of utilization certificate to the funding authorities- Yes
- Faculties are encouraged to participate as resource persons in various workshops, seminars and conferences. - Yes

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

The students of the Institute are groomed for research right from the undergraduate programme. Majority of students participate in technical competitions, Seminars, National/International Conferences, etc. under the guidance of faculty.

Furthermore, final year students of undergraduate and post graduate Programmes are encouraged to undertake projects having a research potential. Research interest in the students is promoted by:

- Motivating and encouraging the students to publish research papers in Journals/conferences.
- Dissertation and project reports are made available to the students for reference.
- Review of projects to monitor its progress.
- Presenting technical paper on UG/PG project work.
- Poster and project exhibitions are organized by the department every year.
- The Institute motivates the students for higher education; the staff is very supportive when it comes to encouraging students to pursue higher education and research.

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.

Faculties are actively involved in research work. They devote themselves in supporting and guiding student's research projects. A good number of research scholars are being successfully guided by our senior faculty members and the details are given below:

Faculty guiding Ph.D. research scholars:

Sr. No.	Name of Faculty	Department	No. of research scholars
1.	Dr. A. A. Keste	Mechanical	01
2.	Dr. S. S. Sarawade	Mechanical	02
3.	Dr. S. H. Gawande	Mechanical	01
4.	Dr. S. P. Narote	E & TC	04

Faculty guiding P.G. students:

Sr. No.	Name of Faculty	Department	No. of students
1.	Prof. Dr. S. P. Narote	E & TC	20
2.	Dr. M. P. Dale	E & TC	04
3.	Mrs. P. P. Mane	E & TC	04
4.	Mr. P. B. Chopade	E & TC	04
5.	Mr. P. N. Kota	E & TC	04
6.	Prof. Dr. A. A. Keste	Mechanical	03
7.	Prof. Dr. S. S. Sarawade	Mechanical	03
8.	Dr. S. H. Gawande	Mechanical	03
9.	Dr. V. N. Raibhole	Mechanical	03
10.	Mr. V. N. Chougule	Mechanical	02
11.	Mrs. V. J. Sonawane	Mechanical	02
12.	Mr. A. Mitra	Mechanical	02
13.	Mrs. N. F. Shaikh	Computer	04
14.	Mrs. R. A. Khan	Computer	04
15.	Mrs. S. K. Wagh	Computer	04
16.	Mrs. J. R. Pansare	Computer	04

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 Conferences/Seminars, FDPs and other activities conducted/ organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students:

A. Details of National Conferences/ Seminars organized:

Sr. No.	Name of Conference	Date of Conference
Mechanical Engineering		
1	RDME-2015	29/01/2015- 30/01/2015
2	RDME-2014	13/03/2014-14/03/2014
3	RDME-2013	26/04/2013-27/04/2013
4	RDME-2011	04/07/2011-05/07/2011
Computer Engineering		
5	RACE-2015	22/01/2015-23/01/ 2015
6	RACE-2014	20/03/2014 -21/03/2014
7	RACE-2013	15/03/2013 -16/03/2013
Electronic & Telecommunication Engineering		
8	ACCET-2015	05/02/2015-06/02/2015
9	ACCET-2014	28/03/2014-29/03/2014

B. Details of the FDPs/ Workshops/ Seminars organized :

Sr. No.	Title of FDP/Workshops	Date
1.	Science Direct user Awareness Session by Mr. Manish Uniyal	21/01/2015-23/01/2015
2.	Two days National Workshop on SDR, By AMITECH, Delhi	20/01/2014 - 21/01/2014
3.	Four days Workshop on PCB Designing	07/02/2014-08/02/ 2014 22/02/2014 & 4/02/2014
4.	Two Day FDP for Faculty of MESCoE by Mr. Minocher Patel	19/02/2014-20/02/2014
5.	Two days Mitsubishi sponsored Workshop on PLC	20/02/2014-22/ 02/2014
6.	Two days Soft Skill Training for SE E&TC Students	03/04/2014-04/04/2014
7.	Three days Faculty Orientation Training Programme on Digital Communication	12/06/2014-14/06/2014
8.	One day workshop on TE Revised Syllabus for the subject “ Database Management and System Application”	15/07/2014
9.	One day Workshop on NBA Accreditation	09/02/2013
10.	Two days Workshop on Printed Circuit Board Design	02/03/2013-03/03/ 2013
11.	One Day Workshop on Online Question preparation of “Engineering Mathematics III” for S.E. (Mechanical Engineering) – Revised 2012 Course.	13/07/2013
12.	One day Workshop on Basic Manual ROBOT PHASE II – WIRELESS	03/08/2013
13.	Two days Workshop on Mobile Making	03/08/2013-04/08/2013

14.	One Day Workshop on Syllabus Implementation of “Advanced Mathematics” in M.E. (Mechanical Engineering) – Revised 2013 Course.	10/08/2013
15.	Four days Workshop on Programmable Logic Circuits (PLC)	24/08/2013- 25/08/2013 14/08/2013- 15/08/2013
16.	NPTEL Workshop on e- learning (A joint venture of IIT’s and IISc’s)	26/08/2013
17.	National live webinar by Mr. Keith Lambert	11/09/2013
18.	Two days State level workshop on Current Research Trends in Information and Network Security(CRTINS), sponsored by BCUD, UoP	10/10/2013 - 11/10/2013
19.	One day workshop on Implementation of “Research Methodology” in M.E. (Mechanical Engineering) – Revised 2013 Course.	14/08/2013
20.	Two weeks FDP for Entrepreneurship Development	09/12/2013 - 21/12/2013
21.	Two days’ workshop on “Advances in Refrigeration & Air Conditioning and Global Warming Implications [WSRAC-2012]	27/02/2012 - 28/02/2012
22.	One day State level Seminar on Current Research Trends in Computer Engineering (CRTCE-2012)	16/03/2012
23.	Two days Robotics workshop on “ROBOTRYST 2013” and pre-zonal competition	27/09/2012- 28/09/2012

C. Other activities conducted by the Institute/Departments:

Sr. No.	Name of the Programme	Date
All Department		
1.	Celebration of Teacher's day	05 th Sept.
2.	Celebration of Engineers Day	15 th Sept.
Department of Mechanical Engineering		
1.	Spirit-2013	07/01/2013-11/01/2013.
2.	Technical Quiz -2013"	03/09/2013-05/09/2013
3.	Auto-quiz & Ingenuous Solutions	15/09/2012
Department of E&TC Engineering:		
1.	ETSA - EPSILON 2014	27/02/2014 - 28/02/2014
2.	ETSA - ROBO competition	17/08/2013
Department of Computer Engineering		
1.	Digital Renaissance – 2014	27/02/2014 - 28/02/2014
2.	Manual Robotic Workshop	09/08/ 2014
3.	SAGA -2012	23/02/2012 - 25/02/2012

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

Sr. No.	Prioritized research areas	Expertise
Department of Mechanical Engineering		
1.	Design, Optimization, Vibration Control, Tribology	Dr. S. S. Sarawade, Dr. S. H. Gawande, Mr. A. Mitra
2.	CAD/CAM/CAE, Numerical Method	Mr. V. N. Chougule Mr. R. N. Yerrawar
3.	Manufacturing & Welding, Materials Science, Metrology	Mr. S. P. Gadewar Mr. K. A. Mahajan
4.	Heat Transfer, Solar Collector Performance Analysis, Fluid Mechanics, Refrigeration & A/C, Cryogenic	Dr. A. A. Keste Dr. V. N. Raibhole
Department of E&TC:		
1.	Pattern Recognition, Machine Vision, Biometric	Dr. S. P. Narote, Dr. Mrs. M. P. Dale Mrs. P. P. Mane Mr. P. B. Chopade
2.	Signal Processing, Speech processing	Dr. S. P. Narote, Dr. Mrs. M. P. Dale Mrs. P. P. Mane Mr. P. B. Chopade
3.	Communication - Wireless Communication, Optical Communication	Mrs. Nabegha Mr. P. N. Kota
4.	Embedded and VLSI	Dr. Mrs. K. S. Tiwari Mrs. M. M. Dhanvijay
Department of Computer Engineering:		
1.	Neural Networks	Mrs. N. F. Shaikh Mrs. A. P. Kale
2.	Speech Processing	Mrs. R. A. Khan
3.	Information security	Mrs. S. K Wagh

4.	Image Processing	Mrs. J. R. Pansare Mrs. S. P. Khedkar
5.	Software Engineering	Dr. A.R Khan
6.	Cloud Computing	Ms. R. M. Wahul Mrs. S. R. Kondhe
7.	Sensor Network	Mrs. S. M. Kori
8.	Data Mining and Big Data	Mr. G. S. Pole Mr. B. K. Bodkhe
Department of First Year Engineering:		
1.	Nano Technology and Nano Material	Dr. D. S. Adkar, Dr. M. Vaishampayam
2.	Advanced Mathematics	Mrs. V. Murli
3.	Radiation Chemistry	Dr. S. B.Sharma
4.	Power system	Mrs. V. S. Galgali
5.	Power Electronics	Mrs. A. R. Prayag
6.	Earthquake Engineering	Mrs. A.S. Purandare

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

Following are the efforts taken by the Institute for attracting researchers of eminence to visit the campus and interact with teachers and students by:

- Organizing Faculty Development Programmes by involving industry personnel's
- Organizing Conferences and workshops inviting experienced professional from the industry for sharing their views.
- Establishing the SDR and NI Lab view as center of excellence.
- Initiating and promoting MOU's with industries 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 Institute does not have the provision of sabbatical leave. However the Institute strongly believes in promoting a research culture by granting study leave for faculty 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)

Following initiatives are taken up by the institution for creating awareness and propagation of research temperament in the student's community:

- Organize exhibitions of Final year projects
- Guest lectures by experts from the industry.
- Access to NPTEL resources.
- Access to research material via e-journals such as IEEE, science direct and ASME journals etc.
- Wi-Fi Campus.
- Access to National and International level technical magazines in the Central Library.
- Industrial visits.
- Industrial training as a part of course curriculum
- Participation of students in inter and intra college technical events.

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 depict the amount allocated & actual utilization on research and development activities:

2013-14

Item	Revised Budget (Rs. in lakhs)	Expenditure (Rs. in lakhs)	Percentage of Budget	Total Institute Budget (Rs. in lakhs)
Research and Development	8.00	6.43	0.529	1513.45

2012-13

Item	Revised Budget (Rs. in lakhs)	Expenditure (Rs. in lakhs)	Percentage of Budget	Total Institute Budget (Rs. in lakhs)
Research and Development	7.72	5.02	0.679	1138.17

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, the Institute provides seed money for pursuing research work. As per the requirement of faculty, budget is allocated for the purpose of purchase of research equipment and other consumable items.

Projects funded by the Institute:

Sr. No.	Name of the Project	Name of PI/ CO-PI	Amount in Rs.	Year
1.	Integration of ETC Solar water heater with heat pump for energy efficiency	Dr. V. N. Raibhole	3.42 Lakhs	2013-14
2.	Advanced Unmanned Aerial Vehicle	Mr. A. J. Hake, Mrs. S. K. Wagh	4.7 Lakhs	2012-13
3.	Design, Development, Testing and Optimization of a Vehicle Suspension System Accounting the Effect of Road Profile using MATLAB/SIMULINK	Mr. A. Mitra	2 Lakhs	2011-13
4.	Tool and Job Display Box for MESCoE workshop	Mr. A. Mitra Mr. S.D. Mozar	45000/-	2011-12
5.	Design, Development and Manufacturing of Folding Drawing Table for Drawing Hall	Mr. A. Mitra	1.8 Lakhs	2010-12

6.	Design and manufacture a single- seat off -road car for a target customer base of weekend off–road enthusiasts.	Dr. S. H. Gawande Mr. A. R. Patil	2.36 Lakhs	2009-12
7.	Design, Development and CFD Analysis of Advanced Vertical Axis Windmill	Mr. A. Mitra	25,000/-	2010-11
8.	Hybrid Vehicle Development	Mr. S. P. Gadewar	10,000/-	2010-11

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

Each department allocates a finite proportion of their budget towards research projects of students. To support student research projects, critical components, software's etc. are procured as and when required. Students are encouraged to seek funds from the agencies such as BCUD SPPU, DST and UGC. Besides this smaller projects with good prospects and utility are also financed by the college.

Following table shows the financial provisions to support different research activities by students:

Sr. No.	Name of the Project	Name of PI/ CO-PI	Amount in Rs.	Year
1.	Integration of ETC Solar water heater with heat pump for energy efficiency	Dr. V. N. Raibhole	3.42 Lakhs	2013-14
2.	Advanced Unmanned Aerial Vehicle	Mr. A. J. Hake, Mrs. S. K. Wagh	4.7 Lakhs	2012-13
3.	Design, Development, Testing and Optimization of a Vehicle Suspension System Accounting the Effect of Road Profile using MATLAB/SIMULINK	Mr. A. Mitra	2 Lakhs	2011-13
4.	Tool and Job Display Box for MESCoE workshop	Mr. A. Mitra Mr. S.D. Mozar	45000/-	2011-12
5.	Design, Development and	Mr. A. Mitra	1.8	2010-

	Manufacturing of Folding Drawing Table for Drawing Hall		Lakhs	12
6.	Design and manufacture a single- seat off -road car for a target customer base of weekend off-road enthusiasts.	Dr. S. H. Gawande Mr. A. R. Patil	2.36 Lakhs	2009-12
7.	Design, Development and CFD Analysis of Advanced Vertical Axis Windmill	Mr. A. Mitra	25,000/-	2010-11
8.	Hybrid Vehicle Development	Mr. S. P. Gadewar	10,000/-	2010-11
9.	Design and development of Electronic Interface of Test Rig of Vehicle Suspension System Using Lab View Software	Mr. S. V. Deshpande, Mr. A. Mitra.	26,418/-	2013-14

3.2.4 How does the various departments/units/staff of the Institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

The college has a Research Committee which comprises of subject experts from various departments. Every department of the college has its own final year project coordinator. Various departments/faculty members of the Institute interact with the committee in undertaking inter-disciplinary research work. Presently a number of UG students are involved in inter-disciplinary projects.

Sr. No.	Name of the project	Department	Guide
1.	Development of shock absorber test-rig for optimizations of vehicle suspension by DoE approach using NI-LABVIEW.	Mechanical Engg.	Mr. A. Mitra
2.	Farm automation using NI-LABVIEW	E & TC Engg.	Mr. S. V. Deshpande
3.	Intelligent System for Automobile Accident Prevention	Mechanical Engg.	Dr. S.S. Sarawade
4.	Performance Evaluation of	Mechanical	Mr. V. N.

	Planetary Gear Train for Hybrid Transmission System	Engg.	Chougule
5.	Quality inspection and fault detection of metal job using wavelet transform.	E & TC Engg.	Mr. P.B. Chopade
6.	Design, optimization and control of MICRO AIRIAL VEHICLE (MAV)	Mechanical Engg.	Mr. K.A.Mahajan
7.	Detection of crack by experimental modal analysis of beam using NI-LABVIEW.	Mechanical Engg.	Mr. S.S.Jadhav
8.	Experimental investigation on influence of notch on a rotating shaft using NI-LABVIEW	Mechanical Engg.	Mr. S.S.Jadhav
9.	Condition Monitoring of Bearing by Vibration Analysis Using NI-LABVIEW	Mechanical Engg.	Mr. R.N.Yerrawar
10.	GSM based automatic obstacle avoider robot using LABVIEW software.	E & TC Engg.	Mr. Y.M. Ajar
11.	Performance testing of Ice Plant using R12 and R134a refrigerant and their comparison, by acquiring temperature and analyzing measurement data using LabVIEW Software	Mechanical Engg.	Mr. H.S.Salve
12.	SAE INDIA BAJA competition which will held at Indore, Madhya Pradesh during 19-22 February 2015. The objective is to manufacture an Off-road All-Terrain Vehicle for endurance test. A team of 25 students has participated.	Mechanical Engg. and Computer Engg.	Mr. S. R. Kandharkar

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

Optimal use of various equipment and research facilities are ensured by:

- Maintaining Log books for usage of equipments.
- The Research Committee monitors the research activities and keeps track of the usage of various resources and facilities for research.
- Laboratories are also utilized for technical add-on courses for students such as CCNA, CATIA V6 to name a few.

- The college central library maintains records of usage of References Book, National/International Journals.

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 Institute has signed MoUs with some industries and other agencies for promoting training, research and extension activities in technical education.

- The Institute has received research grants from DST, BCUD SPPU for conduction of research and for the development of department laboratories.
- In 2013-14 the Institute, had applied to Special Grant Scheme of AICTE under MODROBs scheme for modernization of laboratories and the reply is awaited.
- Grants have been received from DST for organizing Entrepreneurship Development Programmes (EDPs).
- For promoting training, research and extension activities in technical education the Institute has signed MoUs with :
 - BAKER Gauges India Pvt. Ltd
 - ZF Steering Gear India Pvt. Ltd
 - Green Triz
 - IFS academy
 - Seed InfoTech Pvt. Ltd
 - Mitsubishi Electric India Pvt. Ltd.
 - Edgate Technologies and Texas Instruments
 - RS Networks
 - Graceful Growth
 - Harbingers

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

The Institute has several senior faculty members with vast experiences in research activities. These senior faculty members guide other faculty members in preparing research proposals and advise them about current trends in research in their area of expertise. Subsequently the research proposals are sent to various funding agencies for their considerations.

Ongoing Research Projects:

Sr. No.	Name of the Research Project	Name of PI/ CO-PI	Funding Agency	Grant Received (Rs. In Lakhs)	Year
1.	Development of biometric system based on conjunctival vasculature	Mr. S. N. Dharwadkar	BCUD, SPPU	1.4	2013-15
2.	Investigation and development of solar flat plate collector by using reinforced concrete panel as absorber plate and its performance testing	Dr. A. A. Keste	BCUD, SPPU	1.7	2013-15
3.	Role of active antenna in portable computing devices.	Mrs. R. S. Kadam	BCUD, SPPU	1.2	2013-15
4.	Advanced Unmanned Aerial Vehicle	Mr. A. J. Hake, Mrs. S. K. Wagh	R & D, MESCoE	4.7	2012-15
5.	Design, Development, Testing and Optimization of a Vehicle Suspension System Accounting the Effect of Road Profile using MATLAB/SIMULINK	Mr. A. Mitra	R & D, MESCoE	2	2011-15

Completed Research Project:

Sr. No.	Name of the Research Project	Name of PI/ CO-PI	Funding Agency	Amount In Lakhs	Year
1.	Iris image acquisition on the move	Dr. S. P. Narote	BCUD UoP	3	2012-14
2.	PAPR Reduction Technique in Orthogonal Frequency Division Multiplexing System	Mr. P. N. Kota	BCUD, UoP	2.10	2012-14
3.	Design of rough Set Processor for Control and Automotive Applications	Mrs. K. S. Tiwari	BCUD, UoP	1.50	2012-14
4.	Parametric Analysis of Integrated Gasification Combined Cycle Power Plant	Dr. V.N. Raibhole	BCUD, UoP	2	2012-14
5.	Study on projectile ricochet by mathematical modeling and simulation approach	Mrs. Vijayalakshmi Murali	BCUD, UoP	2	2012-14
6.	Numerical Analysis of Oil gas Furnace Performance using CFD and Heat Transfer Model for Different Time Period	Mr.V. N. Chougule	BCUD, UoP	1.5	2011-13

7.	Development of Methodology for Balancing of Multi-Cylinder Inline Diesel Engine	Dr. S. H. Gawande	BCUD, UoP	1	2009-12
8.	Research in Nano-materials	Dr.A.D. Adkar	BCUD, UoP	2.5	2009-12
9.	Fingerprint Analysis Combining Local and Global Features in Transform Domain	Dr. M. P. Dale	BCUD, UoP	1.5	2008-11
10.	Design, Development and Performance Evaluation of Centrifugal Compressor using R410-A Refrigerant facility	Dr. A. A. Keste	BCUD, UoP	1.5	2008-10

Other Core Mini-Projects funded by R & D Cell of the Institute:

Sr. No.	Name of the Project	Name of PI/ CO-PI	Amount In Rs.	Year
1	Integration of ETC Solar water heater with heat pump for energy efficiency	Dr. V. N. Raibhole	3.4 Lakhs	2013-14
2	Advanced Unmanned Aerial Vehicle	Mr. A. J. Hake Mrs. S.K. Wagh	4.7 Lakhs	2012-13
3	Testing and parametric analysis of an Updraft biomass gasifier	Dr. V. N. Raibhole	50,000/-	2012-13
4	Tool and Job Display Box for MESCoE workshop	Mr. A. Mitra & Mr. S.D. Mozar	45000/-	2011-12

5	Design, Development and Manufacturing of Folding Drawing Table for Drawing Hall	Mr. A. Mitra	1.8 Lakhs	2010-12
6	Design, Development and CFD Analysis of Advanced Vertical Axis Windmill	Mr. A. Mitra	25,000/-	2010-11
7	Hybrid Vehicle Development	Mr.S.P.Gadewar	10000/-	2010-11
8	Design and manufacture a single- seat off -road car for a target customer base of weekend off-road enthusiasts.	Dr. S. H. Gawande Mr. A. R. Patil	2.36 Lakhs	2009-12

3.3 Research Facilities

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

The Institute provides facilities like central library and internet with various information resources and access to digital libraries. Apart from computer systems, sophisticated instruments, modeling tools, data processing software and modern equipment's are provided to create infrastructural facilities to meet the needs of new and emerging areas of research. Following table summarizes major research facilities in various departments,

Sr. No.	Research Facilities	Name of the Laboratory
Department of Mechanical Engineering		
1.	Computerized Numerical Controlled machine	Workshop
2.	Autodesk Inventor, MATLAB, ANSYS, CATIA V6, Solid Works, Solid-Edge	CAD/CAM/ PG Lab.
3.	NI & Lab-View	MESCoE-NI Academy
4.	Measurement, Quality Control	MESCoE-Baker Metrology Lab

5.	Industrial Robot- KUKA	Robotics Lab
Department of E & TC Engineering		
1.	DSP Starter Kit (DSK) TMS320C6713 with Code Composer Studio 225Mhz Floating Point Processor	DSP Lab
2.	Virtex FPGA kit	VLSI Lab
3.	Universal Trainer Model MXUK-208-101 with 200k Gate Spartan II FPGA XC2S200PQ208 on Board	VLSI Lab
4.	VLSI Design Software Xilinx Make ISE Series US-ISE _FND Ver.6.1	VLSI Lab
5.	Spartan III Based DSP in VLSI Trainer Model MX35FKDSP	VLSI Lab
6.	Micro wind Package Hardware (Dongle Based) including DSCH3	VLSI Lab
7.	VLSI Design Software ISE	VLSI Lab
8.	Winice Universal In- Circuit Emulator	VLSI Lab
9.	SPJ Software SC-51 Network 20 C Compiler for 8051 Microcontroller Family	VLSI Lab
10.	Microwave set up	FOC Lab
11.	Benchmark OTDR	FOC Lab
12.	Power electronics Trainer kits	Mechatronics lab
13.	Oasis ARM-7 SPIRIT-II Development Board	Embedded lab
14.	Agilent N9320A 9KHz-To- 3GHz Spectrum analyzer	EMAEL
15.	Agilent 100MHz Mixed Signal Oscilloscope 200/NSA/s 54622D MY4001073	EMAEL
16.	Robot kits, Robot Arm, PLC Robot	Embedded lab

17.	Digital Storage Oscilloscope	EMAEL
18.	Arbitrary function generator	EMAEL
Department of Computer Engineering		
1	Internet Access, Project Lab, Access of MESCoE cloud	Project Lab
Department of First Year Engineering		
1	Programmed Furnace, SONICATOR Humidity Sensor	Physics/Chemistry Lab

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 Institute is continuously striving to improve its infrastructural requirements in order to facilitate research in new and emerging areas

- Encouraging faculty and students to attend research programmes, workshops, seminars and conferences conducted in the Institute and at other organizations. The Institute bears the cost of registration fee, conveyance and sanctions duty leave for the same.
- Encouraging faculty members to organize research workshop, seminars, Conferences, with funding internally and from AICTE/UGC/DST/SPPU
- The library of the Institute is enriched with a wide range of books and various national and international journals. Online IEEE, Science Direct journals are also accessible to the researchers.
- High bandwidth Internet facility along with Wi-Fi connectivity is provided in the campus for the faculty members and students for carrying out research work.
- Research groups involving faculties and students are formed by the Institute for identifying planning and carrying out research.
- Provision is made in the Institute budget for procuring latest software and equipment's to carry out research work across all departments.

Industry Institute collaboration

Sr. No.	Research Centre	Year Estab	Description /Area of Research undertaken
1	MESCoE - CDAC	2014	Under this collaboration CDAC has assured to train the concerned faculty nominated by MESCoE in their respective subject domains. Student training has been initiated for Embedded and VLSI domains.
2	MESCoE -	2014	SDR- SDR exhibited a marvelous platform

	AMITEC		for those in research in signal processing and in academia. Amitec Lab is set up in the Institute and proposed to create a Centre Of Excellence in Telecomm. This venture will help the Institute in setting up IIPC in college.
3	MESCoE - Pearson	2014	Pearson conducts exams for Microsoft and CISCO through which revenue is generated for the college.
4	MESCoE - CCNA	2014	Student training for CCNA by RS Networks has been initiated.
5	MESCoE-ZENSAR	2014	Training for students is organized through a mix of virtual and physical classroom setups. Arranged faculties to impart technical as well as soft skills training to the student.
6	MESCoE-Harbinger	2014	Sponsored projects for selected Students along with training and certification after successful completion of the projects.
7	MESCoE-Trident Techlabs Pvt. Ltd. (Texas Instruments Stellaris Lab.)	2013	The college has set up a laboratory by the name "Texas Instruments Stellaris Lab." The Trident Techlab donated ,ten Texas Instruments Stellaris development kits based on TI platform to the college
8	MESCoE-Mitsubishi Electric India Pvt. Ltd., Gurgaon.	2013	To further strengthen the commitment for enhancement of Industry-Academia interaction, college has signed an MoU with Mitsubishi Electric India Pvt. Ltd., Gurgaon
9	MESCoE – SEED Info.	2013	Students are trained in various software technologies.

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, a number of multinational companies have supported establishment of state-of-the-art training and research & development facilities in the college. The Support has been provided in the form of making available equipment and training setups at no cost or at subsidized affordable cost to the college. The facilities created with support from industries are –

Sr. No.	Industry or Other Beneficiary Agency	Instruments/Facilities Created	Year	Grants Or Finances Received in Rs.
1.	Texas Instruments	Texas Instruments Development boards	2014	2 Lakhs
2.	Trident Techlab	Ten Texas Instruments Stellaris development kits based on TI platform	2013	3 Lakhs
3.	Baker Gauges Laboratory	Equipments were supplied at a discount of 50%		

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

- Institute arranges Industrial visits to leading industries for the students.
- Institution has the membership of leading libraries like ARAI and British council library, which helps faculty members and students to use their information resources.
- Institute encourages the students and faculty for participating and attending research competitions and exhibitions.

Sr. No.	Name of the facility	Date of Visit	Location
1.	Elecrama-2010	23/01/2010	Mumbai
2.	GMRT-2011	01/03/2011	Khodad, Narayangaon
3.	Visit to PCB manufacturing company HI-Q-IMAGES-PUNE	01/10/2011	R&D Dighi, Pune
4.	Visit to Elecrama-2012 the international exhibition by IEEEEMA held at MUMBAI EXHIBITION CENTRE	21/01/2012	Mumbai
5.	DRDO-Exhibition	04/02/2012	R&D Dighi, Pune
6.	GMRT-2012	29/02/2012	Khodad, Narayangaon
7.	Sadhu Waswani Mission Darshan	23/01/2013	Pune
8.	GMRT-2013	28/02/2013	Khodad, Narayangaon
9.	Industrial Visit MAPRO PRODUCTION PLANT	02-02-2013	Wai, Satara, Pune
10.	DIPEX Project Visit Report	09/03/2013	COEP, Pune
11.	VISIT TO B.S.N.L-RTTC –Pune	01/03/2013 & 08/03/2013	Pune
12.	Dipex-2013 COEP, Pune	09/03/2013	Pune
13.	AUTOMATION-2013	25/09/2013	Mumbai
14.	Godrej Lawkim	20/3/2014	Satara
15.	Vishay Component Pvt. Ltd.& Mapro Garden	5/04/2014	Pune
16.	Giant Meter Wave Radio Telescope (GMRT), Narayangaon	01/03/2014	Khodad, Narayangaon
17.	MTSO-BSNL Pune	25/03/2014	Pune
18.	Appin Technology OFC	01/02/2014 & 02/02/2014	Pune
19.	INFOCOMM Mumbai Exhibition Centre	19/09/2014	Mumbai

20.	Godrej Lawkim	10/02/2015	Satara
21.	CMC Limited	21-02.2012	Hydrabad
22.	Persistent Systems Limited, Hinjewadi, Pune	01-02-2014	Pune
23.	Mazik Tech Solution, Hyderabad, India	10/12/2014	Hyderabad
24.	Mazik Tech Solution, Hyderabad, India	12/03/2014	Hyderabad
25.	Film and Television Institute of India, Pune	14/03/2011	Pune
26.	Film and Television Institute of India, Pune	12/03/2010	Pune
27.	C-DAC Pune	09/02/2010	Pune
28.	C-DAC University of Pune (Staff)	21/07/2009	Pune
29.	Quick Heal Technologies, Pune	03/08/2013	Pune
30.	Aray Milk Dairy	25/02/2009	Pune
31.	ITI Aundh	26/02/2009	Pune
32.	City pride Theater	18/03/2009	Pune
33.	KSB Pump Chinchwad	16/03/2009	Pune
34.	Kisanvir Sahakari Sakhar Karkhana Satara Rd. Wai.	24/03/2009	Satara
35.	Array Dairy Milk	28/08/2009	Pune
36.	City Pride Theatre	08/02/2010	Pune
37.	Tarapur Atomic Centre	05/04/2010	Mumbai
38.	ITI, Aundh	13/04/2010	Pune
39.	Sugar Factory, Patas	07/03/2010	Pune

40.	Pumping Station ,Bopodi	31/03/2010	Pune
41.	Jaijinedra cold storage, Saswad	09/04/2010	Pune
42.	Gas Turbine Power Station ,Uran Raighad	25/03/2010	Uran
43.	Wonder Cars Pvt. Ltd.	21/04/2010	Pune
44.	Aarey Milk Dairy	28/08/2010	Pune
45.	Citypride Theatre, Kothrud, Pune.	08/03/2011	Pune
46.	Accurate gauges Pvt. Ltd., Saswad.	15/03/2011	Pune
47.	Sugar Factory, Bhimashankar.	09/04/2011	Pune
48.	Sai Service Station, Kondhawa.	25/04/2011	Pune
49.	Sugar Factory at Patas.	26/04/2011	Pune
50.	Aarey Milk Dairy	16/09/2011	Pune
51.	Aarey Milk Dairy	19/09/2011	Pune

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

- A central library and departmental library for each department.
- WI-FI network in campus.
- Membership of online Journals such as IEEE, ASME, Elsevier, DOAJ, NPTEL and e-books.
- Magazines like Refrigeration and Air Conditioning, World pumps India, Indian Foundry Journal and, Cutting tools.
- Reference books on various research topics and project.
- Membership of library of Automotive Research association of India (ARAI) and British Council library.

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.

Different departments have created some specified research laboratories and procured specified equipment/software/hardware in the existing laboratories to augment the research facilities.

Sr. No.	Research Area	Name of Collaborative Research Facility	Collaboration With
1.	Computer Aided Manufacturing with Industrial Robotic Facility	CNC Machine	1. Idea-maps 2. Rajesh Engg. Works
2.	Quality Control	BAKER-MESCoE Metrology and Quality Control Laboratory	Baker Gauges India Pvt. Ltd
3.	Vibrations	Data acquisition System	National Instrument
4.	Computer Aided Design, Computer Aided Analysis	CAD/CAM Laboratory	Zest Technologies, EDS Technologies, Green Triz, IFS Technologies
5.	Analog Circuits	MESCoE- Trident Techlabs Pvt. Ltd.	Texas Instruments Stellaris Lab.
6.	Embedded systems	MESCoE- CDAC	CDAC
7.	Wired and wireless communication	MESCoE- AMITEC	AMITEC
8.	Microsoft & Cisco exams	MESCoE - Pearson	Pearson
9.	Computer Networking	MESCoE - CCNA	RS Networks
10.	Texas Instruments	Development of mixed signal processing lab	Edgate Technologies & Texas Instruments
11.	Mechatronics	Automation training	Mitsubishi Electric India Pvt. Ltd

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):** Two patents have been granted and four are in process.
- **Original research contributing to product improvement**
 - The Institute has signed MoUs with industries and other agencies for promoting training, research and extension activities in technical education.
 - Total 11 research grants have been received by faculty members from BCUD SPP University for the execution of their research work and development of departmental laboratories.
 - Recently Mechanical, E&TC and Computer department have applied to special grant scheme of AICTE for modernization of Mechanical, CSE and ECE laboratories and reply is awaited.
 - Grants have been received from DST for organizing EDP Programme.
- **Research studies or surveys benefiting the community or improving the services:** Nil.
- **Research inputs contributing to new initiatives and social Development:** Nil.

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?

Yes, the Institute has an international Journal entitled “**International Journal of Researchers Scientist & Developers (IJRSD)**”. ISSN No: 2347-3649.

3.4.3 Give details of publications by the faculty and students:

Sr. No.	Name of Faculty	Papers published in		Monographs	Chapters	Book	Citations
		International /National Journal	International /National Conference				
	Department of E & TC Engineering						
1.	Dr. S. P. Narote	13	44	01	-	-	141
2.	Dr.Ms. M.P. Dale	03	24	-	-	-	25
3.	Mrs. P.P. Mane	03	07	-	-	-	01
4.	Mr. P.B.Chopade	01	-	-	-	-	-

5.	Mr. P.N. Kota	04	01	-	-	-	-
6.	Ms. B.M. Narute	-	02	-	-	-	-
7.	Mr. S.N.Dharwadkar	-	07	-	-	-	-
8.	Dr.Mrs. K.S. Tiwari	05	08	-	01	-	08
9.	Ms. A.A. Dhavlikar	-	02	-	-	-	-
10.	Mrs. R.S.Kadam	-	04	-	-	-	-
11.	Mr. S. S. Pansare	-	03	-	-	-	-
12.	Mrs. Y. M. Ajgar	-	03	-	-	-	-
13.	Mrs. U. D. Dattasamje	-	02	-	-	-	-
14.	Mrs. M. M. Dhanvijay	02	08	-	-	-	-
15.	Mr. P.H.Mohite	-	03	-	-	-	-
16.	Mr. L.K. Guttedar	-	01	-	-	-	-
17.	Mr.R.D.Maknikar	01		-	-	-	-
18.	Mr.P.M.Pardhi	-	01	-	-	-	-
19.	Mrs. S.R.Lahane	01	02	-	-	-	-
20.	Ms. A. Varma	-	02	-	-	-	-
21.	Ms. N. V. Awalkar	01	01	-	-	-	-
22.	Mr. P. M. Ambure	01	01	-	-	-	-
23.	Ms.V.H.Kamble	01	01	-	-	-	-
24.	Mr.J.S.Jethra	-	01	-	-	01	-
Department of Computer Engineering							
1.	Mrs. N. F. Shaikh	10	07	-	-	01	-
2.	Mrs. R.A. Khan	04	04	-	-	-	-
3.	Mrs. S.K.Wagh	02	04	-	-	-	04
4.	Ms. R. M.Wahul	05	02	-	-	-	-
5.	Mrs. S.R.Khonde	04	02	-	-	-	-
6.	Mrs. S.P.Khedkar	01	04	-	-	-	-
7.	Mr. B. K. Bodkhe	02	03	-	-	-	-
8.	Mrs. A.P.Kale	01	05	-	-	01	-
9.	Mrs. S. S. Raskar	05	-	-	-	-	-
10.	Mr. G S Pole	01	01	-	-	-	-
11.	Ms. P K Gawande	03	01	-	-	-	-
12.	Mrs. S.S. Shinde	02	02	-	-	-	-
13.	Mrs. S. S. Mane	03	02	-	-	-	-
14.	Ms. T. B. Mane	-	03	-	-	-	-
15.	Mrs. S. Keshari	02	02	-	-	-	-
16.	Ms. D. D. Ahir	04	05	-	-	-	-
17.	Mrs. A. Bharambe	01	02	-	-	-	-
18.	Mr. S. A. Hirve	04	03	-	-	-	-
19.	Mr. S. B. Shinde	02	04	-	-	-	-
20.	Ms. P. S. Khot	02	-	-	-	-	-

21.	Mr. M. A. Malwade	01	-	-	-	-	-
22.	Mr. S. Balwan	-	03	-	-	-	-
Department of Mechanical Engineering							
1.	Dr. A. A. Keste	08	15	-	-	-	12
2.	Mr. V.N. Chougule	03	03	-	-	04	-
3.	Dr. S. S. Sarawade	03	07	-	-	-	-
4.	Dr. V. N. Raibhole	08	12	-	-	-	10
5.	Mr. A. Mitra	03	07	-	-	01	04
6.	Dr. S. H. Gawande	28	10	-	-	-	84
7.	Mrs. V. J. Sonawane	03	02	-	-	-	01
8.	Mr. S.P. Gadewar	01	02	-	-	-	-
9.	Mr. S. S. Jadhav	-	02	-	-	-	-
10.	Mr. A. R. Patil	04	02	-	-	-	03
11.	Mr. S. D. Wankhede	03	02	-	-	-	-
12.	Mr. K. A. Mahajan	04	05	-	-	-	-
13.	Mr. V. M. Suryavanshi	01	03	-	-	-	-
14.	Mrs.S.J. Chikhale	01	0-	-	-	-	-
15.	Mr. B. D. Nandre	01	03	-	-	-	-
16.	Mr.R.N. Yerrawar	07	02	-	-	-	04
17.	Mr. N. N. Kumbhar	-	02	-	-	-	-
18.	Mr. H.S.Salave	01	02	-	-	-	-
19.	Mr. S. R. Kandharkar	01	01	-	-	-	-
20.	Mr. C. B. Meshram	02	-	-	-	-	-
21.	Mr. S. P. Patil	01	-	-	-	-	-
22.	Mrs. P. R. Mugdum	01	-	-	-	-	-
23.	Mr. V. R. Varude	01	-	-	-	-	-
24.	Mr. S. S. Jadhav	-	01	-	-	-	-
25.	Mr.P. B. Biradar	-	01	-	-	-	-
26.	Mr. B. R. Pujari	-	01	-	-	-	-
27.	Mr V.V. Thopate	01	01	-	-	-	-
28.	Mr. P. S. Pandure	02	01	-	-	-	-
29.	Mr. A. A. Patil	02	02	-	-	-	-
30.	Mr V. D. Nandan	01	01	-	-	-	-
31.	Mr. A. A. Chougule	-	02	-	-	-	-
First Year Engineering							
1.	Dr. D. S. Adkar	03	08	-	-	02	02
2.	Mrs. A. S. Purandare	-	02	-	-	-	-
3.	Mrs. M. Vijayalaxmi	04	04	-	-	-	-
4.	Dr. S. B. Sharma	08	-	-	-	-	-
5.	Mrs. A. R. Prayag	-	03	-	-	-	-

6.	Mrs. S. S. Kulkarni	01	01	-	-	-	-
7.	Dr. M. V. Vaishampayan	10	02	-	-	-	206
	Library						
1.	Mr. A. S. Sonawane	01	06	-	-	-	-

3.4.4 Research awards and recognition received from reputed professional bodies and agencies, nationally and internationally.

- Dr. S. P. Narote received Best Teacher award under professional category from University of Pune for the year 2013-14.
- Dr. V. N. Raibhole received best paper presentation award in ICPEE 2012 Phuket, Thailand the year 2012.
- Dr. Ahmed Khan has received best Teacher award from Government of Pondechary in 2011.
- Dr. M. P. Dale received best paper award in National Conference at TPCT's College, Osamanabad and in International Conference at Govt. College of Engineering, Aurangabad in the year 2010.
- Dr. S. H. Gawande received best paper award in ICCAE-2010 at Singapore the year 2010.
- Mrs. S. K. Wagh received best paper award in International Conference ICSCI 2008 at Hyderabad. Andhra Pradesh in the year 2008.
- Mrs. P. P. Mane received best paper award in ISTE National Conference at BIT, Tamil Nadu in the year 2007.
- Dr. S. P. Narote received best paper award in International conference ADCOM 2006 at NIT in the year 2006.
- Dr. S. P. Narote received best paper award in International conference in ICSCI 2005 at Hyderabad in the year 2005.
- Mrs. R.A Khan received best paper award in National Conference CISCON 2004 at Manipal Institute of Technology in the year 2004.

3.5 Consultancy

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

The Institute strongly believes in establishing a bond with the industry for the purpose of inclusive growth

System: The Institute encourages the signing of Memorandum of Understanding with leading industries so as to bridge the gap between academia and industry.

- To invite experts from the industry to share their experiences on industrial trends and practices.

- To offer consultancy services to the industry.
- To produce Engineers with Entrepreneurship skills.

Strategies:-

- Conduction of Workshops in collaboration with industry.
- Arranging industrial visits for students.
- Organizing Entrepreneurship skill development Programmes for students and faculties.
- Identifying emerging trends and inviting experts from the industry to interact with students.
- Offering Industry oriented and customized certification Programmes to address the growing need of IT professionals in the country.

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

The Institute promotes consultancy works to be carried out with outside agencies/industries so as to provide solution to industrial problems through sharing of expertise.

Policy:

- The revenue generated through consultancy would be used in some ratio for the betterment of the Institute.
- Consultancy work should not affect the instruction delivery process.
- Expertise of faculty undergoing training would be used for consultancy.
- Financial revenue generated from consultancy work would be used for R&D and incidental expenses.
- Individuals or Departments may also initiate and take up consultancy work after taking approval of the (RDC) through the Head of the concerned Departments. The report of Department and the report of the individual Consultancy projects will be signed by the Individual Faculty.
- Faculty involved in such consultancy work would be permitted to use college resources.
- The fund received from sponsoring industry/agency would be disbursed amongst the Investigator and other staff involved in the project with a nominal amount retained for college facilities.
- Grant may also be sanctioned to faculty members for developing research infrastructure.

Expertise advocated and publicized in the following manner:

- Institute encourages faculty members with adequate research experience for providing consultancy to industry.
- Training and Placement cell explores the possibility of collaboration with industry during interactions with various industries.
- The concerned faculty members are granted on-duty leave while their consultation work is underway.

- Major areas of expertise are advertised through the college website in the departmental section and also through technical events/Programmes.

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

Institute encourages the staff to utilize their expertise and available facilities for consultancy services in the following ways:

- Faculty members who are expert in specific fields are encouraged by reducing their academic and administrative work load while executing consultancy works with the industries.
- Faculty members are encouraged to obtain consultancy work through their personal contacts and visits to industries.

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

The college has signed number of MoUs with different industries for technology transfer. The details of revenue generated by the department are enlisted in the table below.

Sr. No.	Revenue Generating Activities	Amount Received in Rs	Year
1.	Linux Training	14,500/-	2014-15
2.	Conduction of Practicals on Boiler Plant for other college Students	15,000/-	2014-15
3.	Automobile Design & CAD Development by ZEST Technologies	12,500/-	2015-15
4.	CCNA Training	37,000/-	2014-15
5.	CCNP Training	17000/-	2014-15
6.	CCNA Training	30,000/-	2013-14
7.	TCS online	3,02,299/-	2013-14
8.	Attest Testing Services Gate Forum Online Exam	185073/-	2013-14
Total Revenue Generated		585872/-	2013-15

Sr. No.	Revenue Generating Activities	Amount Received in Rs	Year
1.	Pearson VUE Test Centre	Microsoft- Rs 350 per student Cisco- Rs 180 per student	2014-15
2.	Linux Eaglet Pvt. Ltd.	Rs. 500 per student	2013-14
3.	RS Networks	Rs 1000 per student	2013-14

3.5.5 What is the policy of the institution in sharing the income generated through consultancy and its use for institutional development?

Policy:

- The revenue generated through consultancy would be used in some ratio for the betterment of the Institute.
- Consultancy work should not affect the instruction delivery process.
- Expertise of faculty undergoing training would be used for consultancy.
- Financial revenue generated from consultancy work would be used for R&D and incidental expenses.
- Individuals or Departments may also initiate and take up consultancy work after taking approval of the (RDC) through the Head of the concerned Departments. The report of Department and the report of the individual Consultancy projects will be signed by the Individual Faculty.
- Faculty involved in such consultancy work would be permitted to use college resources.
- The fund received from sponsoring industry/agency would be disbursed amongst the Investigator and other staff involved in the project with a nominal amount retained for college facilities.
- Grant may also be sanctioned to faculty members for developing research infrastructure.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

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

The Institute believes in inculcating a strong sense of moral and social values in its students. A number of activities are organized by the Institute for contributing to society.

NSS: The college has a very active and enthusiastic NSS team that regularly organizes Blood donation camps each year in collaboration with Sadhu Vaswani Mission's Budhrani Hospital's blood bank and Acharya Anandrishiji Hospital's Blood bank. More than 300 students donated blood and participated in this camp. The NSS team has taken part in many Gram Swach Abhiyans and held awareness Programmes to discuss social issues. Poster Exhibition for Environmental Awareness was arranged for students of the college by NSS.

National Anthem: The Institute strongly believes in instilling a sense of patriotism in the staff and students. This is achieved by playing the national anthem every day with all staff and students standing up respectfully for the Anthem.

Awareness Programme: Such as Safety measures to be followed during usage of LPG cylinder for domestic as well as for commercial purpose was arranged for students of the college.

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

A student record file is maintained for all the students at the departmental level which includes all necessary details of the students, including their personal details, performance in technical and cultural events. This ensures a proper tracking mechanism of student.

The various activities involving students which promote citizenship are as follows:

- The Institute is committed to attract students for participating in various social activities like NSS, blood donation, social awareness Programmes, by ensuring consistent encouragement and motivation.
- The student committee members of NSS are appointed through interviews and monitored by senior faculty members.
- NSS training camps are conducted for students where students promote awareness about issues related to
 - Women empowerment
 - Importance of education
 - Formation of trenches for rain water harvesting.
- The Institute has motivated the students to maintain a plastic free campus by banning the use of plastic on the campus.

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

Stakeholders such as Students, Parents, faculty members, University and the society are critical elements of the education system that decide the overall performance and quality of the institution. For smooth functioning of the Institute and to cater to the competitive environment, it is mandatory that certain processes be laid down in order to establish effective linkages between these elements, thereby contributing to the overall improvement in the existing system. In order to address these issues, following steps are undertaken at the Institute level:

Certain forms and formats have been designed to collect feedbacks from the stakeholders. This includes Alumni feedback form, Course exit form, student feedback form etc.

During Alumni meets Alumni feedback is taken. Any suggestions given by the Alumni are analyzed and suitably implemented. Feedback is also collected from companies (who recruit students through campus placements). This feedback is discussed in meetings of Training and Placement (T & P) cell and shortcomings are addressed.

Student feedback for the respective course is conducted twice in each semester. At the end of the Programme an exit survey is conducted for the final year students.

Additionally, other assessment mechanisms such as Placement survey, Result analysis, and feedback analysis are also carried out simultaneously.

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

Every academic year various extension and outreach Programmes are planned and executed. Few of the organized Programmes are:

- Blood donation camp
- Awareness Programme
- Poster exhibition for Environmental Awareness
- Women's Day
- Teachers Day
- Engineers Day
- NSS Camp
- Tree plantation

These Programmes help our students to enrich their body and mind, inculcate the spirit of social service towards society. For this purpose, specific budget is allocated.

Department of Computer Engineering

Academic Year	Name of Activity	Organizing Committee member	Targeted Audience	Purpose	Budget and Expenditure (Rs)
2014-15	Guest Lecture	Mrs. A.P. Kale	Computer Students	Interaction with outside world	28900
	Project	Mrs. S.P. Khedkar	BE Computer	Examination	15000
	NAAC Expert Lecture	Mrs. R.A. Khan	MESCoE Staff	Awareness of NAAC	4000
	Workshop (Python)	Mr.B.Y. Pawar	SE Computer	Interaction with outside world	2500
	Day Celebration	Ms.P.S. Khot	MESCoE Staff	Cultural Activity	2000
	Workshop (Mobile Computing)	Mrs.P.R. Manaria	BE Students	Interaction with outside world	18000

2013-14	Day Celebration	Mrs.A.P. Kale	MESCOE Staff	Cultural Activity	1000
	Guest Lecture	Mr. B.K.Bodkhe	Computer Students	Interaction with outside world	5300
	Industrial Visit	Mr. B.K.Bodhke	TE & BE Computer	Industry Institute Interaction	24600
	ACE(Digital Renaissance)	Mr. G.S.Pole	Computer Students	Industry Institute Interaction	10000
	RACE-14	Mrs.R.A. Khan	Research Scholars	To bring together Engineer, Researcher and Scientists in the domain of interest	23100
	Workshop (CRTINS-13)	Mrs.S.K. Wagh	Computer Students	Interaction with outside world	19295
	BE Project	Mrs.S.K. Wagh	BE Computer	Examination	23000
2012-13	Guest Lecture	Mr.N.L. Chauraiya	Computer Students	Interaction with outside world	972
	Seed Info Tech	Ms.R.M. Wahul	Computer Students	Industry Institute Interaction	55250
	RACE-13	Mrs.S.K. Wagh	Research Scholars	To bring together Engineer, Researcher and	7500

				Scientists in the domain of interest	
	ACE	Mr.B.K. Bodhke	Computer Students	Industry Institute Interaction	42000
	Astitva	Mr.B.K. Bodhke	Computer Students	Cultural Activity	1753
	RACE-13	Ms.R.M. Wahul	Research Scholars	To bring together	50000
	RACE-13	Ms. Vaishali Kamble	Research Scholars	Engineer, Researcher and	13400
	RACE-13	Mr.B.K. Bodhke	Research Scholars	Scientists in the domain of interest	43680
	Guest Lecture	Mr.B.K. Bodhke	Computer Students	Interaction with outside world	952
2011-12	BE Project	Mrs.S.S. Badala	BE Students	Examination	2000
	Guest Lecture	Mrs.J.R. Pansare	BE Students	Examination	290
2010-11	BE Project	Mr.H.G. Muknak Mrs.S.K. Wagh	BE Students	Examination	21000
	Guest Lecture	Mrs.J.R. Pansare	BE Students	Interaction with outside world	1500
	QTP Workshop	Mrs.N.F. Shaikh	BE Students	Interaction with outside world	8000
	Workshop	Ms. Vaishali Kamble	BE Students	Interaction with outside	700

				world	
	Day Celebration	Mrs.J.R. Pansare Mrs.S.P. Derore	MESCoE Staff	Cultural Activity	1100
	Robo Club	Mrs.N.F. Shaikh Mr.V.M. Suryawanshi	MESCoE Students	Interaction with outside world	40000
2009-10	Project	Mrs.S.K. Wagh	BE Students	Examination	1000
	Workshop	Mrs.N.F. Shaikh Dr.A.R. Khan Ms.R.M. Wahul	BE Students	Interaction with outside world	13000

Department of E&TC Engineering

Academic Year	Name of Activity	Organizing Committee member	Targeted Audience	Purpose	Budget and Expenditure (Rs)
2014-15	Workshop	Mrs. Y. M. Ajgar	TE staff	Training on TE Syllabus	2250
	ACCET - 15	Dr. M. P. Dale	Researcher Scholars, UG & PG Students	To bring together Engineer, Researcher and Scientists in the domain of interest	
	Day Celebration	Mr. P. M. Pardhi	MESCoE Staff	Cultural Activity	3800
	Parents Meet	Mrs. S.M.Joshi	Students, Parents & staff	To discuss performance of	885

				students	
	Student Development Programme	Mrs. N. Masood	SE students	To develop & improve technical & non-technical abilities	135000
	Analog Competition	Dr. S.P.Narote	E&TC Students	To develop & improve technical abilities	11597
2013-14	Workshop	Mr. L. K. Guttedar	TE & BE Students	Interaction with outside world	52453
	Day Celebration	Mr. L. K. Guttedar	MESCoE Staff	Cultural Activity	8200
	Soft Skill Training	Mr. S.S.Pansare	SE Students	personality development of the students	16000
	Guest Lecture	Dr. M. P. Dale Mrs. S.M.Joshi Mr. S. V. Deshpande	E&TC Students	Interaction with outside world	4152
	Industrial Visit	Mr. L. K. Guttedar	TE & BE Computer	Industry Institute Interaction	37802
	ACCET - 14	Dr. M. P. Dale	Researcher Scholars	To bring together Engineer, Researcher and Scientists in the domain	71645

				of interest	
	FDP &SDP	Mrs. Nabhega	Students & staff	To develop & improve technical & non-technical abilities	326172
	Parents Meet	Mr.S.S. Pansare	Students, Parents & staff	To discuss performance of students	360
	ETSA's EPSILON 2014	Mrs.U.V. Bomble Mrs.S.M. Joshi	All Engineering students of MESCoE as well as students of other colleges	To develop & improve technical & non-technical abilities of students	41356
2012-13	Guest Lecture	Mr. P.B. Chopade	E&TC Students	Interaction with outside world	2000
	Workshop	Mr. L. K. Guttedar	T.E. & S.E. students	Interaction with outside world	37763
	Accreditation Workshop	Dr. M.P.Dale	MESCOE staff	NBA review	8480
	Industrial Visit	Mr. L. K. Guttedar	T.E. & S.E. students	Industry Institute Interaction	20210
	Parent's meet	Mrs.U.D. Dattasamje	E&TC students	To discuss performance of	360

				students	
	CII competition	Mr. P.B. Chopade	E&TC students	Interaction with outside world	25662
	Day Celebration	Mr. P.N.Kota	E&TC students & staff	Teacher's Day & women's day celebration	5473
	Robotics Competition	Mr. L. K. Guttedar	E&TC students	To develop & improve technical & non-technical abilities of students	6642
2011-12	Workshop	Mrs. N. Masood, Mr. P.B. Chopade	MESCoE E&TC staff & faculties from other colleges/ industries	Interaction with outside world	73798
	Faculty Training Programme	Mrs. N. Masood,	E&TC staff	Interaction with outside world	1013
	Guest Lecture (Industrial Management & Artificial Intelligence)	Mr. P.H.Mohite	T.E. & B.E. students	Syllabus discussion	5898
	Astitiva	Mr. L. K.	E&TC	Extra-	4722

		Guttedar	students	curricular activities for students	
	SAGA	Mrs. K.S.Tiwari	MESCoE students	To develop & improve technical & non-technical abilities of students	41450
	Industrial Visit	Mrs. Y.M.Ajgar	SE & TE Students	Industry Institute Interaction	4427
	Day Celebration	Mr P.N.Kota	E&TC students & staff (ladies)	Women's day celebration	2320
2010-11	Workshop	Mrs.P.P. Mane (Roboclub), Mr. P.B. Chopade (MATLAB)	TE Students	Interaction with outside world	7375
	Day Celebration	Mrs.Anuja Phadke	E&TC students & staff (ladies)	Women's day Guest Lecture	745

Department of Mechanical Engineering

Academic Year	Name of Activity	Organizing Committee member	Targeted Audience	Purpose	Budget and Expenditure (Rs)
2014-15	Industrial Visit	Mr. H. S. Salave, Mr. K. A. Mahajan	TE & BE Mechanical students	Industry Institute Interaction	700
		Mr. S. P. Gadewar	SE Mechanical		

2013-14		Mr. V. M. Suryawanshi and Mr. V. R. Varude	Students		
		Mr. S. R. Kandharkar Mr. C. B. Meshram and Mr. V. V. Thopte	BE Mechanical		55920
		Mr. K. A. Mahajan and Mr. S.P Patil	TE Mechanical		700
	Industrial Visit	Mr. A.A. Chaugule & workshop Staff	SE Mechanical Students	Industry Institute Interaction	-
		Mr. S. R. Kandharkar, Mr. K.A. Mahajan and Mr. H.S. Salave	BE Mechanical Students		-
		Mr. K. A. Mahajan and Mr. S. P. Patil	TE Mechanical Students		700
		Mr. S.D. Wankhede and Mr. S.S. Jadhav	TE Mechanical Students		-
		Mr. B.D. Nandre and Mr. V.M. Suryawanshi	SE Mechanical Students		400
		Mr. H.S. Salave & Mr. S.D. Wankhede	TE Mechanical Students		400
		Mr. H.S. Salave & Mr. S.D. Wankhede	TE Mechanical		400
		Mr. S.S. Jadhav, Mr. S.D. Wankhede	TE Mechanical		-

		Mr. R. N. Yerrawar, Mr.H.S.Salave, & Mr.V.M. Suryawanshi			
		Mr. B.D.Nandre Mr.H.S.Salave Mr.V.M.Suryawanshi & Mr. N .N. Kadli with Mr. Anil Giri, Head-HR, Personnel & Admin	S.E. Mechanical		-
	BE Projest	Mr. A. Mitra Mr. S.V. Deshpande	Mechanical Engineering Student And E&TC Students	Examination	26418
	Guest Lecture	Mr. R N Yerrawar	BE Mechanical Total=108	Opportunities in Higher Education	-
		Mr. R N Yerrawar	TE Mechanical Total=92	How to crack GATE examination	-
		Mr. R N Yerrawar	SE & TE Mechanical . Total=220	Collaborative Innovation through product life cycle management	-
		Mr. R N Yerrawar	TE Mechanical Total=101	Career in Marine Engineering	-
		Mr. R N Yerrawar	TE Mechanical	Embedded system	-

2012-13			Total=52	& robotics	
		Mr. R N Yerrawar	TE Mechanical Total=52	Forging technology in automotive sector	500
		Mr. K A Mahajan	TE Mechanical Total=72	Metrology	1500
		Mr. S R Kandharkar	All BE students From all Branches	Competitive exams and Civil Services Exam	500
		Mr. R N Yerrawar	TE & BE Mechanical Students	Computational Fluid Dynamics.	700
	Industri	Mr. H.S.Salave & Mr. B.D. Nandre with Mr. Ranjeet Patil	B.E Mechanical	Industry	-
		Mr. B.D.Nandre , Mr.H.S.Salave Mr.V.M. Suryawanshi & Mr. N .N. Kadli with Mr. Anil Giri, Head-HR, Personnel & Admin	S.E. Mechanical		-
		Dr. S. H.Gawande, Prof. Mrs. V. J. Sonawane & Mr. A.Mitra	T.E Mechanical		-
		Mr. K. A. Mahajan & Mr.	T.E Mechanical		400

	al Visit	S.P.Gadewar		Institute	
		Mr. H. S. Salave, Prof. V. M. Suryawanshi with Mr. Hole, Plant operator	T.E Mechanical	Interactio n	400
		Mr. R.N.Yerrawar & Dr.S.H. Gawande	B.E. Mechanical		15000
		Mr.K.A. Mahajan Mr.S.P. Gadewar	T.E. Mechanical		400
		Mr. K.A.Mahajan	T.E. Mechanical		400
		Dr.V.N. Raibhole Mr.S.D. Wankhede	T.E. Mechanical		400
		Dr. V.N.Raibhole Mr.A.G. Brahmapurkar	B.E. Mechanical		5000
		Mr. S.S. Jadhav and Mr. B.D. Nandre	S.E. Mechanical		400
		Dr.V.N. Raibhole Mr.S.P. Gadewar	T.E. Mechanical		400
	Guest Lecture	Mr. R. N. Yerrawar	BE Mechanical	Completi ng BE project by CAD/CA M/CAE Tools	-
		Mr S P Gadewar	SE Mechanical	Upcomin g Trends in Technolo gy &	1000

2011-12				Innovations through PLCM	
		Mr S P Gadewar	SE Mechanical	Entrepreneurship	2500
		Mr S P Gadewar	SE Mechanical	Vibration Problems in Mechanical Engineering	4500
	Industrial Visits	Mr. S. S. Jadhav Mr. V. M. Suryawanshi	SE Mechanical -II	Industry Institute Interaction	-
		Mr. S. S. Jadhav Mr. V. M. Suryawanshi	SE Mechanical -I		-
		Mr. S. S. Jadhav Mr. S. D. Wankhede	TE Mechanical		400
		Ms. S. J. Chikhale Mr. S. D. Wankhede	SE Mechanical		400
		Mr. V. N. Chougule Mrs. V. J. Sonawane	BE Mechanical		400
		Mr. V. N. Chougule Mrs. V. J. Sonawane Mr. K. A. Mahajan	TE Mechanical		600
		Dr. V. N. Raibhole Dr. A. A. Keste	TE Mechanical		400

2010-11	Guest Lecture	Mr. Amol Bhramapurkar	TE, BE Mechanical	Carrier Opportunity in CAD/CAM/CAE/CFD	-
		Mr. S. P. Gadewar	SE, TE Mechanical	Collaborative Innovations through product life cycle management"	-
		Mr K A Mahajan	TE Mechanical	Industrial Metrology	-
		Mr S P Gadewar	BE Mechanical	Reliability Engineering	2000
	Robo Club	Mrs.N.F.Shaikh Mr.V.M.Suryawanshi	MESCoE Students	Interaction with outside world	40000
	Industrial Visit	Mr. A. Mitra Mr. K. A. Mahajan	SE Mechanical	Industry Institute Interaction	400
		Mr. A. R. Patil	SE, BE Mechanical		200
		Dr. V. N. Raibhole Mr. V. M. Suryawanshi	TE Mechanical		800
		Mr. Mrs. V. J. Sonawane Mr. S. S. Jadhav	TE Mechanical		400
		Dr. V. N. Raibhole Mr. V. M.	TE Mechanical		400

2009-10		Suryawanshi			
		Mr. K. A. Mahajan Mr. S. P. Gadewar	TE Mechanical		400
		Dr. V. N. Raibhole Mr. V. M. Suryawanshi	BE Mechanical		14400
	Guest Lecture	Mr SH Gawande	TE, BE Mechanical	Design of Machine Elements & Systems by FEAST software, Mumbai.	-
		Dr. V N Raibhole	TE Mechanical	Energy Conservation Possibilities in Refrigeration & Air Conditioning	1500
		Dr. V N Raibhole	SE, TE, BE Mechanical E&TC, Comp	Energy Conservation Possibilities in Thermal & Electrical Utilities	-
		Dr. V N Raibhole	BE Mechanical	Nuclear Power Plant	1300
		Dr. V N Raibhole	TE, BE Mechanical	Renewable Energy Technologies	1300
		Dr. V. N.	T.E.	Industry	-
	Industri	Dr. V. N.	T.E.	Industry	-

	al Visit	Raibhole Mr. S. S. Jadhav	Mechanical	Institute Interactio n	
		Mr. S. S. Jadhav Mr. S. D. Wankhede	SE Mechanical		400
		Dr. V. N. Raibhole Mr. K. A. Mahajan Mr. D. S. Jawale Mr. V. M.Suryawansh i	BE Mechanical		13000
		Mrs. V. J. Sonawane Mr. D. S. Jawale	TE Mechanical		400
		Dr. V. N. Raibhole Mr. A. Mitra Mr. V. M. Suryawanshi	TE Mechanical		600
		Mrs. V. J. Sonawane Mr. S. S. Jadhav	TE Mechanical		400
		Dr. V. N. Raibhole Mr. V. M. Suryawanshi	TE Mechanical		400

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

The college organizes various activities through NSS and other forms of community development services. During induction Programmes coordinators of the extension activities interact with the students and discuss about the benefits and scope of the activities. The information about the proposed activities is disseminated on the college notice board, Academic calendar, circulars, web notifications and also by word of mouth.

Conduction of NSS training camps: NSS training camps are conducted for students. This imbibes self-discipline, self-initiative and strengthens the sentiment of nationhood.

Students are encouraged to participate in street plays in order to spread social messages.

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?

As a part of NSS activities, College had arranged NSS Camps to visit Bhamburde Village, Tal: Mulsi in the year 2011-12, 2013-14 and 2014-15 & Bhavadi village Tal: Haveli in year 2009-10.

Surveys were conducted by students during these camps where students visited homes and schools in the villages.

Following surveys were conducted during the visit:

- Number of members including children in a family.
- Educational qualification of family members.
- Facilities available in the local school.
- Drinking Water facility to villagers and in school.
- Medical facilities.
- Cleanliness of village.

As a social initiative, the Institute donated books and clothes to the under-privileged sections of the society, during the camps.

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.

Engineers are the backbone of a nation. They must be aware of the weaknesses and strengths of a society and what reforms are required to evolve as a better society. The objectives of the extension activities organized by the institution is to sensitize students with respect to critical issues concerning the society and environment such as poverty, social injustice, gender bias, pollution evils and the corrective measures to counter them. This makes them aware of their roles to be played in the society. Hence, all these extension activities groom their personality and enable them to take part in the Nation building process.

Each engineering department has a technical society such as SAE India, ISTE. These extension activities boost the overall confidence of students, instill a sense of leadership and develop team building skills.

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

The institution is roping in communities to actively participate in all the extension activities. This has contributed to both community- institution networking and development of institute. The institution organizes various Activities like:

- Blood Donation Camps
- Cleanliness Drives
- Tree Plantations
- Visits to rural areas and spreading awareness about social issues such as the dowry system, female Feticide and Environment protection to name a few.
- Educating the youth about following traffic rules.

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.

Constructive relationship with other institutions has been developed through following measures:

- Blood donation camps are organized in association with Sadhu Vaswani Mission's Budhrani Hospital and Acharya Anandrishiji Hospital.
- Students from various departments actively participate in cultural Programmes at the inter-collegiate level.
- MoUs signing with reputed companies and groups are carried out. This also provides a platform for relationship building.

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.

The dedication and commitment of National Service Scheme Technical Cell of MESCoE was recognized and appreciated, with the *Indira Gandhi National Appreciation Certificate*.

A student Mr. Ganesh Daphal of the Institute had been awarded as the Best NSS volunteer for the year 2011-12.

The Award was presented by *Hon. President of India, Shri. Pranab Kumar Mukherjee* at the Award Ceremony held at Rashtrapathi Bhavan, New Delhi on Nov 19th 2012.



3.7 Collaborations:

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 Institute has the following industry academia collaborations:

- Department of Mechanical Engineering:
 - KUKA Robotics
 - National Instruments
 - BAKER Gauges India Pvt. Ltd
 - ZF Steering Gear India Pvt. Ltd
- Department of Computer Engineering:
 - Seed Infotech Pvt. Ltd
 - Harbingers System Pvt. Ltd.
 - Zensar Technologies Ltd.
 - Graceful Growth Consulting (India) Pvt. Ltd.
- Department of Electronics & Telecommunication Engineering:
 - Trident Techlab Pvt. Ltd.(Texas Instrument Stellaris Lab)
 - Mitsubishi Electric India Pvt.Ltd.
 - Pearson
 - CDAC
 - Graceful Growth
 - Edgate Technologies & Texas Instruments
 - RS Networks

The Institute organizes various interactive sessions with experts from the industry and other research organizations by:

- Deputing faculty members for exposure to industrial practices
- In-plant training and industrial visits for students
- Guest lectures by industry experts
- Permissions to carry out experiments and training in reputed Institutes.

- Utilization of laboratories by research candidates of other institutions.
- Faculty members are deputed to Universities and Institutes of higher learning for attending refresher courses.

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 Institute has signed MoUs with external organizations to conduct activities like Training, Placement, Development of training facilities for students, Guest Lectures, Participation in technical events and Advanced Learning.

Details on the MoUs with industries are as follows.

Sr. No.	Type of Lab	Year of Establishment	Sponsored Company	Capacity/ Infrastructure
1.	KUKA-MESCoE industrial robotics training	2014	Joint Center established by KUKA Robotics India (P) Ltd And MESCoE	The centre is equipped with a standard training cell, comprising of KUKA KR-16 Industrial Robot with required Auxiliary equipments. This training cell is capable of performing multitude of operations used for welding, painting, gluing and other essential industrial operations used by the automobile, food & beverages, packaging and other manufacturing / Production industries.
2.	MESCoE-NI lab VIEW academy	2014	Joint Center established by National Instruments Systems (India) Pvt. Ltd. and MESCoE	NI data Acquisition Lab introduces students to state-of-the-art Data Acquisition techniques & the concept of virtual instrumentation – the powerful combination of flexible software & modular hardware which

				helps to integrate theoretical concepts with real-world applications.
3.	MESCoE – CDAC	2014	Joint Training Center established by CDAC and MESCoE	Under this collaboration CDAC has assured to train the concerned faculty nominated by MESCoE in respective subject domain. Students are being trained for Embedded and VLSI.
4.	MESCoE - AMITEC	2014	Joint Center established by AMITEC and MESCoE	SDR- SDR exhibited a marvelous platform to those in research in signal processing and in academia. An Amitec Laboratory is set up in the Institute to create a Centre Of Excellence in Telecommunication. . This venture will help the Institute in setting up an Industry Institute Partnership Cell in the college.
5.	MESCoE – Pearson	2014	Exam Center established by Pearson and MESCoE	Pearson conducts exams for Microsoft and CISCO through which revenue is generated for the college.
6.	MESCoE – CCNA	2014	Joint Training Center established by RS Networks and MESCoE	Student training for CCNA by RS Networks has been initiated.
7.	MESCoE-	2014	Edgate	To develop mixed signal

	TEXAS instruments		technologies and Texas Instruments	processing laboratory.
8.	MESCoE-Trident Techlabs Pvt. Ltd. (Texas Instruments Stellaris Lab.)	2013	Joint Center established by Trident Techlabs Pvt. Ltd. and MESCoE	The college has set up a laboratory which will be titled “Texas Instruments Stellaris Lab.” The Trident Techlab donated ten Texas Instruments Stellaris development kits based on TI platform to the college. Undergraduate final year students developed project titled “Mobile Attendance Recorder” for biometric based class attendance.
9.	MESCoE-Mitsubishi Electric India Pvt. Ltd., Gurgaon.	2013	Joint Center established by Mitsubishi Electric India Pvt. Ltd. and MESCoE	To further strengthen the commitment for enhanced Industry-Academia interaction, college has signed MoU with Mitsubishi Electric India Pvt. Ltd., Gurgaon. Under this collaboration MEI will provide training/automation courses, seminar/demonstrations on automation technology and products to the students nominated by MESCoE.
10.	Harbingers System Pvt. Ltd.	2014	Harbingers System Pvt. Ltd.	Harbinger will allow MESCoE students for technical guidance at their premises as per the mutually decided business hours between the parties. Sponsored

				projects for selected Students along with training and certification after successful completion of the projects.
11.	Zensar Technologies Ltd.	2014	Zensar Technologies Ltd.	Training for students is organized through a mix of virtual and physical classroom setups. Imparting soft skills training to the students.
12.	Seed Infotech Pvt. Ltd	2013	Seed Infotech Pvt. Ltd	Seed InfoTech shall provide training on technologies to the students of MESCoE as per the terms of this understanding. Seed InfoTech will help in evaluating and upgrading the laboratories of the college every semester.

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.

Interaction with eminent personalities from various reputed Universities and industries are very useful for the creation of establishing better academic facilities for staff and students. The Institute often interacts with industry people through industrial visits, seminars/Guest Lectures, workshops, conferences and placement. The Institute has signed MoUs with different industries. Many reputed industries visit the institution for placements.

The Institute has organized Entrepreneurship development workshop on 23/04/2014 & 24/04/2014 sponsored by DST New Delhi. These particular events were aimed at helping students understand and adapt to the changes between campus life and corporate life. The organized EDPs and EACs were a platform where experts from the Industry were invited in order to guide the students by giving an insight of their experiences, offering them

encouragement, mentoring, and invaluable suggestions to show them the way forward.

Acknowledging our efforts both industry and government agencies have made strategic tie-ups with our educational Institution. A partnership with government and industry enhances our Institute's research, education, and outreach mission. Such partnerships enable the Institute to investigate new trends and technologies, and to launch new initiatives. Partners provide valuable funding, access to enhanced educational opportunities through visiting lecturers, workshops, industrial visits and special courses.

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

Following table highlights the names of eminent scientists who contributed to the various events (Guest Lectures, Seminars, Workshops, and Conferences etc.)

Sr. No.	Year	Eminent professors/ persons	Workshops and conferences organized by the Institute
Department of Mechanical Engineering			
1.	2014	Dr. A.S. Padalkar Dr. G.S. Tasgaonkar Mr. Narsinma Gupta. Mahindra Engineering Pune Mr. Mehendale Enrich solutions Pune	RDME-2014
2.	2013	Dr. Balasubramham, (Scientist, BARC)	RDME-2013
3.	2011	Dr. Amalnerkar, (Executive Director, Centre For Material For Electronics Technology)	RDME-2011
Department of Computer Engineering			
1.	2015	Prof. Parag Kulkarni (Director, Anomaly Solutions, Pune)	RACE-2015

2.	2014	Dr. Sarang Joshi (Chairman BOS COMP ,UoP)	FDP DMSA - 2014
3.	2014	Prof. G.V. Garje (Chairman BOS IT ,UoP) Mr. Hemant Ambikar, (Sr. Principal Engineer, Symantec India) Mr. Hemant Ambikar Dr. Aditya Abhayankar, (Department of Technology University of Pune)	RACE-2014
4.	2013	Dr. S. N. Mali (Principal SIT Narhe) , Dr. Rajesh Ingle (Professor, PICT, Pune)	Current Research Trends in Information and Network Security – 2013
5.	2013	Dr. S. N. Mali (Principal SIT Narhe) Mr. Gajanan Namjoshi (Delivery Head, HCB - Engg. Product Management, HSBC Pune)	RACE-2013
6.	2013	Dr. Sachin Deshpande Mr. S. Mirashi	FDP-Entrepreneurship Development
7.	2012	Dr. Parag Kulkarni (CEO, Eklat Re-search) Dr. Sachin Lodha (TCS) Dr. Priti Rege (COEP)	Current Research Trends in Computer Engineering – 2012
Department of Electronics & Telecommunication Engineering			
1.	2014	Mr. Sunil Mirashi, Director, Devine Corporation	Entrepreneurship training planning
2.	2014	Mr. Shailesh Kumar,	Project equipment

		Director, Kristech Automation	supplying
3.	2014	Mr. Sanjay Belhi, Director, Proto Control Instruments Pvt. Ltd.	Guidance on entrepreneurship
4.	2014	Mr. Amit Sharma, CEO, Amitec Electronics, Delhi	SDR workshop
5.	2013	Mr. Ganesh Toke, Project Head (CEO), Prism Automation	PLC training
6.	2013	Mr. Ramesh Borania, Training Head, Mitsubishi Electric Pvt. Ltd.	Automation training
7.	2013	Mr. Nitin Lokhande, Director, ETA	Seminar on automation
8.	2013	Mr. Avinash Nagpure, Engineer FA Centre, Mitsubishi Electric Pvt. Ltd.	PLC workshop
9.	2013	Mr. Shahu Jadhav , Director, Candor Minds	First year Engineering study Application

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 Institute has signed MoUs with

- BAKER Gauges India Pvt. Ltd
- ZF Steering Gear India Pvt. Ltd
- Seed Infotech Pvt. Ltd
- Mitsubishi Electric India Pvt. Ltd.
- Edgate Technologies and Texas Instruments
- RS Networks
- Graceful Growth
- Harbingers
- Green Triz

- IFS Technologies
 - **Curriculum development/enrichment:**
 - Analog Circuit Design & Simulation Competition arranged by EdGate Technologies and Texas Instruments, Bangalore on Sat. 27th Sept 2014.
 - Under Institute Interaction, CII National selection for the Worldskills International Competition 2013 Leipzig, Germany hosted by the Institute on analog circuit design & debugging..
 - Workshop and Training Programmes have been arranged under MoUs & collaboration with Industries.
 - **Internship/ On-the-job training:** No
 - **Summer placement:** Yes,

Students have got opportunities in Campus Drive through the following Recruiters like Accurate Gauging, ADWEB, Amura Tech, Atos, Aurin Pro Sena, Bitwise, Bosch, Bosch, Bridgestone, Crest, HSBC, Ideas, Infosys, Jonam Engg. Tech. Pvt. Ltd., Krawler Infosystems, KUKA Robotics, L&T, Lingua Next, QED, Quick Heal, Sanmar, Quinnox, Siemens, Symantec, Syntel, Talent Beat, Crest Premedia, Deloitte, Enzigma, EQMSOL, Eternus Solutions, Fiserv, Flextronics, MAQ Software, Mithi Software, Mphasis, Navis, Nitor, NTT Data, Optra Systems, Opus Software, Persistent, Pubmatics, TCS, Tech M, Thoughtworks, Vag Valves, Volkswagen, Web Tech Developers, Wirtgen India, Zensar Technologies and Flipkart.
 - **Faculty exchange and professional development:** No
 - **Research:** Yes
 - **Consultancy:** Yes
 - **Extension:** Yes
 - **Publication:** Yes
 - **Student Placement:** Yes
 - **Twinning Programmes:** No
 - **Introduction of new courses:** Yes

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

Efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations:

- Planned and established linkages/collaborations related to academic and research activities for students and faculty members in various specializations.
- Signing of MoUs with leading industries.
- Inviting expertise from various industries for delivering Guest Lectures, key note address in Conferences, speaker in workshops and symposiums.

- Conducting joint technical Programmes and events with other organizations.
- Organizing industrial visits with the help of various collaborating agencies.
- It is proposed to establish Industry Institute Interaction cell in the Institute

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1. Physical Facilities

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

The Institute follows the norms provided by AICTE and Savitribai Phule Pune University for creating and enhancing the infrastructure that facilitate effective teaching and learning in proportion to the student strength in different streams. The Institute focuses on developing good and modern infrastructure like classrooms, laboratories, library with reading rooms, internet facility, parking facility, canteen, and hostel with mess for boys and girls in the campus. The Institute strives to create or enhance the infrastructure in view of a healthy, comfortable and technology based environment required for effective teaching and learning. The institution constantly and continuously expands and upgrades the required infrastructure facilities, in view of the changes of the University syllabus.

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.

Institute has an infrastructure in line with AICTE norms. The Institute has planned and constructed the infrastructure which facilitates the curricular and co-curricular activities. All the departments are fully equipped with the necessary infrastructure to meet the ever increasing requirements with adequate class rooms, seminar halls, tutorial rooms, laboratories and sufficient space for hosting all academic activities as shown below.

Infrastructure Facilities:

Infrastru cture facilities	Details	Required Number as per AICTE in Sq.Mts.	Available numbers in Sq.Mts.	Required Area in Sq.Mts.	Avail able area in Sq.M ts.
Academic Activities	Classrooms	24	24	1584	1705
	Laboratories	31	36	2046	2493
	Drawing Hall	01	01	132	132
	Seminar Hall	03	03	396	444
	Tutorial Hall	11	12	363	421
	Workshops	01	01	200	202
	Computer Center	01	01	150	163

	Library& Reading hall	01	01	400	450
	Total	73	79	5271	6010
Administ rative area	Principal office	01	01	30	34
	Board room	01	01	20	29
	Office	01	03	300	320
	Dept. office	03	03	60	64
	HOD cabin	03	03	30	30
	Faculty room	114	119	570	595
	Central store	01	01	30	30
	Maintenance	01	01	10	11
	Security	01	01	10	10
	Pantry of staff	01	01	10	10
	House kipping	01	01	10	10
	Exam controller office	01	01	30	32
	Placement office(old)	01	01	30	34
	Total	130	137	1140	1137
Amenities area	Boys common room	01	02	100	100
	Girls common room	01	02	100	100
	Boys hostel	Adequate	01	Adequate	1135
	Girls hostel	Adequate	01	Adequate	1135
	Cafeteria	01	01	150	172
	Stationary store room	01	01	10	12
	ATM	-	01	-	10
	First Aid/ Sick room	01	01	10	18
	Ladies & Gents toilets	Adequate	27	350	350
	Principal Quarter	Desired	01	150	180
	Guest house	Desired	01	30	40
	Sports/Gym	Desired	01	200	466
	Auditorium (Tata Assembly Hall)	Desired	01	400	744
	Total	5	41	1500	4462
	Circulation area			1978	3128

Laboratories/Workshops: Our institution has 36 well equipped laboratories of different departments. The Institute has Laboratories with state-of-the-art equipment's and machinery for the students to carry out practical courses, projects and research work. The Institute has a well-equipped workshop for conducting practicals.

The lists of major equipments available with the each department are as follows:

Department of Computer Engineering

Sr. No.	Name of Equipment	Quantity	Cost in Rupees
1.	89C51/RD2, Trainer Board with in-System Programing	5	21,600
2.	8051 kit Mini 51 PE Evaluation Board using P89v51RD2	12	64,800
3.	SDA-DAC Interfacing card using DAC08	6	14400
4.	STP 51+Motor Stepper Motor Interfacing Card	3	7,200
5.	TCS 51 Traffic Light Simulation Card	2	3,600
6.	SRL2 2 Relay Interface Card	2	3,600
Total			1,15,200

Department of Electronics and Communication Engineering

Sr.No.	Name of Equipment	Quantity	Cost in Rupees
1.	Power supply Falcon-PS302D, 5V &30V dual regulated variable.	08	54,768
2.	Arbitrary wave form	01	96,812
3.	DSO, Falcon 25MHZ	06	10,16,274
4.	DSO 100MHZ	1	80,064
5.	MSO 100MHZ	1	2,79,462
6.	Scintech20MHz, Oscilloscope 201	06	1,11,000
7.	Function Generator FG-1MD	12	84,096
8.	STK-PIC-18F-4520PIC trainer kit	15	1,44,144
9.	CRO,30MHZADROIT, CQ-5030,DUAL CH- CRO	09	1,23,795

10.	HLTPDT-07 Digital IC trainer kit	15	1,24,875
11.	Communication Toolbox, Image Processing Toolbox, Signal Processing Toolbox New Add-on Modules Control System Toolbox	30	4,49,807
12.	Sigma Make Mobile Phone Trainer Model, MOBILE100L	05	1,52,887
13.	AMITEC, Microtrip Antenna trainer ATS 20A	01	2,09,462
14.	Amitech STC 10 Base 5.8 Ghz C&S Band Satellite Comm. training kit	01	1,74,375
15.	Amitech Software Define Radio LAB SDR 04	02	20,47,500
16.	Adroit CQ-5030,30 MHz Dual Channel Oscilloscope	25	3,43,875
17.	CQ-5030,30MHZ, Analog	08	1,10,040
18.	AM Gn & Det, FM Gn & Det, AM Tr Trainer Model, FM Tr Trainer, RDM 100N Super Het Radio.	11	1,37,000
19.	Benchmark O.T.D.R	01	4,95,110
20.	Falcon Link	03	1,18,125
21.	8255 Educational Trainer Kit Dynamic-Study card	12	1,82,090
22.	Microwave Setup		1,18,095
23.	AMITC make Model, MWL05	01	2,53,125
24.	Kashtronica Sampling & rect PCM, ADM, BPSK, QPSK, FSK	10	1,32,030
25.	Oasis ARM-7 SPIRIT-II	06	91,350

	Development Board		
26.	Educational Practice Board for ARM 7LPC2148 and kits	13	1,17,000
27.	CORE EL TECHNOLOGY	10	2,21,550
28.	Spartan III Based DSP in VLSI Trainer	08	2,59,200
29.	DSP Development Board Scientech	05	3,34,175
30.	Analog PLC trainer Module	01	2,22,834
Total			82,84,920

Department of Mechanical Engineering

Sr. No.	Name of Equipment	Cost in Rupees
1.	Diesel Engine Test Rig	1,33,000
2.	Computerized Multi-cylinder Petrol Engine Setup	9,64,125
3.	Electronic Universal Machine with basic data software	4,78,125
4.	Brinell Hardness Tester	1,63,125
5.	Impact Testing Machine	1,17,000
6.	Vickers Hardness Tester	1,35,000
7.	Erichsson Cupping Tester	54,000
8.	Reciprocating Air Compressor Test Rig(Two stage)	61,500
9.	Bomb Calorimeter	53,000
10.	Solar Water Heater with tank	3,29,935
11.	Fully automatic Boiler	12,71,250
12.	Air Conditioning Test Rig	1,06,674
13.	Ice Plant Test Rig (30Kg/day)	61,000
14.	Hydraulic Trainer	1,05,539
15.	Gear Pump Test Rig	80,917
16.	1HP Pelton Wheel Turbine Test Rig	1,36,372.50
17.	5HP Kaplan Turbine Test Rig	4,06,980
18.	5HP Francis Wheel Turbine Test Rig	2,67,828
19.	FFT Analyzer	8,98,875
20.	Industrial Robot	25,90,062
21.	NI Hardware (data acquisition system)	15,91,065
22.	Steam Engineering Center: Boiler Test rig	15,50,000
Total		1,15,55,371

FE Department

Sr. No.	Name of Equipment	Cost in Rupees
1.	Power Supply Regulated dc 50-300V/30A	1,34,662
2.	Tacho Generator 3HP DC shunt motor	51,851
3.	3-Phase Induction motor 5HP couple to DC shunt generator	71,915
4.	Mitsubishi Project	4,00,000
5.	Online software	1,12,360
Total		7,70,788

Tutorial rooms: The Institute has 12 tutorial rooms for conduction of tutorials which ensure the continuous evaluation of students.

Seminar Hall: The Institute has a big auditorium called Tata Assembly Hall in the campus for conducting various activities. The College has two fully air conditioned seminar halls with LCD projectors, white boards and a public addressing system. Nearly 200 students can be accommodated in the seminar halls. These halls are regularly used for conducting seminars and conference at the college, state and national level. Students are encouraged for active participation in paper presentations and group discussions. The Institute has an additional seminar hall which is used for extra-curricular activities.

Co-curricular activities: The Institute regularly conducts a number of technical events. The events include activities such as technical quizzes, debates and robotics competition to name a few. Students actively participate in these events. In the recent past, the college students have won many prizes in such technical events at the inter-college level. Each department has also organized National level Conferences like ACCET, RDME and RACE.

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.

The Institute encourages and provides facilities for students to participate in various extra-curricular activities in order to build team spirit and leadership qualities. A team of faculty members and Director of physical education, look after all cultural, sports and extra-curricular activities of the college.

Sports: The Institute has a playground having an area of 19437.973 sq.mts. for playing several sports. A separate Gymnasium facility for boys and girls is provided in the college campus. Students are encouraged to play different

sports like football, boxing, cricket, volleyball, basketball, swimming, table tennis and lawn tennis. The Institute has a physical director to guide students.

NSS:

As per the guidelines of the Savitribai Phule Pune University, the Institute has formed a NSS unit of students and staff. The NSS unit in the college provides a platform for various socially relevant services such as:

- Providing guidance to students studying in the rural areas.
- Creating awareness about the natural disasters such as Tsunami, earthquakes in the student community.
- Participating in various Gram Swachchata Abhiyan Camps.
- Creating social awareness among students.
- Providing a platform for NSS students to showcase their talents through poem recitations and enacting plays with a message for society.
- Spreading awareness about traffic rules and safety measures among staff members and students.
- Having discussions regarding the various challenges faced by the youth.

Cultural Activities:

The college has a committee for cultural activities. This committee along with the staff and students of the college organizes an annual cultural function by the name “JHANKAAR”. The aim of JHANKAAR is to provide a platform for students to showcase their talents and organizational skills. It comprises of events in the form of competitions, workshops and stage performances such as, Mr & Miss MESCoE, Lead the Youth, Treasure Hunt, Art Gallery, Fashion Show to name a few. To broaden the horizons of the students, they are encouraged to participate in several inter-colligate events such as Firodia Karandak, Purushottam Karandak, Vinodottam Karandak and the Gokhale Cup.

Under the banner of ASTITVA a cultural group, students are encouraged to share their ideas, through a Wall magazine and debate competitions on social and cultural issues. The Institute believes in maintaining a healthy, safe and hygienic environment with the help of the house keeping staff.

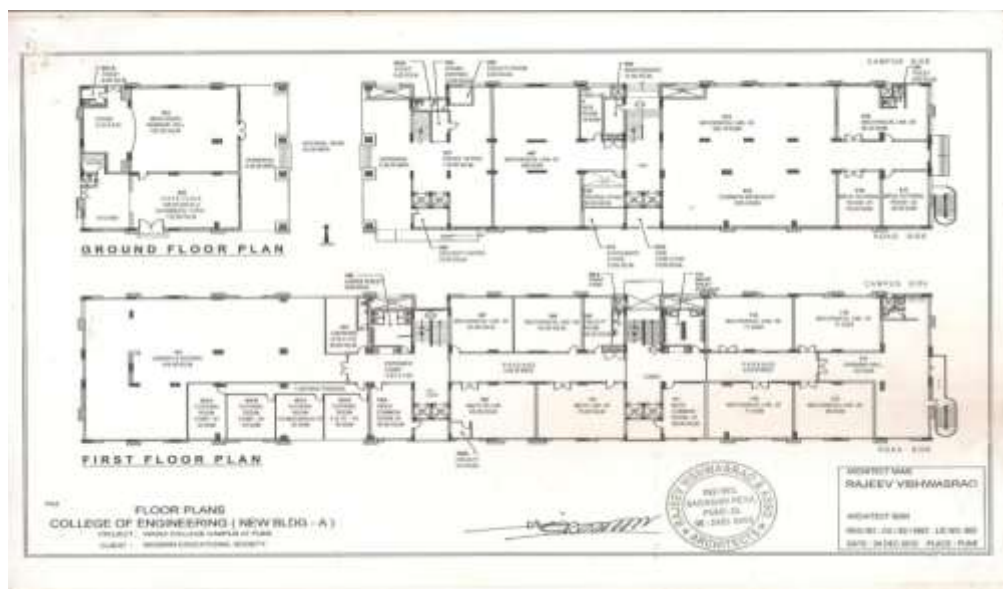
Yoga:

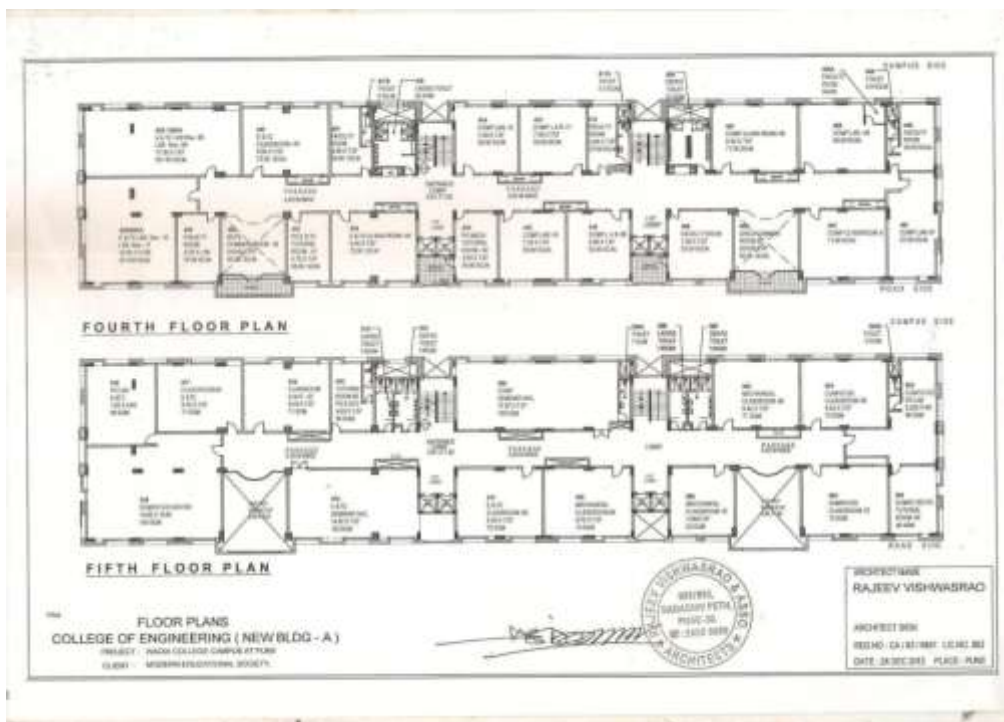
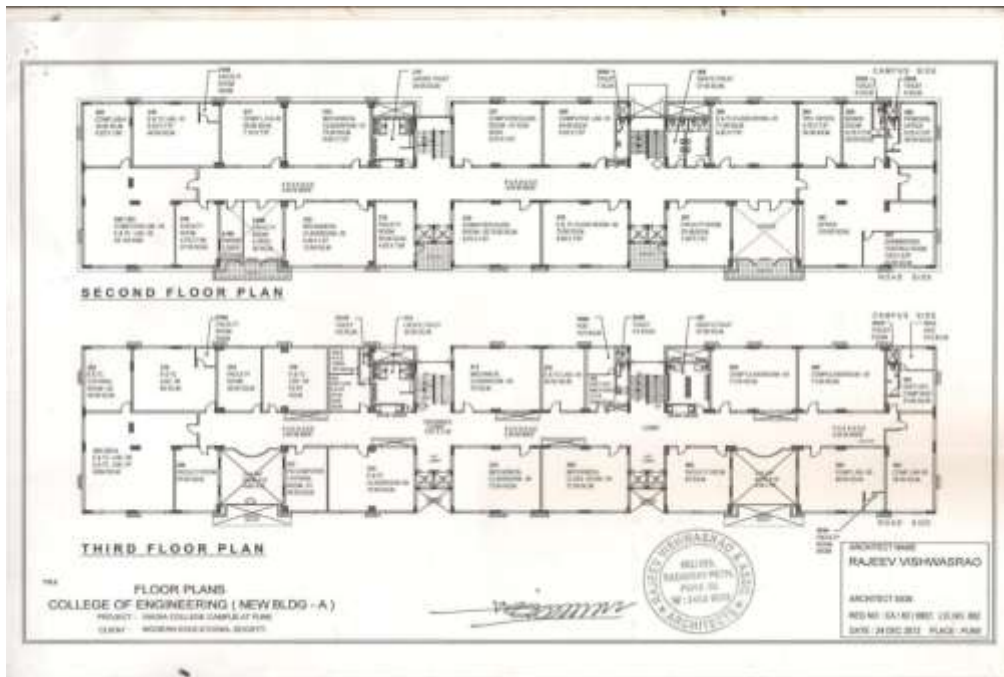
Facility for Yoga is available at the facility block in the hostel building. The campus has a medical center with visiting doctors to attend to the needs of the staff and students.

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).

The Institutes society has a committee of life members which consists of teachers who are well aware of the college needs for infrastructure and are connected with day-to-day developments in the college. This ensures that the proposed expansion of infrastructure is in line with the academic growth of the institution. The Institute expands the infrastructure as per AICTE norms .The floor wise college plan is given below:

The College is situated in an area of 16652.83sq.m. The total built up area of the building is 14737 sq.m.





The investments in the last four years for enhancing the various infrastructure facilities are as follows:

Items	CFY 2013-14		(CFY-1) 2012-13		(CFY-2) 2011-12		(CFY-3) 2010-11	
	Allocated Budget (lakhs)	Expensed (lakhs)	Allocated Budget (lakhs)	Expensed (lakhs)	Allocated Budget (lakhs)	Expensed (lakhs)	Allocated Budget (lakhs)	Expensed (lakhs)
Building	26.00	25.88	23.23	26.22	25.00	27.86	6.00	5.51
Furniture	17.50	17.24	5.00	5.05	10.30	14.57	2.00	1.51
Equipment	10.00	9.49	5.50	5.38	1.00	0.79	1.00	0.82
Computers and other Hardware	4.08	3.88	11.00	12.47	2.38	2.35	2.50	2.22
Vehicles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	57.58	56.49	44.73	49.12	38.68	45.57	11.50	10.06

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

The Institute ensures that infrastructure facilities are made available for students with physical disabilities. In case of students who are physically disabled efforts are made to hold their classes and examinations in classrooms close to the lifts. The Institute has a provision of four ramps for the physically disabled students. Lift facility is available for such students and staff. Wheel chairs are available in the Institute in case of an emergency.

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

- **Hostel Facility–Accommodation available**
- **Recreational facilities, gymnasium, yoga center**
- **Computer facility including access to internet in hostel**
- **Facilities for medical emergencies**
- **Library facility in the hostels**
- **Internet and Wi-Fi facility in the campus**
- **Recreational facility-common room with audio-visual equipment**
- **Available residential facility for the staff and occupancy**
- **Constant supply of safe drinking water**

- **Security**

Hostel facilities:

The Hostel accommodation is offered to the students on a first come first serve and merit basis. A Mess facility is available in the hostel building. Lift facility is also provided in the hostel.

Hostel (boys and girls)

Sr. No.	Description	Boys' Hostel	Girls' Hostel
1.	Area of the Hostel	3240.26 sq.m.	3240.26 sq.m
2.	Number of floors	Parking + 7	Parking + 7
3.	Number of rooms	72	83
4.	Area of each room	14.75sq.m.	14.75sq.m.
5.	Number of students accommodated	181	177

Safe drinking water: Safe drinking water is provided to the hostel students. The hostel has a facility of water coolers.

Recreational facilities:

A Gymnasium facility is available for boys and girls in the college campus. Essentials for playing Carom, Badminton, Cricket, Football, Basketball, Chess board and Table Tennis are available in the campus. Television sets for entertainment are available in the hostel mess.

Security:

The Institute provides 24 hour security. Security guards are present in the Institutes building and the hostel buildings the height of the college compound wall has been extended and CCTV has been installed at strategic locations for security reasons.

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?

A free medical checkup is arranged for students taking admission in the college. Each department has first-aid kit for minor injuries. Besides this the campus has a medical center with one visiting doctors and an attendant. The staff and students can visit the medical center in case of any health issues. In case of an emergency the patient is referred to the General Sasoon hospital, Apollo hospital or Ruby Hall Clinic which are situated at a distance of 0.5 km from the College.

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, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

IQAC Unit: The Institute has formed an IQAC cell in this year. The IQAC cell would be responsible for ensuring continuous development of the Institute. The details of the composition of IQAC cell are as follows.

Sr. No.	Name of Member	Designation
1.	Dr. A. A. Keste	Chairman
2.	Prof. D. A. Rajput	Member
3.	Mrs.N.F.Shaikh	Member
4.	Mr.V.N.Chougule	Member
5.	Mr.P.B.Chopade	Member
6.	Dr.D.S.Adkar	Member
7.	Mrs.R.A.Khan	Member
8.	Dr.Ms.M.P.Dale	Member
9.	Mrs.A.S.Purandare	Member
10.	Dr. S.S.Sarawade	Member
11.	Dr. Mrs. R.P.Bhadane	Member
12.	Mr.S.D.Malpote	Member
13.	Mr. V. A. Rahane	Member
14.	Dr. V. N. Raibhole	Member Secretary

Women's Grievance Cell: This cell is responsible for resolving any issues and problems faced by the women staff of the college. It comprises of the following members:

Sr.No.	Name of Member	Designation
1.	Mrs. P. P. Mane	Chairman
2.	Dr. A. A. Keste	Member
3.	Mr. A. J. Hake	Member
4.	Dr. V. N. Raibhole	Member
5.	Mrs. S. R. Khonde	Member
6.	Mrs. V.J. Sonawane	Member
7.	Mrs. V.S. Galgali	Member
8.	Mr. V. A. Rahane	Member
9.	Mrs. D.S. Rengade	Member
10.	Nominated Member	Nomination awaited from Kusumbai Motichand Mahila Sevagram, Pune 411004.

Training and Placement Cell:

The institution has a training and placement cell to support the students for their placement related activities and for career guidance.

Counseling and Career Guidance: Each department takes care of the counseling and career guidance to the students. Parent teachers are appointed for a group of 20 to 25 students. The parent teacher counsels and guides the students on a regular basis. The parent teacher contacts the parents of the students whenever necessary. The Institute has established a B-WOW section. The members of B-WOW provide career guidance to students especially slow learners.

Recreational facilities:

An extensive area of 4.80 acres is used as playground. A Gymnasium facility is available for boys and girls in the college campus. Essentials for playing Carom, Badminton, cricket, football, basketball, chess board, table tennis, lawn tennis are available in the college. Television sets for entertainment are available in the hostel mess. Separate common room facility for boys and girls is available in the college.

Canteen:

The canteen facility is available for students and staff members between 7 am. to 9.30 pm. Mess facility is also available in the college.

Drinking Water:

Clean drinking water facility along with water coolers is provided in the college Campus.

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, students/user friendly?**

Yes. There is a Library Committee with the following composition:

Sr.No.	Name	Designation
1.	Dr. A. A. Keste	Chairman
2.	Mr. A. J. Hake	Member
3.	Dr. V. N. Raibhole	Member
4.	Mrs. V. J. Sonawane	Member
5.	Ms. R. M. Wahul	Member
6.	Mrs. R. S. Kadam	Member
7.	Mr. R. B. Chormale	Member
8.	Mr. V. A. Rahane	Member
9.	Mr. A. S. Sonawane	Member Secretary

Members of the Library Advisory Committee are chosen judiciously to represent all the streams. The committee is actively involved in library schemes that are intended to make the library user friendly.

Initiatives: The following significant initiatives have been implemented:

- Book Bank is available in the library. The facility provides books to all students by charging 25% of total book cost. At the end of academic year, Book Bank amount is refunded to the students who have scored 60% and above marks. The Books for Book Bank are selected by concerned Faculty with the co-ordination of Library Advisory Members.

- Special book bank scheme funded by SWO, Pune is available for students availing SC scholarship.
- Newspaper and Journals stands in the library provide an access to research, news and other information to the students/readers.
- Savitribai Phule Pune University's previous examination question papers and prescribed Syllabi in all streams are made available to the students for ready reference.
- Online Journals of Science Direct (275Nos), IEEE+ASPP (161Nos) and ASME (25Nos) are made available to Faculty & students.
- NPTEL Lecture Videos are made available to Faculty & students. NPTEL videos are displayed on TV screen from 12pm to 2pm and 4pm to 5pm.
- Library provides institutional membership card (ARAI& British Library) to faculty and student to access their resources.
- The Library staff keeps the Faculty updated regarding its latest acquisition, print Journals issues received in the library.
- Procurement of research papers required by students and faculty is made available through subscribed resources and Inter library loan.

4.2.2 Provide details of the following

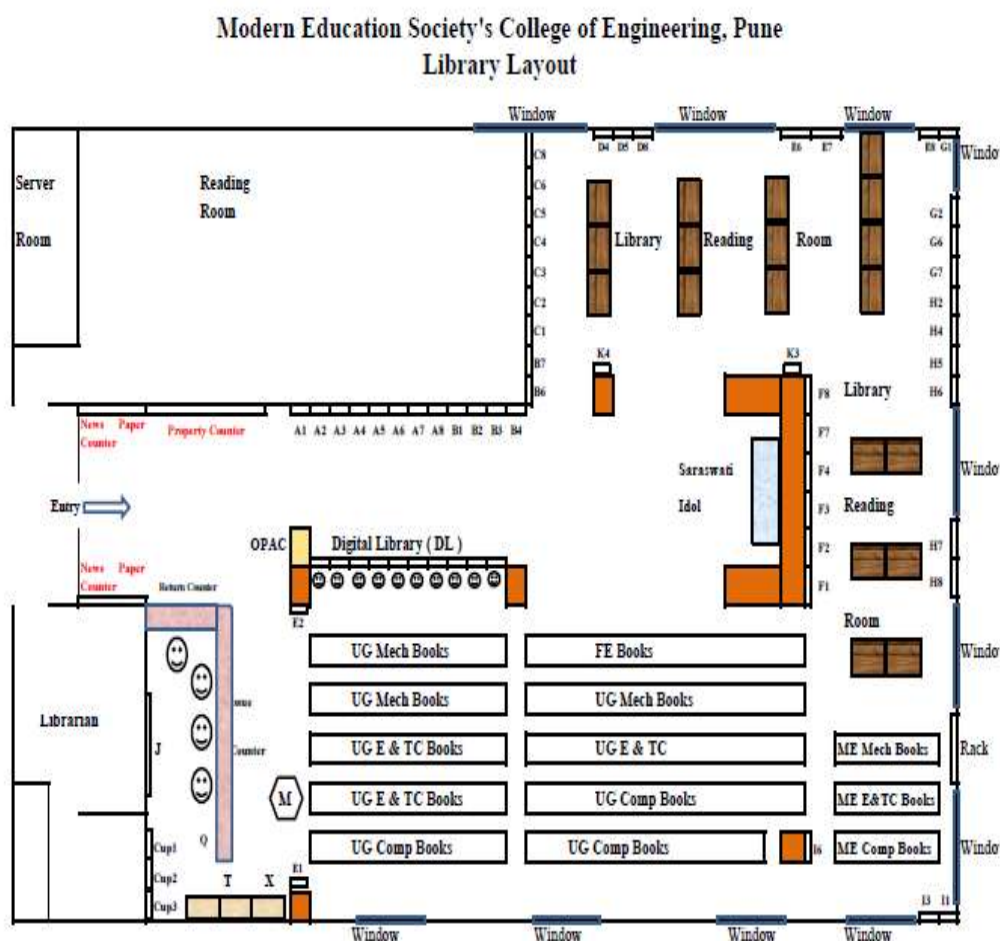
- **Total area of the library (in Sq. Mts.)**
- **Total seating capacity**
- **Working hours (on working days, on holidays, before examination days, during examination days, during vacation)**

Sr. No.	Details	Comments (if any)
1	Total Area of the Library	450 Sq. Mts.
2	Total Seating Capacity	200
3	Working Hours (Daily)	Monday – Friday :
	Before Examination Days	8:00am to 8:00pm Saturday : 8:00am to 4:30pm
	During Examination Days	8:00am to 8:00pm
	During Vacations	8:00am to 04:30pm
	National Holidays & Holidays as per SPPU Calendar	CLOSED

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

Sr. No.	Details	Comments (if any)
1.	Individual reading carrels	Available Total = 58 reading carrels
2.	Lounge area for browsing and relaxed reading	Available
3.	IT zone for accessing e-resources	Available 10 dedicated PCs



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. Library has evolved a system to ensure purchase and use of current titles, important journals etc.

Ensure purchase: Suggestions are taken from Library Advisory Committee, Faculty, students and according to the AICTE norms and University Syllabus the library purchase of books is ensured.

The details of amount spent on procuring new books, journals and e-resources during the last four years

Library Holdings	2010-2011		2011 - 2012		2012 – 2013		2013 - 2014	
	Nos.	Total Cost in Rs	Nos.	Total Cost in Rs	Nos.	Total Cost in Rs	Nos.	Total Cost in Rs
Text books	386	693075	492	1566156	509	1163170	413	1232629
Reference books	01	320	16	12100	57	243745	83	314772
Journals/Periodicals	54	188628	54	211440	28	86140	46	190669
e-resources	275	464860	445	767707	445	815101	462	886170
Others (CDs/DVDs) NPTEL and / or E-Learning CDs	120	100000	--	--	--	--	--	--

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 Institutional Repository
- Content management system for e-learning

• **Participation in Resource sharing networks/consortia**

Sr. No.	Details	Comments (if any)
1.	OPAC (online public access catalog)	Yes <ul style="list-style-type: none"> • 1 dedicated PC for OPAC purpose • To check the availability of book in library. • Categorization of book either as reference or general.
2.	Electronic Resource Management package for e-journals	<ul style="list-style-type: none"> • Science Direct – 275 e-journals (Current & back dated issues) are available online. • IEEE + ASPP - 161 e-journals (Current & back dated issues) are available online. • ASME - 26 e-journals (Current & back dated issues) are available online. • NPTEL Lecture Videos – 120 Videos are available.
3.	Federated searching tools to search articles in multiple databases	Direct Access to online resources through static IP
4.	Library Website	No, but library details are displayed on Institute website.
5.	In-house/remote access to e-publications	Proxy Server
6.	Library Automation	Yes <ul style="list-style-type: none"> • SLIM 21 • Web OPAC • Barcode facility • Smart card reader
7.	Total number of computers for public access	11 Computers (10 for Digital Library, 1 for OPAC) Configuration Dell Inspiron 3542 core i7 with headphones to access audio video NPTEL Lectures
8.	Total number of printers for public access	One
9.	Internet	20MBPS Lease Lines/256 KBPS (shared)

	Bandwidth/Speed	
10.	Institutional Repository	Yes <ul style="list-style-type: none"> • 3 cards to access ARAI Library resources • 10 cards to access British Library resource

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(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 material

Average number of Walk-ins	250 Per/Day
Average Number of Books Issued/Returned	200 Per/Day
Ratio of Library books to Students Enrolled	$29787/1600 = 18.61$
Average number of Books added during last three years	6500
Average number of logins to OPAC	50 per working day
Average number of logins to e-resources	60 per working day
Average number of e-resources downloaded/printed	Downloaded – 16586 average per year [Last 4 Years average up to 2013-14]
Number of information literacy trainings Organized	4
Details of —Weeding Out books and other material.	Yes Books – 251 Magazines – Yearly Newspaper – Half Yearly

4.2.6 Give details of specialized services provided by the library

- **Manuscripts**
- **Reference**
- **Reprography**
- **ILL(Inter Library Loan Service)**
- **Information deployment and notification (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**

Services	Comments (if any)
Manuscripts	Not Available
Reference	Yes <ul style="list-style-type: none"> • Separate reference books section • Department wise arrangement of reference books in cupboards. • Staff or Students can issue one reference book for a day or they may refer to the book in the library • No issuing of costly reference books , usage as read only facility • 1909 number of books in reference section
Reprography	Yes <ul style="list-style-type: none"> • Minimum charges applicable to photocopy documents as well as question papers
ILL (Inter Library Loan) Service	Yes Students or staff can acquire books not available in the Institute library from other libraries under the ILL service as and when required.
Information deployment and notification	Yes (Through e-mail, Website) <ul style="list-style-type: none"> • Information about newly received reference books, print journals, magazines at library is intimated through e-mail to the concerned department. • Information regarding status of Books (number of available books) in the library is also intimated through e-mail to concerned departments.
Download	Yes

Printing	Yes
Reading List/Bibliography compilation	Available (OPAC)
In-house/remote access to e-resources	Through Proxy Server
User Orientation and awareness	Yes
Assistance in searching Databases	Yes <ul style="list-style-type: none"> Assistance provided by library staff to faculty and / or student to search database and books.
INFLIBNET/IUC facilities	No

4.2.7 Enumerate on the support provided by the Library Staff to the students and faculties of the college.

The facilities in the library are as follows.

- Internet facility.
- Provide ILL support.
- Overnight Issues of Reference Books
- Carrel issue (Extra book is issued for 2 days)
- Property Corner (readers' belongings)
- Library staff & volunteers to help readers trace books.
- Separate study tables for staff
- Maintaining a peaceful and academic environment
- Support in e-resources searching.
- Availability of old examination University question papers.

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

The Institute provides wheel chairs, for the use of visually/physically challenged students in the library. In case book issue/return and other facilities of the library, these students are given priority over others.

4.2.9 Does the library get the feedback from its users? If yes, how it is analyzed and used for improving the library services. (What strategies are deployed by the library to collect feedback from users? How the feedback is analyzed and used further improvement of the library services?)

Yes, the library gets online feedback from users in the form of complaints, suggestions and recommendations. The library committee analyzes these complaints and gives suggestions for smooth conduction of library working.

Such feedback is used for betterment of the library 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.
- Standalone facility.
- LAN facility
- Wi-Fi facility
- Licensed software
- Number of nodes/computers with Internet facility
- Any other

Sr. No.	Location	No of P-IV/Latest Configuration		Peripherals
1.	Department of Computer Engineering	Student-270	i3/C2D, 2GB/4GB RAM, 500 GB HD with TFT 17” monitor, Laptop -2, Projector – 07	Dot Matrix Printer – 74 Desk Jet/Laser Printer – 2/27 (For Staff - Comp-7, ENTC-6, Mech-4, FE-4, Admin-6) Canon All in one printer-8 Scanners – 12 Plotter – 1 Fax machine –1 LCD Projector –23 OHP - 5 VIDEO Camera – 2 Professional Cam Control -1 DVD Player – 1 Tape Recorder
		Staff-38		
2.	Department of E&TC	Student-155	i3/C2D, 2GB RAM, 500 GB HD with TFT 17” monitor, Laptop - 1, Projector – 07	
		Staff-30		
3.	Department of Mechanical Engineering	Student-65	i3/C2D, 2GB RAM, 500 GB HD with TFT 17” monitor Laptop - 2, Projector – 07	
		Staff-36		
4.	F.E. Staff	28- C2D, 2GB RAM, 500 GB HD with TFT 17” monitor-6,Thinclient -10, Laptop-2, Projector – 6		
5.	Administration	3- C2D, 2GB RAM, 500 GB HD with TFT 17” monitor, Laptop-2, 20 N Computing with Server		
6.	Library	7 - C2D, 2GB RAM, 500 GB HD with TFT 17” monitor -4 - Thin Client - 10, Laptop – 1		

7.	Language Lab and Computer Centre	– Thin Client-20 – Thin Client-120	–1 Barcode Printer – 1 Camera – 4
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Number of computers with Configuration (provide actual number with exact Configuration of each available system)

Details of Computer Facilities

Details of Server available:-

- **IBM Server Model:3400 - 02**(Intel Xeon E5606 2.13Ghz CPU, 16GB RAM, 500 GB HD)
- **IBM Server Model:E226-02** (Inter Xeon X Series 3.0 Ghz CPU, 2 GB RAM, 80 GB HDD)
- **IBM Server Model:X3650 - (Server Rack – 19, 32 U -1, 9V-6, 6U-12)**
- **Server Rack – 21:- 32U-1, 9U-4, 6U-16**
- **Switches – Cisco - 11, HuWAI – 5, S/W Managed D'Link – 1**
- **Managed Switch D Link – 01** (24 Port)
- **Cyberoam Firewall - 01**

Internet Facility:

- TATA Tele Services - 15 Mbps – 1:1 Leased Line
- TATA Communications Pvt. Ltd. 5 Mbps- 1:1 Leased Line
- BSNL Broadband – 1MBPS
- Router: CISCO 2600, Zone Detector – 2, Zone Flex –9, Wi-Fi Connectivity: with wireless access point.

List of Application and System Software

Department of Computer Engineering				
Sr. No.	Date	Application Software and System Software	Quantity	Amount (in Rs.)
1.	28/08/2012	Oracle 11g Standard Edition	Client – Server Base	2,57,664
2.	15/03/2011	Microsoft Office	Microsoft Campus Agreement 102 Faculty Count	1,49,401
		Microsoft Visual Studio		
		MSDN		
		Windows Server 2008		

		Windows XP, Windows 7		
3.	15/03/2011	IBM Rational Suite Enterprise	30	1,75,000
		IBM Rational Software Architect		
4.	03/03/2004	Oracle 9i Software	10 Users	1,18,000
5.	30/08/2003	Rational Suite Enterprise Edition	10	3,00,000
		Rational Suite Development Studio Real time		
Total Cost				13,49,665

Department of Electronics And Tele-Communication Engg.				
Sr. No.	Date Of purchase	Application Software	Quantity	Amount (In Rs.)
1.	16/01/2014	Toolbox, Image Processing Toolbox, Signal Processing Toolbox, RFTtoolbox, Phase array system toolbox, DSP system Toolbox, MATLAB 2013B	01	12,42,913
2.	27/09/2013	Core EL Technology Xilinxvivado system	1	1,26,600
3.	27/04/2012	MatlabCommunicationToolbox,I imageProcessingToolbox,SignalPr ocessingToolbox New Add-on Modules Matlab Control System ToolboxSignalProcessingToolbox, Matlab,	25	5,20,065
4.	23/03/2012	Single User to 5 User Trident Up-Gradation of Multisim to Latest Multisim 11 Single User to1 5 User Trident Multisim (10 Users)	01	3,04,290
5.	25/08/2011	Triton IDE License Kit, Oasis technology Embedded software	8	1,56,450
6.	21/09/2010	Trident Up-Gradation of Multisim to Latest Multisim 7	01	18,000

7.	02/09/2010	SPJ Compiler Server Additional Licenses(C Cross Compiler) User to20 User	01	45,000
8.	25/09/2008	DSP Application Software Model ES-SYSGEN-4SL-PC	01	51,480
9.	25/09/2008	Make ISE Series Ver 6.1 VLSI Design Software Xilinx Make ISE Series Ver 10.1	01	51,480
10.	08/09/2008	LabView (FDS) Teaching Lincese for 10 User Sr. M64x66581(Disk1of 3 FDS Disk 1DVD 1xp/2000-1	01	2,91,200
11.	04/03/2008	Keil PK51ED Software C-51 Professional Developers Kit Ver.8.0 Educational License Keil MDK-ARM-ED Software	04 04	3,75,580
12.	11/02/2008	Deft Netz 2.0 Deft Technologies PvtLtd.Noida	01	2,57,400
13.	29/09/2007	Oasis ARM Software	02	52,000
14.	16/08/2007	Falcon (Robotics Software) Falcon Electro -Teck	01	93,600
15.	29/09/2006	Microwind Package HardwareDongle Based Microwind Package includes DSCH3 (I) Schematic Editor &Simuvlator,(ii) PIC16f Modeler (iii) Verilog Compiler ,(iv) Spice Extractor Microwind 3,(v) nanolambda (vi) Virtu DSO FAB,(vii) MEMSim,(viii) Prothumb,(ix) Protutor	05	297,500
16.	30/11/2005	Matlab,CommunicationToolbox, Image Processing Toolbox, Signal Processing Toolbox Up-grade	05	4,49,807
17.	08/08/2005	SPJ Compiler Server (C Cross Compiler for 8051Series)	01	85,050
18.	20/10/2004	Educational Ultiboard 5.6 Ver. Education Edition Single User	01	3,35,000

19.	13/07/2004	Matlab,CommunicationToolbox,I mageProcessingToolbox,SignalPr ocessingToolbox Up-grade	05	4,26,785
20.	01/12/2003	VLSI Design Software Xilinx	01	43,706
21.	20/10/2000	Trident Up-Gradation of Multisim to Latest Multisim 6 Education Edition Single User	01 01	86,008 99,000
Total Cost				54,08,914

Department of Mechanical Engineering				
Sr. No.	Date	Name of Software	No of Users	Amount (in Rs.)
1.	14/03/2014	CATIA V6	25	6,96,300
2.	21/03/2014	Up gradation of CATIA V6	25	1,29,947
3.	28/03/2014	Officelite	10	-
4.	28/03/2014	Simpro	10	-
5.	31/03/2014	LabVIEW Software	5	5,14,500
6.	09/02/2013	CAM LAB	10	5,20,785
7.	09/02/2013	CNC Encyclopedia	1	
8.	09/02/2013	CNC Software	1	
9.	27/09/2013	LabVIEW Software	5	4,83,000
10.	13/03/2012	MATLAB 2012	25	2,12,625
11.	14/03/2012	Automation studio 5.7	3	2,88,859
12.	04/08/2011	ANSYS 13	25	3,25,000
13.	29/01/2010	Quick Heal Total Security Antivirus	1	2,500.00
14.	29/10/2010	AutoCAD 2011	30	5,39,121
15.	03/1/2009	Autodesk Inventor Professional 2009	10	2,64,858
16.	31/12/2007	Solid Edge	15	8,00,000
		NX CAM Express	5	
		FENAP	5	
17.	16/09/2006	Autodesk Inventor Professional 2009	10	4,66,499
18.	28/09/2006	Pro-Engineer	2	1,24,800

		FENAP for Nastran	1	83,200
19.	11/01/2005	CADianMech 2004 C Educational	10	1,08,150
20.	24/08/2005	MATLAB 7+Dongle	1	2,12,101
21.	29/12/2004	SolidWorks 2004B + Dongle	10	2,25,634
Total Cost				5,997,879

4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

The Institute provides LAN and Wi-Fi Facility to the faculty and students to meet connectivity requirements. The details are as follows.

Name of the Internet provider	Tata Teleservices Limited, Tata Communication Limited, BSNL
Available bandwidth	21 Mbps
Access speed	256 Kbps
Availability of internet in an exclusive lab:	Yes
Availability in most computing labs:	Yes
Availability in departments and other units	Yes
Availability in faculty rooms	Yes
Institute's own e-mail facility to faculty/students	Google Apps
Security/privacy to e-mail/internet users	Cyber roam Firewall

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

The college upgrades the computer systems of the different laboratories as per the requirements of the University syllabus.

All the classrooms of the college are equipped with LCD projectors. The Institute provides Wi-Fi facility for Staff and final year students for their research and project work.

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)

Items	CFY 2013-14		(CFY-1) 2012-13		(CFY-2) 2011-12		(CFY-3) 2010-11	
	Allocated Budget (lakhs)	Expensed (lakhs)	Allocated Budget (lakhs)	Expensed (lakhs)	Allocated Budget (lakhs)	Expensed (lakhs)	Allocated Budget (lakhs)	Expensed (lakhs)
Component & Lab. Material	32	24.69	5.75	31.63	4.76	19.61	4.32	4.95
Computers	54.20	12.10	36.66	17.15	48.58	37.49	5.55	5.73
Software	58.26	26.20	37.14	30.79	14.01	16.36	9.74	13.02
Repairs, Maintenance on computers & others	4.08	3.88	11	12.46	2.38	2.34	2.5	2.22

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?

- The Institute provides on line NPTEL video material.
- Faculty members make use of power point presentation for effective instruction delivery.
- All the class rooms are well equipped with LCD projectors. All Staff rooms have the facility of computing and Internet connections.
- The Institute maintains a data base of objective questions for all courses. This helps to verify the knowledge grasped by students.
- Students can avail the facilities of photocopying, printing and CD writing in the college building.

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 center of teaching-learning process and render the role of a facilitator for the teacher.

The Institute provides on line NPTEL video material for students and staff. Content beyond syllabus is covered by conducting workshops and guest

lectures by experts from the industry. Webinars are also conducted by subject experts.

4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating University? If so, what are the services availed of?

The Institute has the facility of NPTEL video network connectivity. Besides this e-papers are shared with reputed Institutes like College of Engineering Pune and the British Council Library.

4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

- A review of the requirements of infrastructure is done before the commencement of each academic term. Details of the budget allocated for infrastructure and others are shown below for the last four years:

Items	CFY 2013-14		(CFY-1) 2012-13		(CFY-2) 2011- 12		(CFY-3) 2010- 11	
	Allocated Budget (lakhs)	Expensed (lakhs)	Allocated Budget (lakhs)	Expensed (lakhs)	Allocated Budget (lakhs)	Expensed (lakhs)	Allocated Budget (lakhs)	Expensed (lakhs)
Building	26.00	25.88	23.23	26.22	25.00	27.86	6.00	5.51
Furniture	17.50	17.24	5.00	5.05	10.30	14.57	2.00	1.51
Equipment	10.00	9.49	5.50	5.38	1.00	0.79	1.00	0.82
Computers and other Hardware	4.08	3.88	11.00	12.47	2.38	2.35	2.50	2.22
Vehicles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	57.58	56.49	44.73	49.12	38.68	45.57	11.50	10.06

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the Infrastructure, facilities and equipment of the college?

The Institute has a Building maintenance committee. The committee monitors the maintenance of infrastructure and facilities. Members of this committee are as follows

Building/Furniture Maintenance committee:

Sr.No.	Name	Designation
1.	Dr. A. A. Keste	Chairman
2.	Dr. V. N.Raibhole	Member
3.	Mr.V.A.Rahane	Member
4.	Mr.P.P.Mahajan	Member
5.	Mr.R.R.Shivade	Member
6.	Mr.S.T.Mahajan	Member
7.	Mr.M.D.Niwathe	Member
8.	Mr.S.D.Mozar	Member
9.	Mr. C. J. Mijar	Member
10.	Mr. A.A. Chougule	Member Secretary

Functions of the committee:

- Proper upkeep and maintenance of the buildings
- Maintenance of the surroundings
- Carrying out minor repairs of furniture, electrical and sanitary fittings
- Maintenance of the roads, water tanks and other services in the compound
- Maintaining security
- Ensuring the safety requirements in the college.

Equipment and Computer Maintenance Committee:

The Institute has a committee who overlooks the maintenance and upkeep of the equipment and computer facilities of the institution and the details are as follows:

Sr.No.	Name	Designation
1.	Dr. A. A. Keste	Chairman
2.	Dr. V. N.Raibhole	Member
3.	Mr.G.S. Pole	Member
4.	Mr.V.A.Rahane	Member
5.	Mr.V.H.Kamble	Member
6.	Mr.P.V.Raut	Member
7.	Mr.H.G.Muknak	Member
8.	Mr.D.S.Rengade	Member
9.	Mr.L.N.Kuri	Member
10.	Mr. R.R.Shivade	Member
11.	Mr. A.A. Chougule	Member
12.	Mr.A.Mitra	Member secretary

- All the stand alone and dedicated computers, network systems connecting these computers are taken care of by the respective departments, System Engineers and Junior Technical officers.
- Management of fittings and fixtures: All the electrical and Electronic equipment fitted in different positions in the Institute is looked after by the team of Electrical maintenance staff consisting of electricians and engineers.

Caretaking & Housekeeping supervisor of the Institute:

The Institute has a house keeping supervisor for overlooking the maintenance of cleanliness and minor repairs (sanitation, carpentry) required on a day to day basis. The housekeeping is outsourced.

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

Type of maintenance	Resource	Remark
Civil maintenance	Through Estate office for minor maintenance work Through Civil Contractor for major maintenance work	Weekly or after 15 days checking of all toilets is carried out and if needed maintenance is carried out.
Electrical Maintenance -	In house electrical staff Number of electrical Staff : 02	Maintenance after receiving the complaints
Maintenance of computing facilities	In house staff. number of staff: 02	Maintenance after receiving the complaints
Maintenance of water supply facility	In house plumbing staff. Number of plumbers : 01	Maintenance after receiving the complaints Cleaning of water tank:
Housekeeping	Number of Housekeeping staff: 08	Daily cleaning of corridors, lecture halls, toilets and parking is done.
AMC for generators	Name: Shree Diesel Service. No of persons : 02	Maintenance is carried out after every 6 months or annually depending on the use.
AMC for lifts	Name of service provider: 1.Schindler 2.Kone	Maintenance is carried out annually.

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

Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

Maintenance of academic infrastructure and facilities

- Firefighting system with fire alarm with talkback system is provided separately in both staircases.
- Sprinklers system is provided in main passages.
- Fire extinguishers are provided at multiple locations as per requirement.
- Multiple exits in case of emergency are provided
- Firefighting equipment training is provided

Exit signs and floor indication boards are given at strategic locations.

- Electricity: - 3-Phase line with LT 45 kW electricity supplies from Maharashtra State Electricity Distribution Co. Ltd.
- Power Backup: - Power back up from Mahindra Genset 125KVA, 62.5KVA (50 Hz). Server room, online exam 10KVA UPS backup.
- Telecom: - BSNL's one line (Telephone No/FAX No. 26163831) is available with EPBX system (400 intercom lines.)
- Water supply: - Municipal Corporation water supply is available in the campus round the clock and it is utilized for drinking purpose after filtration. Beside this well water is also available in campus, which is used for all purposes other than drinking.

Summary of all the facilities in the Institute is as follows.

Facility	Capacity	Quality	Availability	Location
Electricity	MSEB - 300KV, 80A, 3 Phase	Good	Yes	Nearby boys hostel
Power Back Up	125KV	Good	Yes	In front of canteen
Telecom Facility	BSNL line with EPBX 400 intercom lines.	Good	Yes	All floors
Drinking Water	30,000Litre.	Good	Yes	All floors
Security	-	Good	Yes	24 X 7 security at the College Entrance and Boys & Girls hostels

Other Information Regarding Infrastructure

Parking:

Ample parking space is provided for parking of two wheeler vehicles of students. Four Wheeler and Two Wheeler parking are also available for the College Staff.

Banking and ATM and Post Office:

A branch of Bank of Baroda is located in the campus along with ATM Center. Post Office is located in the College campus.

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 the prospectus annually. The copy of the prospectus is given along with the application form to every candidate who applies for Programmes of the Institute.

Prospectus is also available online on college website.

The prospectus reflects the entire scope of the college profile. Starting from a brief history of the Institution, it consists of Vision and Mission of college, total intake of UG and PG Programmes, information regarding infrastructure, laboratory facilities, internet facilities, result analysis and departmental activities. Information regarding Training & Placement Cell is also included in the prospectus. The students can find information regarding various co-curricular and extra-curricular activities conducted in the institution. The fee structure and guidelines for scholarship are also given in detail in the prospectus.

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

The Institute allows students to pay their fee in installments.

The Institute admits students under TFW (Tuition Fee Waiver) scheme of Government of Maharashtra.

Year	Total No. of students	No .of students getting TFWS	Percentage of students	Total Amount (Rs.)
2013-14	1603	50	3.12	41,67,837
2012-13	1272	46	3.62	32,76,640
2011-12	1054	41	3.89	26,10,909
2010-11	759	24	3.16	11,85,312
2009-10	633	25	3.94	11,75,855

The Institute admits students under J&K quota and GOI Nominees.

Year	Total No. of students	No. of students in J&K quota	Percentage of students	Total Amount
2013-14	1603	10	0.62	6,37,090
2012-13	1272	9	0.70	4,76,751
2011-12	1054	10	0.94	5,44,721
2010-11	759	9	1.18	3,30,918
2009-10	633	8	1.26	2,40,970

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

- Scholarships / free ships are given by state Government of Maharashtra on the basis of parental annual income.
- Apart from above GATE Scholarships are provided by AICTE to PG students.

Details of Scholarships / free ships

2013-14										
	SC		ST		NT		OBC		SBC	
	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs
Scholar Ship	102	96.68	10	9.12	81	68.42	159	69.04	14	12.26
Free Ship	70	6.11	9	6.66	40	31.08	106	43.71	12	9.49
2012-13										
	SC		ST		NT		OBC		SBC	
	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs
Scholar Ship	74	57.77	9	7.46	64	50.24	123	43.8	11	8.32
Free Ship	50	39.79	9	6.18	44	31.37	104	38.38	9	6.59
2011-12										

	SC		ST		NT		OBC		SBC	
	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs	No. of Students	Amt. (Rs) Lakhs
Scholar Ship	53	40.76	6	4.59	39	29.05	80	29.47	5	3.63
Free Ship	42	28.84	9	6.38	43	27.32	77	27.04	14	9.80

Summary of above tables

Year	Total No. of students	Financially Assisted Students	%Financially Assisted Students
2013-14	1603	850	53.02
2012-13	1272	665	52.27
2011-12	1054	518	49.14
2010-11	759	352	46.37
2009-10	633	248	39.17

The students are informed about the scholarship available in the institution through the class teachers and applications are circulated to them. The registrar and the student section ensure that above said amounts are disbursed in time to the students.

5.1.4 What are the specific support services/facilities available for

- **Students from SC/ST, OBC and economically weaker sections**
The students who belong to SC/ST, OBC and the economic weaker sections are identified during the process of admission, these students are provided every possible help to get the Government scholarships.
 - Earn and Learn Scheme: This scheme being implemented by the college in cooperation with the University enables the socially and economically disadvantaged students to earn small amounts of money by working in various college departments.

- **Students with physical disabilities**

College ensures that infrastructure facilities like ramp, lift and wash room meet the requirements of the students with physical disabilities. It is ensured that they don't have any physical obstruction. They are provided front-seats in the class rooms, comfortable furniture and attendant facility. College also provides lift facility for these students. Help is provided by supporting staff on a need basis to the physically challenged students.

- **Overseas students**

Institute does not have quota for overseas students.

- **Students to participate in various competitions/National and International**

Students are encouraged to participate in extracurricular and co-curricular activities such as technical fests, cultural events, and sports events etc. which are organized by reputed institutions such as IIT's, NIT's, Universities and Government colleges. All necessary support and services are provided by the Institute like financial assistance, Wi-Fi facility and library facility. Faculty members are deputed to assist and guide the students.

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

College has a Medical officer for medical checkups. Complete medical check-up is provided to all students of college when they get admitted to the college. Well known hospitals (Jahangir Hospital, Ruby Hall Clinic etc.) are at a distance of half a kilometer from the college and can be approached easily in case of an emergency. General medicine and a first-aid box are available with every department.

- **Organizing coaching classes for competitive exams**

To prepare students for competing in the GATE examinations college provides coaching to the interested students. College also provides infrastructural facilities to organize coaching classes for the same. Study material related to GATE and other competitive examinations is available in the college central library.

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

The college identifies students with poor communication skills and provides coaching to improve their skills. College conducts various seminars, workshops and guest lectures for the students by experts to enhance their skills.

College has a separate cyber area in the library with internet facility and provides Wi-Fi connectivity, which helps students stay updated with new technologies and current affairs.

- **Support for “Slow learners”**

The department appoints a parent teacher who identifies slow learners and provides them counseling and intense coaching. As and when required remedial classes are conducted for slow learners.

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

Various workshops, seminars and guest lectures are arranged by the college to guide the students for their carrier, to motivate them for higher education & getting placed in reputed companies, to let them know about current scenarios in industry. Famous personalities and industrialists are invited regularly for guest lectures. Our students get the benefit of sharing their invaluable expertise. The college also arranges industrial visits to leading corporate houses for practical exposure. The students are motivated to participate and present research papers in various national and international seminars, conferences and workshops.

- **Publication of student Magazine**

The Institute publishes a college magazine annually named as “QUASAR”. The college encourages students to be a part of the college magazine. The magazine provides a platform for students to showcase their creative talents. The students of all departments bring out a Wall magazine called ‘ASTITVA’ which comprises of general as well as articles relating to the latest developments in engineering.

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

The Institute has organized various Programmes, awareness drives for Entrepreneurship Development.

The Activities organized for Entrepreneurship Development:

Sr. No.	Programme	Date	No. of Participants
1.	Entrepreneurship Development Programme - 2	25/08/2014 - 23/09/2014	30
2.	Entrepreneurship Development Programme - 1	07/07/2014 - 02/08/ 2014.	12
3.	Entrepreneurship Awareness Camp – 2	20/02/2014 – 22/02/2014	93 students of TE, BE from All Branches
4.	Entrepreneurship Awareness Camp – 1	23/01/2014 – 25/01/2014	BE students of All Branches

The college has initiated B-WOW model for placement and entrepreneurship development for 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.

- ❖ additional academic support, flexibility in examinations
- ❖ special dietary requirements, sports uniform and materials
- ❖ any other

The institution is promoting students for participating in various extracurricular activities by ensuring consistent encouragement and motivation. The necessary facilities are provided and adequate funds are allotted. The sports and cultural committees arrange and coordinate the extra-curricular activities. The college has Instituted several prizes for students showing remarkable performance in extra-curricular activities. These are ceremoniously presented at the hands of an eminent guest on the prize distribution day during the Annual social gathering.

5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services, etc.

The Institute motivates its students for higher studies and for research work. Students are allowed to have access to library till night so that they can prepare for competitive examinations. Students are helped by the teachers in matters of study materials and counseling for the right strategies. Academic exemption in attendance is provided to students for such examinations. Students can appear in online examinations using internet facilities at our institution. Many students have appeared and qualified in various competitive exams.

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

The Institute provides regular counseling services to the students to address the issues related to their academic, personal as well as career awareness.

- **Academic & career counseling:**

The Institute has a parent teacher scheme in which 15 to 20 students are assigned to each faculty member who counsel the students regularly and look after their academic as well as career related issues.

First year students are informed by parent teachers about the scope and nature of the various subjects that form the syllabus. The students are not pressurized in choosing the elective subjects. Students are guided and counseled by class in-charge and Head of the department on academic and career prospects.

- **Personal & psycho-social counseling:**

The parent teacher interacts with all the allotted students regularly and tries to identify the personal problems of the students. For this the students are made comfortable by providing a friendly environment so that they can share their personal problems with the parent teacher. The teacher concerned is very supportive in guiding them to solve their problems. The candidates at times come face to face with certain social issues or problems which tend to bring the inferiority complex in them. The teachers make it sure that no such deterioration happens with the psychosocial understanding of the students. They are counseled to become better human beings and advised to stand tall for the social cause.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If ‘yes’, detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the Programmes).

Various training initiatives have been taken up by the Training and Placement Cell to develop the required skills in students so as to get them placed in reputed organizations.

All the students are provided with intense and multidimensional career guidance throughout the course duration. Online assessment tests are conducted for the students so that they can analyze their strengths and weaknesses. Reputed international academicians’ consultants and experts in higher education are invited for conducting seminars in the college

- The institution has a well-organized Training and Placement Cell to support the students for their career development. Many reputed companies, such as Tech Mahindra, Persistent, Zensar, HSBC, Volkswagen, Siemens, ZF Steering, TCS and IBM have visited our institution, and our students are working (placed) with them currently. T & P Cell works round the year to provide efficient, effective training and employment opportunities for all students. The operation is a two tier system one at the corporate level and one at the College. The T&P Cell is equipped with a database secured and maintained through an ERP System. A group of trained professional rollout different soft skill development Programmes and technical development training Programmes in house on a regular basis.
- T & P Cell arranged four Job fairs in the last two years and each time about 12-15 companies participated and approximately 2200 students benefited from the Job fairs.
- T & P Cell arranged many pool campuses as the college has infrastructure for conduction of “On Line” test for around 450 students at a time.
Companies that participated in the Job Fairs and pool campus are,

Accurate Gauging, ADWEB, Amura Tech, Atos, Aurin Pro Sena, Bitwise, Bosch, Bridgestone, Crest, HSBC, Ideas, Infosys, Jonam Engg. Tech. Pvt. Ltd., Krawler Infosystems, KUKA Robotics, L&T, Lingua Next, QED, Quick Heal, Sanmar, Quinnox, Siemens, Symantec, Syntel, Talent Beat, Crest Premedia, Deloitte, Enzigma, EQMSOL, Eternus Solutions, Fiserv, Flextronics, MAQ Software, Mithi Software, Mphasis, Navis, Nitor, NTT Data, Optra Systems, Opus Software, Persistent, Pubmatics, TCS, Tech M, Thoughtworks, Vag Valves, Volkswagen, Web Tech Developers, Wirtgen India, Zensar Technologies and Flipkart.

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 Institute has a mechanism for the student grievance redressal. The Institute has a Student Grievance Redressal Cell. A suggestion and complaint box is placed on first floor in front of library in the institution. This box is opened once every month and suggestions/ grievances are discussed in the meeting of the Cell and appropriate action is taken if necessary.

The composition of Student Grievance Redressal Cell is as follows.

Sr.No.	Name	Designation
1.	Dr. A. A. Keste	Chairman
2.	Mrs. N. F. Shaikh	Member
3.	Mr. P. B. Chopade	Member
4.	Mr. V. N. Chougule	Member
5.	Dr. D. S. Adkar	Member
6.	Dr. V. N. Raibhole	Member
7.	Mr. B. D. Nandre	Member
8.	Mr. V. A. Rahane	Member
9.	Mr. P. P. Bhoge	Member
10.	Mr. P. N. Kota	Member Secretary

Beside this the college has a number of committees for addressing the students problems such as Local Managing Committee, Reservation Committee, Anti-ragging Committee, Anti-Ragging Squad, Women's Grievance Cell and Student Council.

No major grievances have been reported to the redressal cell.

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

College has a women grievance cell in view of combat violence against women employees and students. Cell takes necessary steps if the incidents pertaining to sexual harassment require the intervention of the law. Cell is headed by a senior lady faculty. Till date no such case of sexual harassment

has been reported in the Institute. Continuous vigilance of college authority and strict punishment provisions prevent sexual harassment of students.

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, the college has an Anti-Ragging Committee, Anti Ragging Squad as well as other Student Counseling Committees as provisioned in UGC/AICTE regulation 2009. Constitution of the Committee and the progress report sent to the University.

No. of ragging case in last five year – Nil

Anti-ragging Committee:

Sr.No	Name	Designation
1	Dr. A. A. Keste	Chairman
2	Mr. A. J. Hake	Member
3	Mrs. N. F. Shaikh	Member
4	Mr.V.A.Rahane	Member
5	Mr.V.C. Chandegave	Member
6	Mr.H. B. Jagtap	Member
7	Mr.Y. S. Pawale	Member
8	Dr. Milind Bhoi	Member
9	Mrs. V. A. Hajare	Member
10	Mr. M. L. Prabhune	Member
11	Mrs. R. P. Bhadane	Member
12	Mr. P. S. Magdum	Member
13	Ms. P. B. Somwanshi	Member
14	Ms. Ruchi Bakshi	Member
15	Mr. Sagar Khenat	Member
16	Mr. V. N. Chougule	Member Secretary

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

- **Earn and learn scheme**

College has appointed a welfare officer to monitor various activities of earn and learn scheme. Under the universities earn and learn scheme College provides financial aid to economically weaker students.

- **Bank & postal services:**

The space and facilities are provided to Bank of Baroda and post office in college premises, Student and faculties are utilizing the facilities. A Bank of Baroda ATM is available in College Premises.

- **Health services:**

A health centre in the institution takes care of the basic health problems of the students. The college has made arrangements of a full time doctor. The college

has also having the nearby hospital in need of any emergency. The blood donation camp is organized under NSS activity.

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?

No, Alumni Association is under process of registration. Two alumni meets are successfully held. It has got a very good response from the former students.

5.2 Student Progression

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

Year	Total No. of students	Student Session Progression	No. of Students Progressed	% Progression
2013-14	294	UG to PG	12	04.08
		Employed - Campus Selection - Other than Campus Recruitment	114	38.77
2012-13	158	UG to PG	18	11.39
		Employed - Campus Selection - Other than Campus Recruitment	63	39.87
2011-12	166	UG to PG	18	10.84
		Employed - Campus Selection - Other than Campus Recruitment	70	42.16
2010-11	159	UG to PG	22	13.83
		Employed - Campus Selection	59	37.10

		- Other than Campus Recruitment		
2009-10	144	UG to PG	03	2.84
		Employed - Campus Selection - Other than Campus Recruitment	40	27.78

5.2.2 Provide details of the Programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the University)? Furnish Programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating University within the city/district.

Sr. No.	Year	Branch	No. of Students appeared	Passed	I st class with distinction	I st Class	II nd Class	% of Pass
1.	2013 - 2014	Comp.	123	119	44	58	17	96.75
		E&TC	49	46	13	26	07	93.85
		Mech.	122	116	70	44	7	95.05
2.	2012 - 2013	Comp.	44	44	25	18	01	100
		E&TC	58	52	25	20	07	89.65
		Mech.	56	55	32	23	06	98.21
3.	2011 - 2012	Comp.	57	48	20	17	11	84.21
		E&TC	52	39	14	22	03	75.00
		Mech.	57	45	22	19	03	77.19

4.	2010 - 2011	Comp.	56	53	12	26	15	94.64
		E&TC	52	50	10	23	17	96.15
		Mech.	51	45	23	17	05	88.25
5.	2009 - 2010	Comp.	51	43	16	18	09	84.31
		E&TC	57	34	06	07	21	59.64
		Mech.	51	39	11	22	06	76.47

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

The modern and interactive teaching learning academic programmes are organized according to present industrial and competitive job employment by arranging campus drives every year for final year students. The personality and skill development programmes are also conducted to prepare students for competition or for value addition to their previous knowledge. College placement cell is taking untiring efforts to enhance students' chances of placement in the company. The thrust of the placement cell is to create maximum job opportunities for them in the market by establishing good relationship with the Industry. Entrepreneurship awareness camp for final year students was also arranged. The final year students are also promoted to GATE, GRE, TOEFL, IELTS, etc.

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

The Institute provides academic support for the students who are at the risk of failure

- Open house session
- Extra classes

College has initiated B-WOW model for the slow learners.

B-WOW MODEL– for Placement and Entrepreneurship Development

B-WOW is Bridging Work Opportunities Worldwide. This programme is launched with a motive of interaction and consultation with staff, students and the industry to bring out the best results for individual, Institute and society. Its goal is to find out hidden talent in students and nurturing it with an appropriate direction. Here proper mentoring of backlog and year down students is successfully done. A strong database with information such as marks, weak points etc. is prepared. Accordingly problem identification is

done. B-WOW team will have feedback about the progress or shortcoming and necessary corrective actions are taken. A proper interaction between junior and final year students is ensured that help to share their problems, sense of responsibility leading to a positive attitude.

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 programme calendar.

The Cultural activities, games and sports are integral part of education. The college provides sufficient time and facilities for cultural, sports and gymnasium. The annual cultural and sports meet is held every year as the part of “JHANKAAR”. The different cultural, sports and extra-curricular activities are as follows:

- **Cultural:**

Every year college organize cultural week JHANKAAR and execute various events like annual social gathering, cultural and sports events.

Sr. No.	Year	Events	Participation
1.	2013-14	Singing & Band, Dance, Drama, Fashion Show	SE, TE, BE and ME All branches
		Traditional day celebrations	
		Drawing, Graffiti and Rangoli Competition, Art Gallery	
		Treasure Hunt	101 teams from all Branches
		Photography & Short Films Competition	1-short films & 11-photography
2.	2012-13	Singing, Music, Dance Drama and Fashion show	SE, TE, BE and ME All branches
		Traditional day celebrations	
		Drawing, Graffiti and	

		Rangoli Competition, Art Gallery	
		Treasure Hunt Competition	37 Students from all branches
		Photography & Short Films Competition	1-short films & 11-photography
3.	2011-12	Dance (solo & group), Singing, Music, Fashion show and Drama SE, TE, BE and ME All branches	
		Art gallery	30 poems, 50 painting, 7 articles
		Traditional day	All Students
		Fun-fair, mismatch & chocolate day	20 stalls
		Treasure Hunt	64 groups
		Photography	10 Students from all branches

• **ASTITVA**

ASTITVA runs two wall magazines namely, “ASTITVA” and “Tech Vision”. ASTITVA tries to search artist hidden in an engineer, the magazine displays Articles, Poems, Paintings, Thoughts, Movie reviews, book reviews etc. On the other hand Tech Vision puts scientific views and innovative ideas of students in front of the world.

The objectives of ASTITVA is as follows

- Wall magazine to encourage hidden artist in an engineer.
- Celebration of various days to maintain cultural, social and family value.
- Passing monthly resolution for maintaining health and encouraging engineer participate in it.
- Arranging expert lectures for mental peace and spiritual awareness and library of virtuous books.
- Making the environment artistic by doing different artistic Programmes.

- **Mr. and Miss MESCoE award**

The college organizes Mr and Miss MESCoE competition every year. There are many rounds to select this award like aptitude test, technical test, extempore, physical fitness, group discussion, personal interview. For this award we consider all academic records, social awareness, communication skills, presentation skills, their strengths and weaknesses.

The winners of this activity are shown below.

Year	Mr. MESCoE	Miss MESCoE
2013-14	Siddharth Pantoji (BE Mech.)	Aishwarya Desai (TE COMP)
2012-13	Sanket Atre (TE Mech)	Sayali Jain (TE Mech)

- **Lead the Youth award**

The cultural committee has initiated a new event “Lead the Youth” award competition every year since 2014-15.

The objectives of this award are:

- Create a social awareness among youngsters.
- Find and present day to day life social issues, problems.
- Find feasible solution and make report to publish in newspaper and create awareness in society.
- The winner will give presentation on the chosen topic during the annual social gathering.

- **Result:**

- Total no. of participants: 8
- Winner: Mr. Mayur Gangawane
- Topic: How soft drink is unhygienic and affects water polluting?
- Runner up: Mr. Sourabh Gujar
- Topic: How to make helmet rule easier to implement?

- **Debate competition:**

Every year on the eve of 15th August a debate competition is organized.

The details are as follows:

Sr. No.	Details of activity	Duration
1	Debate Competition : Winners: Shruti Vijaykumar (SE E&TC) & Harsh Pereira (SE Comp)	14/08/2013
2	Debate Competition :	14/08/2012

	Winners: Aishwarya Desai & Karan Ahuja (TE Comp)	
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- NSS:**

Activity	Duration	Location	No. of students participated
NSS Camp	3/12/2014-9/12/2014	At Bhambarde Tq- Mulshi	28
	11/12/2013-17/12/2013	At Bhambarde Tq- Mulshi	45
	18/12/2011-24/12/2011	At Bhambarde Tq- Mulshi	46
	20/12/2009-27/12/2009	Bhavadi, Pune	31

- Sports:**

The college encourages the students to participate in various sports such as Chess, Badminton, Table Tennis, Carom, Football, Cricket, Volleyball, and Basketball and Throw ball.

Following table depicts range of sports/games (Outdoor/Indoor) facilities available within campus. Institute also has a well-equipped gym facility.

Sr. No.	Outdoor/ Indoor games	Description of the facility
1.	Basket Ball	15 x 28 m size two courts
2.	Badminton	6.10 x 13. 10 m size two courts
3.	Carom	4 carom boards
4.	Chess	4 chess board
5.	Cricket	65 m circle radius ground with mat pitch
6.	Table-Tennis	2 Tables
7.	Volley Ball	9 x 15 m one court
8.	Foot ball	60 x 120 m one court

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.

The data related to student participations in sports events at different levels is as follows:

2013-14

Sr. No.	Event Name	Period	Organized by	Description
1.	MILLANGE Inter collegiate games (Football)	22/02/2014 - 27/02/2014	VIT, Pune	Gold Medal Winner (Football)
2.	All India Inter University National Games (Volleyball)	19/02/2014 - 23/02/2014	Rajasthan University	Samyak Bhalerao B.E.(Comp) represented the University of Pune
3.	ZEST Annual National Level Inter-Engineering Sports Meet (Chess)	23/01/2014 - 26/01/2014	Govt. College of Engineering , Pune	Third Rank (Chess Team)
4.	Pune District Cricket Association (Cricket) District level games	09/01/2014 - 18/01/2014	Pune District Cricket Association	Aditya Marsala (F.E) represents Pune District Team
5.	Krida Mahotsav State level Inter University Games (Volleyball)	27/11/2013 - 01/12/2013	Mahatma Phule Krishi Vidyapeeth, Rahuri, Dist. A'Nagar	Samyak Bhalerao B.E.(Comp) represented the University of Pune
6.	Pune Zonal University Games (Basketball)	07/10/2013 - 09/10/2013	University of Pune	Amruta Hebbar B.E (E&TC) participated and represented Pune City Team
7.	MIT SUMMIT 14 National Level Inter-	20/09/2013 - 24/09/2013	MIT, Pune	Participated in Football, Chess Carom, Basketball,

	Engineering Sports Meet			Badminton, TT
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2012-13

Sr. No.	Event Name	Period of Activity	Organized By	Description
8.	Maharashtra State Inter-Zone Volleyball Championship	04/01/2013 - 06/01/2013	Venutai Chavan College, Karad	Participation (T.E. Comp.)
9.	West zone inter-University (Basketball)	10/11/2012 - 16/11/2012	L.N.U.P.E College, Gwalior	Amruta Hebbar (Basketball) Represent UoP (T.E.Comp)
10.	West zone inter-University (Volleyball)	28/11/2012 - 02/12/2012	P. S college, Kadi, Gujarat	Samyak Bhalerao 3rd Place (T.E.Comp)
11.	MIT SUMMIT 2012	15/10/2012	MIT, Pune	Participate
12.	MIT SUMMIT 2012	17/09/2012	MIT, Pune	Umesh Nimbalkar Gold Medal (Boxing 48 kg.) S.E.Mech
13.	Maha Kridamohastav (Volleyball)	17/01/2012 - 22/01/2012	Mahatma Phule Krishi Vidyapith, Rahuri.	Samyak Bhalerao Bronze Medal 3rd Place (T.E.Comp)

14.	Inter collegiate Volley Ball Tournament	21/08/2012 - 23/08/2012	Deccan Gymkhana, Pune	Samyak Bhalerao Represent pune city 2nd Place (T.E.Comp)
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2011-12

Sr. No.	Event Name	Period of Activity	Organized By	Description
1.	National Inter Engineering Games (Chess)	29/09/2012	SUMMIT MIT, Pune	Won two round (Chess Team)
2.	National Inter Engineering Games	29/09/2012	SUMMIT MIT, Pune	Participated (Table Tennis) College Team (Carom)
3.	National Inter Engineering Games (Swimming)	29/09/2012	SUMMIT MIT, Pune	6th rank (Swimming) College Team
4.	National Inter Engineering Games (Basket Ball)	29/09/2012	SUMMIT MIT, Pune	Participated (Basket Ball) College Team
5.	National Inter Engineering Games (Table Tennis)	29/09/2011	SUMMIT MIT, Pune	Participated
6.	National Inter Engineering (Football)	28/09/2011	SUMMIT MIT, Pune	Quarter final (Football Team)
7.	National Inter Engineering Games (Cricket)	26/09/2011	SUMMIT MIT, Pune	Participated (Cricket Team)
8.	National Inter Engineering Games (Boxing)	17/09/2011	SUMMIT MIT, Pune	Semi Final Yash Date(SE)

Apart from this, following table shows participation in various co-curricular / extra-curricular and cultural events:

2013-14

Sr. No.	Event Name	Organized by	Participants	Description
1	BAJA 13-14	SAE INDIA	A team of 25 Students from Dept. of Mech. Engg.	Participation
2	GO-KART International Championship 2013-14	Lovely Professional University, Punjab	Team of 18 Students from Dept. of Mech. Engg.	The overall rank of our team was 20th among 53 teams
3	Avishkar- 2013	University of Pune	12-Students from final year(All branches)	Project competition participation
4	NSS Camp Venue: Bhamburda Tal. Mulshi	MESCoE & UoP	45-Students from all branches	Participation
5	Elocution competition 13-14	Nowrosjee Wadia College, Pune	2-Students from Dept. of Comp. Engg.	Winners of Gokhale Cup
6	'TECHCRAFT' 13	PVG, COET, Pune	SE Students from Dept. of Mech. Engg.	Participation
7	CREDENZ 13	PICT, Pune	SE student from Dept. of Comp. Engg.	Participation in Robo League
8	Fastrack Omega 13	MESCoE, Pune	SE students from all Branches	Runner up

9.	SURVIVAL TRAINING 2014	CHAMPION AQUATIC CLUB, Pune	TE student from Comp. Dept.	Best survival swimmer
10	Robomania Competition	PVG COET , Pune	SE Students from all Branches	Won 2nd Prize
11	Paper Presentation at 3rd National Conference for Students in Electrical and Electronics Engineering organized by IEEE Students Branch.	VIT, Pune	BE Comp. Engg.	first Prize

2012-13

Sr.No.	Event Name	Organized by	Participant	Description
1.	Project Competition	ARAI & PESMCOE Pune	4-students from BE(Mech)	Won trophy and cash prize 7000
2.	Project Competition	ARAI & PESMCOE Pune	4-students from BE(Mech)	Participation
3.	“Powerless” in TECHFEST	IIT Bombay	2-Students from TE(Mech)	Best Design Award
4.	“MECHTRIX” technical fest	COEP	2-Students from TE(Mech)	1 ST Prize
5.	“Snap Hunt” Cultural and Sports Mega Event	AISSMS IOIT, Pune	3-Students from SE	1 st Prize
6.	ALACRITY 2013 MAD ADS	AISSMS IOIT, Pune	SE Student from	Participation

			Comp. Engg.	
7.	DIGITAL RENAISSANCE 2013 (G-Brainy Event)	MESCoE, Pune	TE Student Comp. Engg.	Participation

2011-12

Sr. No.	Event Name	Organized by	Participant	Description
1.	Project Competition (AVISHKAR)	BCUD, UoP	6-Students from BE (Mech)	Participation
2.	Supra 2012	SAE INDIA	4-Students from SE to BE (Mech)	Participation
3.	“FREIGHTER” in TECHFEST	IIT Bombay	4-Students from TE(Mech)	Participation
4.	“MECHTRIX” technical fest	COEP	2-Students from TE (Mech)	1 ST Prize
5.	NSS Camp	MESCoE & UoP	46-Students from all branches	Venue Bhamburde Tal. Mulshi
6.	“Pro-Expo” event in “Rebel 11” held on 24 th – 25 th March 2011	COE, Malegaon (Bk)	3-Students from BE Comp. Engg.	3rd Prize in Project Competition
7.	“Concepts” Technical Symposium at Impetus & Concepts 11	PICT, Pune	3-Students from BE Comp. Engg.	Participation
8.	“Scriptech” Paper Presentation held during “TECHNO	CUMMINS College of Engineering	3-Students from BE Comp.	Participation

	SPHINX 11” on 27th March 2011	for Women, Pune	Engg.	
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2010-11

Sr. No	Event Name	Organized by	Participants	Description
1.	“Securus” : An autonomous PDF document reader with enhanced security features on 17th March 2010 at Impetus and Concepts’ 10 Pratibha: National Level Paper Presentation Competition PICT, Pune	PICT, Pune	4-Students from BE Comp. Engg.	Presentation
2.	Implementation of Biometric Security System Using Iris Recognition on 11-13th March 2010 at Excelsior 2K10 : National Level Paper Presentation SIT, ,Pune	SIT, Pune	4-Students from BE Comp. Engg.	Presentation
3.	LAN Monitoring And Control System With Remote Installation Capability on 3rd April 2010 at Working Models / Projects / Products Exhibition, Prakalp 2010: (National Level) K J Somaiya College, Mumbai	K J Somaiya College, Mumbai	4-Students from BE Comp. Engg.	Presentation
4.	Cross Compiler On, Speech Recognition Application 18-20th March 2010 at Intercollegiate Technical Event: M-Pulse 2010 (State Level) PES Modern COE, Pune	PES Modern COE, Pune	7-Students from BE Comp. Engg.	Presentation
5.	Web Based Project Management System on 27th March 2010 at Scriptech: State level Project Competition	Cummins College of Engg, Kothrud, Pune	4-Students from BE Comp. Engg.	Presentation

6.	Web Integrator Using Cloud Computing on 8-9th March 2010 at Technozest 2K10 : Project Exhibition Competition,	D Y Patil COE, Pune	4-Students from BE Comp. Engg.	Presentati on
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2009-10

Sr. No	Event Name	Organiz ed by	Participa nts	Descript ion
1.	“Data Mining & Warehousing for Collaborative Web Based Educational Enterprise Resource Planning” on 22-24th Dec 2009 at National Conference On Futuristic Computer Applications Sponsored by: UoP	AISSMS ,IOIT, Pune	4-Students from BE Comp. Engg.	Presenta tion
2.	INTECHXICATION 2009 Code-X[C/C++]	MIT, Pune	8-Students Comp. Engg.	Participa tion
3.	ZION 09 NEO[C/C++]	Dr.D.Y. Patil Institute of Engineering and Technology, Pimpri,Pune	5-Students Comp. Engg.	Participa tion
4.	VITALITY 09 C-ATHLON	VIT, Pune	13- Students Comp. Engg.	Participa tion

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

Student Feedback

The Institute has set the process of feedback mechanism to improve the quality and performance. All departments, library, TPO and office conduct pre and post midterm feedback activity. Report is generated for the further performance improvement. The department collects the course exit survey

from all students at the end of semester about understanding & learning the subjects learned. Department also takes the graduate exit survey from final year students and alumni regarding the learning process.

Employer Feedback

T&P department collects the feedback from industry. The suggestions given by graduates, alumni and employers are taken into consideration to set the course objectives whenever required to improve the quality in teaching learning process.

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

The Institute publishes the magazine named as “QUASAR” (bright center of a galaxy) yearly. The College encourages publishing the material in various areas like paintings, poems, photography and articles related to technical as well as societal interest. Apart from this department publishes wall magazine “ASTITVA” which promotes the literature in various languages. The achievements of students and faculties are published in departmental Newsletter. The Institute also promotes the students to publish technical papers in National conferences RDME, RACE, ACCET conducted by the college.

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

Yes, as per the Rules and regulations Under provision of section 40(2)(b) of the Maharashtra Universities act, 1994 and guidelines were provided by Board of Student’s Welfare, Pune University, College has formed the Student Council. Student Council consisting of the following members

- Principal - Chairman
- One lecturer Nominated by the Principal
- National Service Scheme Programme officer
- One student from each class who has shown academic merit at the examination held in the preceding year and who is a regular student in the college.
- Director of sports and physical education
- One student from each of the following activities who has shown outstanding performance, nominated by the Principal, namely- Sports, NSS, Cultural activities
- Two ladies students member nominated by the Principal

From all the students one General Secretary is elected and one Culture secretary is elected by the Principal. Two meetings were conducted throughout the academic year.

Student Council Executive Committee	Year 2013-14	Year 2012-13	Year 2011-12	Year 2010-11	Year 2009-10
Chairman	Dr. A. A. Keste	Dr. A. A. Keste	Dr. L. G. Navale	Dr.L.G. Navale	Dr.L.G. Navale
NSS Officer	Mr.M.D. Shahare	Mr.S.M. Nawghare	Mr.S.M. Nawghare	Mr.S.M. Nawghare	Mr. D. S. Adkar
Physical Director	Mr. P.P. Bhoge	Mr. P. P. Bhoge	Mr. K. A. Mahajan	Mr. K. A. Mahajan	Mr. K. H. Munde
General Secretary	Shreyas Joshi (BE Mech)	Vallabh Jagtap (B.E. E&Tc)	Wagh Tushar (B.E. E&Tc)	Mistry khushro bomi (BE Mech.)	Sangale Stephen (BE Mech.)
Sports Secretary	Omkar Lonkar (BE Mech)	Sourabh Suku (BE Mech)	Bhagwat Hrishikesh (BE Mech)	Ghadge Prasanna (BE Mech)	Pukh Raj Khadka (BE Mech)
NSS Representative	Vicky Devkate (BE Mech)	Sagar Thorat (BE Mech)	Shelke Viraj (BE Mech)	Bargaje Ameya (BE Comp)	Amalnelkar Ishan (BE Mech)
Cultural Secretary	Gaurav Khandave (BE Comp)	Akshay Gavande (BE E&TC)	Rishi chandra Digambar (BE Mech)	Potnis Sourabh (BE Comp)	Vishal Gosavi (BE E&TC)
Ladies Representative – 1	Pooja Gandhi (BE E&TC)	Ashwini Shivsharan (BE E&TC)	Nikita Dhanorkar (T.E. Mech)	Badgujar Gayatri (B.E. Comp)	Vishaka Bendare (T.E. Comp)

Ladies Representative – 2	Rasika Pandit (BE E&TC)	Aditi Maswade (B.E. Comp)	Nalawade Megha (T.E. Mech)	Singhvi Karishma (T.E. Mech)	Badgujar Gayatri (T.E. Comp)
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5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

Sr. No.	Academic /Administrative Bodies	Student Representatives (Year 2013-14)	Year 2012-13	Year 2011-12	Year 2010-11	Year 2009-10
1.	Student Council	Shreyas Joshi (BE Mech)	Vallabh Jagtap (BE E&TC)	Wagh Tushar (BE Mech)	Mistry khusrobomi (BE Mech)	Sangale Stephen (BE Mech)
2.	Cultural committee	Gaurav Khandve (BE Comp)	Akshay Kawade (BE E&TC)	Rishi Chandra Digamber (BE Mech)	Potnis Sourabh (BE Comp)	Vishal Gosavi (BE E&TC)
3.	Sports Committee	Omkar Lonkar (BE Mech)	Sourabh suku (BE Mech)	Bhagvat Hrishikesh (BE Mech)	Ghadge Prasanna (BE Mech)	Pukhraj khadke (BE Mech)
4.	NSS Committee	Vicky Devkate (BE Mech)	Sagar Thorat (BE Mech))	Shelke Viraj (BE Mech)	Bargaje Ameysa (BE Comp.)	Amalnelkar Ishyan (BE Mech)
5.	MESA	Akash Sharma (BE Mech)	Gaurav Gupta (BE Mech)	NA	NA	NA
6.	ACE	Heena	Pranav	Shivin	G.K.	Nishant

		Surve (BE Comp)	Kulkarni (BE Comp)	Saxena (BE Comp)	Sudarsan (BE Comp)	Rohatgi (BE Comp)
7.	Roboclub	Merin Thomas (BE E&TC)	Akshay Kawade (BE E&TC)	Nagarajan Chandrasekaran (BE Mech)	Anand Biradar (BE Mech)	Bhaskar Hulawale (BE E&TC)
8.	ETSA	Avinash Shirsat (BE E&TC)	Merin Thomas (BE E&TC)	Shivin Saxena (BE Comp)	Anand Biradar (BE Mech)	-
9.	ASTITVA	Bhavana Mahajan (BE E&TC)	Shraddha Mane (BE E&TC)	Sham Lomte Vidya Patil Sarathak Kand (BE E&TC)	-	-

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution. Any other relevant information regarding Student Support and progression which the college would like to include.

The Institute organizes Alumni Meet every year since 2012. Head of the Departments, Faculty and Staff maintains repo with the Alumni. The Institute has developed a portal for its alumni to stay in touch with each other as well as the college. College has established sophisticated “BAKER-MESCoE Metrology and Quality Control Lab” in collaboration with alumni Mr. Taizoon Baker, Executive Director “BAKER GAUGES INDIA PVT.LTD” Pune in 2013. Each department conducts guest lecture for which alumni of college are invited.

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

Institute Vision: To Groom - Motivated, Environment Friendly, Self-esteemed, Creative and Oriented Engineers.

Institute Mission: To Develop Industry Oriented Manpower to accept the challenges of Globalization by:

- Promoting Value Education through motivated trained faculty,
- Maintaining conducive environment for education at affordable cost,
- Promoting Industry Institute interaction, and
- Involving Alumni.

The College has ensured that its vision and mission statements, clearly define the institution's distinctive characteristics in the following manner:

- The Institute has been set up with a mission to impart such knowledge as may be necessary for the holistic development of students thereby making them capable of being better employable and at par with the highly competitive job market.
- The institution follows a three-fold system which involves curricular, co-curricular and extra-curricular activities. The curriculum being followed is designed in such a way so as to enhance and empower the knowledge base of students. The main focus is on the recent trends in technology.
- The college visualizes facilitating young adult learners with opportunities to inculcate ethics and leadership potential thereby sensitizing learners towards inclusive social concerns, human rights, gender and environmental issues.
- The College has drawn a clear perspective plan for future development and to maintain competitive edge in imparting quality education.

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

The top management, Principal and faculty play a very productive role and have an ample say in the design and implementation of the policies and plans of the college.

The top management of the Modern Education Society consists of a group of dedicated teachers, called Life Members, who are important office bearers in their respective institutions. The Board of Life Members meets periodically to discuss the developments in each institution and interact with heads of sister institutions with regard to the decisions to be taken. Thus the top management

is closely associated with the decision-making at the institutional level. If the institutional head is a Life Member, he/she is a part of the decision-making. If he/she is not a Life Member, the Life Member representing the institution on the Board apprises the Principal of the discussions and decisions of the top management. Thus, the institutional head also plays a very significant role in the institutional decision-making.

The Principal holds meeting with Heads of the various departments every week. All the decisions and policies to improve academic activities are reviewed and discussed in this meeting before implementation. Thus, the Head of the departments, as the representatives of the Faculty, are involved in the institutional decision-making. In case the faculty wishes to express its views on a non-academic matter, it may do so through the teachers' representatives on the Local Managing Committee, which is a statutory body formed as per the provisions of the Maharashtra University Act, 1994.

6.1.3 What is the involvement of the leadership in ensuring?

- **The policy statements and action plans for fulfillment of the stated mission**
 - **Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan**
 - **Interaction with stakeholders**
 - **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders**
 - **Reinforcing the culture of excellence**
 - **Champion organizational change**
- **The policy statements and action plans for fulfillment of the stated mission**

The Institute is working continuously to achieve the following

- To ensure all-round development of students by providing various co-curricular extra-curricular. and entrepreneurship skill development opportunities
- To enhance research culture amongst the faculty and students, by providing latest, research facilities and industry Institute interaction.
- To inculcate moral integrity in students and make them socially responsible good human beings.
- To develop leadership qualities and an ability to work in a team, by encouraging the students to participate in various activities.
- To set up a research center recognized by the affiliating University, SPPU.

The Management and the Principal ensure that the institution forges ahead with all the planning, to consolidate and become one of the premier institutions. The policy statements and action plans are formulated, after careful consideration of all the stakeholders, by the management.

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

The action plans for operations are prepared under the supervision and guidance of the Principal and Heads of the departments. Each department has a well-planned academic calendar before the start of each semester. This calendar lists down all the curricular, co-curricular and extra-curricular activities and events to be organized throughout the semester. There are multiple committees that exist within the department, whose responsibility is to plan out developmental activities and ensure their timely execution. As an individual each staff member prepares a lecture plan and content analysis for the subjects allotted to them much before the start of each semester.

- **Interaction with stakeholders**

There are regular interactions with the various stakeholders, in the form of alumni meets, parent meetings and discussions with employers, so as to take their viewpoints into consideration. This ensures constant communication with the stakeholders.

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

The Heads of the departments review the departmental progress for continuous improvement in consultation with the Principal. Based on the suggestions given by the stake holders during interactions, guest lectures training Programmes are arranged for bridging the gap between academics and industry. The Institute has signed MoUs with various companies for providing additional technical training to the students. Some of the companies which provide us such support are C-DAC, Graceful Growth Consulting India Private Limited, Baker Gauges, Harbinger, Seed Technologies, IBM, Trident Technology, TI and Edgate technologies, ZF Steering India Pvt. Ltd., MEI (Mitsubishi Electric India Private Limited). This number is continuously increasing.

- **Reinforcing the culture of excellence**

The Institute believes in striving for excellence in all aspects. The students are trained to take initiative to act on opportunities and take responsibilities. The Institute inspires and creates culture of involvement, entrepreneurship and improvement by providing support at all levels.

- **Champion organizational change**

The Institute is always open for accepting change in policy for achieving excellence. Taking into consideration the preceding year's performance in terms of academic results, placements, research publications in conferences and journals, funded projects etc. the college follows a well-structured approach for implementing the required changes to ensure improvement in the performance of the system.

Requirements arising, in order to achieve the above goals in the Institute, are systematically conveyed with its justifications to the competent authorities and decisions are taken towards its fulfillment/ implementation.

6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

The heads of various departments conduct weekly meetings with the staff to review the activities of the previous week and plan for the next week. During the weekly meetings with the Heads of the departments, the Principal reviews the processes and plans of each department. The Local Managing Committee, which has representatives from both teaching and non-teaching staff, meets twice in a year. In order to have effective implementation of the policies and to monitor and evaluate the same, various committees have been formulated.

- Academic Monitoring Committee:
 - Members of this committee monitor the instruction delivery on a regular basis so as to record the progress in theory classes and practical sessions.
 - Student's attendance is monitored and corrective actions are taken if required by informing the parents.
 - Feedback is taken from the students with regards to conduction of lectures and practical sessions. This feedback is conveyed to faculty for necessary action so as to improve the teaching learning process.
 - Students are allowed to organize and participate in Seminars, Conferences, Competitions, Technical Festivals, Science Exhibitions and Cultural Programmes.
- Examination Coordination Committee:
 - Conduction of tutorials/mid semester tests/mock practical examinations so as to judge the grasping of concepts by students.
 - Corrective action is taken by conducting remedial classes after declaration of results by SPPU.
- Projects- UG and PG Planning and Monitoring Committee:
 - Encouraging students to participate in project competitions and present papers in National and International conferences.
- Grants and revenue generation Committee :
 - To generate revenue from existing infrastructure and research facilities available in the Institute.
 - To provide expert training Programme by internal and external resources for the students of the Institute and students from other Institutes.
- Training and Placement/Alumni/Entrepreneurship skills development Committee:
 - Helping the students to get employment.
 - Arranging hands-on-training, industrial visits and in-plant training.
 - Arranging guest lectures by professionals from industry and academics.

- Guiding students for higher education in the country and in foreign universities.
- Arranging Alumni meet.
- Conferences/Publications Committee:
 - Organization of National level conference by each department.
 - Plan for organizing an international conference.
- Monitoring of Extra-curricular activities:
 - Celebrating Women's day, Engineer's Day, Independence Day, Republic Day etc.
 - Organizing annual social gathering.
 - Publication of newsletter every semester by each department.
 - Publication of annual college magazine.
 - Organizing events such as camps, blood donation camp and various other activities under the banner of NSS.

Each committee listed above has a group leader and four members, one from each department, viz. Computer, Mechanical, E&TC and FE section. The group leaders in consultation with the committee members prepare a plan before the commencement of each semester. Each committee meets weekly/fortnightly in the presence of the Principal of the Institute to review/monitor various activities executed/to be executed.

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

The Institute has formed various committees and responsibility is given to the members. These committees are supported by the top management, to promote academic leadership.

Sr. No.	Name of the Committees	Chairman	Name of Member Secretary
1.	Governing Council	Dr. M. S. Wadia	Prin. Dr. A. A. Keste
2.	Local Managing Committee	Dr. M. S. Wadia	Prin. Dr. A. A. Keste
3.	Standing Committee	-	Prin. Dr. A. A. Keste
4.	Anti-Ragging Committee	Dr. A. A. Keste	Mr. V. N. Chougule
5.	Anti-Ragging Squad	Dr. A. A. Keste	Dr. V. N. Raibhole
6.	Women's Grievance Cell	Mrs. P. P. Mane	-
7.	NSS Advisory Committee	Dr. A. A. Keste	Mr. B. D. Nandre
8.	Reservation Committee	Dr. A. A. Keste	Mr. L. J. Parande

9.	Library Advisory Committee	Dr. A. A. Keste	Mr. A. S. Sonawane
10.	Examination Committee	Dr. A. A. Keste	Dr. S. B. Sharma
11.	Departmental Advisory Board	Heads of Department	-
12.	Research Committee	Dr. A. A. Keste	Mrs. N. F. Shaikh
13.	Industry Institute Interaction Cell	Dr. A. A. Keste	Mr. S. E. Shende
14.	Internal Quality Assurance Committee	Dr. A. A. Keste	Dr. V. N. Raibhole Co-ordinator
15.	Cultural Committee	Dr. A. A. Keste	Mr. P. N. Kota
16.	Equipment & Computer Furniture Maintenance Committee	Dr. A. A. Keste	Mr. A. C. Mitra
17.	Building/Furniture Maintenance Committee	Dr. A. A. Keste	Mr. A. A. Chaugule
18.	Student Council	Dr. A. A. Keste	Mr. P. P. Bhoge
19.	Training and Placement Cell	Dr. A. A. Keste	Mr. S. E. Shende
20.	Student Grievance Redressal Cell	Dr. A. A. Keste	Mr. P. N. Kota

6.1.6 How does the college groom leadership at various levels?

The Principal is appointed through an interview conducted by a University appointed committee as laid down by the UGC. He is normally a member of the institutional faculty though in the absence of a suitable candidate, an outsider may be appointed to the post. The departmental heads are normally appointed on the basis of institutional seniority of the members of the department.

Life Members of the Society play an important leadership role in the activities of the institution. Each Life Member is an experienced and dedicated teacher, who has taken an oath of giving 20 years of their life to the service of the Society. Whether institutional office bearers or not, they are all closely associated with the decision making at the institutional level. They are identified from among the existing faculty by the top management on the basis of their reputation as teachers and academics. They do not receive any monetary compensation for their contribution to the Society in terms of time, intellect and energy.

6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

The college delegates authority and provides operational autonomy to the departments to work towards decentralized governance system.

Academic responsibilities are fairly divided among all the faculty and these responsibilities are mentioned in the academic calendar of every department. Committees are formed for the various curricular, co-curricular and extra-curricular activities to be conducted during the academic year. The departments are encouraged and given financial support to arrange various activities for the benefit of students and faculty.

The administrative office of the College is headed by the Registrar. The Registrar in consultation with the Principal coordinates the day to day activities concerned with administration of the Institute.

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

Yes, the college is keen on the involvement of staff for improvement of effectiveness and efficiency of the institutional process. The Institute has always been in favor of participative management.

All the Founder-Members of the Society were teachers themselves and products of the freedom struggle. Democrats to the core, they ensured in the constitution of the Society that the institutions established by the Society were all managed by the teachers and academicians themselves. As such, the teachers have always had an important say in the decision-making process within the institution.

The teaching and non-teaching staff is represented in the college committees due to participatory management. The college involves and allows the faculty members to participate voluntarily in the activities.

There are various committees constituted to manage different institutional activities which require participation of faculty. List of committees are as follows:

Sr. No.	Name of the Committees
1.	Governing Council
2.	Local Managing Committee
3.	Standing Committee
4.	Anti-Ragging Committee
5.	Anti-Ragging Squad
6.	Women's Grievance Cell
7.	NSS Advisory Committee
8.	Reservation Committee
9.	Library Advisory Committee
10.	Examination Committee
11.	Departmental Advisory Board

12.	Research Committee
13.	Industry Institute Interaction Cell
14.	Internal Quality Assurance Committee
15.	Cultural Committee
16.	Equipment & Computer Furniture Maintenance Committee
17.	Building/Furniture Maintenance Committee
18.	Student Council
19.	Training and Placement Cell
20.	Student Grievance Redressal Cell

6.2 Strategy Development and Deployment

6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes, the Institute has a formally stated quality policy. It has been formed after discussions with the top management, Principal, Heads of the departments and staff members in order to achieve the vision and mission of the Institute. The Institute undertakes various activities to fulfill the quality policies. All the activities are monitored by the committees that meet periodically to decide and discuss various quality issues.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

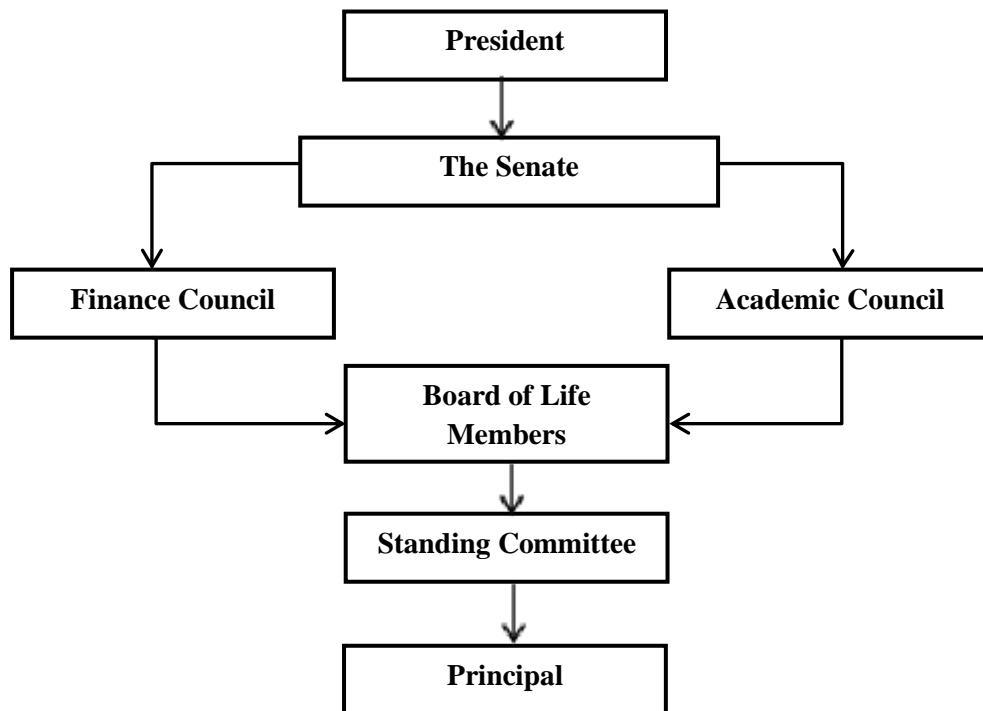
Yes, the Institute has a perspective plan for development. The institution takes effort in finding the key performance indicators for performance assessment and development. It addresses the issues from the stake holder's perspective and takes steps to fulfill their requirements.

The Institute has following perspective plans:

- Permanent affiliation by Savitribai Phule Pune University
- Approval as a Research Center by the affiliating University.

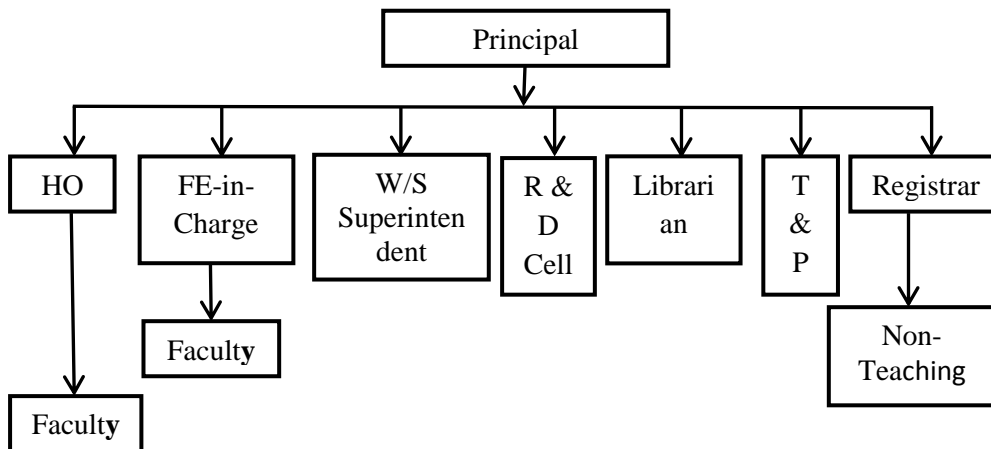
6.2.3 Describe the internal organizational structure and decision making processes.

The organizational structure of the society is as mentioned below.



1. **The Senate** is the highest policy making body concerned with all areas of operation of all the institutions established by the Modern Education Society.
2. **Academic Council** is concerned with academic matters of all the institutions established by the Modern Education Society.
3. **Finance Council** is concerned with financial matters of all the institutions established by the Modern Education Society.
4. **Board of Life Members** which consists of teachers from Society's institutions and is concerned with the day to day operations of these institutions.
5. **Standing Committee** is constituted specifically for each institution to discuss matters pertaining to that institution.

Policy decisions are taken by the Standing Committee. The decisions taken by Standing Committee are further discussed and approved by the higher bodies of the Society i.e. Board of Life Members, Academic Council, Finance Council and the Senate of the Society.

Institutional Organization Structure:-**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

The Institute ensures effectiveness of the teaching-learning process by:

- Implementation of outcome based teaching and learning methodology.
- Recruitment of well qualified and experienced staff as per AICTE norms.
- Course allocation to the faculty much before the commencement of the semester to help them prepare lesson plan and lesson notes.
- Review of the academic results of the previous year
- Authenticated copy of syllabus is issued to the faculty members.
- To bridge the curricular gap contents beyond the syllabus are taught by the faculty members. Online feedbacks from students to assess the teaching skills of the faculty.
- Continuous assessment of students' performance through tests, assignments, seminars and projects.
- Emphasis on imparting skills through laboratory experiments and various skill development Programmes.
- Promoting professional development of faculty by providing support
 - To undergo refresher courses.
 - To pursue doctoral Programmes.
 - To attend and organize National and International Seminars/workshops/conferences.

- **Web-based Learning:**

The Institute has Central internet facility with 15 Mbps and 5 Mbps leased lines. There is a centralized computing facility with 100 computers to promote and motivate students for self-learning.

- **Learning with Multi-media:**

- Availability of course material on intra-net
- Digital library facility
- Availability of video lectures
- LCD projectors for presentation

- **Research & Development**

Research and Development Cell at Institute has started functioning from 2009. Research and Development cell is an integral part of the activities of Institute. This cell is one of the wings of the Institute which facilitates, channelizes, records, and regulates all the academic, sponsored, collaborative research projects and consultancy works in the Institute. The Institute is closely working with core industries to train the students in this direction. The key goal of the Institute is to provide a creative atmosphere in which higher studies and research thrive amongst the faculty and students. It also promotes and manages Institute-Industry interaction. The major role of this cell is in administering research projects sponsored by various Government and non-Government, research funding agencies such as UGC, DST, AICTE, SPPU (BCUD) etc., and promotion of collaborative research partnerships for undertaking creative and advanced research.

- **Community Engagement**

The Institute actively participates in NSS. Students participate in the camps arranged by NSS for promoting community services. Apart from this, the Institute organizes blood donation camp every year.

NSS activities are listed below:

CAY: 2014-15				
Sr. No.	Activity	Duration	Participants	Co-ordinators
1.	NSS Special Camp 2014	03/12/2014 - 09/12/2014	NSS Students	Mr. B. D. Nandre Mrs. S. M. Narsale Mr. P. P. Bhoge Mrs. A. N. Shendkar Ms. Priyanka Tondewad Ms. Nutan Awhadkar

2.	Blood Donation Camp	11/09/2014	All students	Mr. B. D. Nandre Mrs. S. M. Narsale Mr. P.H.Mohite Mr. Pravin Patil Ms. Nilufer Zaman
3.	Mutha river cleaning programme	22/07/2014	NSS students	
4.	Maharashtra State Youth training Centre inauguration	19/07/2014	NSS Staff	
5.	Joy of Forgiveness	02/08/2014	NSS students	
6.	Guest Lecture of Dr. S. M. Galande on International Youth Day	12/08/2014	NSS students	
7.	NSS Swacha Bharat Abhiyan and Shapath Grahan Programme	02/10/2014	NSS students and Staff	
8.	NSS AIDS awareness rally	01/12/2014	NSS students and Staff	
(CAY-1): 2013-14				
Sr. No.	Activity	Duration	Particip ants	Co-ordinators
1.	Natural Disaster Management Lecture	06/02/2014	NSS students	Mr. S. M. Nawghare Mr. M. D. Shahare Mr. P.H. Mohite Ms. Nilufer Zaman
2.	Traffic Safety Fortnight (वाहतूक सुरक्षा	18/01/2014		

	पंधरवडा)			
3.	Saptrang (NSS WEEK)	15/01/2014		
4.	Janata Darbaar	08/01/2014		
5.	NSS- Special Camp	19/12/2013		
6.	NSS-Poster Exhibition for Environmental Awareness	24/09/2013		
7.	NSS- Blood Donation Camp	17/09/2013	All students	
(CAY-2) : 2012-13				
Sr. No.	Activity Details	Duration	Participants	Co-ordinators
1.	Bomb Diffusion safety by police department	07/01/2013	NSS students	Mr. S. M. Nawghare, Mr. P.H. Mohite
2.	Driving safety guidance by police department	03/01/2013	All students	
3.	Rally about women safety	03/02/2013	NSS students	
4.	Police station visit	27/12/2012	NSS students	
5.	Medical Check up	01/11/2012 - 02/11/2012	FE students	
6.	Orientation of NSS Students .	17/08/2012	NSS students	
7.	NSS week celebration	24/09/2012 -30/09/2012	NSS students	
(CAY-3): 2011-12				
Sr. No.	Activity	Duration	Participants	Co-ordinators
1.	Womens Day Celebration	09/03/2012		Mr. S. M. Nawghare, Mr.P.H. Mohite
2.	Rangpanchami celebration with AIDS affected students	12/03/2012	NSS Students and Staff	
3.	NSS Camp	18/12/2011 - 24/12/2011	NSS Students	

4.	NSS- Blood Donation Camp	14/10/2011	All students	
5.	NSS week celebration	24/09/2011 - 2/10/2011	NSS students	
6.	Value Education	05/08/2011		

• **Human resource management**

- The Institute takes care of its human resources.
- Employees are given utmost importance and their needs are well-recognized.
- Service rules are made transparent and the staff gets benefits such as Provident Fund, Gratuity, Group Insurance Scheme etc.
- The faculties and staff are entitled to other benefits like casual leave, maternity leave, medical leave, earned leave and vacation according to rules laid down in the statutes of SPPU.
- The Institute frequently arranges training Programmes and also deputes the staff to other organizations for attending such Programmes for acquiring balanced skills (technical skills, teaching skills, soft skills).
- The Institute has also arranged financial planning lectures for staff, to assist them for effective planning of their finances.
- The Institute has a well-defined and effective selection procedure, systematic performance appraisal system and promotion policies.

• **Industry interaction**

The institution has an Institute industry interaction through the Training and Placement Cell. They promote industrial training for the students and for the faculty as well. Every academic year it is made sure that the students are taken for industrial visits. Both UG and PG students are motivated to undertake their final year project in the relevant industries of their domain, thus exposing and preparing them to meet the real time requirement of the industry.

The Institute has signed MoUs with well-known industries such as C-DAC, Graceful Growth Consulting India Private Limited, Baker Gauges, Harbinger, Seed Technologies, IBM, Trident Technology, TI and Edgate technologies, ZF Steering India Pvt. Ltd., MEI (Mitsubishi Electric India Private Limited) to improve the interaction with industries and thereby providing better exposure to students and faculty members.

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?

The Board of Life Members is a vital body under the constitution of the Modern Education Society. It meets periodically to take a review of the developments in the Society's institutions. The Life members are all

prominent office bearers in their respective institutions. During the Board meetings, information is shared with other board members regarding developments in their own institutions. The resolutions passed in the Board meetings are subsequently sent to Academic and Finance Councils and then finally to Senate which meets periodically. Thus, information regarding developments in the Society's institutions finally reaches to the top management. Once the top management approves of the information, it is circulated among other stakeholders, if necessary. The Principal imparts necessary information to the Heads of the departments in the periodical meetings.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

The management always encourages faculty to involve themselves in ongoing institutional processes. Faculties are the Heads of various committees at college level. Management maintains communication with the staff and is open to their suggestions.

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

A meeting of Governing Council of M E S College of Engineering, Pune was held on 28/01/2015 at 11.30 am in the office of Modern Education Society, Pune.

Following members were present for the meeting:

- Prof. M. S. Wadia – Chairman
- Prin. V. R. Rao
- Dr. S. S. Sarawade
- Dr. V. N. Raibhole
- Prof. Dr. A. A. Keste - Convener

It was resolved that

- Minutes of the meeting held on 27/12/2011 be confirmed.
- Staff position of teaching and Non-Teaching as on 21.01.2015 as mentioned below is noted and efforts be made to recruit faculty at Professor and Associate Professor Level as per norms of AICTE.

Position of teaching staff

Sr.No.	Department	Sanctioned Intake	Staff Required as per AICTE			Approved Staff			Adhoc Staff		
			Prof	Asso. Prof	Asstt. Prof	Prof	Asso. Prof	Asstt. Prof	Prof	Asso. Prof	Asstt. Prof
1	Computer 1st Shift	360	2	6	19	0	2	16	0	0	16
2	Computer 2 nd	60									
3	Computer PG	24									
4	E&TC UG	360	2	5	16	1	3	13	0	0	11
5	E&TC PG	48	1	3	1						
6	Mechanical UG	360	2	5	16	2	4	10	0	0	12
7	Mechanical PG	48	1	3	1						
8	FE	420	0	0	28	0	0	16	0	1	12
	Total	1680	9	23	82	3	9	55	0	1	51

Position of Non-Teaching Staff

Sr.No.	Post	Permanent	Temporary
1.	Registrar	1	0
2.	Senior Clerk	3	0
3.	Computer Programmer	2	0
4.	Junior Clerk	0	9
5.	Library Clerk	1	3
6.	Data Entry Operator	1	0
7.	Electrician	1	0
8.	Laboratory Assistant	6	9
9.	Assistant to T.P.O.	1	1
10.	General Mechanic	1	0
11.	Carpenter	1	0
12.	Diesel Mechanic	1	0

13.	System Administrator	0	1
14.	Technical Assistant	0	1
15.	Junior Electrician	0	1
16.	Foreman	0	1
17.	Machinist	1	0
18.	Project Engineer	0	1
19.	Attendant cum Wireman	1	0
20.	Attendant cum Plumber	0	1
21.	Workshop Attendant	0	1
22.	Medical Officer	0	1
23.	Account Officer	1	0
24.	Instructor Physical Education	0	1
25.	Hamal	10	0
26.	Library Attendant	0	3
27.	Liftman	0	2

- Statutory Audit Report dated 21/06/2014 submitted by Bal Bathia and Co, Chartered Accountants along with Audited Statement for the year 2013-14 along with suggestions and Budget for the year 2014-15 be noted.
- Letter bearing No. CA/4710 dated 12/06/2014 received from Dy. Registrar, Academic, and University of Pune for granting permission to start B. E. Computer Engineering (Second Shift) with intake of 60, M. E. Signal processing with intake of 24 and M E Mechanical Design with intake of 24 from the academic year 2013-14 and Letter No. CA/7574 dated 15/07/2014 received from Dy. Registrar, Academic, SPP University for granting permission to start M. E. Computer Engineering with intake of 24 from the academic year 2014-15 be noted.
- Court cases filed by 31 Non-Teaching Staff appointed on Temporary basis in Industrial Court, PMT Building, Swargate, Pune be noted.
- Scholarship/Freeship amount receivable from Social Welfare Office, Pune amounting to Rs.66,00,052/- as on 21/01/2015. It is noted that efforts be made to obtain the said amount at the earliest.
- Proposal for starting Research Centre in the college from the Academic Year 2015-16 submitted to the University along with Continuation of Affiliation and Natural Growth for the year 2015-16 be noted.
- Submission of intimation regarding LOI alongwith related documents and fees to the Director, NAAC, Bangalore vide Letter No. A-64/NAAC/393 dated 04/09/2014 be noted and preparation for submission of SSR be initiated on priority basis.

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?

The Management is broadly in favor of autonomy. However the institution has no immediate plans 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 Institute has following committees for hearing grievances/complaints from students, teaching and non-teaching staff.

- Local Managing Committee
- Reservation Committee
- Anti-ragging Committee
- Anti-Ragging Squad
- Women's Grievance Cell
- Student Council
- Student Grievance Redressal Cell

Everybody in the institution is made aware of the existence of these committees. As and when the committee receives a complaint, they meet immediately, review and resolve the problems. They also ensure that necessary actions are taken. The complaint details are filed separately and kept confidential.

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

There are two court cases filed against the Modern Education Society and the Institute as second party. One of the court cases is related with gratuity claim which was amicably settled on mutual grounds. As it was the first application for claim of gratuity, it took time for the formalities to complete.

The other case is related to regularization of temporary non-teaching staff. As the non-teaching staff roster checking is in process with State Government, the recruitment process is on hold. Once roster checking process is complete, recruitment of non-teaching staff will be carried out.

6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If yes, what was the outcome and response of the institution to such an effort?

Yes, the institution collects online feedback every semester, from students, on Institutional performance for the improvement and development of academic standard as well as various types of facilities. Students provide their feedback on the working of the administrative office, facilities provided

by the department, facilities provided by the Institute and the working of the training and placement cell as well. In addition to this, students evaluate their subject teachers using the specified questionnaire. This is an online process and is conducted at the department level. A faculty and one supporting staff of the department is assigned this activity and the Heads of the Departments monitor the process.

Heads of the departments go through the departmental feedback and convey it to staff members. After discussion, decisions are taken for the improvement of institutional performance.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?

The institute is taking continuous efforts for the professional development of its teaching and non-teaching staff by:

- Creating a conducive atmosphere for developing capabilities and upgrading skills through training to achieving higher quality and excellence.
- Enabling staff to make use of latest equipments through awareness Programmes and technical trainings.
- Providing duty leaves to faculty and staff for attending workshops, seminars and national and international conferences.
- Providing access to Internet, audio-visual aids, software packages for upgrading knowledge and skills.
- Providing well equipped library and learning resources for effective instruction delivery.
- Motivating faculty to take membership of known technical and professional bodies like CSI, IETE, ISTE, SAE, ASME, ISHRAE.
- Organizing various faculty development Programmes.
- Organizing English Proficiency and communication skill training for selected staff as per need.

6.3.2 What are the strategies adopted by Institute for faculty Empowerment through training, retraining and motivating the employees for the role they perform?

Institute is always striving to motivate and empower the faculty to create sense of direction and positive awareness to all the departments in the teaching learning processes by:

- Sponsoring them to attend various Programmes like National / International conferences, workshops, STTPs and FDPs carried out at different levels.
- Creating a sense of belongingness amongst faculty members by involving them in various committees.

6.3.3 Provide details of performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal?

- The Institute strictly follows all the basic recruitment and promotional policies as stipulated by AICTE, Savitribai Phule Pune University as well as Government of Maharashtra.
- Each and every faculty member completes the self-appraisal procedure every year in the format prescribed by Savitribai Phule Pune University.
- Self-appraisal is done on the basis of the following points:
 - Teaching learning process evaluation
 - Specific duties / tasks assigned by Heads of the Department.
 - Major contribution for the benefit of student/ staff / Institute.
 - Awards/ Rewards obtained by the faculty and staff.
 - Contribution towards extracurricular and co-curricular activities.
 - Execution of exam duties assigned by Savitribai Phule Pune University.
 - Research contribution of staff in terms of research projects, publications and guidance provided to students for involvement in research.

6.3.4 What is outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

The management reviews the performance appraisal for suitable suggestions and remedial actions like regularizing the staff after probation period, deciding the regular increments and deciding promotions.

The following faculty members have been promoted:

Sr. No.	Name of Faculty	Department	Year of promotion	Post before promotion	Post after promotion
1.	Mrs. B. M. Narute	E&TC	01/07/2010	Lecturer	Senior Lecturer
2.	Mr. P. N. Kota	E&TC	01/02/2010	Lecturer	Senior Lecturer
3.	Mr. S. H. Gawande	Mechanical	01/02/2010	Lecturer	Senior Lecturer
4.	Mrs. N. Masood	E&TC	20/06/2008	Lecturer	Senior Lecturer
5.	Dr. S. B. Sharma	F.E.	01/03/2008	Lecturer	Senior Lecturer
6.	Mrs. J. R.	Computer	08/11/200	Lecturer	Senior

	Pansare		7		Lecturer
7.	Mrs. S. K. Wagh	Computer	08/11/2007	Lecturer	Senior Lecturer
8.	Ms. V. S. Galgali	F.E.	01/04/2006	Lecturer	Senior Lecturer
9.	Mrs. A. S. Purandare	F.E.	29/07/2005	Lecturer	Senior Lecturer
10.	Mr. D.S.Adkar	F.E	27/07/2005	Lecturer	Senior Lecturer
11.	Mr. A. C. Mitra	Mechanical	25/09/2005	Lecturer	Senior Lecturer

6.3.5 What are the welfare schemes available for teaching and non-teaching staff? What Percentage of staff has avail benefit of such scheme in the last four years?

Following welfare schemes are available for teaching and non-teaching staff associated with the Institute.

- Staff members of the Institute can avail the loans from Modern Education Society's colleges employee's Co-op Credit Society Ltd.
- GIS (Group Insurance Scheme).
- Extended maternity leaves and permission to leave early (2Hrs) for ladies staff members whose children are below one year is given.
- Uniforms are given to Class IV employees every year.
- Apron, footwear and uniforms are provided to workshop staff every year.
- Need based Training Programmes are arranged by the Institute for the faculty.
- Faculty members are permitted to attend Training Programmes conducted at different institutions.

Percentage of staff availing benefit of such schemes

Facility Available	Group Insurance Scheme	Society Loan	Permission for Relaxation in Timings	Permission for Higher Education
Percentage of staff who have availed the facility	31.41	74.65	3.14	26.70

6.3.6 What are the measures taken by the Institute for attracting and retaining eminent faculty?

The college has been taking efforts to attract and retain, learned people in the college in two ways:

1. Induction to management cadre: The Institute tries to include eminent faculty in the decision making process by inducting him/her to the management cadre. That is why the members of the management of the

Modern Education Society have been the cream of teachers at their respective institutions.

2. Encouragement for Research: Faculty is encouraged to pursue Ph.D. Programme. The Institute supports them by giving duty leaves for their research activities. Even the technical non-teaching staff is encouraged to upgrade their qualification by providing them necessary support.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

The Institute has a well-defined procedure to monitor effective and efficient utilization of available resources for infrastructure, development and teaching-learning process. All the major financial transactions are monitored by the College Standing Committee which comprises of the college authorities and Life Members of the Society.

The financial resolutions of the Standing Committee are recommended by the Board of Life Members to the Finance Council of the Society. Finally there are trustees of the Society who may raise a point with regard to any financial transaction of the college.

In addition to this, the account of each financial year of the college is audited by Chartered Accountant. Thus the utilization of financial resources is monitored at several levels.

6.4.2 What is the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections?

Internal and external auditors are appointed by the parent society. The last audit for the year 2013-14 has been carried out by internal Auditor in May 2014 and External (Statutory) Auditor in June-2014. The details are given as follows.

Audit Compliance Report F.Y. 2013-2014

1. Bank A/c no. 12 (BOB):

Query 1. There are several cheques issued in the month of May 2012 to Dec 2012, however the said cheques are not yet cleared.

Reply: In this regard, we are in regular follow up with Vendors and Students.

Query 2. There are cheques issued for purchases of library books but not encashed till 31.03.14.

Reply: Cheques are encashed on 11/07/2014 and 23/09/2014.

Query 3. One cheque of Rs.71034/- issued towards security charges on 10.06.13 but encashed.

Reply: Point noted.

Query 4. One cheque of Rs.107110/- issued towards printing expenses on 09.12.13 but encashed.

Reply: Cheque is encashed on 26/06/2014.

2. Adv. MES Society:

Query 1. This account shows credit balance of Rs.25860000/- this is subject to confirmation with accounts maintained by society.

Reply: We have confirmed this amount in Account of Modern Education Society.

Query 2. This account records one entry of Rs.5000000/- where Corpus Fund with MES debited by Rs.500000/- Leave Encashment Rs.3500000/- and Advance ME Society Rs.1000000/-. Kindly confirm this transaction with society account.

Reply: We have confirmed these entries in Account of Modern Education Society, however Fixed Deposit Receipts are not available with us.

Query 3. Three cheques amounting to Rs.20000000/- received from ME Society in the month of March 2013, however the same are carried forward in reconciliation.

Reply: Cheque is encashed on 31/07/2014.

3. Advance received from scholarship account (Rs.21500000/-). This advance is returned on 29.3.2014. College has now received advance of Rs.21500000/- from R&D account.

Reply: This advance is returned on 27/06/2014.

4. During this year college has got the permission from the concerned government authorities (DTE, AICTE) to start ME courses from the academic year 2013-14 similarly they have also got the permission from government authorities to commence Second ship in respect of Computer Engineering and that is why quantum of the tuition fees is increased as compared to last year.

Reply: Point noted.

5. It is seen that Savitribai Phule Pune University had given the Grant of Rs.100000/- for purchase of equipment. The Grant amount is now credited to equipment account; this is not in accordance with accountancy principle.

Reply: The point is noted; however there is no communication from Auditor regarding the Account Head.

6. Research and Development:

TD of Rs.22205/- deducted by various parties. This TD amount is to be claimed in the return of ME Society.

Reply: Point noted.

7. Rent received details

Particulars	RENT	TDS
Rent received from TATA Consultancy	Rs.768540/-	Rs.19857/-
Rent received from Attest Testing Services	Rs.226500/-	Rs.4972/-
Rent received from IIT Bombay	Rs.249800/-	NIL
TOTAL	Rs.1244840/-	Rs.24829/-

It appears that TATA Consultancy deducted TD amount which is not matching with the TD account appearing in Tally, however finally claim the TD as per form no. 26AS i.e. Rs.24829/-

Reply: We are in regular follow up with Account Section of Tata Consultancy Services.

8. Outstanding Fees(Tuition Fees only)as on 31/03/2014:

Following are the details of outstanding Tuition fees from the F.Y. 2007-08 to F.Y. 2013-14, such details are put as per the details given by the account department.

Quarter	Form No.	A/C. No.	Amount Rs.	Return filled on	Due Date
4 th Q	24Q	100349600063882	1000000	06/05/2014	15/05/2014
4 th Q	26Q	100349600063893	242701	06/05/2014	15/05/2014
3 rd Q	24Q	100349600007053	1196600	13/01/2014	15/01/2014
3 rd Q	26Q	100349600007031	33584	13/01/2014	15/01/2014
2 nd Q	24Q	100340100522351	1178800	10/10/2013	15/10/2013
2 nd Q	26Q	100340100522340	83571	10/10/2013	15/10/2013
1 st Q	24Q	100340100462486	1193100	11/07/2013	15/07/2013
1 st Q	26Q	100340100462475	10962	11/07/2013	15/07/2013

Reply: Point noted.

9. Tuition Fees Record:

Sr. No.	Details	Amount(Rs) actual recived in a year	Amount (Rs.) accrual basis
1.	Details of tuition fees and other fees as under (on accrual Basis)	-	140355106
2.	Less: Recovery During this year from students and DTE	102304177	-
3.	Less: Excess Recovery from the students	787664	101516513
4.	Amount Outstanding From Government and Student	-	38838593

Further breakup of outstanding tuition fees other fees etc. are as under:

Social Welfare Department	37590250
Outstanding from students	1248343

It is seen that college has maintained the student wise tuition fee and other fee record in excel and we have gone through the same. However, we have been reporting to the college to maintain the Tuition fees record including Tuition Fees on accrual basis in separate Tally package as maintained by some other

colleges of M. E. Society. If this package is adopted, college will get all the details of Outstanding Tuition fees either receivable from the students directly or from the Social Welfare officer and Tribal office. Even year wise outstanding amount can be also made available in this Tally package. Therefore, we would like to advice to maintain such Tuition fees record at least w.e.f. 01/04/2014. This system is most essential so as to avoid financial irregularities and to obtain full proof information of Outstanding Tuition fees etc.

Reply: In this regard, we contacted Mr. Vinod (Tally Student ERP Provider) for providing the Tally Package considering the Year wise and Category Wise Fee Structure of Engineering College so as to enable us to maintain the data in Tally Package. However he showed his inability to maintain such type of Fee Structure in the existing Tally Package as required.

10. Advance to ME Society:

Credit balance payable to ME Society is subject to confirmation.

Reply: We have confirmed this balance in Account of Modern Education Society.

11. Internal Auditor's Report:

We have received the copy of internal audit report on 17th June for the last quarter ending 31st March, 2014. We have gone through the same. The internal audit reports of all quarters will become a part and parcel of our audit report. While checking the vouchers on test check we have seen that internal auditor has checked most of the cash payment vouchers and bank payment vouchers.

Reply: Point noted.

12. TDS Return:

Quarter	Form No.	A/C. No.	Amount Rs.	Return filled on	Due Date
1 st Q	26Q	100340100462475	10962	11/07/13	15/07/13
1 st Q	24Q	100340100462486	1193100	11/07/13	15/07/13
2 nd Q	26Q	100340100522340	83571	10/10/13	15/10/13
2 nd Q	24Q	100340100522351	1178800	10/10/13	15/10/13
3 rd Q	26Q	100349600007031	33584	13/01/14	15/01/14
3 rd Q	24Q	100349600007053	1196600	13/01/14	15/01/14
4 th Q	26Q	100349600063893	242701	06/05/14	15/05/14
4 th Q	24Q	100349600063882	1000000	06/05/14	15/05/14

Reply: Point noted.

13. Physical Verification of Prospectus:

- a. College has printed 880 prospectuses in total from Sanjay Trading Co. Vch. No. 616. Out of which 569 are sold to students, 15 are given to M.E. Society as complementary, 10 are given as complementary to others (i.e. Principal, TPO etc.). Thus, there is 286 closing balance.

Reply: Point noted.

- b. It is explained that college does not use the previous year prospectus as these prospectus bear year on the cover page and hence it cannot be used for selling in current year.

Reply: Point noted.

- c. While physically verifying the Prospectus it is found that the prospectuses are not serially numbered.

Reply: We have maintained separate Register of Prospectus. Entries in the Register are complete in all respect and closing of stock of Prospectus has been carried out at the end of year 2013-14. You are therefore requested to verify the same and inform us accordingly.

14. Physical Cash Verification:

We have physically verified cash of MESCoE on 12th June, 2014 and found to be correct i.e. Rs.6299/-

Reply: Point noted.

6.4.3 What is the major source of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

The major source of institutional receipts is from the fees of students. Any deficit is managed by taking advance from the parent society. Audited income and expenditure statement are available with office in B3/AS file and summary of which is given in the following table.

Details	CFY 2013-14	(CFY-1) 2012-13	(CFY-2) 2011-12	(CFY-3) 2010-11	(CFY-4) 2009-10
Income	13,24,84,904	8,07,26,775	6,92,07,556	3,69,86,155	2,75,75,588
Academic Expenses	12,74,45,140	9,84,86,540	7,80,05,260	5,06,51,160	3,81,36,785
Administrative Expenses	14,31,911	20,57,451	7,85,530	7,86,046	6,78,176

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

The Institute is taking efforts for getting additional funds from various agencies like AICTE, DST & SPPU (BCUD). Details of grants received from BCUD, SPPU in the past years are as mentioned below.

Sr. No.	Name of the faculty	Funding agency	Year	Amount (in Rs. Lacs)
1.	Mr. S. N. Dharwadkar	BCUD, SPPU, Pune	2013-15	1.4
2.	Mrs. R. S. Kadam	BCUD, SPPU, Pune	2013-15	1.2
3.	Dr. A. A. Keste	BCUD, SPPU, Pune	2013-15	1.5
4.	Mrs. K. S. Tiwari	BCUD, SPPU, Pune	2012-14	1.5
5.	Mr. P. N. Kota	BCUD, SPPU, Pune	2012-14	2.1
6.	Mr. V. N. Chougule	BCUD, SPPU, Pune	2011-13	1.5
7.	Mrs. Vijayalakshmi M.	BCUD, SPPU, Pune	2011-13	2.0
8.	Dr. V. N. Raibhole	BCUD, SPPU, Pune	2011-12	2.0
9.	Dr. S. H. Gawande	BCUD, SPPU, Pune	2010-12	1.0
10.	Dr. M. P. Dale	BCUD, SPPU, Pune	2010-11	1.5
11.	Dr. D. S. Adkar	BCUD, SPPU, Pune	2009-12	2.5
Total				18.2

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). The cell is coordinated by a team of faculty representatives from all the departments. The formation was institutionalized through formal office order of the Institute. The Institute's existing policies on academic and

administrative systems in respect of, process of teaching learning and evaluation system, level of satisfaction for academic performances, faculty recruitment and training /qualification enhancement, are of high standard.

Internal Quality Assurance Cell

Sr. No.	Name of the Member	Designation
1.	Prin. Dr. A. A. Keste	Chairman
2.	Prof. D. A. Rajput	Member
3.	Mrs. N. F. Shaikh	Member
4.	Mr. V. N. Chougule	Member
5.	Mr. P. B. Chopade	Member
6.	Dr. D. S. Adkar	Member
7.	Mrs. R. A. Khan	Member
8.	Dr. Ms. M. P. Dale	Member
9.	Mrs. A. S. Purandare	Member
10.	Prof. S. S. Sarawade	Member
11.	Dr. R. P. Bhadane	Member
12.	Mr. S. D. Malpote	Member
13.	Mr. V. A. Rahane	Member
14.	Dr. V. N. Raibhole	Member Secretary

b. How many decisions of the IQAC have been approved by the management/authorities for implementation and how many of them were actually implemented?

NA

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Yes, we have one external member: Prof. R. P. Bhadane.

d. How do students and alumni contribute to the effective functioning of the IQAC?

NA

e. How does the IQAC communicate and engage staff from different constituents of the institution?

All the heads of the department are members of IQAC. This ensures that all the faculty members of the Institute are involved directly/indirectly in effective functioning of IQAC.

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 academic and administrative activities. Meetings are conducted regularly for review of the same.

6.5.3 Does the institution provide training to its staff or effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

The staff members are encouraged to attend training Programmes/workshops that will ensure quality enhancement.

6.5.4 Does the institution undertake Academic Audit for other external review of the academic provisions? If "yes", how are the outcomes used to improve the institutional activities?

The academic progress of the college is being continually monitored by the Academic Council of the Modern Education Society. The Principal communicates in this regards during the regular meetings. The Heads of the Department also review the various academic activities during the weekly departmental meetings and guide the staff members accordingly. Submission of self-appraisal reports and annual activity reports regularly is mandatory for each and every staff member of the Institute.

6.5.5 How is the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

IQAC committee has ensured that internal quality policies will not conflict with external quality assurance agency policies.

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?

Academic monitoring committee takes continuous review of teaching learning process in the Institute. It mainly comprises of Principal, Heads of the department and departmental coordinators. Before commencement of the term, academic calendar is prepared and all the coordinators ensure that the activities are conducted as per schedule. This committee monitors class wise, faculty wise and subject wise instruction delivery.

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

Any other relevant information regarding Governance Leadership and Management which the college would like to include.

Our institution communicates its quality assurance policies, mechanisms and outcomes through the Vision, Mission statement, parent meetings, alumni meets and discussions with employers and through the college website.

CRITERION VII: INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness:

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

The Institute has not conducted a green audit but is in the process of planning a green audit for the campus and its facilities.

7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

The basic philosophy of the Institute is oriented towards environmental sustenance and eco friendliness

- **Energy conservation:**

The Institute is committed towards energy conservation. The common areas in the college are illuminated with LED lights which lead to an energy saving of 35 % as compared to conventional lights. Fans in the college are fitted with electronic fan regulators which achieves power saving of 49% as per compare to normal fan regulators. All the computers in the college have LCD monitors instead of CRT monitors. Information stickers are displayed in all classrooms near the switch boards so as to sensitize students about energy conservation. All the washrooms are fitted with proximity sensors to save electricity when the washrooms are un-utilized.

- **Use of Renewable Energy:**

The Institute has taken initiatives to use renewable energy. The hostels are fitted with solar water heaters (2 units with a capacity of 5000 LPD) .

- **Water Harvesting:**

The Institute has implemented the rain water harvesting project, which has saved a significant amount of water expenses. It also maintains the campus ecology. The plant collects rain water from the roof of the Institute buildings and surrounding areas. The rain water project encompasses most of the educational institutions on the campus. It has been observed that the ground water level in the campus has shown a significant growth. As a result, apart from drinking water requirements, most of the campus water requirements are taken care of by the project. The project has thus helped in achieving the green campus goal.

The project has been implemented in four phases:

Phase I: MESCoE (old building), Nowrosjee Wadia college cycle stand roof and surface water.

Phase II: Playground surface water and the Ness Wadia College.

Phase III: Engineering building and parking

Phase IV: Hostel waste water recycling

- **Check dam construction:** Not Applicable.

- **Efforts for carbon neutrality:**

The Institute is conscious about reducing its carbon footprint. Bio waste from trees and plants is converted into vermicompost instead of burning

it by using the vermiculture pit. The compost produced is used as fertilizer for the plants on the campus thereby promoting reusability. Waste paper in the form of rejected documents are shredded and then sold for the purpose of recycling. To contribute in reducing the effects of global warming all doors and windows in the Institute are made of eco-friendly material instead of wood.

- **Plantation:**

The Institute has successfully implemented a Tree Plantation Programme through the NSS activity, which has resulted in a green and eco-friendly campus.

- **Hazardous waste management:**

Chemicals and Hazardous materials used for the purpose of training and practical sessions are purchased in limited quantities hence no managing/disposing of outdated chemicals is required. All the toilets and bathrooms waste water lines are directly connected to the municipal drainage system.

- **E-waste management:**

The old unused irreparable electronic equipments are disposed as scrap.

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 Institute.

The Institute has many innovative practices which have helped in improving the functioning of the Institute.

- **Academic Innovations:**

- Academic Monitoring is performed regularly which includes data submission regarding lectures and practical conducted and student attendance.
- Remedial classes are conducted for students who have failed in University examinations.
- Online student feedback system for taking feedback of individual teachers, departments, administrative office, library and T & P cell.
- Book-bank scheme for all students.
- Development of advanced laboratories like NI Lab view.
- Center of excellence for Telecom and Pearson Authorized VUE Test Center.
- Parent teacher for every 20 students till they complete their graduation.
- Guest lectures by experienced people from leading industries and reputed institutions.

- **Administrative Innovations:**

- The Institute has a teacher oriented management through the Board of Life Members.

- Regular meetings for monitoring the curricular, co-curricular and extra-curricular activities.
- Director of physical education to take care of all the sports activities.
- The functioning of the administrative office has been automated by using softwares, mailing system and web portal.
- A well established Training and Placement Cell catering to the placement requirements of the students.
- Health Care Centre established for staff as well as students.

7.3 Best Practices

7.3.1 Elaborate on any two best practices in the given format, which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

1. Title of the Practice: “Practical Exposure to the Students”.

2. Goal

The goal of this practice is to give practical exposure to students, so as to broaden their knowledge base thereby enhancing their confidence, employability and research skills. This practice would ensure a good academic record and develop leadership qualities.

3. The Context

Due to the rapid up gradation of technology, a demand for new products, globalization and a highly competitive market, students need to keep themselves abreast with the latest trends in the industry. In order to bridge the gap between academia and industry the students need to get practical exposure. Need of the hour is for academia to identify, understand and provide solutions for problems faced by the industry and to train the students to tackle the same. Hence it is vital to give relevant practical exposure to the students, so that they gain technical knowledge and enhance their confidence.

4. The Practice

Students are expected to be academically strong and have a good practical exposure. Students are encouraged to upgrade their knowledge in their respective disciplines. Besides having a good academic records, students need to have good communication skills, soft skills and learnability skills. To cater to these aspects of student development eminent personalities from various reputed Institutes and industries are invited to impart practical exposure to the students through conferences, workshops, seminars, guest lectures etc. Industrial visits are arranged for students to get an insight into the industrial environment .The Institute has signed MoUs with reputed industries so as to bridge the gap between industry and academia. Students are encouraged to undertake sponsored projects to get hands on experience. Students are motivated to participate in project competitions, National/International conferences/ Workshops and, seminars. They are encouraged to share their ideas with the outside world by presenting their research work in

National/International conferences and Journals. The progress of the students is regularly monitored by their project guides.

The training and placement cell conducts aptitude tests to prepare students to face job interviews. Coaching sessions are arranged for preparing students to appear for competitive exams like GATE.

5. Evidence of Success

The Institute efforts are indicative in students academic performance and placements. Sizeable numbers of students are pursuing post graduate Programmes. The Institutes success is evident from the MoUs with reputed organizations/industries such as C-DAC, KUKA Robotics, SEED Technologies, ZF Steering, Harbinger, Baker Gauges India Pvt. Ltd. and Zest Engineering Services and Technology.

6. Problems Encountered

Time constraints due to the semester pattern and in-sem examinations limit the number of workshops, seminars and guest lectures.

Resources Required

Necessary provisions are made in the budget allocation.

7. Notes

The confidence of the students is boosted due to arranging the expertise training and corrective measures taken by the Institute. There is recognition and appreciation by the Industry and students, and they are actively participating in all such Programmes. Due to the impact of above practice, noticeable positive change has been observed in education process. The students' measurable performance is observed through their better placement, the efforts made by the Institute are well appreciated by the industries.

8. Contact Details

Name of the Principal: Dr. A.A. Keste.

Name of the Institution: Modern Education Society's College of Engineering, Pune

City: Pune

Pin Code: 411001

Accredited Status: In Process

Work Phone: 020 - 2616 3831

Fax: 020 - 2616 3831

Website: www.mescoepune.org

E-mail: principal@mescoepune.org

Mobile: 9423011128

Address: 19, Late Prin. V.K. Joag Path, Wadia College Campus, Pune 411001

Best Practice II:

1. Title of the Practice: Systemic Academic Monitoring of Students.

2. Goal:

The goal of this practice is to identify academically weak students and the reasons for their poor performance. After identification of the weakness appropriate remedial actions are taken to address the problems.

3. The Context:

Since the college is closely located to the railway station and bus depot a large number of students hail from nearby rural areas. Most of these students have completed their higher secondary education from vernacular mediums and find it difficult to adapt to the English medium of instruction. Such students require guidance and counseling in order to adjust to their new environment. Lateral entry students find it difficult to cope with the academics since they are admitted late into the course. Hence they require additional coaching. Besides this there are students from economically and socially weak backgrounds and some sort of financial assistance is necessary.

4. The Practice:

The academic monitoring of the students is done in a continuous and systematic manner and helps faculty members to identify students who are lagging in their academics. The college has a parent teacher system whereby 15-20 students report to a parent teacher until the time they have completed their graduation. The parent teacher plays the role of a counselor and mentor for these students. The parent teacher maintains records of the students personal, academic details and interacts regularly with the students to solve their problems.

The College supports the Earn and Learn scheme of the University, where students from economically weak backgrounds are given an opportunity to earn money, by helping the college during their spare time. A Book bank facility is also available in the college library.

Before the commencement of the second year, special coaching classes are conducted in the college for lateral entry students. Students from other colleges can also avail this facility by paying a nominal fee, which is refunded if the student gets admitted to this Institute. After commencement of term extra classes are conducted for lateral entry students, to help them cope with the academics in spite of being admitted late into the course.

B-WOW cell prepares slow learners for the industry by giving them special training so as to enhance their employability skills. Entrepreneurship skills are encouraged in the students by conducting several Entrepreneurship Awareness Camps (EACs).

5. Evidence of Success:

It has been observed that due to the systemic monitoring of the students their academic performance has shown improvement. Alumni of this college are doing well in the corporate world. The college has produced a number of Entrepreneurs.

6. Problems Encountered:

Students are reluctant to wait after college hours for attending extra classes.

Students hesitate to report to the parent teachers.

Counseling of students from rural area becomes difficult since they are shy and do not openly discuss their problems.

Resources Required:

The only resource required for this practice is motivated teachers and there is no dearth of them in the Institute.

7. Contact Details

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Mobile: 9423011128

Address: 19, Late Prin. V.K. Joag Path, Wadia College Campus, Pune
411001

E. Evaluative Reports of the Departments

DEPARTMENT OF COMPUTER ENGINEERING

1. Name of the department: **Computer Engineering**
2. Year of Establishment: **1999**
3. Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):
UG: B.E. (Computer Engineering)
PG: M.E. (Computer Engineering)

4. Names of Interdisciplinary courses and the departments/units involved

Sr. No.	Names of Interdisciplinary courses	Departments/units involved
1.	Digital Electronics and Logic Design	Electronics and Telecommunications
2.	Microprocessor Interfacing Techniques	Electronics and Telecommunications
3.	Engineering Mathematics III	Mathematics
4.	Discrete Structures	Mathematics

5. Annual/ semester/choice based credit system (Programme wise):

UG - Semester-Pattern.

PG - Semester-Pattern.

6. Participation of the department in the courses offered by other departments

Sr. No.	Names of Department	Course
1.	Electronics and Telecommunications	System Programmimg and Operating System
2.	FE sections	Fundamental of Programmimg Languages I and II

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Sr. No.	Name of Industry	Course
1.	Arizona Infotech- Information Security	Information Security
2.	Seed Infotech Pvt. Ltd	C, C++, Core Java

3.	C-DAC	Embedded Systems, Network Security
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8. Details of courses/Programmes discontinued (if any) with reasons: – **Nil**

9. Number of teaching posts

Teaching Posts	Department	
	Sanctioned	Filled
Professors	3	0
Associate Professors	8	2
Asst. Professors	23	35

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D./M.Phil.etc.)

Sr. No	Name of Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1.	Mrs.N.F. Shaikh	M. E. (CE), Ph. D. Pursuing	Associate Professor & HoD	Neural Networks, Image Processing	17 yrs	NA
2.	Mrs.R.A. Khan	M. E. (CE), Ph. D. Pursuing	Associate Professor	Speech Processing	Industry 6 yrs Teaching 13 yrs	NA
3.	Mrs.S.K. Wagh	M. E. (CE) , Ph. D. Pursuing	Asstt. Prof.	Security	15 yrs	NA

4.	Mrs.J.R.P ansare	M. Tech (CSIT), Ph. D. Pursuing	Asstt. Prof.	Image Processing	14 yrs	NA
5.	Ms.R.M. Wahul	M. Tech. (CE)	Asstt. Prof.	Software Engg.	11 yrs 6 mths	NA
6.	Mrs.S.S. Badala	M. Tech. (CSEIT)	Asstt. Prof.	Networkin g	11 Yrs	NA
7.	Mr. A.R. Khan	Ph. D.	Asstt. Prof.	Software Engg.	9 yrs	NA
8.	Mrs. S.R. Khonde	M. E. (CE)	Asstt. Prof.	Cloud Computing , Informatio n Security	10.5 yrs	NA
9.	Mrs. S.P. Khedkar	M. E.	Asstt. Prof.	Computer Networks	8 yrs	NA
10.	Mr. B.K. Bodkhe	M. Tech.(C E)	Asstt. Prof.	HADOOP and Security	5 yrs	NA
11.	Mrs. S.P. Deore	M. E. (CE)	Asstt. Prof.	Pattern Recognitio n	6 yrs	NA
12.	Mrs. A.P.Kale	M. E. (CE)	Asstt. Prof.	Pattern Recognitio n	11 yrs	NA
13.	Ms. M.G. Devikar	M. Tech. (CSEIT)	Asstt. Prof.	Image Processing	2 yrs 5 mths	NA

14.	Mr. P.S.Patil	M. E. (CSE) Pursuing	Asstt. Prof.	Cloud Computing	Industry 4 yrs Teaching 2 yrs 5 mths	NA
15.	Mrs. S.S. Shinde	M. E.(IT)	Asstt. Prof.	Image Processing	5 yrs 6 mths	NA
16.	Ms. S.H. Pathan	M.E. (Pursuing)	Asstt. Prof.	Computer Vision	2 yrs 6 mths	NA
17.	Mr. N.L. Chourasiya	M.E. (CSIT)	Asstt. Prof.	Networking, Cloud Computing, Database	2 yrs	NA
18.	Mrs. S.S. Raskar	M. Tech.	Asstt. Prof.	Text Mining	8 yrs	NA
19.	Mrs. Nilufar Zaman	M.E. (Pursuing)	Asstt. Prof.	Image Processing	2 yrs 5 mths	NA
20.	Mrs. S. S. Mane	M.E.	Asstt. Prof.	Data Mining	3 yrs	NA
21.	Mr. Bhushan Pawar	M. Tech. (CE) Pursuing	Asstt. Prof.	Industrial 1yr 5m Teaching 4yrs 2m	4 yrs	NA
22.	Ms. Trupti B. Mane	M.E. (CE)	Asstt. Prof	Data Mining	1 yr	NA
23.	Mr. Vishal R. Chaudhary	M.E. (C.E) Pursuing	Asstt. Prof	Network Security	6 yrs	NA

24.	Mrs. Swati Keshari	M.E. (CE)	Asstt. Prof	Web Security	5 yrs	NA
25.	Mrs.D. D. Ahir	M. E. (CE)	Asstt. Prof	Networkin g	6 yrs	NA
26.	Ms. A. S. Tayade	M.E. (CE)	Asstt. Prof	Pattern Recognitio n	3 yrs 5 mths	NA
27.	Mr. G. S. Pole	M. E. (CE)	Asstt. Prof	Informatio n Retrieval Distributed Systems	8 yrs	NA
28.	Mr. Sagar Shinde	M.E. (CSE)	Asstt. Prof	Network security, data mining	3 yrs	NA
29.	Ms. P. K. Gawande	M.E. (CSE)	Asstt. Prof	Operating Systems	2 yrs	NA
30.	Mrs. A. Walunj	M. Tech.	Asstt. Prof	Software Engg	2 yrs 4 mths	NA
31.	Ms. P. S. Khot	M. Tech.	Asstt. Prof	Software Engg	2 yrs	NA
32.	Mr. S. Hirve	M. Tech. (CE)	Asstt. Prof	Networkin g	6 yrs	NA

33.	Mrs. Sharada Y. Y.	M. Tech. (CSE), Ph.D.(Pursuing)	Asstt. Prof.	Distributed Sensor Networks	5 yrs	NA
34.	Mrs. P. B. Bhongade	M.E. (CSE)	Asstt. Prof.	Image Processing	5 yrs	NA
35.	Mr. Suraj R. Balwan	M. Tech (CSE)	Asstt. Prof	Privacy on online social network	6 mths	NA
36.	Mr. Mahesh A. Malwade	M. Tech (CSE)	Asstt. Prof	Cloud computing, Hadoop	6 mths	NA
37.	Mr. A. S. Kamble	M.E. (Computer)	Asstt. Prof	Text mining	Industry - 9 mths Teaching- 2 yrs 3 mths	NA

11. List of senior visiting faculty: **Nil**
12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty: **55.12%**
13. Student-Teacher Ratio (Programme wise) Computer:
UG: 15:1
PG: 12:1
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Supporting Staff	Sanctioned	Filled
Technical Staff	7	7
Administrative Staff	2	2

15. Qualifications of teaching faculty with D.Sc. /D.Litt. /Ph.D. /MPhil/PG.

D.Sc.	D.Litt.	Ph.D.	M.Phil.	P.G.
-	-	01	-	31

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: **No**

19. Publications:

Academic Year	Journals (National / International)	Conferences (National / International)	Chapters in Books	Books Edited	Citation	h-Index
2014-15	13	-	-	-	-	-
2013-14	22	05	-	-	05	-
2012-13	07	14	-	-	-	-
2011-12	05	08	-	01	-	-
2010-11	-	01	-	01	-	-
2009-10	-	04	-	-	-	-

20. Areas of consultancy and income generated: **Nil**

21. Faculty as members in
A) National committees b) International Committees c) Editorial Boards: **Nil**

22. Student project
a) Percentage of students who have done in-house projects including interdepartmental/Programme

Academic Year	Total no. of Students	In-house Projects
2014-15	133	82%
2013-14	127	53 %
2012-13	45	82 %
2011-12	58	93 %
2010-11	58	47 %
2009-10	55	57 %

- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies

Academic Year	Total no. of Students	Sponsored projects
2014-15	133	18%
2013-14	127	47 %
2012-13	45	18 %
2011-12	58	7 %
2010-11	58	53 %
2009-10	55	43 %

23. Awards/Recognitions received by faculty and students

- Meeta Simpi student of SE Comp performed Arangetram at Tilak Smarak Mandir, Pune on 6-1-2014.
- Ammen Singh from TE Comp and Auzita Irani from BE Comp won Gokhale Cup for elocution competition at Nowrosjee Wadia on 25/1/2014.
- Aniket Bhadane from BE comp got approval for his patent in area Information Security from Mumbai in the year 2013-14.
- Samyak Bhalerao won bronze medal in volley ball at krida mohotsav 2013, Nasik in the year 2013-14.
- Garima Goyal and group won cash prize of 7000/- in VIT national level paper presentation competition.
- Onkar Nibandhe and Abhishek Korpe present their views on HADOOP Technology in "HADOOP SUMMIT 2014" at Amsterdam, Netherlands. (Europe)
- 3 students from department hold Rank in first 10 toppers at University level in academic year 2012-13
- Deepak Mahajan and group won cash prize of 7000/- in VIT national level paper presentation competition.

24. List of eminent academicians and scientists/visitors to the Department:

- Dr. Sachin Lodha (TCS)
- Dr. Parag Kulkarni (CEO, Eklat Research)
- Dr. Priti Rege (COEP)
- Dr. R.S. Deodhar (DIAT, Pune)
- Mr. Darshan Masaliya (Consultant)
- Miss Snehal Parate (Software Testing Engineer WIFI Soft Solutions, Pune)
- Mr. Rahul Songadkar from Harbinger Systems
- Mr. Rakesh Agarwal from Mittal Software
- Dr. S. A. Joshi (Chairman, BoS, Pune)
- Mr. G.V. Garje (BoS Chairman, IT, SPPU)

- Dr. Aaditya Abhyankar (Head, IOIT, SPPU)
- Dr. S.N.Mali (Principal, SIT Narhe, SPPU)
- Dr. S.J.Wagh (Principal, Trinity COE, SPPU)

25. Seminars/Conferences/Workshops organized & the source of funding a) National b) International

a) National -Seminar/ FDP

Name of the Event Organized	2014 - 15	2013 -14	2012- 13	2011- 12	2010- 11	2009- 10	Source of funding
National Conference	01	01	01	-	-	-	Institute
National Workshop	02	03	-	01	02	01	Institute
Seminar	-	-	-	02	02	-	Institute & SPPU
FDTP/SDP	01	-	-	-	-	-	Institute
Guest Lecture	07	11	08	07	05	06	Institute
Industrial Visit	01	02	01	01	01	03	Institute

*Note- I- Institute U- Savitribai Phule Pune University

b) International – **NIL**

26. Student profile Programme/coursewise :

UG:

Name of the Course/Programme	Academic Year (Graduation)	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
2013-14				64	42	96.75

2012-13	UG	As the admission process is governed by DTE. The rules and regulations of DTE are followed in the admission process.	23	25	100.00
2011-12			27	22	84.21
2010-11			32	11	94.64
2009-2010			33	12	84.31

*M=Male *F=Female

PG:

Name of the Course/ Programme	Academic Year (Graduation)	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
2014-15	PG	Admission through DTE		2	14	--

27. Diversity of Students

UG:

Name of the Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
2014-15	UG	94.4%	5.92%	0%
2013-14		95.67%	4.32%	0%
2012-13		94.4%	5.55%	0%
2011-12		92.85%	7.15%	0%
2010-11		91.5%	8.5%	0%
2009-10		91.67%	8.34%	0%

PG:

Name of the Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
2014-15	PG	100%	0%	0%

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

NET – 0

SLET – 0

GATE – 17

Civil Services – 02

Defense services - 02

29. Student progression

Student progression	Against % enrolled			
	2013-14	2012-13	2011-12	2010-11
UG to PG	8	10	5	--
PG to M.Phil.	NA			
PG to Ph.D.	01	--	--	01
Ph.D. to Post-Doctoral	NA			
Employed Campus selection Other than campus recruitment	64	24	27	28
Entrepreneurship/Self-employment	--	--	--	--

30. Details of Infrastructural facilities

- a) Library - Centralized Library
- b) Internet facilities for Staff & Students (complete college)
 - 15 Mbps Leased Line (Tata Telecommunication Limited)
 - 5 Mbps Leased Line (Tata Communication Limited)
 - 1 Mbps BSNL Broad band
- c) Class rooms with ICT facility
 - 5 Mbps Leased Line (Tata Communication Limited)
 - 1 Mbps BSNL Broad band

Class rooms with ICT facility

Sr. No.	Room Description	Room No.	Usage	Shared/ Exclusive	Capacity	Rooms equipped with PC, Internet
1.	Classrooms	211	Classroom for 1st year	Exclusive	80 student	PC, Internet, LCD Projector
		212	Classroom for 1st year	Exclusive	80 student	PC, Internet, LCD Projector
		303	Classroom for 2nd year(S E-1)	Exclusive	80 student	PC, Internet, LCD Projector
		305	Classroom for 2nd year(S E-2)	Exclusive	80 student	PC, Internet, LCD Projector
		403	Classroom for 3rd year(T E-1)	Exclusive	80 student	PC, Internet, LCD Projector
		407	Classroom for 3rd year(T E-2)	Exclusive	80 student	PC, Internet, LCD Projector
		503	Classroom for 4th year (BE-1)	Exclusive	80 student	PC, Internet, LCD Projector

		504	Classroom for 4th year (BE-2)	Exclusive	80 student	PC, Internet, LCD Projector
2.	Tutorial rooms	102-A	Tutorial room	Exclusive	25 student	Internet
		102-B	Tutorial room	Exclusive	25 student	Internet
		317	Tutorial room	Exclusive	25 student	Internet
		501	Tutorial room	Exclusive	25 student	PC, Internet, LCD Projector

d) Laboratories

Sr. No.	Room No.	Name of the Lab	Facilities
1.	217	Basic Computing Lab	Desktop: Lenovo, Core2Deo-25, Dotmatrix Printr-2, Switch-1
2.	405-A	Project Lab-1	Desktop: Lenovo, Core2Deo-15, Switch-1
3.	405-B	Project Lab-2	Desktop: Lenovo, Core2Deo-15, Switch-1
4.	302	Software Lab – I	Desktop: Lenovo, Corei3-25, Dotmatrix Printr-3, Switch-1, Scanner-1
5.	304	Computer Network Lab	Desktop: Lenovo, Corei3-25, Dotmatrix Printr-2, Switch-1,
6.	401	Programmemeing Lab-I	Desktop: Lenovo, Corei3-25, Dotmatrix Printr-3, Switch-1
7.	410	Microprocessor and Hardware Lab	Desktop: Lenovo, Corei3-25, Dotmatrix Printr-3, Switch-1, Hardware Kit 89C51 -5 , 8085& 80666-48, 8051-12
8.	412	Software Lab – II	Desktop: Lenovo, Core2Deo-25, Dotmatrix Printr-3, Switch-1
9.	413	Software Engg. Lab	Desktop: Lenovo, Corei3-25, Dotmatrix Printr-2, Switch-1,

			Laser Printer-1
10.	414	Linux/OS Lab	Desktop: Lenovo, Dual Core-25, Dotmatrix Printer-3, Switch-1
11.	502	PG. Lab	Desktop: Lenovo, Corei3-25, Dotmatrix Printer-2, Switch-1,
12.	518	Computer Centre	Thin Client 100, Dot-Matrix printer 1, Laser Printer 1 and Managable Switch.

31. Number of students receiving financial assistance from college, University, Government or other agencies

Sr. No	Type of Assistant	Agency Providing Financial Assistance	Academic Year					
			2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
1	GOI PM Scholarship	Social Welfare Dept. & Tribal Development dept	124	138	96	69	47	37
2	GOI PM Free ship		83	92	86	70	53	37
3	EBC Concession	Jt. Director of Tech. Education	65	67	65	43	26	18
4	Minority Scholarship	Dept. of Minority Welfare	18	12	11	12	10	11
5	Central Sector Scholarship	Jt. Director of Higher Edu.	03	04	03	03	05	00
6	STC/PTC	Zilha Parishad	0	02	01	0	0	0
7	J & K Speci	AICTE	01	01	01	0	0	0

	al Sch							
8	Pvt. Schol arship	Trust, NGO, Companies, etc.	02	01	04	12	02	0

32. Details on student enrichment Programmes (special lectures/workshops/ Seminar) with external experts

Sr. No.	Year	Semester	Day and Date	Topic	Speaker's Name	Audience
1.	2009-10	I	23/07/09	Information Security	360 Degree Research Private Limited	B.E. and T.E.COMP
			20/07/09	.NET TECHNOLOGY and VISUAL STUDIO 2008	K. Feroz by ITECH CONNECT	B.E.
			30/07/09	Red Hat Linux	Sanket kulkarni	S.E. and T.E.COMP
2.	2009-10	II	26/02/10	Mobile Computing	Sachin Murgunde Alumni	T.E.COMP and T.E. E&TC
			11/02/10	.NET TECHNOLOGY	Mr. Dipesh Rane, Quinstreet Software	T.E.COMP
			03/02/10	Uses of Google	Dipesh Rane	T.E.COMP
3.	2010-11	I	21/09/10	Webinar on Introduction To Mainframes	Ms. Soudamini Patil by INFOSYS	T.E. and B.E. COMP

4.	2010 -11	II	03/03/11	Microsoft .NET Technology	Mrs. Ananya Chavan	B.E. COMP
			9/03/11	Introduction to Mainframes	Ms. Soudamini Patil by INFOSYS	T.E. and B.E. COMP
			10/03/11	Web Applications	Mr. Digvijay Pande Alumni	T.E. and S.E. COMP
			19/03/11	Structured Query Language	Piyush Agarwal Alumni	T.E. COMP
5.	2011 -12	I	8/8/11	RECENT TECHNOLOGY FOR PROJECT IMPLEMENTATION	Mr. Rohan Nikam & Mr. Dinesh from Future Tek	S.E. and T.E. COMP
			22/8/11	Object Oriented Programming Concepts	Ms Parvin Shaikh from Kerox Technologies	S.E. COMP
			22/8/11	Net Technology	Ms. Parvin Shaikh from Kerox Technologies	T.E. COMP
			22/8/11	J2EE and Interview Skills	Ms. Preeti Kala from Kerox Technologies	B.E. COMP

6.	2011-12	II	20/01/12	“HARDWARE TECHNOLOGY “	Rohini Dharnadhikari & Mr. Ketan Dedge From Jetking	T.E.and B.E. COMP
			06/03/12	Mobile Computing	Mr. Amulay Prakash and Mr. Rohini Swaminiranjan Dass from Quagnizia	T.E.and B.E. COMP
			14/03/12	GD Technique	Mr. Rakesh Agarwal from Mittal Software	T.E.COMP and T.E. E&TC
7.	2013-12	I	10.7.12	C# Dot Net Technology and carrier guidance	Mr. Bhavin Sheth, Mr. Vibhu DattaMr. Bhavin Sheth	T.E.1 & T.E.2

33. Teaching methods adopted to improve student learning:

- Guest Lecture
- Workshop
- Quiz
- Industrial Tour
- Industrial Visits
- Value Added Course
- Mock Interviews
- Assignments/Semester
- Class Test
- Tutorial
- Seminar
- Feedback Analysis
- Educational Tour
- Department Library Facility
- Internet Facility

- Student Counselling

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Activities conducted under NSS at college -

- Maharashtra State Youth Conference 2014 (19/07/2014)
- Mutha River cleaning and Tree Plantation (22/07/2014)
- Moment of Calm-Joy of Forgiveness (02/08/2014)
- International Youth Day (12/08/2014)
- Blood Donation Camp (11/11/2014)

35. SWOC analysis of the department and Future plans

Strengths

- Young and dynamic faculty in adequate number so as to maintain a teacher student ratio of 1:15. The faculty is well qualified with good teaching and communication skills.
- A curriculum designed to meet both national and international standards, with strong engineering science component, soft skills component, a well-structured laboratory experience and a strong professional component.
- Well-equipped laboratory, library and IT Facilities
- Culture of Research

Weaknesses

- Deficiencies in certain outcomes in graduating students
 - Communication skills
 - Design real world applications
 - Laboratory experience
- Lack of motivation to excel
 - Consultancy needs to be improved.
 - Inadequate language preparation
 - Inadequate training in critical or analytical thinking
- Inappropriate mode of teaching
 - Lack of active learning
 - Inadequate classroom assessment

Opportunities

- Strong Support from the Institute
 - Sufficient funding for attending FDPs/STTPs
 - Encouragement for pursuing higher studies/research.
- Support for organizing Conferences/ Workshops

Challenges

- Competition (local, regional and global)
 - Emerging local and regional private colleges.
 - Accessibility of international schools via distance education.
 - Fast pace of developments in technology (e.g. IT, emerging new

fields)

- Declining enrollment (interest) in engineering
 - Lack of sufficient number of quality students with strong interest in Engineering
 - Inadequate public awareness for engineering profession and job opportunities
- To keep abreast with the everchanging requirements of the IT indus

Future plans

- Planning to apply for major/minor research projects
- To offer consultancy services
- To establish a research centre
- Organize Summer/Winter school and STTPs
- To enhance R&D activities
- To have 40% doctorate faculty

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATIONS ENGINEERING

1. Name of the department : **Department of Electronics & Telecommunications Engineering**
2. Year of Establishment: **1999**
3. Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
UG: B.E. (Electronics and Telecommunication Engineering)
PG: M.E. (Electronics and Telecommunication - Signal Processing)
4. Names of Interdisciplinary courses and the departments/units involved:

Sr.No.	Course	Department
1	Engineering Mathematics III	First Year Engineering
2	Mathematics in Signal Processing	First Year Engineering
3	System Programming and Operating Systems	Computer Engineering

5. Annual/ semester/ choice based credit system (Programme wise):
UG: Semester- Pattern
PG: Semester- Pattern
6. Participation of the department in the courses offered by other departments:

Sr.No.	Course	Department
1	Basic Electronics Engineering	FE
2	Microprocessor Interfacing & Techniques	Computer Engineering
3	Electronics & Electrical Engineering	Mechanical Engineering

7. Courses in collaboration with other universities, industries, Foreign institutions, etc.

Sr. No.	Name of Industry	Course
1.	RS networks	CCNA
2.	RS networks	CCNP
3.	Proactive IT Services Pvt.Ltd	LINUX
4.	C-DAC	Embedded Systems, Programming Fundamentals

8. Details of courses/ Programmes discontinued (if any) With reasons: **Nil**

9. Number of Teaching posts

Teaching posts	Sanctioned	Filled
Professors	03	01
Associate Professors	08	02
Asst. Professors	25	26

10. Faculty profile with name, qualification, designation, Specialization, (D.Sc. /D.Litt. /Ph.D M.Phil.etc.)

Sr. No.	Name Of Faculty	Specialization/ Qualification	Designation	Date of Joining institution	No. of Years of Experience		No. of Ph.D. Students Guided For the Last 4 yrs
					Teaching (Yrs)	Industry (Yrs)	
1.	Prof.Dr.S.P. Narote	ME (EC) PhD (E&TC)	Professor	13/05 /2014	14	2.5	04
2.	Dr.M.P. Dale	PhD. ME (E&TC)	Associate professor	27/12 /2001	16	08	NA
3.	Mrs.P.P. Mane	ME (Digital) PhD pursuing	Associate professor	11/07 /2006	15	--	NA
4.	Mr. P. B.Chopade	ME(E&TC) PhD pursuing	Assistant professor	28/02 /2004	15	--	NA
5.	Mr.P.N. Kota	MTech (Electronics) PhD pursuing	Assistant professor	28/02 /2004	11	2	NA
6.	Ms.B.M. Narute	MTech (Electro	Assistant professor	30/03 /2004	12	--	NA

		atics)					
7.	Mr.S.N. Dharwadkar	MTech (Electro nics) PhD pursuing	Assistant professor	05/07 /2005	10	--	NA
8.	Dr.Mrs.K.S. Tiwari	MTech (Electro nics)	Assistant professor	01/08 /05	12	--	NA
9.	Mrs.A.A. Dhavalikar	ME (Electro nics)	Assistant professor	02/07 /2007	8	--	NA
10.	Mrs.R.S. Kadam	ME (E&TC) PhD pursuing	Assistant professor	05/01 /2009	6	--	NA
11.	Mr. S.S.Pansare	ME (E&TC) Microw ave	Assistant professor	24/08 /2011	3	3	NA
12.	Mrs.U.V. Bomble	ME (E&TC) Microw ave	Assistant professor	15/12 /2011	6	--	NA
13.	Mrs.N. Masood	MTech (Electro nics)	Assistant professor	27/12 /2001	12	4	NA
14.	Mrs.Y.M. Ajgar	ME (E&TC) Microw ave	Assistant professor	02/07 /2007	7	-	NA
15.	Mrs. U.D. Dattasamje	ME (E&TC)	Assistant professor	22/08 /2008	10	--	NA
16.	Mrs.M.M. Dhanvijay	ME (VLSI & Embedd ed Sys) PhD pursuing	Assistant professor	18/06 /2012	6	3	NA

17.	Mrs.P.M. Bagul	ME (VLSI & Embedded Sys)	Assistant professor	17/06 /2013	4	--	NA
18.	Ms.P.S. Tondawade	MTech (VLSI& ES)	Assistant professor	08/05 /2014	0.5	--	NA
19.	Mr.P.H. Mohite	ME (E&TC)	Assistant professor	01/10 /2008	3.0	--	NA
20.	Mr.L.K. Guttedar	MTech (VLSI& ES)	Assistant professor	18/06 /2012	2.5	2	NA
21.	Mr.R. Maknikar	ME (E&TC)	Assistant professor	09/12 /2013	1	--	NA
22.	Mr. P.M. Pardhi	MTech (E&TC)	Assistant professor	09/12 /2013	1	--	NA
23.	Mrs.S.R. Lahane	Perusing ME (E&TC)	Assistant professor	15/01 /13	1	--	NA
24.	Mrs.A.J. Varma	ME (ECE)	Assistant professor	16/06 /2014	4	2	NA
25.	Mr.G.S. Shidardi	ME (E&TC)	Assistant professor	16/06 /2014	5	1	NA
26.	Ms.N.V. Awalkar	ME (E&TC)	Assistant professor	16/06 /2014	5	-	NA
27.	Mr.P.M. Ambure	ME (E&TC)	Assistant professor	26/06 /2014	5.5	--	NA
28.	Ms. V.H. Kamble	ME (E&TC)	Assistant professor	01/08 /2014	2.5	07	NA
29.	Mr. J.T.Jethra	M.Tech(Electronic System)	Assistant professor	19/08 /2014	0.5	3.9	NA

11. List of senior visiting faculty: **Nil**

12. Percentage of lectures delivered and practical classes handled

(Programme-wise) by temporary faculty:

47.43% for UG and **4%** for PG Programme

13. Student-Teacher Ratio (Programme-wise):

15:1 for UG and **12:1** for PG Programme

14. Number of Academic support staff (Technical) and Administrative

staff; sanctioned and filled

Academic support staff	Sanctioned	Filled
Number of academic support staff(technical)	03	03
Number of administrative staff	03	03

15. Qualifications of teaching faculty with DSc/D.Litt./Ph.D./MPhil/PG.

Qualification	Number of teaching faculty
PhD	03
PG	25
UG	1

16. Number of faculty with ongoing projects from

a) National b) International funding agencies and grants received

Number of faculty with ongoing projects from National funding agencies	Grants received from National funding agencies	Number of faculty with ongoing projects from International funding agencies	Grants received from International funding agencies
02	2.6 Lakhs	Nil	Nil

17. Departmental projects funded by DST-FIST;UGC,DBT, ICSSR, etc. and total grants received

Sr. No.	Name of the Research Project	Name of PI/ CO-PI	Funding Agency	Amt. (Rs. Lakhs)	Year
1.	Development of biometric system based on conjunctival vasculature	Mr. S.N. Dharwadkar	BCUD, SPPU	1.4	2013-15

2.	Role of active antenna in portable computing devices	Mrs. R.S. Kadam	BCUD, SPPU	1.2	2013-15
3.	Iris image acquisition on the move	Dr. S. P. Narote	BCUD SPPU	3	2012-14
4.	PAPR Reduction Technique in Orthogonal Frequency Division Multiplexing System	Mr. P.N. Kota	BCUD, SPPU	2.10	2012-14
5.	Design of rough Set Processor for Control and Automotive Applications	Dr.Mrs. K. S. Tiwari	BCUD, SPPU	1.50	2012-14
6.	Fingerprint Analysis Combining Local and Global Features in Transform Domain	Dr. M.P. Dale	BCUD, SPPU	1.5	2008-11

18. Research Centre/facility recognized by the University: **NA**

19. Publications:

Sr.No.	Name of the Faculty	No.of Papers published in peer reviewed journals Faculty/students	No.of Publications listed in International National conference	Mono-graphs	Chapters In Book	Books Edited	Books with ISBN in international DB	Citation Index	SNIP	SJR	Impact Factor	h-Index Average
1.	Prof. Dr. S. P. Narote	13	44	1	-	-	-	141	-	-	-	-
2.	Dr. M.P. Dale	3	24	-	-	-	-	25	-	-	-	-
3.	Mrs. P.P. Mane	3	7	-	-	-	-	1	-	-	-	-
4.	Mr. P.B. Chopade	1	-	-	-	-	-	-	-	-	-	-
5.	Mr.P.N. Kota	4	1	-	-	-	-	-	-	-	-	-
6.	Ms.B.M. Narute	-	2	-	-	-	-	-	-	-	-	-
7.	Mr S.N.Dhar wadkar	-	7	-	-	-	-	2	-	-	-	-
8.	Dr.Mrs.K .S. Tiwari	5	8	-	-	-	-	8	-	-	-	-
9.	Mrs. A.A. Dhavlikar	-	2	-	-	-	-	-	-	-	-	-
10.	Mrs.R.S. Kadam	-	4	-	-	-	-	-	-	-	-	-
11.	Mr.S.S. Pansare	-	3	-	-	-	-	-	-	-	-	-
12.	Mrs.U.V. Bomble	--	1	-	-	-	-	-	-	-	-	-
13.	Mrs.Y.M. Ajar	-	3	-	-	-	-	-	-	-	-	-

1 4.	Mrs.U.D. Dattasam je	-	2	-	-	-	-	-	-	-	-	-
1 5.	Mrs.M.M .Dhanvija y	2	8	-	-	-	-	-	-	-	-	-
1 6.	Mr. P.H. Mohite	-	3	-	-	-	-	-	-	-	-	-
1 7.	Mr.L.K. Guttedar	-	1	-	-	-	-	-	-	-	-	-
1 8.	Mr.R.D. Maknikar	1	-	-	-	-	-	-	-	-	-	-
1 9.	Mr. P.M. Pardhi	-	1	-	-	-	-	-	-	-	-	-
2 0.	Ms.S.R. Lahane	1	2	-	-	-	-	-	-	-	-	-
2 1.	Mrs.A. Varma	-	2	-	-	-	-	-	-	-	-	-
2 2.	Ms.N. V. Awalkar	1	1	-	-	-	-	-	-	-	-	-
2 3.	Prof.P. M. Ambure	1	1	-	-	-	-	-	-	-	-	-
2 4.	Ms.V.H. Kamble	1	1	-	-	-	-	-	-	-	-	-
2 5.	Mr. J.S.Jethra	-	1	-	-	-	-	-	-	-	-	-

20. Areas of consultancy and income generated

Sr.No.	Area of Consultancy	Income generated
1.	Course Conduction (CCNA)	Rs.54000/-
2.	Course Conduction (CCNP)	Rs.31,000/-
3.	Course Conduction (LINUX)	Rs.14500/-

21. Faculty as members in a) National committees b)International Committees c) Editorial Boards

Sr.No.	Committee	No. of Faculty
1.	National	05
2.	International	Nil
3.	Editorial	Nil
4.	Reviewer	06

22. Student projects

a) Percentage of students who have done in-house projects including interdepartmental/ Programme

Sr.No.	Year	No. of In-house Projects	% of in-house projects
1.	2014-15	24 (out of 43)	55.81
2.	2013-14	14 (out of 18)	78
3.	2012-13	20 (out of 21)	95
4.	2011-12	17 (out of 20)	85
5.	2010-11	18 (out of 20)	90
6.	2009-10	13(out of 14)	92.28

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies

Sr.No.	Year	No. of Projects in Collaboration	% of projects done in collaboration
1.	2014-15	15/43	34.89
2.	2013-14	4/18	22
3.	2012-13	1/21	5
4.	2011-12	3/20	15
5.	2010-11	2/20	10
6.	2009-10	1/14	7.72

23. Awards / Recognitions received by faculty and students

Faculty

Sr.No	Name of Faculty	Award
1.	Prof.Dr.S.P.Narote	Best Teacher,SPPU,Pune 2013-14

Students:

Sr. No.	Name of the Student	Achievement
1.	Mr.Jagtap Vallabh (BE)	Principal M.N. Khondwekar Award , Gold Medal and Nalini & Vishwanath Kulkarni prize awarded cash of Rs. 5000/-
2.	Mr.Millind Bhangare (BE)	Principal M.N. Khondwekar Award , Gold Medal and Nalini & Vishwanath Kulkarni prize awarded cash of Rs. 5000/- for Year 2011- 2012

24. List of eminent academicians and scientists/ visitors to the department

Sr. No.	Name of visitor	Designation	Organization	Purpose of visit
1.	Mr. Ganesh Toke	Project Head (CEO)	Prism Automation	PLC training
2.	Mr. Ramesh Borania	Training Head	Mitsubishi Electric Pvt. Ltd.	Automation training
3.	Mr. Nitin Lokhande	Director	ETA	Seminar on automation
4.	Mr. Avinash Nagpure	Engineer FA Centre	Mitsubishi Electric Pvt. Ltd.	PLC workshop
5.	Mr. Shahu Jadhav	Director	Cander Minds	First year Engineering study off
6.	Mr. Sunil Mirashi	Director	Devine Corporation	Entrepreneurship training planning
7.	Mr. Shailesh Kumar	Director	Kristech Automation	Project equipment supplying
8.	Mr. Sanjay Belhi	Director	Proto Control Instruments Pvt. Ltd.	Guidance on entrepreneurship
9.	Mr. Amit Sharma	CEO	Amitech Electronics, Delhi	SDR workshop

25. Seminars/ Conferences/ Workshops organized & the source of funding
a) National b) International

Sr. No.	Programme organized	National/International	Source of funding
1.	Workshop on Software Defined Radio (SDR),2013-14	National Workshop	Institute
2.	ACCET-2014 National Conference on Advancements in Communication, Computing and Electronics Technology	National Conference	Mitsubishi
3.	Measurement Techniques in RF and optical communication,2011-12	National Workshop	Agilent Technologies, Pune

26. Student profile Programme/coursewise:

Name of the Course/ Programme	Academic Year (Graduation)	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
UG (Electronics and Telecommunication Engineering)	2013-14	As the admission process is governed by DTE. The rules and regulations of DTE are followed in the admission process.		29	18	95.83
	2012-13			29	22	89.65
	2011-12			31	17	75.00
	2010-11			27	17	96.15
	2009-10			34	12	83.30

*M=Male *F=Female

Name of the Course/ Programme	Academic Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
PG Electronics and Telecommunication Engineering)	2014-15	As the admission process is governed by DTE. The rules and regulations of DTE are followed in the admission process.		03	15	-
	2013-14			07	14	-

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
UG	2014-15	96.87	3.13	Nil
	2013-14	97.29	2.70	
	2012-13	95.90	4.09	
	2011-12	91.93	8.06	

PG	2010-11	91.48	8.51	
	2009-10	83.63	10.90	
	2014-15	100	0.00	
	2013-14	100	0.00	

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				
	2009-10	2010-11	2011-12	2012-13	2013-14
GATE	02	--	04	03	04
Defence	--	--	--	--	--
CAT	--	--	--	--	--
MBA-CET	--	--	--	--	--
CIVIL Services	-	-	01	-	-

29. Student progression

Student progression	Against % enrolled			
	2013-14	2012-13	2011-12	2010-11
UG to PG	02	16	05	03
PG to M.Phil.	NA	NA	NA	NA
PG to Ph.D.	--	--	--	--
Ph.D. to Post-Doctoral	--	--	--	--
Employed				
• Campus selection	17	21	25	20
• Other than campus recruitment	03	07	10	03
Entrepreneurship/Self-employment	--	--	--	01
Government Sector	--	--	--	--

30. Details of Infrastructural facilities

a) Library

- Titles: 69
- Volumes: 69
- Project reports: 101

b) Internet facilities for Staff & Students

- Internet service: Total 20 MBPS broadband leased line.
- This 20 MBPS line is distributed to student, staff and office section as-
- Staff: 10 MBPS (wired & Wi-Fi)
- Student: 5 MBPS (only Wi-Fi)
- Office : 5 MBPS (R&D, office, HOD) wired connection

c) Class rooms with ICT facility: 05

d) Laboratories

Sr. No.	Name of the Lab	Name Of Faculty In charge & Support Staff	Room No.	Facilities
1.	Digital Electronics Lab	Mrs.R.S.Kadam	316	Digital trainer kits, Digital IC Tester
2.	Basic Electronics Lab	Mr.S.S.Pansare	220	Basic exp. Kits
3.	Project and Design Development Lab	Mrs. A.A.Dhavalikar	321	CRO,FG,PS,DSO
4.	VLSI Design & Software Development Laboratory	Dr.Mrs. K.S.Tiwari	422A	PC's, Xilinx software, Microwind software, Spartan-2, Spartan-3, Spartan-6 board, CPLD Board, SPJ's Microcontroller CPU and peripheral Kits, SIDE 51 S/W
5.	Electronic Measurement and Advanced Equipment Lab	Mrs. U.D.Dattasamje	321A	Universal Counter, DSO, Mixed Storage Oscilloscope, 6&1/2 DMM, 4&1/2 DMM, Spectrum Analyzer, LCR-Q meter, Distortion Meter, Arbitrary Waveform Generator, Lab

				View Software
6.	Digital & Analog Communication Lab	Ms. B.M.Narute	423	CROs, DSOs, communication kits, Antenna trainer kit, FOC kits
7.	Mechatronics	Mr. L.K.Guttedar	310	PLC trainer kit, PLC Based arm robot, PID-KIT, Piezoelectric transducer kit
8.	Signal Processing Lab	Mr.P.N.Kota	422B	Matlab software, PC'S
9.	Circuit Simulation and Modelling LAB	Mr. S.N.Dharwadkar	319	PC's, Simulation S/w, Multisim 11, 12, Printer
10.	Optical Communication Lab	Mrs. Nabegha Masood	423B	AntennaTrainer, satellite communication, Microwave Bench, optical communication kits
11.	Embedded System	Mrs. P.M.Bagul	322	ARM-7,ARM-9 Kit, PC's, Triton software

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					
			2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15
1	GOI PM Scholarship	Social Welfare Dept. & Tribal Development dept	21	30	52	99	122	156
2	GOI PM Freeship		36	30	52	59	66	75
3	EBC Concession	Jt. Director of Tech. Education	14	17	30	38	51	66

4	Minority Scholarship	Dept. of Minority Welfare	0	1	4	8	6	7
5	Central Sector Scholarship	Jt. Director of Higher Edu.	0	4	6	1	1	5
6	STC/PTC	Zilha Parishad	0	0	1	1	1	0
7	J & K Special Sch	AICTE	0	0	0	0	1	1
8	Pvt. Scholarship	Trust, NGO, Companies	0	1	3	0	0	3

32. Details on student enrichment Programmes (special lectures/workshops/seminar)with external experts

Sr. No.	Lectures/Workshops	Topic	Day and Date	Attendees
Seminars				
1.	Seminar	How to prepare for competitive exams for Engineering Students	7 th January 2014	SE students
2.	Seminar	Technical paper presentation competition	10th August 2013	SE to BE Students
Guest Lectures				
3.	Guest Lecture	Guest Lecture on PLC by PRIZM	Wed. 17 th July 2013	TE students
4.	Guest Lecture	Guest Lecture on Embedded	Thurs. 18 th July 2013	SE,TE, BE students
5.	Guest Lecture	Guest Lecture on The IET (Institute of Engineering and Technology, UK)	Friday, 2 nd Aug. 2013	TE students
6.	Guest Lecture	Guest Lecture on EPD	Thursday. 29 th August 2013	BE students
7.	Guest Lecture	Mixed Signal Processing System Design for	Tuesday, 22 nd Oct. 2013	ME E&TC students (Module – 1)
8.	Guest Lecture	Lecture on Latex for ME E&TC	Wed. 13 th Nov. 2013	ME Students

		students		
9.	Guest Lecture	PLC	Wed. 19 th March 2014	SE students
Workshops				
10.	Workshop	Workshop on Basic Manual Robot	20th and 21th July -2013	SE,TE students
11.	Workshop	Basic Manual Robot Phase II – Wireless	3rd Aug-2013	SE,TE students
12.	Workshop	Mobile Making. 2 days	3rd and 4th August 2013	SE students
13.	Workshop	PLC	Saturday & Sunday 24 & 25th Aug to 14 & 15th Sep-2013	TE & BE students
14.	Workshop	ARM development using Stellaris Guru Development Kit	16th Sep-2013	TE & BE students
15.	Workshop	SDP by Shaila Hooli	27 th , 28 th and 29th December-13	SE students
16.	Workshop	Entrepreneurship Awareness Camp (sponsored By Department of Science and Technology	23rd January 2014 – 25th January 2014	TE & BE students
17.	Workshop	Entrepreneurship Awareness Camp (sponsored By Department of Science and Technology	20 th February to 22 nd February 2014	TE & BE students
18.	Workshop	Workshop on PCB Designing	22nd and 24th Feb 2014	SE students
19.	Workshop	ETSA's EPSILON 2014	27 th and 28 th Feb 2014	SE,TE, BE students
20.	Workshop	Mitsubishi Sponsor Workshop on PLC, 20-22nd Feb-2014	20-22nd Feb-2014	TE students

33. Teaching methods adopted to improve student learning

- Apart from regular teaching through black board seminars,

- workshops, technical contests are arranged.
- Special coaching classes for the preparation for placement.
- Tutorial classes are arranged for the students to improve their problem solving skills.
- Conduction of class tests after completion of prescribed syllabus.
- Counseling sessions are arranged for the students to understand their needs and to help them in their problems.
- Guest lectures, industrial visits are arranged to create interest about specific topics among students and to enhance the knowledge.
- Organizing Add-on courses in the college campus to meet global challenges.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities.

Different student oriented Programmes are organized such as

- NSS camps
- Blood donation camps
- Donation drives for orphanages
- Personality development and talent hunt Programmes
- Health awareness Programme

35. SWOC analysis of the department and Future plans

Strengths:

- Qualified, experienced and committed faculty with good retention.
- MOUs are signed with different industries.
- SDP and FDP's are conducted

Weaknesses:

- Interaction with professional bodies
- Less number of publications

Opportunities:

- Skill set required by local, national and global industry
- Alumina interaction for student development
- Ambience management with generous attitude in the form of special pays and incentives

Challenges:

- External funding for research
- Rapid changes in technology and time bound learning and training skills for the faculty

Future plans:

- Research Centre for PhD
- Centre of excellence
- Enhancing industry Institute interaction for projects by students and faculty through industrial training.

DEPARTMENTS OF MECHANICAL ENGINEERING

1. **Name of the department** : **Mechanical Engineering**
2. **Year of Establishment** : **1999**
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., and Integrated Masters; Integrated Ph.D., etc.):**
U.G. - B.E. (Mechanical Engineering)
P.G. - M.E. (Mechanical Design Engineering)
4. **Names of Interdisciplinary courses and the departments/ units involved:**

Sr. No.	Class	Interdisciplinary Courses	Departments involved
1.	FE Mechanical	Engineering Mathematics I	Mathematics
2.	FE Mechanical	Engineering Mathematics II	Mathematics
3.	FE Mechanical	Engineering Physics	Physics
4.	FE Mechanical	Engineering Chemistry	Chemistry
5.	FE Mechanical	Basic Electrical Engineering	Electrical Engineering
6.	FE Mechanical	Basic Electronics Engineering	Electronics & Telecommunication
7.	FE Mechanical	Fundamental Programmimg Languages I	Computer Engineering
8.	FE Mechanical	Fundamental Programmimg Languages I	Computer Engineering
9.	FE Mechanical	Engineering Mechanics	Mechanics
10.	SE Mechanical	Engineering Mathematics III	Mathematics
11.	SE	Electrical & Electronics	Electrical

	Mechanical	Engineering	Engineering, Electronics & Telecommunication
12.	TE Mechanical	Mechatronics	Electronics & Telecommunication
13.	ME Design Sem I	Advanced Mathematics	Mathematics

5. Annual/ semester/choice based credit system (Programme wise):**U.G. - Semester-Pattern****P.G. - Semester-Pattern****6. Participation of the department in the courses offered by other departments:**

Sr. No.	Class	Courses	Departments involved
1.	FE (Computer, Electronics & Telecommunication Engineering)	Basic Mechanical Engineering	Computer Engineering, Electronics & Telecommunication
2.	FE (Computer, Electronics & Telecommunication Engineering)	Engineering Graphics I	Computer Engineering, Electronics & Telecommunication
3.	FE (Computer, Electronics & Telecommunication Engineering)	Engineering Graphics II	Computer Engineering, Electronics & Telecommunication
4.	TE (Electronics & Telecommunication)	Industrial Management	E&TC Department

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Sr. No.	Certificate Course name	Participating institution /industry
1.	CATIA V6 fundamental	EDS Technologies
2.	Zest Technologies	CATIA V6, Hyper mesh

8. Details of courses/ Programmes discontinued (if any) with reasons: Nil**9. Number of teaching posts:**

Teaching posts	Sanctioned	Filled
Professors	03	02
Associate Professors	08	03
Asst. Professors	25	30

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D./M.Phil.etc.)

Sr. No.	Name of Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided for the last 4 years
1.	Dr. A. A. Keste	Ph.D.	Professor & I/C Principal	Mechanical	28	2
2.	Dr.S.S. Sarawade	Ph.D.	Professor	Mechanical	30	2
3.	Mr. V. N. Chougule	ME	Assoc. Prof. & HoD	Mechanical Mfg. Engg & Automation	17	NA
4.	Dr.V. N. Raibhole	Ph.D.	Assoc. Prof.	Mechanical Heat Power	15	NA
5.	Dr.S. H. Gawande	Ph.D.	Assoc. Prof.	Mechanical Design	11	1
6.	Mrs.V.J. Sonawane	M.Tech	Asst. Prof.	Heat Power	17	NA
7.	Mr. A. Mitra	ME	Asst. Prof.	Mechanical Design Engineering	18	NA
8.	Mr. S.P. Gadewar	ME	Asst. Prof.	Manufacturing Engineering	11	NA
9.	Mr. S. S. Jadhav	ME	Asst. Prof.	Mechanical Design	8	NA

				Engineering		
10.	Mr. S. D. Wankhede	ME	Asst. Prof.	Heat Power	7	NA
11.	Mr.A. R. Patil	ME	Asst. Prof	Heat Power	9	NA
12.	Mr. K. A. Mahajan	MTech	Asst. Prof	Mechanical	7	NA
13.	Mr. B. D. Nandre	ME	Asst. Prof	Mechanical Machine Design	9	NA
14.	Mr. H.S. Salave	MTech	Asst. Prof	Heat Power	3	NA
15.	Mr.M.D. Shahare	M.Sc	Asst. Prof	Product Design	2	NA
16.	Mr.V.M. Suryavanshi	ME	Asst. Prof	Heat Power	5	NA
17.	Mr.R.N.Yerrawar	MTech	Asst. Prof	Mechanical CAD/CAM	8	NA
18.	Mr. N. N. Kumbhar	MTech	Asst. Prof	Production Mfg. Engg & Automation	4	NA
19.	Mr. V.R. Varude	MTech	Asst. Prof	Mechanical Automobile	2	NA
20.	Mrs. S.J.Chikhale	ME	Asst. Prof	Mechanical Automotive Engineering	4	NA
21.	Mr.S R Kandharkar	MTech	Asst. Prof	Mechanical Design Engineering	2	NA
22.	Mrs.P. R. Magdum	ME	Asst. Prof	Heat Power	7	NA
23.	Mr.S.P. Patil	MTech	Asst. Prof	Mechanical Cad/Cam	2	NA
24.	Mr. C.B. Meshram	MTech	Asst. Prof	Heat Power	2	NA
25.	Mr.P. B. Biradar	MTech	Asst. Prof	Mechanical Design Engineering	6	NA
26.	Mr.N. U. Alone	MTech	Asst. Prof	Mechanical Design Engineering	6	NA
27.	Mr. P. S. Pandure	MTech	Asst. Prof	Mechanical	2	NA

28.	Mr.V.V. Thopte	ME	Asst. Prof	Mechanical Heat Power	5	NA
29.	Mr.S.S. Jadhav	ME	Asst. Prof	Mechanical Heat Power	4	NA
30.	Mr.B. R. Pujari	M.Tech	Asst. Prof	Mechanical	4	NA
31.	Mr.V.S. Mane	M.Tech	Asst. Prof	Mechanical Automobile Engineering	2	NA
32.	Mr. A. A. Chaugule	M.Tech	Workshop Superintendent	Mechanical	4	NA
33.	Mr. A. A. Patil	M. E	Asst. Prof	Mechanical Design	5	NA
34.	Mr. A. N. Kavitke	M.Tech	Asst. Prof	Mechanical Cad/Cam	0	NA
35.	Mr. V. D. Nandan	M. E	Asst. Prof	Mechanical Thermal	2	NA

11. List of senior visiting faculty:

Sr. No.	Senior Visiting Faculty	Class	Topic
1.	Mr. Ramdas C.	ME	FEM
2.	Dr. Sutaone M. S.	ME	Research Methodology
3.	Mr. Sachin Wagh	ME	Vehicle Dynamics
4.	Mr. Hubbor Sirua	ME	Vehical Dynamics

12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty:

Programme	Percentage of lectures delivered and practical classes handled by temporary faculty
UG	52
PG	Nil

13. Student-Teacher Ratio (Programme wise):

UG : Mechanical Engineering 15:1

PG : Mechanical Design Engineering 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Academic support staff	Sanctioned	Filled
Number of academic support staff (technical)	10	10
Number of administrative staff	04	04

15. Qualifications of teaching faculty with DSc/D.Litt./Ph.D./MPhil/PG.

P.G.	Ph.D.	D.Lit.
31	04	--

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Sr. No.	Name of the Research Project	Name of Principal Investigator/ Coordinator	Funding Agency	Amount as seed money Rs.	Duration of project
1.	Solar water heating system	Prof. A. A. Keste	BCUD, SPPU	1,70,000	2013-15

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Sr. No.	Name of the Research Project	Name of Principal Investigator / Coordinator	Funding Agency	Amount as seed money Rs. Lakhs	Duration of project
1.	Parametric Analysis of Integrated Gasification Combined Cycle Power Plant	Dr V. N. Raibhole	BCUD, University of Pune	2	2012-14
2.	Design, Development, Testing and Optimization of a Vehicle Suspension System Accounting the Effect of Road	Mr. A. Mitra	R & D, MESCoE Pune	2	2011-13

	Profile using MATLAB/SIMULINK				
3.	Numerical Analysis of Oil gas Furnace Performance using CFD and Heat Transfer Model for Different Time Period	Mr. V. N. Chougule	BCUD, University of Pune	1.5	2011-13
4.	Development of Methodology for Balancing of Multi-Cylinder Inline Diesel Engine	Dr. S. H. Gawande	BCUD, University of Pune	1	2009-12

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 Faculty/students	No. of Publications listed in International DB	Monographs	Chapters In Book	Books Edited	Books with ISBN in international DB	Citation Index	SNIP	SJR	Impact Factor	h-Index Average
1.	Prof. Dr. A. A. Keste	8	8	-	-	-	-	-	-	-	-	-
2.	Dr. S.S. Sarawade	3	3	-	-	-	-	-	-	-	-	-
3.	Mr. V. N. Chougule	3	3	-	-	-	2	-	-	-	-	-
4.	Dr. V. N. Raibhole	8	8	-	-	-	-	6	-	-	-	1
5.	Dr.S. H. Gawande	28	28	-	-	-	-	85	-	-	0.5	5
6.	Mrs.V.J.	3	3	-	-	-	-	-	-	-	-	-

	Sonawane											
7.	Mr. A. Mitra	3	3	-	-	-	1	4	-	-	-	1
8.	Mr. S.P. Gadewar	1	1	-	-	-	-	13	-	-	-	1
9.	Mr. S. S. Jadhav	0	0	-	-	-	1	-	-	-	-	-
10.	Mr. S. D. Wankhede	3	3	-	-	-	-	3	-	-	-	1
11.	Mr.A. R. Patil	4	4	-	-	-	-	4	-	-	-	1
12.	Mr. K. A. Mahajan	4	4	-	-	-	-	6	-	-	-	1
13.	Mr. B. D. Nandre	1	1	-	-	-	-	-	-	-	-	-
14.	Mr.H.S. Salave	1	1	-	-	-	-	-	-	-	-	-
15.	Mr.M.D. Shahare	1	1	-	-	-	-	-	-	-	-	-
16.	Mr.V.M. Suryavanshi	1	1	-	-	-	-	-	-	-	-	-
17.	Mr.R.N. Yerrawar	7	7	-	-	-	-	1	-	-	-	-
18.	Mr. N. N. Kumbhar	0	0	-	-	-	-	-	-	-	-	-
19.	Mr. V.R. Varude	1	1	-	-	-	-	-	-	-	-	-
20.	Mrs. S.J. Chikhale	1	1	-	-	-	-	-	-	-	-	-
21.	Mr. S R Kandharkar	1	1	-	-	-	-	-	-	-	-	-
22.	Mrs.P. R. Magdum	1	1	-	-	-	-	-	-	-	-	-
23.	Mr.S.P. Patil	1	1	-	-	-	-	-	-	-	-	-
24.	Mr.P. B.	0	0	-	-	-	-	-	-	-	-	-

	Biradar											
25.	Mr.N. U. Alone	3	3	-	-	-	-	-	-	-	-	-
26.	Mr. P. S. Pandure	2	2	-	-	-	-	-	-	-	-	-
27.	Mr.V.V. Thopte	1	1	-	-	-	-	-	-	-	-	-
28.	Mr.Sushant S. Jadhav	0	0	-	-	-	-	-	-	-	-	-
29.	Mr.B. R. Pujari	0	0	-	-	-	-	-	-	-	-	-
30.	Mr.V. S.Mane	1	1	-	-	-	-	-	-	-	-	-

20. Areas of consultancy and income generated

Sr.No.	Area of Consultancy	Name of Industry/organization	Income generated Rs.
1.	ANSYS	IFS Academy	54000
2.	CFD	Green-Triz	45000
3.	Steam Engineering Centre: Boiler Test Rig	Nutan Maharashtra Institute of Engineering Talegaon	15000

21. Faculty as members in

a) National committees, b) International Committees, c) Editorial Boards

Sr.No.	Faculty Name	Members
1.	Prof. Dr. A. A. Keste	BoS Member, University of Pune
2.	Dr. S. S. Sarawade	BoS member, Solapur University, Solapur
3.	Mr. V. N. Chougule	Purchase committee DIC,Pune
4.	Dr.V. N. Raibhole	Certified Energy Auditor, BEE, Government of India
5.	Dr.S. H. Gawande	Editorial Boards, 5 Int. Committee
6.	Mr. B. D. Nandre	Editorial Committee of RDME

22. Student projects

a) Percentage of students who have done in-house projects including interdepartmental / Programme

Sr. No.	Year	No. of In-house Projects	% of in-house projects
1.	2013-14	16/34	47
2.	2012-13	8/15	53.3
3.	2011-12	6/16	37.5

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies

Sr.No.	Year	No. of Projects in Collaboration	% of projects done in collaboration
1.	2013-14	18/34	53
2.	2012-13	7/15	42.7
3.	2011-12	10/16	62.5

23. Awards / Recognitions received by faculty and students 2013-14:**a. faculty**

Sr. No.	Name of the faculty	Achievement
1.	Dr. A. A. Keste	Is on Editorial Board of International Committee.
2.	Dr.V. N. Raibhole	Certified Energy Auditor, BEE, Government of India. Best paper presentation, ICPEE-2012, Phuket, Thailand. Is on Editorial Board of International Committee.
3.	Dr.S. H. Gawande	Is on Editorial Boards of 5 International Committee

b. Students

Year	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
No. of Prizes won	01	02	09	04	01	08

24. List of eminent academicians and scientists/visitors to the department

Sr. No.	Name of visitor	Organization	Purpose of visit
1.	Dr. Balasubramaniam	Scientists, BARC	RDME

2.	Dr. S. K. Basu	Emeritus Professor, CoEP, Pune – 05	Guest Lecture
3.	Dr. M.D. Jaybhaye	Professor, CoEP, Pune - 05	Visiting Lecture
4.	Mr. Taizoon Baker	Director, Baker Gauges India Ltd, Pune	Guest Lecture
5.	Mr. Arvind Paranjpe	Nuclear Power Plant, Mumbai.	Guest Lecture
6.	Mr. Rajesh A. Balani	Joint Director PCRA	Guest Lecture
7.	Mr. Paranjape	Nuclear Power Plant, Mumbai.	Guest Lecture
8.	Mr. Ajay Chandak	IIT Mumbai.	Guest Lecture
9.	Mr. Ramesh Pranjpey	ASHRAE/ISHRAE Pune Chapter	Guest Lecture
10.	Dr. S. G. Joshi	Principal, Walchand College of Engineering, Sangli.	Guest Lecture

25. Seminars/ Conferences/Workshops organized & the source of funding

Sr. No.	Conferences organized	Date	National/ International	Source of funding
1.	RDME-2015	29/01/2015-30/01/2015	National	Institute
2.	RDME-2014	13/03/2014-14/03/2014	National	Institute
3.	RDME-2013	26/04/2013-27/04/2013	National	SPPU
4.	RDME-2011	04/07/2011-05/07/2011	National	Institute

Sr. No.	Workshops organized	Date	Source of funding
1.	NI Lab View Software	01/02/2014	Institute
2.	Syllabus Implementation of Advanced Mathematics	10/08/2013	Institute
3.	Syllabus Implementation of Research Methodologies	14/10/2013	Institute
4.	Advances in refrigeration and air conditioning	28/12/2011	BCUD

26. Student profile Programme/course wise:

Name of the Course/Programme	Academic Year (Graduation)	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
Mechanical Engineering	2013-14	As the admission process, it is governed by DTE.		99	21	98.21
	2012-13			41	09	77.19
	2011-12			39	08	88.00
	2010-11	As the rules and regulations are followed as per DTE		43	03	76.00
	2009-10			37	05	92.00

*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
UG Mechanical Engineering	2013-14	521	23	Nil
	2012-13	428	21	Nil
	2011-12	372	14	Nil
	2010-11	272	12	Nil
	2009-10	199	14	Nil

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				
	2009-10	2010-11	2011-12	2012-13	2013-14
GATE	---	6	---	6	6
Defense	1	---	---	---	---
CAT	---	---	---	---	---
SLET	---	---	---	---	---
MBA-CET	---	---	---	---	---

29. Student progression

Student progression	Against % enrolled			
	2013-14	2012-13	2011-12	2010-11
UG to PG	4	4	4	6
PG to M.Phil.	NA	NA	NA	NA
PG to Ph.D.	-	-	-	-
Ph.D.to Post-Doctoral	-	-	-	-
Employed				
• Campus selection	-	21	13	4
• Other than campus recruitment	-	4	9	7
Entrepreneurship/Self-employment	-	-	-	-
Government Sector	-	-	-	-

30. Details of Infrastructural facilities**a) Library**

Particulars	Titles	Volumes
Books		
U.G.	1780	7869
P.G.	100	300
On line journal		
ASME On line	27	-
Science Direct	55	-
Printed journal		
Printed Journal U.G.	12	-
Printed Journal P.G.	05	-

b) Internet facilities for Staff & Students

- Internet service: Total 20 MBPS broadband leased line.
- This 20 MBPS line is distributed to student, staff and office section as-
 - Staff: 10 MBPS (wired & Wi-Fi)
 - Student: 5 MBPS (only Wi-Fi)
 - Office : 5 MBPS (R&D, office, HOD) wired connection

c) Class rooms with ICT facility

Room Description	Usage	Shared/ Exclusive	Capacity	Room Equipped With
Class Room No.311	S.E / T.E /B.E	Shared	80	Overhead Projector, LCD, Wi-Fi
Class Room No.312	T.E / B.E	Shared	80	Overhead Projector, LCD, Wi-Fi

Class Room No.309	S.E	Exclusive	80	Overhead Projector, LCD, Wi-Fi
Class Room No.510	B.E	Exclusive	80	Overhead Projector, LCD, Wi-Fi
Tutorial Room 016	S.E / T.E / B.E	Shared	25	Overhead Projector, LCD, Wi-Fi
Tutorial Room 017	S.E / T.E / B.E	Shared	25	Overhead Projector, LCD, Wi-Fi
Tutorial Room 102C	S.E / T.E / B.E	Shared	25	Overhead Projector, LCD, Wi-Fi
Tutorial Room 415	S.E / T.E / B.E	Shared	25	Overhead Projector, LCD, Wi-Fi

d) Laboratories

Laboratory Description in the Curriculum	Exclusive Use/ Shared	Number of Experiments	Quality of instruments	Laboratory Manuals
Metrology & Quality Control Lab	Exclusive	08	Operational	Available
Applied Thermodynamics	Shared	08	Operational	Available
Internal Combustion Engines	Exclusive	10	Operational	Available
Fluid Mechanics	Exclusive	08	Operational	Available
Metallurgy	Shared	08	Operational	Available
Strength of Materials	Shared	05	Operational	Available
Industrial Fluid Power	Exclusive	08	Operational	Available
Heat Transfer Lab	Exclusive	08	Operational	Available
Fluid Machinery Lab	Exclusive	08	Operational	Available

Theory of M/c & Mechanism and Dynamics of Machinery Lab	Exclusive	08	Operational	Available
Refrigeration and Air Conditioning	Exclusive	08	Operational	Available
CAD/ CAM Lab 1 / PG Lab	Exclusive	11	4Gb Ram and Core 2 Duo Processor	Available
CAD/ CAM Lab 2	Exclusive	CAD/CAM:06 CONM: 06 GM: 06	Operational	Available
Drawing Hall	Exclusive	06	Operational	Available

31. Number of students receiving financial assistance from college, University, government or other agencies

Sr. No.	Type of Assistant	Agency Providing Financial Assistance	Academic Year					
			2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
1.	GOI PM Scholarship	Social Welfare Dept. & Tribal Development dept	25	33	64	86	104	107
2.	GOI PM Freeship		39	57	64	73	79	86
3.	EBC Concession	Jt. Director of Tech. Education	18	35	42	58	64	67
4.	Minority Scholarship	Dept. of Minority Welfare	0	1	5	6	10	12
5.	Central Sector Scholarship	Jt. Director of Higher Edu.	0	4	1	2	2	4

6.	STC/PTC	Zilha Parishad	0	0	1	1	0	0
7.	J & K Special Sch	AICTE	0	0	0	1	2	2
8.	Pvt. Scholarsh ip	Trust, NGO, Companies, etc.	0	1	3	3	6	2

32. Details on student enrichment Programmes (special lectures / workshops / seminar) with external experts

a. Special Lecture:

Year	Name of the event organizedSpecial Lectures
2013-14	08
2012-13	05
2011-12	04
2010-11	06

b. Workshops

Year	Name of the event organizedWorkshops
2013-14	01
2012-13	02
2011-12	01
2010-11	01
2009-10	01

33. Teaching methods adopted to improve student learning

- Guest Lecture
- Workshop
- Quiz
- Industrial Tour
- Industrial Visits
- Value Added Course
- Mock Interviews
- Assignments/Semester
- Class Test
- Tutorial
- Seminar
- Feedback Analysis
- Educational Tour
- Department Library Facility
- Internet Facility

- Student Counselling

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Organizing NSS Camps
- By involving students in Blood Donation Camps
- Free PUC Check up
- Celebrating Teachers Day
- By involving students in National Festival celebration Republic and Independence day
- Pollution awareness Programmes

35. SWOC analysis of the department and Future plans:

Strengths

- Well qualified experienced and dedicated faculty.
- State-of-the-Art computing facilities
- Well-equipped Workshop facility
- Library – International Journals
- Enthusiastic, dedicated Mechanical students who are consistent in their enrollment.
- Healthy student teacher ratio (STR)
- Air-conditioned seminar Halls, fully equipped with state-of-the-art audio-visual devices.
- High success rate
- High speed internet facility for students & staff
- Well-furnished class rooms

Weaknesses

- Professional skills needs to be further improved among students
- Communication skills among rural based students' needs improvement
- Affiliated University curriculum is not Industry Oriented.
- in sufficient core modules in the affiliated curriculum
- Lack of international student attraction

Opportunities

- Leader in providing quality engineering education clubbed with placements
- Industry oriented training
- Becoming a leader in student placements.
- Becoming a leader in interdisciplinary and integrated learning
- An opportunity to interact with eminent personalities.

Constraints

- Lesser Placement opportunities due to recession faced by the mechanical industries

- Fee restriction by the state government

Future plans:

- Research Centre for Ph. D.
- Centre of excellence
Enhancing industry Institute interaction for projects by students and faculty also industrial training for faculty



Modern Education Society's
College of Engineering, Pune

19, Late Prin. V. K. Joag Path, Wadia College Campus, Pune - 411 001
Tel. / Fax : (020) 26163831 / 26160935 • Website : www.mescoepune.org
E-mail : principal@mescoepune.org • Id. No. PU / PN / Engg./ 136 / 1999
AICTE Approval No. 740-89-337(E)/ET/99
Govt. of Maharashtra Approval No. PEC 2099/53458(269/99)/TS-1

Ref.No.A-64/NAAC/837
Date : 09.3.2015

DECLARATION BY THE HEAD OF THE INSTITUTION

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

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

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

Signature of the Head of the institution



With seal:

Place: Pune

Date: 09/03/2015



Modern Education Society's
College of Engineering, Pune

19, Late Prin. V. K. Joag Path, Wadia College Campus, Pune - 411 001
Tel. / Fax : (020) 26163831 / 26160935 • Website : www.mescoepune.org
E-mail : principal@mescoepune.org • Id. No. PU / PN / Engg./ 136 / 1999
AICTE Approval No. 740-89-337(E)/ET/99
Govt. of Maharashtra Approval No. PEC 2099/53458(269/99)/TS-1

Ref.No.A-64/NAAC/836
Date - 09.03.2015

Certificate of Compliance

This is to certify that Modern Education Society's College of Engineering, Pune - 411 001 fulfills all norms

1. Stipulated by – **Savitribai Phule Pune University, Pune, and**
2. Regulatory Council - **All India Council for Technical Education, New Delhi,**
and
3. The affiliation and recognition is valid as on date.

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

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

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

Date: 09.03.2015
Place : Pune



Principal
M.E.S. College of Engineering,
Pune - 411 001

Savitribai Phule Pune University

Telephone Nos. :

020 - 25691233

25601258

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ACADEMIC SECTION

Ganeshkhind, Pune - 411007, INDIA

Telegraph : 'UNIPUNE'

Fax : 020-25691233

Website : www.unipune.ac.in

E-mail : dyracademic@unipune.ac.in


Ref. No. : 8279

Date : 27/09/2014

TO WHOM IT MAY CONCERN

This is to certify that Modern Education Society's College of Engineering, Pune is affiliated to the Savitribai Phule Pune University, since 1999 (PU/PN/Engg./136/1999) 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. - Computer Engineering	4 Year	Temporary	Upto 2014-15
B.E. - E & TC	4 Year	Temporary	Upto 2014-15
B.E. - Mechanical Engineering	4 Year	Temporary	Upto 2014-15
B.E. - Computer Engineering (Second Shift)	4 Year	Temporary	Upto 2014-15
M.E. - Computer Engineering	2 Year	Temporary	Upto 2014-15
M.E. - E & TC (Signal Processing)	2 Year	Temporary	Upto 2014-15
M.E. - Mechanical Engineering (Design)	2 Year	Temporary	Upto 2014-15

TRUE COPY

PRINCIPAL
M.E.S. College of Engineering
Pune - 411 001.




Director
B.C.U.D.

सं. १५९९/२०१४
२५.९.०१.२०१४
२५.९.०१.२०१४
२५.९.०१.२०१४



14030035

पुणे विद्यापीठ



गणसंविधे, पुणे-४११००४

संविधान : 'पुणेपुणे'
पं.सं. : ०२०-२५६९१२३३
वेबसाइट : www.unipune.ac.in
ई-मेल : dynamicform@unipune.ac.in

संदर्भ क्र. : २०१४/पु.१११

दि. : ११/०९/२०१४

प्रति,

मा. प्राचार्य,

पॉइन्ट एज्युकेशन सोसायटी एम.ई.एस. अभियांत्रिकी

महाविद्यालय पता: काडीया कॉलेज आवार, १९, कॅ. प्रा.

दे. के. जोग पथ, पुणे-४११००४ ता.: पुणे (महानगर

हासिल ह.स.) जि. पुणे

विषय: अटीच्या पूर्ततेच्या पडताळणी अहवालबाबत...

महोदय,

वरील विषयासंदर्भात विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार आपणास कळविण्यात येते की, आपल्या महाविद्यालयास शैक्षणिक वर्ष २०१४-२०१५, या वर्षाकरिता खालील रकमेच्या नमूद केलेल्या अभ्यासक्रमांच्या सलग्नीकरणाच्या नुतनिकरणास / नैसर्गिकवाढीस अहवालातील अटीच्या पूर्ततेचा पडताळणी अहवाल मान्य करण्यात येत आहे.

नु. क्र.	अभ्यासक्रमाचा तपशील	विद्यार्थी संख्या	प्रथमपाळी/द्वितीय पाळी	सलग्नीकरणाचा प्रकार
1	एम.ई. (ई.अँड.टी.सी.) सिग्नल प्रोसेसिंग	24	2014-2015 : - वर्ष पहिले- Div No.1,,	नूतनीकरण
2	एम.इ. (मेकॅनिकल डिझाइन)	24	2014-2015 : - वर्ष पहिले- Div No.1,,	नूतनीकरण
3	बी.ई. (इलेक्ट्रॉनिक्स अँड टेलिकम्युनिकेशन)	120	2014-2015 : - वर्ष पहिले ते चौथे- Div No.1,- वर्ष पहिले ते तिसरे- Div No.2,,	नूतनीकरण
4	बी.ई. (कॉम्प्युटर)	120	2014-2015 : - वर्ष पहिले ते चौथे- Div No.1,- वर्ष पहिले ते चौथे- Div No.2,- वर्ष पहिले- दुसरी पाळी Div No. 0,,	नूतनीकरण
5	बी.ई. (मेकॅनिकल)	120	2014-2015 : - वर्ष पहिले ते चौथे- Div No.1,- वर्ष पहिले ते चौथे- Div No.2,,	नूतनीकरण
	एम.ई. (ई.अँड.टी.सी.) सिग्नल प्रोसेसिंग	24	2014-2015 : - वर्ष दुसरे- Div No. 1,,	नैसर्गिकवाढ
	एम.इ. (मेकॅनिकल डिझाइन)	24	2014-2015 : - वर्ष दुसरे- Div No. 1,,	नैसर्गिकवाढ
	बी.ई. (इलेक्ट्रॉनिक्स अँड टेलिकम्युनिकेशन)	120	2014-2015 : - वर्ष चौथे- पहिली पाळी Div No. 2,,	नैसर्गिकवाढ

आपला,

(सुपु)

उपकुलसचिव
शैक्षणिक

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College of Engineering
Pune - 411 001.

दूरध्वना क्रमांक :
०२०-२५६९१२३३
२५६०१२५८
२५६०१२५९

पुणे विद्यापीठ



राष्ट्राध्यक्ष भवन
गणेशखिंड, पुणे-४११ ००७

टेलिग्राफ : 'युनिपुणे'
फॅक्स : ०२०-२५६९८००७
वेबसाइट : www.unipune.ac.in
ई-मेल : dyracademic@unipune.ac.in

संदर्भ क्र. : सीए/ ७५७४
प्रति,

दिनांक : १५/७/२०१४

मा. प्राचार्य,
मॉडर्न एज्युकेशन सोसायटीचे,
कॉलेज ऑफ इंजिनिअरिंग,
वाडिया कॉलेज कॉम्पस,
१९, प्रि.व्ही.के.जोग पथ, पुणे ४११ ००१

विषय : शैक्षणिक वर्ष २०१४-१५ या एका वर्षाकरिता नवीन अभ्यासक्रम सुरु करण्यास
परवानगी देण्याबाबत...

संदर्भ : शासन निर्णय क्र. टीईएम-२०१४/प्र.क.१५१(ब)/तांशी-४, दि. ०३ जुलै, २०१४

महोदय,

वरील विषयासंदर्भात विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार आपणास कळविण्यात येते की, आपल्या महाविद्यालयास शैक्षणिक वर्ष २०१४-१५ या एका वर्षाकरिता खालील रकान्यात नमूद केलेले अभ्यासक्रम नव्याने कायम विनाअनुदानित तत्वावर सुरु करण्यास परवानगी देण्यात येत आहे.

अनु. क्र.	अभ्यासक्रमाचा तपशील	विद्यार्थी संख्या	प्रथमपाळी/द्वितीय पाळी	संलग्नीकरणाचा प्रकार
१	कॉम्प्युटर इंजिनिअरिंग	२४	प्रथम वर्ष एम. ई.	नवीन

कळावे,

सोबत : अहवाल

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आपला,

१५/७/१४
उपकुलसचिव
(शैक्षणिक विभाग)