


THE MET LEAGUE OF COLLEGES  
**MET**  
AS SHARP AS YOU CAN GET

**Bhujbal Knowledge City**

**MET's Institute of Engineering,  
Adgaon, Nashik - 422003.**

# **SELF STUDY REPORT (SSR)**

**Submitted to  
National Assessment and Accreditation  
Council  
Bangalore**



**QUALITY EDUCATION  
WITH WORLDCLASS INFRASTRUCTURE**

DTE CODE : MET's Institute of Management - 5120 | MET's Institute of Pharmacy - 5287 | MET's Institute of Engineering - 5151 | MET's Institute of Technology-Polytechnic - 5264

• Management • Pharmacy • Engineering • MCA • C-DAC • Polytechnic

**MET Bhujbal Knowledge City**  
AS SHARP AS YOU CAN GET  
Adgaon, Nashik | Tel.: (0253) 2303515 ☎ 988 110 0099  
enquiries@bkc.met.edu | www.metbhujbalknowledgecity.ac.in

**ISO  
9001:2008  
CERTIFIED**

- INDIVIDUAL STUDENT COUNSELLING
- REGULAR INDUSTRIAL VISITS
- PLACEMENTS IN LEADING COMPANIES



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**Institute of Engineering**

Ref. No.: MET/BKC/IOE/NAAC/2017/1898

Date: 31/03/2017

To,  
The Director  
National Assessment & Accreditation Council  
P. O. Box No. 1075, Nagarbhavi,  
Bangalore - 560 072

**Subject: Submission of Self Study Report (SSR).**

Ref: Track ID MHCOGN27576


Respected Sir,

With reference to your e-mail from admn@naac.gov.in dated 31<sup>st</sup> March 2017, regarding approval of LOI and further submission of Self Study Report for Institute Track ID MHCOGN27576, I have to inform you that we have uploaded the Self Study Report (SSR) on our institute website www.metbhujbalknowledgecity.ac.in on 31<sup>st</sup> March 2017 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  
MET's Institute of Engineering,  
Bhujbal Knowledge City,  
Adgaon, Nashik - 422 003



## NAAC STEERING COMMITTEE

<u>Post</u>	<u>Name of Faculty</u>	<u>Designation</u>
<b>Chairperson</b>	Dr. V. P. Wani	Principal
<b>Co-ordinator</b>	Dr. V. J. Gond	HOD, Department of E&Tc
<b>Co-Coordinator</b>	Dr. M. U. Kharat	HOD, Department of Computer Engg

### **Members**

Mr. S. L. Khairnar	Registrar
Mr. R. B. Rehpade	Professor in E & TC
Mr. S. B. Patil	Institute Examination Officer
Mr. S. V. Ingle	HOD, Department of Mech. Engg.
Mr. K. S. Chobe	HOD, Department of Civil Engg.
Mrs. N. R. Kale	HOD, Department of IT
Mr. P. D. Jadhav	HOD Department of MCA
Mr. V S. Khairnar	Coordinator, First Year Engg.
Miss. U. L. Mohite	HOD, Dept of Electrical Engg.
Dr. S. G. Patil	Librarian
Mr. S. L. Prasad	Assistant Registrar

## PREFACE

We are delighted to present Self Study Report of MET's Institute of Engineering, Bhujbal Knowledge City, Nashik to NAAC, Bangalore for assessment and accreditation.

Mumbai Education Trust, Mumbai was established in the year 1989. The trust runs various educational Institutes in Nashik as mentioned below:

- MET 's Institute of Management founded in 2006
- MET 's Institute of Pharmacy founded in 2006
- MET 's Institute of Engineering founded in 2006
- MET 's Institute of Technology (Polytechnic) founded in 2006

MET's Institute of Engineering has come a long way since its inception in 2006. The campus of MET's Institute of Engineering situated in Adgaon, Nashik. The Bhujbal Knowledge City is spread over 34 acres, and the Institute prides itself for having state of art infrastructure for being eco-friendly energy efficient and naturally lush green the perfect place for learning.

Our Institute offers Six Under Graduate (UG) courses that are Mechanical Engineering, Civil Engineering, Electronics and Telecommunication Engineering, Computer Engineering, Information Technology and Electrical Engineering. We also have Post Graduate program in Mechanical Engineering, Computer Engineering, MCA and Research Centre in Mechanical Engineering & Computer Engineering for Doctoral Program. Our courses are affiliated to the Savitribai Phule Pune University (SPPU), formerly known as Pune University and recognized by AICTE, New Delhi and Directorate of Technical Education, Government of Maharashtra.

MET's IOE is the entity which gives expression to the educational intent of the trust. The Institute is managed by the leadership team comprising of the MET Trust, Principal and Heads of all sections and departments. Our goal is to nurture students in multi-dimensional and subtle manner in a caring and enriched environment with the highly qualified, accomplished, experience and human beings around them. Therefore, the first activity of exploration and implementation start from teaching learning process and further organizing technical symposium named “Engineers Week Program ” which constitute of Project Competition, ROBORACE, Paper Presentation, Technical Quiz. For professional development a Soft skill training module is also included.

For experimental learning internships and sponsored projects from industries are offered to the students.

The Institute has always envisioned instilling life skills among the students through their participation in various extracurricular activities like NSS, Earn and Learn scheme, sports and cultural event and has won several accolades.

The teachers are motivated to carry out the research in their field of interest and supported for preparing proposal for research project by means of which they receives grants from Savitribai Phule Pune University. The

Institute is continuously encouraging and supporting faculty to pursue their doctoral programme from Institutes like IITs, IISc, and NITs etc. by deputing them to such Institutes. The Institute deputed faculty members for participation in conference, seminars, workshop organized by other Institutes to upgrade and quality improvement in their area of specialization. This has resulted in creating research culture, quality publications and intensified teaching learning process.

Various conferences, workshops, seminars are also organized in the Institute to give exposure to faculty and students in technological advancements in their field of interest.

The preparation of SSR required the formation of a steering committee comprising of NAAC coordinator, Assisting NAAC coordinator, Heads of all departments and some senior faculty. The steering committee gave directions and critical reviews for the SSR to take its final shape.

The SSR is divided into two main parts. The first part includes the preface, executive summary, SWOC analysis of the Institute, profile of the Institute, criteria wise analytical reports and evaluation reports of seven departments. The second part consists of annexure consisting of all supporting documents. The entire work of preparation of SSR involved tireless work of faculty members, in-charges, assisting faculty and NAAC coordinators of all respective departments.

We aim to excel in graduate and postgraduate education, dedicated to advancing in the field of engineering with effective teaching learning methods, industry Institute association and thoughtful research. We aim to create the supportive and constructive environment that encourages our students, faculty members and others to achieve to the best of their abilities.

I take this opportunity to thank our Management for their genuine support for this noble task.

We are eagerly looking forward to welcome the Peer Team in the splendidly beautiful premises of MET's Institute of Engineering, Nashik.

## EXECUTIVE SUMMARY

In order to provide wholesome and complete education right from FE to Ph. D. has been Instituted under the MET with vision of providing education to the youth, the Bhujbal Knowledge city work towards providing the students with opportunities to excel in various profession and contributes towards global development.

- MET IOE is affiliated to Savitribai Phule Pune University (SPPU) and approved by AICTE. Our faculties are involved with BoS for curriculum design, development and implementation for University of Pune. Faculties and scholar from prestigious Institutes are invited as a resource person in conferences workshops and FDP.
- Curriculum is developed in such a way to satisfy professional and personal need of students.
- While pursuing academic excellence, Institute ensures all-round personality development of every student. The teaching learning process has a conducive environment, with liberty and discipline, which is utmost important in the process of moulding engineers.
- A well-planned, beautifully landscaped and neatly maintained campus provides all the state-of-the-art modern facilities at par with international standards. Our team committed and experienced faculty shall evolve our students into complete and competent professionals. The Teacher-Guardian scheme helps students solving their academics as well as personal problems and motivates them to achieve their goals along with their academics, the student are free to develop their skills in allied interest like sports, reading and cultural activities.
- The Institute has sufficient space for all academics, extra-curricular, co-curricular and other activities. Every department is well equipped with necessary infrastructure such as separate classrooms, laboratories, workshop, and seminar hall. Hostel facilities are provided for boys and girls. Boy's hostel building has a capacity to accommodate 150 students as well as the girl's hostel has a capacity to accommodate 150 students. All rooms are self-contained with bath/toilets and fully furnished with necessary basic requirements like beds, cupboards, study tables and chairs. The water purifiers are provided in hostel for cold and filtered water. Free medical consultation is available for all students and staff. A qualified and experienced Doctor is appointed for any kind of medical emergencies in hostel. Wi-Fi enabled campus is provided. The library has acquired a valuable collection of more than 29, 951 books with a rich collection of International and National level Journals of current and back volumes. Library can accommodate more than 150 users at a time. There is a book bank facility for students of every department for their study purpose. Digital library is also



available with ASME Membership, NPTEL, IEL online. IEEE access is given for staff and students, Special Membership of British Library, Membership of NDL.

- The Institute publishes its updated information annually and provides all the necessary information regarding admissions, various programs, student facilities and placement information. Requirements and monitoring of the students are fulfilled by ERP system. MET Scholarship scheme is implemented for economically weaker OPEN and OBC Category students as well as financial assistance is provided for SC/ST, NT category students. The students are supported and guided for the preparation of competitive examinations such as MPSC/UPSC, GATE, GRE, TOFEL, GMAT etc. Professional counselors have been employed along with the faculty members of MET's IOE to maintain constant dialogue with the students and to sort out their problems at the grass root to guide them to move ahead.
- The vision of the Institute is to educate and inspire engineers committed to innovative and ethical application of technology in the solution of societal problems and lead among peer institutions of interdisciplinary research. The department in turn has to formulate their vision and mission in tune with the Institute. The governing body (GB) gives general guidelines regarding academic excellence and value based education. The top management provides us effective academic leadership to the faculty by setting goals and involving them in decision making process. Principal and Heads of all departments have adequate autonomy in academic and administrative perspectives.
- The Institute also believes that faculties are its backbone and Principal is pillar of the Institute and success of the Institute depends on the quality of human resources thus the objective of the management are focused on maximizing employee's performance. Priority is given for recruitment of experienced, qualified and competent faculty. Training programs are conducted for young faculty members to improve their teaching skills and low performance faculties are counseled based on their appraisal report. Quality of faculties has been enhanced by using strategies like Faculty Development Programs, Paper Presentations, Seminar, Personality Development Workshops, refresher courses etc.
- The NSS unit of MET's IOE has done various social activities through a different program like Tree plantation, Blood Donation Camp, Health Check up, similarly NSS students visited and organized cleanliness drive at adopted village during the period of NSS camp.
- As a part of quality improvement program we develop a bridge between academics and industries, Institute have established an Industry Institute Interaction cell. The administration and academic systems work incorporation for smooth and effective governance.

- For effective and optimized working of the Institute and the infrastructure required for teaching and learning, sufficient funds are provided by the management every year. Given norms are always followed for purchases in compliance and the budget are followed effectively. All documents related to finance and accounts are audited every year.
- For upgrading quality of Institute and to achieve academic and administrative excellence, the Institute has to undergo for audits from government regulatory bodies like LIC from SPPU, DTE, AICTE. Institute promotes in environmental awareness like energy saving, Rainwater harvesting, waste water management and Institute has also adopted two villages Kone and Nagosali for social awareness.
- Various schemes under the guidance of SPPU like Earn and Learn, Special guidance and personality development are carried out every year which includes health check-up of girl students.
- In order to boost research work and technology Institute conducts meetings and interactions with persons that have involved in research work. Institute organizes various workshops, FDP & training programmes.

## SWOC ANALYSIS

### Strength

- Approved by AICTE, DTE, Govt. of Maharashtra & affiliated to Savitribai Phule Pune University.
- Received Grants for research projects under QIP programme of SPPU.
- Institute receives grants from department of Science and Technology.
- Recognized research centre in Mechanical & Computer engineering.
- Institute has collaboration with various industries for internship and sponsored projects for industry exposure.
- Institute is running Earn and Learn scheme for student's welfare.
- Placement of the students in SSI, MSI and MNC.
- Participation of students in social curricular and co-curricular activities.
- Our faculty members are involved in curriculum design, development and implementation for SPPU, Pune.
- Faculties and scholar from prestigious Institutes are invited as a resource person in conferences workshops and FDP.
- Good number of publications.
- A flexible transport facility in addition to city buses.
- ERP system for effective administration, data analysis.
- Good faculty retention in IOE.
- Special Counseling cell to cope up with the diversified students

### Weakness

- Inadequate number of Ph. D. qualified faculty
- Less placements of students in prestigious and big companies.
- Very less involvement of alumni, since alumni association is formed recently.

### Opportunities

- To increase employability of the students and also encourage them for being entrepreneurs in various fields.
- To enhance alumni involvement in placement activities.
- To encourage faculties for pursuing Ph. D. from prestigious Institutes.
- To encourage the students for participating in various competitive examinations.
- To motivate students for improving their technical and practical knowledge to become quality engineer.

### Challenges

- Achieving 100% placement
- Improving soft skills of students from different background to get them placed into MNCs.
- Need of adequate funding to meet to upgrade and conduct innovative programmes.
- Interface between Institutes of national importance, research laboratories and Industries.

## SECTION B

### 1. Profile of the Affiliated / Constituent Institute

1. Name and Address of the Institute:

Name :	<b>MET's Institute of Engineering</b>	
Address :	Bhujbal Knowledge City, Adgaon	
City : Nashik	Pin : 422 003	State : Maharashtra
Website :	<a href="http://www.metbhujbalknowledgcity.ac.in">www.metbhujbalknowledgcity.ac.in</a>	

2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. V. P. Wani	0253-2555925	9372670533	0253-2303203	principal_ioe@bkc.met.edu
Steering Committee Coordinator	Dr. V. J. Gond	0253-2555894	8407900741	0253-2303203	vjg.eltx@gmail.com

3. Status of the Institution:

Affiliated Institute	<input checked="" type="checkbox"/>
Constituent Institute	<input type="checkbox"/>
Any other (specify)	<input type="checkbox"/>

4. Type of Institution:

a. By Gender

i. For Men	<input type="checkbox"/>
ii. For Women	<input type="checkbox"/>
iii. Co-education	<input checked="" type="checkbox"/>

b. By Shift

Regular	<input checked="" type="checkbox"/>
Day	<input type="checkbox"/>
Evening	<input type="checkbox"/>

5. It is a recognized minority institution?

No

6. Sources of funding: **Self Financing**

7. a. Date of establishment of the Institute: **30/06/2006**  
 b. University to which the Institute is affiliated /or which governs the Institute (If it is a constituent Institute): **Savitribai Phule Pune University, Pune**

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	F. No. 06/07/MS/ENGG/2006/03	30-06-2006	2006-07	
AICTE	F. No. 740-89-02(E&T)2006-07	25-07-2007	2007-08	
AICTE	F. No. 06/07/MS/ENGG/2006/03	02-05-2008	2008-10	
AICTE	F. No. Western Region, Maharashtra/1-4441835/201/EOA	23-08-2010	2010-11	
AICTE	F. No. Western/1-423103921/2011/LOA	01-09-2011	2011-12	
AICTE	F. No. Western/1-722739825/2012/EOA	10-05-2012	2012-13	
AICTE	F. No. Western/1-364698056/2013/EOA	19-03-2013	2013-14	
AICTE	F. No. Western/1-2013209891/2014/EOA/Corrigendum-1	20-06-2014	2014-15	
AICTE	F. No. Western/1-2452247434/2015/EOA	07-04-2015	2015-16	
AICTE	F. No. Western/1-2809364092/2016/EOA	05-04-2016	2016-17	

(Enclose the recognition/approval letter)

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

Yes  No

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

Yes  No

9. Is the Institute recognized

a. By UGC as an Institute with Potential for Excellence (CPE)?

Yes  No

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

b. For its performance by any other governmental agency?

Yes  No

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

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

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

Location	Urban
Campus area in sq. mts.	Total 5 acres for MET's Institute Engineering
Built up area in sq. mts.	22000

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:

ii. Number of inmates:

. iii. Facilities (mention available facilities)

Spacious and Furnished Rooms, Bus Transport, Guest Room, Visitors Room, Laundry Service, Medical Assistance, Security, Nutritious Food, Reading & Recreation Room, Purified Drinking Water by RO system Hot Water, Gym, Newspapers, LEDDTH, Indoor Games, Small Library, Power Backup System, Xeroxcentre

\*Girls' hostel

i. Number of hostels:

01

ii Number of inmates:

2-4

iii. Facilities (mention available facilities) Spacious and Furnished Rooms, Bus Transport, Guest Room, Visitors Room, Laundry Service, Medical Assistance, Security, Nutritious Food, Reading & Recreation Room, Purified Drinking Water by RO system Hot Water, Gym, Newspapers, LED DTH, Indoor Games, Small Library, Power Backup System, Xerox centre

\*Working women's hostel:

Nil

i. Number of inmates:

Nil

ii. Facilities (mention available facilities)

- Residential facilities for teaching and non-teaching staff (give numbers available — cadre wise) **No**
- Cafeteria — **Yes**
- Health centre – **Yes**

First aid, Inpatient, Outpatient, Emergency care facility: **Yes**

Health centre staff – **No**

- Facilities like banking (ATM) : **Yes**
- Transport facilities to cater to the needs of students and staff: **Yes**
- 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 Institute (Give data for current academic year)

Sr. No.	Programme Level	Name of the Programme / Course	Duration	Entry Qualification	Medium of instruction	Sanctioned /approved student strength	No. of students admitted
1	Under Graduate	Computer Engineering	4 Years	1. Passed HSC or its equivalent examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry or Biotechnology or Biology or Technical or Vocational subjects 2. Obtained Score in MHT-CET or JEE Main Paper I	English	60	59
2	Under Graduate	Mechanical Engineering	4 Years		English	120	109
3	Under Graduate	Electronics & Telecommunication Engineering	4 Years		English	120	17
4	Under Graduate	* Electronics Engineering	4 Years		English	--	--
5	Under Graduate	Information Technology	4 Years		English	60	54
6	Under Graduate	Civil Engineering	4 Years		English	60	54
7	Under Graduate	Electrical Engineering	4 Years		English	60	53
8	Post Graduate	Computer Engineering	2 Years	1. Passed Bachelor Degree in relevant field of Engineering / Technology 2. Obtained	English	24	4
9	Post Graduate	Mechanical (Computer Aided Design , Manufacture) Engineering	2 Years		English	18	7



				score in Graduate Aptitude Test in Engineering (GATE) 3. For Sponsored candidates , minimum of two yearswork experience in a registered firm/ company/in dustry/ educational and/ or research Institute/ any Government Department or Governmen t Autonomou s Organizatio n in the relevant field in which admission is sought			
10	Post Graduate	Master in Computer Applications	3 Years	1. Passed Minimum 3 Years Bachelor Degree course 2. Obtained	English	120	20

				score in MAH - MCA – CET			
1 0	Ph. D.	Computer Engineering		Passed M. E / M. Tech. in relevant field of engineering /technology	Engli sh	--	--
1 1	Ph. D.	Mechanical Engineering		Passed M. E. / M. Tech. in relevant field of engineering /technology	Engli sh	--	--

(\* Course closed from the academic year 2014-15)

13. Does the Institute offer self-financed Programmes?

Yes  No

If yes, how many? **NA**

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

Yes  No  Number

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

Faculty	Departments	UG	PG	Research
Engineering	Computer Engineering	UG	PG	Ph. D.
Engineering	Mechanical Engineering	UG	PG	Ph. D.
Engineering	Electronics & Telecommunication	UG	---	---
Engineering	Information Technology	UG	---	---
Engineering	Civil Engineering	UG	---	----
Engineering	Electrical Engineering	UG	----	---
MCA	MCA	---	PG	----

16. Number of Programmes offered under (Engineering)

- 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)

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

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

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 / State Government	12		28		116		N. A.		N. A.	
Recruited	05	00	02	00	77	40	N. A.		N. A.	
Yet to recruit	7		26		00		N. A.		N. A.	
Sanctioned by the Management/ society or other authorized bodies	--	--	--	--	--	--	46	04	34	09
Recruited	--	--	--	--	--	--	46	04	34	09
Yet to recruit	--	--	--	--	--	--	--	--	--	--

\*M-Male \*F-Female

21 Qualifications of the teaching staff:

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	*M	*F	*M	*F	*M	*F	
<b>Permanent Teachers</b>							
D. Sc. /D. Litt.	0	0	0	0	0	0	0
Ph. D.	4	0	0	0	01	01	06
M. Phil.	0	0	0	0	01	01	02
PG	1	0	2	0	66	38	107
UG	0	0	0	0	09	0	09
<b>Temporary teachers</b>							
Ph. D.	--	--	--	--	--	--	--
M. Phil.	--	--	--	--	--	--	--
PG	--	--	--	--	--	--	--
<b>Part-time teachers</b>							
Ph. D.	--	--	--	--	--	--	--
M. Phil.	--	--	--	--	--	--	--
PG	--	--	--	--	--	--	--

\*M-Male \*F-Female

22. Number of Visiting Faculty /Guest Faculty engaged with the Institute

03

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

Categories	2013-14		2014-15		2015-16		2016-17	
	*M	*F	*M	*F	*M	*F	*M	*F
SC	129	91	133	106	154	124	127	111
ST	36	22	39	35	51	38	49	30
OBC	480	321	494	418	558	510	493	425
General	522	287	472	316	474	287	359	215
Others	161	94	167	111	194	142	169	121

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

Type of students	UG	PG	M. Phil.	Ph.	Total
Students from the same state where the Institute is located	560	31	00	00	591
Students from other states of India	67	00	00	00	67
NRI students	00	00	00	00	00
Foreign students	00	00	00	00	00
Total	627	31	00	00	658

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

UG  PG

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. 52985/-

(b) excluding the salary component Rs. 13743/-

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

Yes  No

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

Sr. No	Name of the programme	Teacher Student Ratio
	UG	
1	Computer Engineering	1:17.14
2	Mechanical Engineering	1:16.55
3	Electronics & Telecommunication Engineering	1:18.26
4	Information Technology	1:17.14
5	Electrical Engineering	1:18.46
6	Civil Engineering	1:17.14
	<b>PG</b>	

7	Computer Engineering	1:16
8	Mechanical (Computer Aided Design , Manufacture) Engineering	1:18
9	MCA	1:32.7

29. Is the Institute applying for  
 Accreditation: Cycle 1  Cycle 2  Cycle 3  Cycle 4

Re-Assessment:

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

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

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.

<b>211 Days</b>
<b>185 Days</b>

32. Number of teaching days during the last academic year

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

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

<b>15/03/2017</b>
-------------------

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

<b>NA</b>
-----------

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 Institute would like to include. (Do not include explanatory/descriptive information)

# **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 (Institute of Engineering):** To develop Institute as a Centre of Excellence for developing globally accepted professionals having application orientation, lifelong learning approach towards socio-economic growth of stake holders and the Society as a whole.

**Mission (Institute of Engineering):**

- Preparing Graduates capable enough to practice effectively and responsibly to technological changes and pursue advanced engineering.
- Inculcate applied research to support and contribute to the social and economic well-being of citizens and organization in nearby region.
- Cultivate the entrepreneurial spirit and linkage of engineering education and business for technology commercialization.
- Evolve thoughtfully to the changing needs of industry and surrounding world.

**Process of Dissemination/Communication:**

- Display of Vision, Mission at various prominent places;
- Uploading on appropriate website links;
- Uploading on appropriate ERP login and Training & Placement Portal;
- Communicating through mail or hard copy to different stakeholders, etc;
- During various continuing education programs and orientation programs, Vision, Mission made known to the faculty and support staff with clear understanding of the goals specified by the Institute and Trustees of the Mumbai Educational Trust;
- Vision, Mission are made known to the students during their admission process, during continuing education programs, through various counseling activities like induction and annual programs, etc;
- Vision, Mission are made known to the Faculties and Students through their ERP login and also displayed on notice boards;
- Dissemination of information about Vision, Mission and PEOs among Alumni are carried out during communication with Alumni.

**Internal Stakeholders:**

<b>Stakeholder</b>	<b>Extent of Awareness / Purpose</b>
Trustees of the Mumbai Educational Trust, Governing Board members	<ul style="list-style-type: none"> <li>Defining development plans and path ways to achieve them;</li> <li>Providing structural, technical, human and financial resources;</li> <li>Formulation of Protocols, rules &amp; regulations as per the guidelines of Apex bodies like AICTE, University, DTE, SSS.</li> </ul>
Human Resource (Faculty and Support Staff)	<ul style="list-style-type: none"> <li>Implementer of Protocols, rules &amp; regulations;</li> <li>Key contributor in developing/implementing development plans;</li> <li>Responsible for producing skillful graduates from the Institution / Department.</li> </ul>
Students	An entity of the institution who projects Institute image to the outside world, and are termed as brand ambassador of the Institution.

**External Stakeholders:**

<b>Stakeholder</b>	<b>Purpose</b>
Employer	Appointing graduates and making an assessment on competency and skills of Graduates.
Industry	Contribution in curriculum enrichment and industry – Institute interaction.
Alumni	Providing best suggestions from their experiences.
Funding Agencies	Provides financial assistance to the institution and interacts with the concerned, principal investigator, faculty of the department/program.
Parents and society at a large	Evaluate and Utilize services of the Outcome of the Program graduates.

**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).**

Development, Deployment and Action Plans for effective implement of the



Curriculum, The process includes the implementation and continuous monitoring of following:

- **Preparation of Academic Calendar:** Academic calendar is prepared for every semester. In order to fulfil the program requirements. Academic calendar is prepared by referring University Academic Calendar as a base and guidelines for every semester including different guest lectures, workshops, seminars, conferences, Faculty Development Programs, IN SEM exam schedule etc. that need to be performed in respective semester. The academic calendar is followed throughout the semester for its effectiveness and timely execution of activities.
- **Workload Distribution and Time Table:** According to the workload distribution based on the choices given by the respective subject teacher, Time Table Coordinator prepares department time table containing the schedule for teaching to meet the requirements of University curriculum. A copy of the same is made available to all the faculties and students. Lab time tables are prepared and displayed describing the utilization of laboratories. Head of the Department assigns the workload to the faculty members in the ERP system for class attendance and other academic monitoring purposes in the support of compliance of University curriculum.
- **Portfolio Distribution:** Choices are requested from the faculty members and Technical Staff of the Department according to their expertise and interest for various portfolios being needed by the department. Portfolio like Class Coordinator, University Examination In-charge, Timetable Coordinator, UG/PG coordinator, Training and Placement coordinator, extended activities like conference, seminars, workshops, project coordinator, Event coordinator, e. g. SAC Coordinator, CESA coordinator, Professional bodies coordinators etc. are assigned to the faculty members as per their choices in the meeting of department. The choice based assignment of portfolio helps in getting proper outcome and desired effectiveness.
- **Subject Teaching Plan and Laboratory Plan:** Subject teaching plans are prepared by each faculty in coordination with the head of department. The head of department monitors the status of syllabus covered and status of completion of practical every month as well at the end of semester. Similarly Laboratory plan is prepared considering the time required for implementing the assignment and displayed on the notice board as well it is being circulated in the classes. Teaching plan is also prepared as per the syllabus specified and also includes extra lectures if required. Copy of such lab exercise and teaching plan is also available in the teachers course file. Faculty members ensure that they cover entire syllabus before the In Semester examinations and by the end of semester. It is mandatory for all the teachers to complete the desire portion before the commencement of In-sem and end-sem examination as prescribed by University.
- **Course File and Subject File:** Faculty maintains a detailed subject file

and course file. A Course file consisting of class notes, power point presentations, links to relevant animations/videos, assignments and question bank and lifelong learning material. These contents are posted / updated on ERP/ Communication group of concern students. The faculty also maintains a detailed subject file that includes following details:

- a. Course Objective & Course Outcomes;
  - b. University syllabus structure and copy of University syllabus;
  - c. Teaching plan and lab plan;
  - d. Copy of academic calendar;
  - e. Vision and Mission of department;
  - f. Program Outcomes and Program Specific Outcomes;
  - g. The Course Outcomes and their mapping with POs and PSOs;
  - h. Identified gaps in the syllabus and action plan to bridge the gaps;
  - i. Time table (individual);
  - j. In-semester examination question paper, University question papers and solutions, University result of the course and its analysis, question bank, tutorial record etc. ;
  - k. List of Extra Assignments apart from University syllabus. ;
  - l. Record and action taken for extra classes and lab sessions conducted for weak and failure students. Record of remedial lectures for the failure student;
  - m. Record and action taken for progressive assessment of term work and Mock test etc. ;
  - n. Proof of Collaborative learning i. e. Students and faculty members participated in different collaborative initiatives like Soft Skill development courses, online courses, NPTEL, Amrita Virtual Lab etc. ;
  - o. Each faculty submits the subject file at the end of semester to the department.
- **Laboratory Practical:** Lab manuals are prepared for specific labs by the faculty members using the grouping of practical's from A, B, C and D groups as prescribed in syllabus. These manuals are used as a reference by the students for development of programming, logic and problem analysis skill. A mock practical exam is conducted for students in their practical session at the end of each semester i. e. before commencement of University practical/oral examination. Term Work is based on progressive assessment of laboratory assignments implementation and on time submission of those assignments.
  - **Apart from Teaching Learning:** In addition to the regular syllabus conduction by the faculty, class room teaching is augmented by arranging guest lectures and workshops by experts from industry and academia. Weekend classes for slow learners are arranged for their development. Student can refer Question bank for the course and also go through the University question papers for the preparation and guidelines of the examination which helps in enhancing the applicability of engineering

knowledge in respective field.

- **Industrial Visit:** In order to get a real time exposure of Industry, Industrial visits are arranged for the third year students, in strengthening the Engineering Knowledge. In-plant training in industries during vacation supports the students in selecting industrial projects. Some of the students participate in such trainings based on their interest.
- **Student's Feedback:** Automated feedback from the students is obtained and analyzed periodically to improve the teaching learning process. There is about 10 class room teaching learning process related parameters in the feedback form. Analysis of feedback is further considered for attainment of PO/PSO of respective course.
- **Student's Counseling and Mentoring:** A counselor is made available for the students in the campus. A pyramid structure is followed by the counselor in order to group the students and activities are conducted for the students. A group of students is encouraged for counseling the students of other group in a hierarchical structure. The time slot are allocated/scheduled and informed from time to time to the students. A group of 12-15 students is assigned to the faculty counselor for counseling and mentoring purpose. If required the faculty counselor may forward students to the Institute counselor for in-depth counseling, mentoring and further considerations. Counseling helps the students in developing lifelong learning approach.
- **Collaborative Learning:** Students and faculty members participate in different collaborative activities like Soft Skill development, Expert Lectures, online courses, NPTEL, Virtual Labs, IIT Spoken Tutorial, IIT free open source software laboratory etc. Such collaborative learning helps the students and faculties to develop their communication and conceptual Engineering knowledge. Students also get an opportunity to present and share their technical knowledge in the form of seminars in front of other students and panel of faculty members for their communication improvement.
- **Student Encouragement:** Students are encouraged by providing various facilities apart from teaching learning resources. They are encouraged to *participate* in various activities conducted at Department level/Institute level/State level/National level In/outside the Campus. Students are also encouraged to *organize* various activities at Department level/Institute level/State level/National level in the Campus. A platform has been generated in the name of "SAC: Students Association for Computer", to explore problem analysis, designing and development of solutions to the complex problems through technical and professional events. This helps in improving communication and team work building. For inter-Institutional coordination and giving exposure to work in a team, "MET-UTSAV" program for all students in the campus is arranged every year. This gives the platform for development of an individual and working in a team. There are four different types of Institutes viz. Engineering, Polytechnic,

Management and Pharmacy participating in such events. Students get multidisciplinary environment through this platform for their overall development as an individual and a team.

- **Online ERP System:** Every individual student is given a login-ID of ERP system so as to operate and obtain the updates time to time. This enables the students habituating the use of modern tools. Students can generate their profile; go through vision, mission, Program objectives, course objectives for which they normally seek the admission. As well the facilities like online resources, giving feedback, and appearing for online test examination are provided through their respective login IDs. This is an in-house developed system based on all possible types of requirements.
- **Orientation Program:** Orientation program is arranged for new entrants immediately after admission to first year / direct second year. They are given an exposure to the facilities, culture, and information about mission, vision of the Trust / Institute / Department. This gives in-depth idea and approach for their development before they start their career as a student.
- **Identifying appropriate curriculum gaps:** As per conduction of the academics and its effectiveness in the line of Industry requirements, every teacher reviews the contents and identifies appropriate curriculum gaps. Such identified gaps are further communicated to the concerned University authority for corrective measures. Sometimes department plans and conduct the extra activities for minimizing such gaps. Appropriateness of these activities is verified in achieving the course objectives, Program objectives, Mission and Vision of the Institution.

### **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?**

In addition to the curriculum University/Institute supports for examination system. Institute provides all possible infrastructures for the effective teaching-learning process like projectors, smart class rooms, etc. Specifically for class room teaching and practical's desired updations in the infrastructures/equipment's/systems/software are provided by the Institute. This enhances the achievements of learning objectives and course objectives. We have online support for enhancing teaching learning processes including various e-material, e-resources, e-journals.

### Process for University Examination

S r. N o	Assessme nt Process	Data Collection / Input	Verificati on Method / Paramete rs	Analysis / Observati ons	Decision s / Confirm ation	Remarks
<b>University Assessment Process</b>						
1	Assessme nt of Universit y Theory Exam	Question Paper and Model Answer Solutions from the CAP centre	Meeting of Subject Chairman , CAP Authoritie s and Evaluato rs	Marking scheme for step wise points in the Model Answer Solutions	Allocatio n of Marks as per Model Answer Solution	This confidenti al work is carried out at Centralize d Assessme nt Program (CAP)
2	Assessme nt of Universit y Practical / Oral Exam	Practical Assignme nt List for the subjects from the guidelines in syllabus scheme and Assignme nts submissio n records,	Verificati on of certifiedjo urnal, External Examiner and Internal Examiner verify Practical Assignme nt conducted and as per syllabi guideline	Practical Assignme nt Complete d based on problem statement, time.	Marks assigned to Practical Assignm ent complete d	Extension to the problem statement suggested by the External or Internal Examiner
3	Student Project Assessme nt	Students Reporting to the guide (work book) progress follow-up	External Examiner, Internal Examiner verifies the Project Report as	Demonstr ationand Working of Project	Marks assigned to the project based on Presentat ion, Demonst	

		of project development, Syllabus guideline, and Project Competition Participation, Project Report, Publication	per guidelines in the Syllabus.		ration, Application and contribution to society.	
<b>Internal Assessment Process</b>						
1	Insem Exam	Question Paper and Model Answer Solutions from the CAP centre of Institute	Meeting of Subject Teachers, CAP Authorities.	Marking scheme for step wise points in the Model Answer Solutions	Allocation of Marks as per Model Answer Solution	
2	Project Submission / Evaluation	Students Reporting to the guide (work book), Seminar Report, Publication and Project Competition Participation, Syllabus guideline	External Examiner, Internal Examiner verifies the Seminar Report as per guidelines in the Syllabus.	Demonstration and Methodology explanation of Project	Marks assigned to the project based on Presentation and demonstration.	
3	Seminar Presentation	Students Reporting	Panel of In-house	Presentation,	Marks assigned to	

	on	to guide, Seminar Reports, Papers or supporting materials and Syllabus guidelines	Faculties verify seminar report.	Contents and Knowledge of topic and Question Answer on Topic.	the seminar based on Presentation & Contents.	
4	Term work Submission / Oral Examination	Students Attendance, Assignments Completed,	Attendance records, Assignments records	Marking scheme to each and every category (Attendance, Assignments)	Summing and confirming the marks	

**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.**

1. Academic calendar prepared for every semester: In order to fulfil the program requirements Academic calendar is prepared by referring university Academic Calendar and guidelines for every semester which includes different guest lectures, workshops, seminars, conferences, Faculty Development Programs; Class Test, IN SEM exam schedule etc that need to be perform in that semester and the academic calendar is strictly followed throughout the semester.
2. Automated feedback from students is analyzed periodically to improve the teaching learning process. The Head of department discusses personally with each faculty his/her feedback and if required gives guidelines for improvement in the weak areas.
3. Class tests are conducted and results are analyzed to identify weak students. Further extra classes are conducted for the identified weak students so as to revise the contents already covered in the class.
4. Remedial classes/ Concept clearing classes for few complex topics in the subject are conducted for the weak and other interested students.
5. University result for every subject is analyzed thoroughly, counseling for failure students and if required remedial classes are arranged.
6. Lab Assignments: As per the load distribution every individual faculty prepares for the practical subject allotted to him/her by identifying the

requirements and procurement of equipments if required. Further demonstration of practical's and Lab Manual is given by the faculty in front of all the faculty members so as to make improvements during delivery if required and also identify the gaps if any. Finally practical assignments are conducted as per the time table and evaluation/grading is done by individual faculty.

7. Lab Plan and Teaching Plan: Laboratory plan is prepared considering the time required for implementing the assignment and displayed on the notice board. Teaching plan is also prepared as per the syllabus specified and also includes extra lectures if required. Both laboratory and teaching plan are made available to the students. Copy of these lab and teaching plan is also available in the teachers course file.
8. Seminar finalization: Third year students are asked to do literature survey by referring digital and printed journals in library so as to submit abstract on minimum three topics related to recent advancement in the area of their choice containing standard references preferably IEEE / ACM. Guide allotment is done considering the availability and expertise of the faculty in the respective domains. Students interact with their respective guide on regular basis for discussion on details of their topic, literature survey, presentation, preparation of report, etc. Students deliver their presentation in front of the panel of experts where they are evaluated based on the content, fluency, confidence, knowledge about the topic, refutation, report, etc.
9. Elective selection: Final year students are briefed about the different electives available regarding contents, applications and scope/demand for each. They are given sufficient time for discussion and then they give their choices for elective subjects. Accordingly concern faculty members are informed about the electives so as to deal with the further processing.
10. Load Distribution: Every individual faculty is asked to give his/her choice for the subjects of his/her interest at SE, TE, BE. The head of department take a review of previous year feedback and results for subjects at Second, Third, and Final year. A meeting of all faculty members is called so as to finalize the load as per the choice of the faculty; in case of conflict priority is given to the faculty who has already taught the same subject previously with good results and feedback. All the faculty members are informed about the final load distribution so that they can start preparation for their allotted theory and practical subjects.
11. Faculty maintains a detailed subject file and laboratory manual at the beginning of each semester.  
Subject file includes following details
  - Course Objective & Course Outcomes
  - University Syllabus structure and copy of university syllabus
  - Teaching plan and Lab plan
  - Copy of Academic calendar
  - Vision and Mission of Department



- Course Outcomes and learning objectives
  - The Course Outcomes and their mapping with learning objectives
  - Identified gaps in the syllabus and action plan to bridge the gaps
  - Time table (individual)
  - In-sem exam question paper, university question papers and solutions, university result of the course and its analysis, question bank, class test record with marks obtained, tutorial record etc.
  - List of Extra Assignments apart from university syllabus
  - Record of Extra classes and lab sessions conducted for weak and failure students. Record of Remedial lectures for the failure student.
  - Record of progressive assessment of term work and record of Mock test etc
  - Proof of Collaborative learning i. e. Students and faculty members participated in different collaborative initiatives like Soft Skill development courses, online courses, NPTEL, Virtual Lab etc.
12. At the end the end of the course the attainment level of each course is calculated based on the performance of students and feedback on the course by the students.
  13. The faculty shares his/her course material, question bank and other details of the subject on students group and the students are encouraged to use it in order to increase student-teacher interaction.
  14. Monitoring of Teaching Learning Process: The regular monitoring of teaching learning process is done through following activities:
    - i) Attendance register of each course (theory and Laboratory) is entered in ERP as well as maintained by the faculty in the attendance register. Parents are informed about the attendance through ERP via SMS on regular basis. Every fortnight attendance of the students is prepared to ensure that the students are attending the classes regularly. If a student fails to meet the required attendance of 75% then he is warned and his parents are informed.
    - ii) Head of department takes review of the progress of the course at the end of each month. Corrective measures are taken in case some course is lagging in schedule.
    - iii) A class test is conducted to assess the learning outcome of students.
  15. The evaluation of students is done through the examinations conducted by the University which sets the question papers and does the assessment also. With revised syllabus, the assessment of students is done through two examinations viz. In-semester examination conducted in the middle of the semester and End-semester examination. A practical/Oral examination is conducted by the university in which an external examiner assesses performance of students along with an internal examiner.
  16. Student can also get opportunity to present and share their technical knowledge in the department in the form of seminars. Students get

opportunity to give power point presentation in front of other students and panel of faculty members.

17. Students are encouraged to participate in conferences, project competitions etc at university level/ State level/ National level and to explore different mini projects as a part of forum Cell, student branch activity.

18. Student feedback also plays a vital role in improving the quality of teaching learning process.

A feedback of each course is taken in the middle of the semester to find the difficulties faced by the students and corrective measures like extra sessions for weak students are taken.

19. Counseling students: A mentor is assigned and is taking care of a group of 15-20 students. A pyramid structure is followed by the mentor in order to group the students and activities are conducted for the students in one group by the students in other group as per the slot allocated/schedule designed and informed from time to time. If required the mentor forwards few students to the Institute counselor for in depth counseling.

20. Continuous learning through STTP, FDP, workshops etc by the faculty members to enhance and update the knowledge of course to deliver the content more effectively to the students.

21. The bright students are encouraged by awarding scholarships, giving them books through book bank, appreciating their work in the extended student council meet.

22. Process for Feedback Collection, Analysis and Corrective Measures

Feedback Collection: All the students give feedback through their ERP login on the following parameters by rating each parameter as Excellent(4), Very Good(3), Good(2), Average(1).

01 Regularity of Class Conduction

02 Syllabus Contents Coverage of the Subject up to this Date

03 Question / Answer Interactions with Students

04 Delivery of Content (Use of Board, OHP, Other Teaching Aids, LCD Projector, ICT)

05 Teaching Methodologies used for Understanding Technical Concepts

06 Command on Communication and audibility of Delivery

07 Approach of Faculty to motivate in Learning the Subject

08 Timely Starting and Finishing the Class as per Time Table

09 Over All Command on Class and Subject

10 Friendliness of Faculty with Students for Making the Subject easier and Clearing the Doubts.

Feedback Analysis and Corrective Measures: Analysis of the collected feedback is done to calculate the overall score out of 10. The Head of department communicates the analysis of feedback to each staff individually, discusses on corrective measures and suggestions for improvements on parameters in which feedback is below Average i. e. 8.0. Instructions are given to the concern faculty members to follow the suggestions and corrective

measures during the upcoming academic activities for improvement of feedback.

Basis of Reward: Faculty members having overall score of 10.0 for three consecutive semesters are rewarded and appraised appropriately in their Appraisal.

23. Process for Academic Audit: Academic Audit is conducted once in a semester based on the academic process. Academic Audit mainly focuses on following parameters:

- Number of Lectures Conducted.
- Number of Practical Assignments completed.
- Syllabus Coverage.
- Feedback Analysis.
- In Semester/End semester Examination Result Analysis.

Based on these parameters Academic Audit is performed and actions are planned and executed for Expert lectures, Workshop, Remedial Classes, Make-Up Test, Student common exercise, Online MCQ practice etc. The Effectiveness of these implemented actions is verified during university result analysis and Academic Audit.

### **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?**

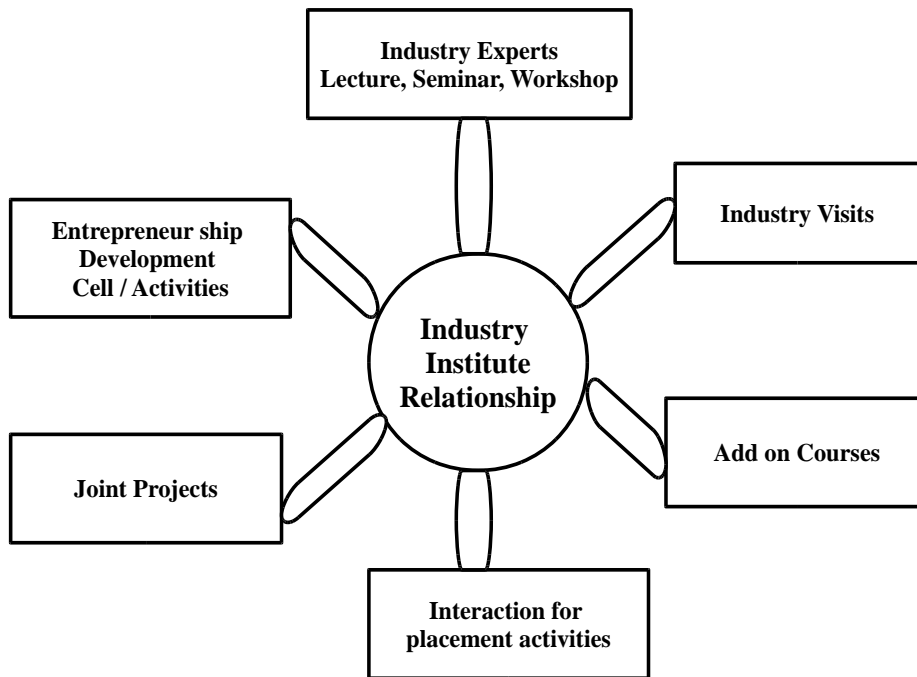
To enrich the learning experience of the students and to provide them the knowledge of current industrial practices, Department strives hard to provide opportunities to the students which include industrial visits, industrial training, invited lectures, industrial projects, add-on modules and internships as depicted in following tables. Regular interaction among faculty and industry experts on various aspects is ensured by following activities.

#### **1. Joint research projects:**

Every Department of Institute has signed Memorandum of Understanding (MoU) with companies/industries for joint collaborative research, organization of workshops/symposia/projects and training programs for the students and faculty.

#### **2. Industry experts lectures, seminars and workshops:**

Department organizes guest lectures, workshop and seminars of eminent personalities to give professional information on various areas like Personality & Soft Skills Enhancement Program, Scientific & Educational Resources, Social Awareness, Career Guidance & Higher Education prospectus so that these experts share their practical experiences with the students.



### 3. Industrial Visits:

Industrial visits are organized for all Third and final year students every year. Visit to industry / organization is done to get exposure to industrial environment, interaction with industry experts, team work etc.

### 4. Add on Courses:

Department is organizing add-on courses to bridge the gap between academic & industry current requirement.

### 5. Entrepreneurship Development Activities:

- To create awareness and interest of being an entrepreneur and consider entrepreneurship as a lucrative, preferred and viable career option, Institute initiates the frequent interaction of students with the alumni entrepreneurs.
- To orient and prepare students for an entrepreneurship career by imparting knowledge and aptitude for entrepreneurship; Institute invites successful businessmen from diverse background as resource persons to share their knowledge and experience with the students.

The details of various activities carried out in last 3 years are as follows:

**(A) Some of the activities carried out:**

Sr No	Initiatives	Date	Implementation details	No of Students Participated (%)	Details of the Resource person
1	Zensar Employability Skills Development Training	1 <sup>st</sup> June to 20 <sup>th</sup> June 2015 (2013-14, 2014-15 and 2016-17 Batch)	Technical Training on Core JAVA, SQL, RDBMS, PLSQL	22 (2013-14) 30 (2014-15) 21 (2015-16)	Satish Mahajan And Ms Upasna From Seed Infotech and GTT
2	Aptitude Training program by T. I. M. E.	In the academic year 2014-15 & 2015-16	Quantitative, Logical, Verbal Aptitude, Soft Skills	26	Mr. Krunal Dhakte From T. I. M. E. Group
3	In-house Employability Skills Assessment Platform (ESAT)	In-house technical and aptitude assessment is carried out.	Technical as well as General Aptitude Assessment	All the final year students	In-house faculties
4	IIT Spoken Tutorial Certification	2013-14 2014-15	Technical Course along with IIT Certification	All Students	IIT Study Material

**(B) Other Efforts**

Sr No	Initiatives	Implementation details	Details of the Resource person
1	MOUs with industries	1. MoU with Zensar Technologies for technical training as well as soft skills	1. Mr. Mukund and Mr. Satish Mahajan from Zensar 2. Ms. Radhika Malik,

		training. 2. MoU with ESDS Software Solutions	HR, ESDS.
2	Association with industry for faculty and industry training in general	Association for System Administrator program. (2014-15 and 2015-16)	Ms. Kavita from Aress Software Solutions.
3	Industry persons called as Experts/Judge for various events	1. Interview Skills (2014-15) 2. Android Technical Workshop STTP. (2015-16)	1. Ms. Sapna Karia, BDE, NEC. 2. Prasad from GM Soft-tech
4	Invited industry personnel for may be mock interviews/judge etc.	1. For BeRFI Event (2014-15) Judge panel of ELC 2. For BeRFI Event (2015-16) Judge panel of APART	

#### **Initiatives related to industry internship/summer training**

**Year: 2014-15**

<b>Initiatives related to industry internship/Summer training and its Implementation details</b>	<b>Impact analysis &amp; No of students participated</b>
<ul style="list-style-type: none"> <li>a. 15 to 35 days leave is given for the internship</li> <li>b. Students are informed on email groups / briefing by placement officer regarding internship opportunities.</li> <li>c. Internships are obtained through Placement Cell.</li> <li>d. MOUs also helped in obtaining industry projects for the students.</li> </ul>	<p>Students will get oriented for industry culture and professional and engineering ethics.</p> <p><b>10 students went for the internship/summer training in the year 2014-15.</b></p>

**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.)**

Sample as follows:

<b>Faculty members represented syllabus restructuring at University</b>	<b>Contribution</b>
Dr. M. U. Kharat	Member BOS, Member Syllabus restructuring for SE Computer Engineering, TE Computer Engineering, ME Computer Engineering
Prof. P. M. Yawalkar	Member Syllabus restructuring for SE Computer Engineering, TE Computer Engineering, ME Computer Engineering

Curriculum gaps are identified for all the courses, few of them are informed to University for further improvement.

Sample gaps identified for the courses of Computer Engineering:

<b>Sr. No</b>	<b>Subject Code</b>	<b>Subject name</b>	<b>Gaps identified</b>
01	210241	Discrete Structure	210241. G1 Emphasis on design and development of complex problems needs to be addressed
02	210250	Computer Organizations	210250. G1 More Stress on Investigation of complex problem is needed.
03	210245	Microprocessor Architecture	210245. G1 Course needs introductory exposure of parallel programming using FOSS tools
04	201251	Programming Laboratory	201251. G1 Detail programming exposure on design and implementation of animated games.

**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.**

NOT APPLICABLE

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

In the University Syllabus, course objectives and course outcomes (COs) are

specified for each course. Evaluation of course outcomes for each subject is prepared by respective department. The major objective is to develop globally acceptable professional, same is achieved by giving knowledge and skill through open end learning approach. This helps in developing understanding and knowhow of the respective discipline among the student.

## **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.**

NA (AS Institute offers the UG and PG programs affiliated to the Savitribai Phule Pune University)

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

NO

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

- Range of Core / Elective options offered by the University and those opted by the Institute Students are given choice to select elective subject of their interest among list of elective subjects offered by University. This will enable students to gain professional and skill oriented knowledge apart from regular curriculum. This task is carried out at Final year level.
- Choice Based Credit System and range of subject options  
Choice Based Credit System is applicable to first and second year Engineering subjects.
- Courses offered in modular form  
NA
- Credit transfer and accumulation facility  
NA
- Lateral and vertical mobility within and across programmes and courses  
NA
- Enrichment courses  
Institute organizes Soft skill courses for first year and second year engineering students. Amrita Virtual Lab facility is available for the students and faculty. FOSS labs are available for getting exposure to the open source courses. (It is IIT Bombay Initiatives for the students)  
Students and staff enroll to various NPTEL online certification courses run by IITs and IISc.



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

NA

**1.2.5 Does the Institute provide additional skill oriented programmes, relevant to regional and global employment markets? If ‘yes’ provide details of such programme and the beneficiaries.**

Some of the activities carried out are listed below:

Sr No	Initiatives	Date	Implementation details	No of Students Participated (%)	Details of the Resource person
1	Zensar Employability Skills Development Training	1 <sup>st</sup> June to 20 <sup>th</sup> June 2015 (2013-14, 2014-15 and 2016-17 Batch)	Technical Training on Core JAVA, SQL, RDBMS, PLSQL	22 (2013-14) 30 (2014-15) 21 (2015-16)	Satish Mahajan And Ms Upasna From Seed Infotech and GTT
2	Aptitude Training program by T. I. M. E.	In the academic year 2014-15 & 2015-16	Quantitative, Logical, Verbal Aptitude, Soft Skills	26	Mr. Krunal Dhakte From T. I. M. E. Group
3	In-house Employability Skills Assessment Platform (ESAT)	In-house technical and aptitude assessment is carried out.	Technical as well as General Aptitude Assessment	All the final year students	In-house faculties
4	IIT Spoken Tutorial Certification	2013-14 2014-15	Technical Course along with IIT Certification	All Students	IIT Study Material

**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?**

NA

### **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?**

In the University Syllabus, course objectives and course outcomes (COs) are specified for each course. Evaluation of course outcomes for each subject is prepared by respective department. The major objective is to develop globally acceptable professional, same is achieved by giving knowledge and skill through open end learning approach. This helps in developing understanding and knowhow of the respective discipline among the student.

**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?**

Organizing Industrial visits, Industrial training, and Value addition courses on regular basis.

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

Institute organizes expert sessions on the issues of gender. Climate change, environmental education human rights etc.

e. g Expert session of Dr. Rajendra Singh, (Magasay Awardee), Session on woman harassment act by Mrs. Anita Pagare and Dr. Medha Saikhedkar

**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

The two points viz moral and ethical values as well as community orientation is covered through CSR activities, wherein students identifies the needy villages after survey contributes by providing teaching aids, sports material to the tribal students. The contribution is from the savings in student’s forum activities. For inculcating other aspects sample programs arranged as

follows:

**Expert Lectures/ Workshops Organized**

**Year 2013-14**

<b>Sr No</b>	<b>Activity conducted</b>	<b>DATE</b>	<b>Resource Person With Designation</b>	<b>% Of Student</b>
01	“Advance Computer Network”(Workshop)	22/03/2014	Dr. M. U. Kharat (Professor and Head, Computer Engineering Department, MET’s, IOE, Nashik)	ME (52/64) + TE (60/78) = 79. 08%

**Year 2014-15**

<b>Sr No</b>	<b>Activity conducted</b>	<b>DATE</b>	<b>Resource Person With Designation</b>	<b>% Of Student</b>
01	“Advances in Computer Architecture” (Expert Lecture)	29/09/2014	Dr. G. K. Patnaik	ME (43/46) + BE (70/84) =88. 40%
02	“Intelligent System”(Expert Lecture)	30/09/2014	Dr. R. S. Tiwari	ME (29/46) + BE (50/64) =74. 55%
03	“Distributed Computing”(Expert Lecture)	11/10/2014	Mr. Kedar Ghogale Technical Officer C-DAC, Pune	ME (37/46) + BE (50/66) = 78. 09%
04	“Research Methodology” (Expert Lecture)	19/10/2014	Dr. P. M. Javandhia Principal	ME (29/46) + BE (50/66)= <b>69. 70%</b>
05	“Preparing Students For Software Industries”	21/10/2014	Dr. Uday Wad Cell Bean Technologies, Nashik	ME (21/46) + BE (60/66) =68. 28%
06	“Challenges Ahead On Personality	19/01/2015	Mr. P. S. Pardeshi	TE (65/74) =87. 83%

	Development, Time Management And Result Oriented Attitude”			
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**Year 2015-16**

<b>Sr No</b>	<b>Activity conducted</b>	<b>DATE</b>	<b>Resource Person With Designation</b>	<b>% Of Student</b>
01	“Open Source: A Bright Future for the Developer”	20/09/2015	Dr. G. K. Patnaik, Professor and Head, Dept of Comp Engg, SSBT COE, Bhambori, Jalgaon	ME (29/41) + BE (84/84) = 85.36%
02	Cloud Computing: An Opportunistic Business Model	20/09/2015	Dr. S. K. Shinde, Professor and Head, Dept of Comp Engg, L. T. COE, Navi Mumbai	ME (25/41) + BE (84/84) = 80.48%
03	3D Reconstruction in Computer Vision and Image Watermarking with its applications	26/09/2015	Dr. S. B. Wankhade, Professor and Head, Dept of Comp Engg, RGIOT Varsova Mumbai	ME (22/24) + BE (84/84) = 95.83%
04	Big Data Management	28/09/2015	Dr. Satish Devane, Professor and Head, Dept of Comp Engg, DMCOE, Airoli	ME (19/24) + BE (84/84) + TE (70/79) = 89.25%
05	“Design And Analysis Of Algorithm”(Expert Lecture)	01/10/2015	Dr. Nitin Choube	ME (32/46) + BE (70/84) = 76.44%

06	Information Security	31/03/2016	Dr. S. B. Wankhade, Professor and Head, Dept of Comp Engg, RGIOT Varsova Mumbai	ME (15/17) +BE (84/84) =94.11%
07	Advancements in Parallel Computing	03/04/2016	Dr. G. K. Patnaik, Professor and Head, Dept of Comp Engg, SSBT COE, Bhambori, Jalgaon	ME (25/25) +BE (84/84) =100%
08	Software Design and Testing	03/04/2016	Dr. Uday Wad, Datamatics, Nashik	ME (25/25) +BE (84/84)+TE (79/79)=100%

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

Feedback and inputs from various stakeholders are obtained and Communication with BOS is done for enrichment of the curriculum.

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

**Quality of class room teaching:** In addition to the regular syllabus coverage in-depth study of the teacher is expected. Based on the advanced topics studied in such subjects the students are given quality inputs in clearing the ideas and concepts. Almost after conduction of every class and before start of new topic, students are asked the review questions based on previous topic taught. This enhances life-long learning and good practices for students and faculty members as well. The class room teaching is augmented by arranging guest lectures and workshops by experts from industry and academia. Use of various methods like interactive presentations, video lectures, animations, role play, which helps students in understanding and learning the concepts clearly by which they acquire in-depth Engineering Knowledge.

**Conduction of Experiments:** As per the load distribution every individual faculty prepares the practical subject allotted to him/her by identifying the requirements and procurement of equipments, if required. Further demonstration of practical's and Lab Manual is given by the faculty in front of all the faculty members so as to make improvements during delivery if required and also identify the gaps, if any. Laboratory plan is prepared considering the time required for implementing the assignment. Teaching plan and Lab manuals for the concerned practical are prepared by the concerned faculty as per the syllabus specified. These manuals are used as a reference by the students giving them the development of programming skill and problem analysis skill. During the practical session, faculty demonstrates the

details of the practical assignment to the students and then students perform the assignment individually. Doubts of the students are resolved by the faculty during this session. Details of write-up for each assignment are specified during the practical session. Students prepare write-up and take printout of assignments and keep ready in file for further assessment. This helps students in writing applications using modern tools with concepts and skills in their domain subject.

**Continuous assessments in laboratory:** At the start of practical students are made aware of learning objectives, purpose of the practical. Students are instructed and made habitual to complete their practical assignments in the time and prepare desired documents as per file requirements. Faculty assesses the students on regular basis during the practical session in the line of learning objectives. Term Work is based on progressive assessment of laboratory assignment implementation, on time submission, and performance in questions and answers sessions for the performed practical assignment.

#### **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?**

Various faculties from every department are involved in the design and development of the curriculum prepared by University as a Subject Coordinator, Subject Member, Board of Studies member, etc. Feedback Communication is done based on the gaps identified in the curriculum by the faculties.

##### **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?**

YES through the channel of Board of studies of respective courses.

##### **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?)**

NIL

## CRITERION II: TEACHING - LEARNING AND EVALUATION

### 2.1 Student Enrollment and Profile

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

Institute strictly adheres to the DTE guidelines, wherein the admissions are done through Centralized Admission Process for the State of Maharashtra.

#### 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.

Same as above

#### 2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the Institute and provide a comparison with other Institutes of the affiliating university within the city/district.

Minimum and maximum marks for admission to first year of all undergraduate and postgraduate programmes offered by the Institute from AY 2013-14 to 2016-17 is detailed in the table no-2. 1. 3(A) given below.

Table 2. 1. 3(A) Minimum and maximum marks for admission to first year all undergraduate and postgraduate programmes

<b>MET's Institute of Engineering, Nashik</b>									
<b>Course Name (UG)</b>	<b>Admission Class</b>	<b>Academic Year</b>							
		<b>2016-17</b>		<b>2015-16</b>		<b>2014-15</b>		<b>2013-14</b>	
		Min	Max	Min	Max	Min	Max	Min	Max
MECH	First Year	33	112	32.59	83.96	30.9	84.93	46	116
	Direct Second Year	65.82	83.94	60.47	84.29	60.42	84.24	64.29	83.70
CIVIL	First Year	47	85	33.76	74.55	15.11	81.42	42	117
	Direct Second Year	71.58	84.69	61.24	82.82	61.35	84.25	60.11	81.46
COMP	First Year	36	101	22.83	86.49	15.13	77.08	41	99
	Direct Second Year	69.59	80.76	58.19	83.44	62.06	82.90	62.52	83.50
IT	First Year	35	85	17.93	75.67	19.9	67.38	44	96
	Direct Second	51.06	81.59	52.32	79.6	53.81	81.5	55.5	78.52

E&TC	First Year	11	80	17.43	65.65	22.23	55.19	34.5	91
	Direct Second Year	58.29	87.18	55.31	88.38	67.94	90.23	62.52	84.50
ELE	First Year	46	95	21.44	78.79	19.98	75.28	52	102
	Direct Second Year	65.03	84.30	68	84.42	63.65	84.56	60.47	84.44
<b>(PG)</b>									
MECH	First Year	1.05	13.63	4.97	17.63	6.33	42	27	313
COMP	First Year	2.28	6.32	2.57	15.98	0.17	20.55	35	70
MCA	First Year	30	77	11.25	67.91	12.69	130.75	20	78

Table 2.3.1(B) Minimum and maximum marks for admission to first year all undergraduate and postgraduate programmes

<b>R. H. SAPAT Institute of Engineering, Management Studies &amp; Research, Nashik</b>									
Course Name (UG)	Admission Class	Academic Year							
		2016-17		2015-16		2014-15		2013-14	
		Min	Max	Min	Max	Min	Max	Min	Max
MECH	First Year	34	97	24	82.3	30.3	91.6	50	117
	Direct Second Year	60	85	61	85.9	66	86	63.2	84.2
CIVIL	First Year	44	87	29.3	76.5	31.4	66.2	42	96
	Direct Second Year	61.9	83.3	61.9	83.3	67.8	82.5	64.8	81.0
COMP	First Year	39	103	9.74	74.7	21.7	77.8	31	93
Electrical	First Year	33	88	--	--	--	--	--	--
	Direct Second Year	75.77	85.09	63.88	83.27	--	--	--	--
	Direct Second Year	65.3	85	53.5	82.7	64.5	86.2	64.1	83.8
	First Year	37	77	11	33.7	22.3	85.2	39	93
	Direct Second Year	61	83	57	85.4	54.9	87.09	68.7	83.9
<b>(PG)</b>									
MECH	First Year	4.5	24.1	61.2	42.2	5.93	40.1	22	38.7
MCA	First Year	22	136	30.4	71	25	76	45	87
	Direct Second Year	-	-	-	-	44.7	78.80	48.4	59.1



Table 2.3.1(C) Minimum and maximum marks for admission to first year all undergraduate and postgraduate programmes

<b>K. K. Wagh Institute of Engineering &amp; Research Center, Nasik.</b>									
<b>Course UG</b>	<b>Admission class</b>	<b>Academic Year</b>							
		2016-17		2015-16		2014-15		2013-14	
		Min	Max	Min	Max	Min	Max	Min	Max
MECH	First Year	17	155	38.2	94.2	35.1	95.5	58	151
CIVIL	First Year	47	130	21.8	91.2	35.6	88.2	57	151
COMP	First Year	52	146	17.4	97.7	30.7	94.4	39	132
IT	First Year	46	131	39.5	89.8	30.5	80.4	43.5	121
E & T. C	First Year	35	123	27.7	88.5	30.6	89.9	59	136
Electrical	First Year	52	146	12.18	93.35	38.82	91.0	54	124
<b>PG</b>									
MBA	First Year	31	62	5.2	64.79	0.83	70.44	23	114
MCA	First Year	12	88	11.25	87.53	42	104	26	98

Table 2.3.1(D) Minimum and maximum marks for admission to first year all undergraduate and postgraduate programmes

<b>NDMVP's KBT Institute of Engineering, Nashik</b>									
<b>Course Name (UG)</b>	<b>Admission Class</b>	<b>Academic Year</b>							
		2016-17		2015-16		2014-15		2013-14	
		Min	Max	Min	Max	Min	Max	Min	Max
MECH	First Year	31	105	21.6	92.6	24.8	91.5	41	122
	Direct Second Year	62	86.6	60	85.5	57.5	86.2	58	86.3
CIVIL	First Year	32	99	21.6	82.3	16	82.7	35.5	122
	Direct Second Year	68.5	87.4	66.4	84.2	68.6	85.3	72	83.9
COMP	First Year	47	106	23.4	82.7	10.4	90.1	39	114
	Direct Second Year	71	85.3	63.6	86	85	57.7	70	84.8
IT	First Year	43	97	18.97	73.76	24.65	64.04	33	85
	Direct Second Year	60.6	84.6	56.9	83.5	63.5	84.5	60.5	90.3

E&TC	First Year	30	94	17.4	79	25.2	77.7	38.5	114
	Direct Second Year	88	69.6	86.9	70.6	88.4	67.7	87	63.6
<b>(PG)</b>									
MECH	First Year	0.76	32.88	2.51	31	2.37	25.5	0	66.2
MCA	First Year			15	82			6	79
	Direct Second Year					4	97.3		

**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?**

It is through Centralized Admission Process carried out by Directorate of Technical Education, Maharashtra State

**2. 1. 5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion**

- \* SC/ST
- \* OBC
- \* Women
- \* Differently abled
- \* Economically weaker sections
- \* Minority community
- \* Any other

To meet the commitment towards national diversity, policy has been formulated by Directorate of Technical Education, Maharashtra State and it is mandatory for Institute to follow the same.

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

Variations depend on different variables in Industrial growth / recession based on which students choose the branch / course.

Sr. No	Course Name	Year	No. of Students Admitted	Sanctioned Intake (Y)	Demand Ratio (X/Y)
<b>UG</b>					
1	Mechanical Engineering	2016-17	109	120	0.90
		2015-16	125	120	1.04
		2014-15	114	120	0.95
		2013-14	122	120	1.01
2	Civil Engineering	2016-17	54	60	0.90
		2015-16	64	60	1.06
		2014-15	59	60	0.98
		2013-14	58	60	0.96
3	Computer Engineering	2016-17	59	60	0.98
		2015-16	63	60	1.05
		2014-15	59	60	0.98
		2013-14	55	60	0.91
4	IT Engineering	2016-17	54	60	0.90
		2015-16	44	60	0.73
		2014-15	27	60	0.45
		2013-14	33	60	0.55
5	E & TC Engineering	2016-17	17	120	0.14
		2015-16	44	120	0.36
		2014-15	36	60	0.60
		2013-14	57	60	0.95
6	Electrical Engineering	2016-17	53	60	0.88
		2015-16	62	60	1.03
		2014-15	57	60	0.95
		2013-14	57	60	0.95
<b>PG</b>					
1	Mechanical Engineering	2016-17	07	18	0.38
		2015-16	12	18	0.66
		2014-15	18	18	1
		2013-14	18	18	1
2	Computer Engineering	2016-17	04	24	0.16
		2015-16	17	24	0.70
		2014-15	24	24	1
		2013-14	24	24	1
3	MCA	2016-17	20	120	0.16
		2015-16	50	120	0.41
		2014-15	0	120	0
		2013-14	22	120	0.18

\*Above table includes over and above admissions.

## **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?**

Institute has full-fledged facility for the differently-abled students. Institute has complete facilities viz ramp, lift, wheel chair for access to different locations to the differently-abled students.

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

Yes, counselor conducts the session first in group followed by individual interaction for mentoring, guiding in choice and selection of career path.

### **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?**

It is carried out through different means viz. Industrial visit: making acclimatization with industrial culture, Industry Experts sessions: awareness about industry expectation from students; Industry Oriented Projects/In plant Training: to have exposure to shop floor and real industrial world.

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

It is through workshop /seminars/ poster presentation competition etc

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

For the purpose, every department has one laboratory, wherein students do their experimentation work beyond the syllabus.

### **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, slowlearners, economically weaker sections etc. who maydiscontinue their studies if some sort of support is not provided)?**

Based on result analysis, students with poor performance are identified and special remedial classes as well as concept clearing classes are conducted for this group. Moreover, extra classes are conducted for the students admitted through lateral entry scheme.

## **2.3 Teaching-Learning Process**

### **2.3.1 How does the Institute plan and organize the teaching, learning**

**and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)**

**Preparation of Academic Calendar:** Academic calendar is prepared for every semester. In order to fulfil the program requirements, Academic calendar is prepared in tune with University Academic Calendar as a base and guidelines for every semester including different guest lectures, workshops, seminars, conferences, Faculty Development Programs, IN SEM exam schedule etc. that need to be performed in respective semester. The academic calendar is followed throughout the semester for its effectiveness and timely execution of activities.

**Subject Teaching Plan and Laboratory Plan:** Subject teaching plans are prepared by each faculty in coordination with the head of department. The head of department monitors the status of syllabus covered and status of completion of practical every month as well at the end of semester. Similarly Laboratory plan is prepared considering the time required for implementing the assignment and displayed on the notice board as well it is being circulated in the classes. Teaching plan is also prepared as per the syllabus specified and also includes extra lectures if required. Copy of such lab exercise and teaching plan is also available in the teachers course file. Faculty members ensure that they cover entire syllabus before the In Semester examinations and by the end of semester. It is mandatory for all the teachers to complete the desire portion before the commencement of In-sem and end-sem examination as prescribed by University.

**Apart from Teaching Learning:** In addition to the regular syllabus conduction by the faculty, class room teaching is augmented by arranging guest lectures and workshops by experts from industry and academia. Weekend classes for slow learners are arranged for their development. Student can refer Question bank for the course and also go through the University question papers for the preparation and guidelines of the examination which helps in enhancing the applicability of engineering knowledge in respective field.

**Student Encouragement:** Students are encouraged by providing various facilities apart from teaching learning resources. They are encouraged to participate in various activities conducted at Department level/Institute level/State level/National level In/outside the Campus. Students are also encouraged to organize various activities at Department level/Institute level/State level/National level in the Campus. A platform has been generated in the name of “SAC: Students Association for Computer”, to explore problem analysis, designing and development of solutions to the complex problems through technical and professional events. This helps in improving communication and team work building. For inter-Institutional

coordination and giving exposure to work in a team, “MET-UTSAV” program for all students in the campus is arranged every year. This gives the platform for development of an individual and working in a team. There are four different types of Institutes viz. Engineering, Polytechnic, Management and Pharmacy participating in such events. Students get multidisciplinary environment through this platform for their overall development as an individual and a team.

**Process for Academic Audit:** Academic Audit is conducted once in a semester based on the academic process and their conductions.

Academic Audit mainly focuses on following parameters:

Number of lectures targeted and conducted;

Number of practical assignments expected and completed;

Syllabus coverage and attendance of the students for its effectiveness;

Monitoring regularity of the student’s attendance;

Communications held with the parents and students;

Feedback assessment analysis;

In semester examination/online examinations result analysis for immediate improvements required;

Records of all academic audit parameters are placed before the Academic Assessment and Quality Improvement Committee for monitoring, its remarks and recommendations. Based on the recommendations of this committee actions are followed in the regard of Academic Audit and Improvement.

Based on these parameters Academic Audit is performed and actions are planned and executed for expert lectures, workshop, remedial classes, make-up test, student common exercise, online MCQ practice etc. The effectiveness of these implemented actions is verified during University result analysis and Academic Audit.

**Academic audit Assessment:**

Sr. No	Assessment Criteria	Frequency	Conduction Mechanism	Action plan for continuous improvement	Effectiveness
1	Theory / Practical Engagements	Twice in a Semester	1. Observation on number of lectures/practical’s engaged against targeted. 2. Syllabus coverage.	Plan for Expert or Extra Lectures/ Practical’s (if required).	Completion of syllabus portion as per exam schedule

2	Attendance of Students in TH/PR	Monthly During the Semester	1. Observation on percentage attendance of students against the categories: A). 75% and above B). 65% to 74%. C). less than 65%	1. Weekly SMS for parents to update about attendance. 2. Communication to parents of students having attendance less than 65%.	Improvement in overall attendance
3	Online Test Practise	Twice in a Semester	1. ERP based Online test system through student login. 2. Student Practise for online test for various subject by selecting Duration and Question Level as per his choice. 3. Observation of test result.	1. Additional practise test if needed based on result.	Improvement in result of the student for the subject.
4	Insem / Online Examination Result comparison	Once in a Semester	1. Observation and analysis of results of each subject. 2. Identify students with weak performance.	1. Extra lectures for weak students.	Improvement in result of the weak student for the subject.
5	End-sem Examination Result comparison with last exam Results	Once in a Semester	1. Record maintenance & updates in ERP system. 2. Comparison of each subject result with last 3 exams results.	1. Instructions for improvement in Teaching Methodology. 2. Change in Faculty (if needed.). 3. Remedial Classes	Improvement in overall result.

6	Student feedback	Once in a Semester	<ol style="list-style-type: none"> <li>1. Online ERP based feedback system through individual login.</li> <li>2. Collection of feedback from students having attendance above 65%.</li> <li>3. Observation and Analysis of received feedback.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discussion with Individual Faculty.</li> <li>2. Instructions for improvement in lagging parameters.</li> </ol>	Improvement in effective teaching
7	Professional Endeavors of Individual Faculty related to Academics	Once in Semester	<p>Observations on following parameters:</p> <ol style="list-style-type: none"> <li>1. Improvement in Qualification.</li> <li>2. Technical Papers Published/ Presented.</li> <li>3. Worked as Reviewer/Session Chair/ Co-Chair.</li> <li>4. Research Proposals / Sponsored projects.</li> <li>5. Expert Lectures delivered.</li> <li>6. Short Term Courses/ Seminar/ Workshop/Conference attended.</li> </ol>	<ol style="list-style-type: none"> <li>1. Encouragement to Faculty for attending FDP/STTP of his/her subject.</li> <li>2. Encouragement for submission of Research Proposal / Sponsored Projects.</li> <li>3. Encouragement for publications and participation in workshop / conferences</li> </ol>	Overall involvement and improved performance of faculty.
8	Academic Functional Performance	Once in a Year	<p>Observations on following parameters through ERP system</p> <ol style="list-style-type: none"> <li>1. Quality of</li> </ol>	<ol style="list-style-type: none"> <li>1. Discussion with Individual Faculty.</li> <li>2. Instructions for</li> </ol>	Improvement in Functional performance



	Parameters	<p>Assignment given to student</p> <p>2. Innovation in Paper Setting / Evaluation</p> <p>3. Assessment of Assignment/Unit Test / Sessional / Tutorials</p> <p>4. Discussion in Classroom on sessional / Unit Test / Assignments</p> <p>5. Record Keeping of Assignments / Sessional Marks</p> <p>6. Maintaining overall student's discipline.</p> <p>7. Organising Individual Sessions Regularly.</p> <p>8. Organising Industrial Visit / Department Activity.</p> <p>9. Participation in Departmental Seminars.</p> <p>10. Preparing / Updating Question Bank.</p> <p>11. Adding New Experiments to Laboratory.</p> <p>12. Arranging Lectures of outside Faculty from Industry / Institutions.</p> <p>13. Regular</p>	improvement in lagging parameters.	
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			<p>Checking of Journals.</p> <p>14. Display of Instructional Material/Charts Information/Notices.</p> <p>15. Innovations in Curriculum design and case study development.</p> <p>16. Relation with Colleagues.</p> <p>17. Relation with Seniors.</p> <p>18. Proficiency in English.</p> <p>19. Punctuality / Sincerity.</p>		
9	Placement Improvement & Industries Interactions	Once in a Year	<p>Observation on</p> <p>1. Industry status, No. of Industries visited, Payment Package.</p> <p>2. Sponsorship for projects.</p>	<p>1. Arrangement for Aptitude Sessions, Aptitude test, GD, PI.</p> <p>2. Expert Sessions by Industry experts.</p> <p>3. Training for Placement.</p>	Improvement in Placement ratio
10	Academic Assessment and Quality Improvement Committee.	Once in a Semester	<p>1. Call for meeting immediately after results.</p> <p>2. Analysis on results.</p> <p>3. Suggestions from committee members.</p>	<p>1. Implementation of suggestions, corrective actions.</p>	Improvement in overall academics

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

Institute has taken initiative in the regard of formation of IQAC and Academic Assessment and Quality Improvement Committees are formed with every department. As a part of continuous improvement with quality parameters such Committees are constituted for maintaining and improving the quality of assessment and academic affairs. Sample committee is as follows:

#### Constitution of committee (Computer Engineering):

Sr. No.	Name of the Member	Affiliation/Designation
1	Prof. Dr. R. S. Tiwari	<b>Member:</b> Ex Director, School of Computer Science YCMOU, Nashik
2	Prof. Dr. S. S. Sane	<b>Member:</b> Ex. BOS Chairman, Vice Principal and Head of Dept, KKWIER, Nashik
3	Prof. Dr. S. V. Gumaste	<b>Member:</b> Professor, Computer Engg , Gokhale Education Society's COE, Nashik
4	Prof. P. M. Yawalkar	<b>Member:</b> Senior Faculty member of Computer Engineering Department,
5	Prof. Dr. M. U. Kharat	<b>Co-ordinator:</b> Professor and Head Computer Engineering Department

All Committee members meets twice a year preferably before the start of academic year and/or after the result declaration of University examinations for discussions, assessment, feedback and action recommendations on the various academic and quality improvement parameters.

### 2.3.3. How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

#### NPTEL Online Certification Courses

NPTEL has been offering self-study courses across engineering, humanities and science streams for more than a decade. These are available at: <http://nptel.ac.in>. From March 2014 NPTEL has been offering online certification for its courses, the highlight being the certification exam through which the student gets an opportunity to earn a certificate from the IITs! These are available at: <https://onlinecourses.nptel.ac.in>

To take this initiative forward and to encourage more students across Institutes to participate in this initiative, NPTEL offered setting up NPTEL chapter in Institutes (with the approval of the management) which will be under the headship of a faculty member of the Institute, who would be the Single Point of Contact (SPOC).

Our Institute started NPTEL Local Chapter. Faculties and students registered

for various NPTEL courses and using the online learning facility enriching the knowledge of the respective domain.

### **IIT Spoken Tutorial**

About IIT Spoken Tutorial project:

The Spoken Tutorial project is the initiative of the ‘Talk to a Teacher’ activity of the National Mission on Education through Information and Communication Technology (ICT), launched by the Ministry of Human Resources and Development, Government of India.

The use of spoken tutorials to popularize software development and its use will be coordinated through <http://spoken-tutorial.org> website.

(The Spoken Tutorial project is being developed by IIT Bombay for MHRD, Government of India)

### **Virtual Lab and practical facility:**

Objectives of the Virtual Labs:

1. To provide remote-access to Labs in various disciplines of Engineering. These Virtual Labs would cater to students at the undergraduate level, post graduate level as well as to research scholars.
2. To enthuse students to conduct experiments by arousing their curiosity. This would help them in learning basic and advanced concepts through remote experimentation.
3. To provide a complete Learning Management System around the Virtual Labs where the students can avail the various tools for learning, including additional web-resources, video-lectures, animated demonstrations and self-evaluation.
4. To share costly equipment and resources, which are otherwise available to limited number of users due to constraints on time and geographical distances?

Amrita University jointly participates with IIT Delhi, IIT Kanpur, IIT Bombay, IIT Madras, IIT Kharagpur, IIT Guwahati, IIT Roorkee, IIIT Hyderabad and Dayalbagh University.

These experiments and labs will be hosted for open access through the main project website <http://vlab.co.in> and at the University link <http://vlab.amrita.edu/>

This project is an initiative of Ministry of Human Resource Department under National Mission on Education through ICT.

Virtual lab provides **online labs and experiments** from top technology Institutes

<b>Name of Lab</b>	<b>Name of technology Institute</b>
Wireless Sensor Network Remote Triggered Lab	AMRITA UNIVERSITY

### **MWM:MET WORLD OF MUSIC**

Modern Life Style creates stress when due space is not given to Individual Personality. In order to relieve from this stress, we have solution of Music Therapy in the form of MET World of Music. MET League of Institutes has launched a unique music library for its students and staff. The MET MWM is equipped with touch-screen kiosks, headphones and a colossal archive of music.

Student can select song from the screen and the details of the song appear singer and its style of the beat and more. The songs/videos can be queued in the playlists. Apart from Indian music, the music varies from Western, Classical, Filmy, Karaoke Tracks, Devotional, Ghazals, Qawallis, Classics, Retro-pop, World music, Jazz and even Techno music is also available. All the information about the ragas of the song is given in the database.

"Studies have proven that music plays a very important role in the development of the human brain, it also acts as a stress buster and eases tensions. MET tries to provide musical meditation to students through MET World of Music"

The music centre is also equipped with various Indian Classical and Western instruments like the Tabla, Guitar, Casio, Harmonium, octopod and Vocal for students who are keen to learn classical music practically on the Instrument. Learning Music or Listening Music is a stress busting exercise which allows all to break free from the regular assignments and work, to relax in the world of music.

### **Infrastructure at MWM**

#### **List of equipments**

1. Lenovo Commercial M90Z All-In-One Desktop 17 nos  
Configuration: Intel Core i3 2. 93 GHz Processor,  
2GB DDR3 RAM, 23" TFT touch sensitive screen,  
320 GB SATA Hard Disk Drive
2. Amplified Speakers Proton 02 nos
3. DELL LCD Projector with remote 01 nos
4. Motorized Projector Screen 4'x6' 01 nos
5. NX Audio Stereo Headphones 17 nos
6. Lenovo USB Keyboard 01 nos
7. Lenovo USB Mouse 01 nos
8. Panasonic Telephone 01 nos
9. A/C Remote 01 nos
10. Record Books In/Out registers for Staff and Students

Total numbers of songs are 47500 approx

#### **Category-wise songs:**

1	Classical	248 songs
2	Semi Classical	5000 songs
3	Western	4000 songs
4	Filmy	12800 Hindi,
		1000 Telugu,

		1200 Bengali, 4000 Marathi
5	Non-Filmy	2000 songs
6	Others	MET Videos

**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?**

As already discussed, after theory lectures and experimentation, students have knowledge and skill. Then students are encouraged to go for major or minor projects with open end problem. This helps them to go from known to unknown path inculcates them to have out of box thinking, helping in application of knowledge and skill. This is a step towards nurturing critical thinking with creative mindset and inculcating them towards lifelong learning approach.

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

**NPTEL Online Certification Courses**

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**IIT Spoken Tutorial through NMEICT**

About IIT Spoken Tutorial project:

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4. To share costly equipment and resources, which are otherwise available to limited number of users due to constraints on time and geographical distances?

**FOSS Tools laboratory from IIT Bombay**

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

Students and faculties are exposed to advanced level of knowledge and skills by attending, conducting and organizing various workshops, seminars, expert lectures, etc.

**e. g. Expert Lectures/ Workshops Organized by Computer Engineering Department**

**Year 2013-14**

Sr No	Activity conducted	DATE	Resource Person With Designation	% Of Student
01	“Advance Computer Network”(Workshop)	22/03/2014	Dr. M. U. Kharat (Professor and Head, Computer Engineering Department, MET’s, IOE, Nashik)	ME (52/64) + TE (60/78) = 79.08%

**Year 2014-15**

Sr No	Activity conducted	DATE	Resource Person With Designation	% Of Student
01	“Advances in Computer	29/09/2014	Dr. G. K. Patnaik	ME (43/46) +

	Architecture” (Expert Lecture)			BE (70/84) =88.40%
02	“Intelligent System”(Expe rt Lecture)	30/09/2014	Dr. R. S. Tiwari	ME (29/46) + BE (50/64) =74.55%
03	“Distributed Computing”(E xpert Lecture)	11/10/2014	Mr. Kedar Ghogale Technical OfficerC- DAC, Pune	ME (37/46) + BE (50/66) = 78.09%
04	“Research Methodology” (Expert Lecture)	19/10/2014	Dr. P. M. JavandhiaPrincipal	ME (29/46) + BE (50/66)= <b>69.70%</b>
05	“Preparing Students For Software Industries”	21/10/2014	Dr. Uday WadCell Bean Technologies, Nashik	ME (21/46) + BE (60/66) =68. 28%
06	“Challenges Ahead On Personality Development, Time Management And Result Oriented Attitude”	19/01/2015	Mr. P. S. Pardeshi	TE (65/74) =87.83%

### Year 2015-16

Sr No	Activity conducted	DATE	Resource Person With Designation	% Of Student
01	“Open Source: A Bright Future for the Developer”	20/09/2015	Dr. G. K. Patnaik, Professor and Head, Dept of Comp Engg, SSBT COE, Bhambori, Jalgaon	ME (29/41) + BE (84/84) = 85.36%



02	Cloud Computing: An Opportunistic Business Model	20/09/2015	Dr. S. K. Shinde, Professor and Head, Dept of Comp Engg, L. T. COE, Navi Mumbai	ME (25/41) + BE (84/84)= 80.48%
03	3D Reconstruction in Computer Vision and Image Watermarking with its applications	26/09/2015	Dr. S. B. Wankhade, Professor and Head, Dept of Comp Engg, RGIOT Varsova Mumbai	ME (22/24) + BE (84/84)= 95.83%
04	Big Data Management	28/09/2015	Dr. Satish Devane, Professor and Head, Dept of Comp Engg, DMCOE, Airoli	ME (19/24) + BE (84/84) + TE (70/79)= 89.25%
05	“Design And Analysis Of Algorithm”(Expert Lecture)	01/10/2015	Dr. Nitin Choube	ME (32/46) + BE (70/84) = 76.44%
06	Information Security	31/03/2016	Dr. S. B. Wankhade, Professor and Head, Dept of Comp Engg, RGIOT Varsova Mumbai	ME (15/17) + BE (84/84) = 94.11%
07	Advancements in Parallel Computing	03/04/2016	Dr. G. K. Patnaik, Professor and Head, Dept of Comp Engg, SSBT COE, Bhambori, Jalgaon	ME (25/25) + BE (84/84) = 100%
08	Software Design and Testing	03/04/2016	Dr. Uday Wad, Datamatics, Nashik	ME (25/25) + BE (84/84) + TE (79/79) = 100%

**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?**

**Academic, Personal, Psycho-social and Mentoring system**

Type of mentoring: Professional guidance/career advancement/course work specific/laboratory specific/all-round development. Number of faculty mentors: Number of students per mentor: Frequency of meeting:

**Mentoring System:**

To resolve the issues of the Students effectively, Group Mentoring System is developed with following vision:

- The Total Strength of the Student of the particular Class to be divided by the faculties available to the Class.
- The particular faculty will be the Mentor for the Concern student and they will be called as Mentee. Henceforth the relationship will be the “Mentor & mentee“
- The mentor will conduct the exercise of identifying Strength & Weakness of the each mentee of his group.
- Periodical meetings will be conducted with the group on Monthly basis or as and when required by mentor and its minute of the meeting file will be maintained by the Mentor.
- If Mentor find critical case, it will be forwarded for Counseling to the Central Counseling Cell.

Benefits of Mentoring System:

- Improve Communication Skills.
- Academic or Subject related doubts
- Enhance Team work skill
- Improve problem Solving Skill
- Initiative & Leadership development
- Planning & Organizing
- Improve Self-Management & Self Discipline.
- Continuous Learning
- Technology Skill
- To know the value of Self Learning , Self-Motivation,

**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?**

**Innovations by the Faculty in Teaching and Learning**

Faculty Innovations in Teaching Learning Process

**A. The Innovation work is made available on Institute website.**

The innovation work prepared by faculty is made available on the Institute website [www.metbhujbalknowledgecity.ac.in](http://www.metbhujbalknowledgecity.ac.in). Innovation work includes teaching learning material prepared by faculty on their respective subject. ERP login is provided to every student and staff to access the innovation work;

### **1. ERP login to every student and staff**

ERP System is implemented for the students and staff. Students are regularly accessing the information uploaded by the staff members. Students can check their attendance, download e-material, receive group messages, time table, exam time table etc. Also students submit feedback to teaching learning process through their ERP login. Various important links are provided to the students through this ERP login.

### **2. Access of Teaching Learning material of Text/Audio/video type**

All the teaching learning material like PDF, PPTs, Text files, Videos related to the subject are uploaded by respective staff on their ERP login. Students can access these materials through their login, download it and carry those for their reference.

#### **A. The work available for peer review and critique.**

The uploaded material is made available for review and critique by stakeholders. By using Institute portal, student can provide their review and communicate their problems.

Some Innovation work is also made available on website like [www.authorstream.com](http://www.authorstream.com) which is having both National and International access.

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

#### **Quality of Learning Resources (hard/soft)**

The Library is well equipped with modern facilities & resources as well as our Central Library is having so many resources which are available in print like Books, Technical Journals, Standards, Conference Proceedings Theses, Reports as well as electronic form like e-books, e-journals, CD-ROMs, Audio-video cassettes and NPTEL video lectures related to Engineering discipline. Library offers its services to about 1300+, users comprising undergraduate students and post graduate students and research scholars of different branches of Engineering, Faculty and supporting staff from various departments of the Institute of Engineering as well as other BKC Institutes through ILL service.

Library resources include a growing collection of 29000+ books; current subscriptions to 143+ Journals/Periodicals and most leading newspapers and E-resources to support every course offered by the Institute. The library's collection is growing in all subjects every year.

#### **Relevance and Available Resources**

In maintaining the relevance of the changing courses and their contents, a book recommendation system has been adopted by the library. According to the changes in the University syllabus, respective teachers in consultation with

Head of the department, recommends books for procurement in the library. In the due course of time library starts the process for procurement and update the library stock. As well book bank system has been adopted for easy access and issuing of the books. In this system every student, as per recommendation of the teacher, is issued three books for a period of one semester. Apart from these books two more books can be issued by the student on weekly returnable basis.

Access to the facilities of library and E-Library is fully digitized and all the information of books is available to the students through OPAC system. Students can avail this facility through their respective ERP login.

**Students access to the learning resources:**

Access to the facilities of library and E-Library is fully digitized and all the information of books is available to the students through OPAC system. Students can access this facility through their respective ERP login.

**Students Access to E-Resources:-**

Sr. No	Description Unit	Subjects
01	IEEE	Computer Engineering + Computer Science + Electrical & Electronics Engineering + Telecommunications & related disciplines <b>(IEEE ASPP from 1st July 2015 To 30th June 2016)</b>
02	ASME	Mechanical Engineering (e-journals Package 26 Journals plus back file to 2000) <b>(ASME from 1<sup>st</sup> Jan. 2016 To 31<sup>st</sup> Dec 2016)</b>
03	British Council Library	Online subscription
04	British Council Library	Corporate Membership

Apart from the above mentioned resources students have an access to

- 1) Digital library Content;
- 2) British Council Library;
- 3) Learning resources uploaded on ERP by the faculty members over Intranet;
- 4) Availability of exclusive space, reading Room;
- 5) An IP based service of e Journals;
- 6) Library resource sharing with other libraries of the campus.

**Central Library support to the self-learning**

Library provides following services in the support of self-learning

1. References and Referral Services

2. Tie-up with British council library, Pune, Providing books, Magazines and CD/DVD's to all USER's.
3. Current awareness, Photocopy(Xeroxing) and Newspaper Clippings Services
4. Audio – Visual Service
5. Book Bank Facility for SC/ST Students
6. Institutional Book bank Facility for all students.
7. Collection of General Reading Books
8. Internet Facility E-Library (E-Journals and E- Books)
9. Electronic library and Online services
10. Information product and services
11. E-resource and Database development and maintenance
12. NPTEL IIT Video LectureSeries
13. Bibliographic Compilation, Reference Service
14. User Orientation and Information literacy (literature searches) programmes for in-house users
15. Information Display and Notification
16. Employment & Career Information Service
17. Counseling & Guidance
18. All Previous Question Papers Set
19. All Branches Syllabus (Online / Hard copy)
20. Resource Sharing / Inter Library Loan (ILL) Services
21. Internet facility and Library Digital Resources Accessibility.
22. Library has 'Web Resource Centre' where one can get new URLs, INDEST-E-Resources and other free web resources for the learning and teaching.

**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 Institute faces challenges in completing the curriculum within the planned time frame as per academic calendar

S. N.	Nature of Challenge	Institutional approach to overcome
1	Late admission process of Direct second year students	Regular conduction of the classes happens as per academic calendar. In addition to this for the DSE admitted students extra sessions of theory / practical's are planned and executed in completing the curriculum.

		Expert sessions for specific topics are arranged
2	Late Declaration of University examination results	Without waiting for the results Institute plans academic and its conduction right from the inception of the first day. Every teacher prepares the teaching plan and conducts academic accordingly
3	Time elapse during in-semester examinations	Extra hours in regular days and Saturday, Sundays are used for the completion of curriculum
4	Curriculum Gaps	Because of the changes in the syllabus and desired prerequisites, certain gaps are identified and based on those proper corrective actions are planned. Further small duration workshops, expert lectures, hands on are carried out.

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

In the process of academic improvements academic audit and quality improvement committees are formed to monitor the evaluation and quality of teaching learning.

#### **Academic Audit and actions taken thereof during the period of Assessment**

**Process for Academic Audit:** Academic Audit is conducted once in a semester based on the academic process and their conductions. Academic Audit mainly focuses on following parameters:

- Number of lectures targeted and conducted;
- Number of practical assignments expected and completed;
- Syllabus coverage and attendance of the students for its effectiveness;
- Monitoring regularity of the student's attendance;
- Communications held with the parents and students;
- Feedback assessment analysis;
- In semester examination/online examinations result analysis for immediate improvements required;
- Records of all academic audit parameters are placed before the Academic Assessment and Quality Improvement Committee for its remarks and recommendations. Based on the recommendations of

AAQI committee actions are followed in the regard of Academic Audit and Improvement.

Based on these parameters Academic Audit is performed and actions are planned and executed for expert lectures, workshop, remedial classes, make-up test, student common exercise, online MCQ practice etc. The effectiveness of these implemented actions is verified during University result analysis and Academic Audit.

## 2.4 Teacher Quality

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

Highest Qualification	Professor		Associate Professor		Assistant professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							
D. Sc. / D/Litt.	--	--	--	--	--	--	--
Ph. D.	4	--	--	--	1	1	6
M. Phil.	--	--	--	--	1	1	2
PG	1	--	2	0	65	38	106
UG	--	--	--	--	8	--	8
Temporary Teachers							
Ph. D.	--	--	--	--	--	--	--
M. Phil.	--	--	--	--	--	--	--
PG	--	--	--	--	--	--	--
Part-time Teachers							
Ph. D.	--	--	--	--	--	--	--
M. Phil.	--	--	--	--	--	--	--
PG	--	--	--	--	--	--	--

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

Institution has developed a practice for promoting the faculty to attend Faculty development programs. Normally, Institutions organizes FDP in association with University and Industry to train the faculty in the new/modern areas in the support of advanced curriculum. Institute made it mandatory to attend such FDPs for the faculty members involved in teaching such subjects.

Moreover, teaching / teaching supporting staff in encouraged attending the workshop/seminars/conferences at the Institute of National Importance like NIT/IIT's.

**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  
As per the requirement of changes in the syllabus and training needs of faculty, they are motivated and permitted to participate in the FDP and training programs.

Sr. No.	Academic Staff Development Programmes	2013-14	2014-15	2015-16	2016-17	2017-18
1	Refresher courses	--	--	--	--	01
2	HRD programmes	02				
3	Orientation programmes	09	05	--	--	--
4	Staff training conducted by university	02	--	--	05	01
5	Staff training conducted by other institution	29	23	23	36	01
6	Summer/ winter schools, workshops etc.	02	02	03	01	02
7	Total					



\* presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies

- b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning
- Teaching learning methods/approaches
  - Handling new curriculum
  - Content/knowledge management
  - Selection, development and use of enrichment materials
  - Assessment
  - Cross cutting issues
  - Audio Visual Aids/multimedia
  - OER's
  - Teaching learning material development, selection and use
- c) Percentage of faculty invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies participated in external Workshops/Seminars/ Conferences recognized by national/international professional bodies presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies

Sr. No.	Name of Department	2013-14	2014-15	2015-16	2016-17	2017-18
1	Civil Engineering					
2	Computer Engineering	01	05	08	18	06
3	Electrical Engineering	--	--	--	03	01
4	Electronics and Telecommunication	12	06	--	--	--
5	Information Technology	01	--	01	07	01
6	Mechanical Engineering					
7	MCA	--	02	--	--	--

\* participated in external Workshops / Seminars / Conferences recognized by national / international professional bodies

Sr.no .	Branch wise	No of staff	International Conference	National conference	FD P	State Level Workshop	Syllabus for BC UD	Pg con	STTP	Amount
1	Civil Dep	24	4	1	13	0	4	0	2	26321
2	Computer Dep	43	1	2	33	1	4	0	2	66327
3	E&TC, ETX Dep	92	6	2	54	1	10	0	19	157073
4	Electrical Dep	20	5	0	14	1	0	0	0	30816
5	IT Dep	35	1	5	17	1	4	0	7	57050
6	MCA Dep	11	1	1	2	1	0	0	6	17342
7	Mechanical Dep	96	34	24	24	0	1	1	12	167856
8	First Year	17	2	1	6	3	5	0	0	32702
9	Exam Dep.	2	0	0	2	0	0	0	0	2643
10	Library	1	1	0	0	0	0	0	0	5000
	<b>Total</b>	<b>341</b>	<b>55</b>	<b>36</b>	<b>165</b>	<b>8</b>	<b>28</b>	<b>1</b>	<b>48</b>	<b>563130</b>

\* presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies

Sr. No.	Name of Department	2013-14	2014-15	2015-16	2016-17	2017-18
1	Civil Engineering	06	--	11	04	--
2	Computer Engineering	2	2	1	2	
3	Electrical Engineering	07	04	01	08	04
4	Electronics and Telecommunication	03	05	03	08	--
5	Information Technology	04	14	--	04	--
6	Mechanical Engineering					
7	MCA	02	01	05	15	--

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

1. Faculties are encouraged to prepare and submit the research project proposals for opting the grants
2. Study leaves are granted for perusing the higher studies
3. Registration for conferences, publications in journals, attendingworkshops with financial assistance

**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.**

**E&TC Engg Department:-**

**1. Mr. A. B. Kotade:**

- Awarded as Young Researchers' Award at IETE Conference.

**Computer Engineering Department:-**

**Dr. M. U. Kharat:**

- Regional Students Branch Coordinator, CSI
- Fellow IEI
- MemberBOS-IT & CE (Govt. COE, Karad, GHRCEM, Pune, SPPU, Pune)
- Ex-Member, Faculty of Engineering. SPPU, Pune

**P. M. Yawalkar:**

- Subject Chairman for TOC &MIT Lab, Discrete Structures
- Member, Institute Management Committee, ITI Surgana

**A. R. Ugale:**

- Subject Chairman for Computer Organization

**S. C. Vidhate:**

- IIT-Spoken Tutorial Regional Promoter
- IIT-Spoken Tutorial SELF-WORKSHOP Ambassador

**V. D. Dabhade:**

- Secretary, CSI- Nashik Chapter
- Longest Continuous SBC award
- IIT-Spoken Tutorial SELF-WORKSHOP Ambassador

**Electrical Engineering Department:**

**Ms. U L Mohite:**

- Achieved gold Medal atM. E Electrical Control Systems Institute Topper Year 2014-15

**M. C. A. Department:**

**Mrs. Remya Panicker:**

- Active Participation Women Award by CSI.

**Mechanical Engineering Department:**

**Mr. Amol B. Varandal:**

- Awarded as Bharat Shiksha Ratan.

**Mr. Sandip B. Patil:**

- University level Award for Project in Avishkar 2010, and selected for National level.

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

Yes, teachers are evaluated based on the performance in academics, research, and like activities. Appraisal system for the faculty is in place catering to various aspects of teaching, learning, research, student's feedback, functional performance and professional endeavors. This system is available in the ERP as an evaluation of a faculty. Every year it is reviewed and followed for the appraisal of faculty.

**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?**

Every student and faculty works with ERP system through their login. Students are giving the feedback as a part of faculty evaluation based on teaching learning parameters. All faculty members are given the training for ERP system and its different modules which are directly related to the faculty evaluation process.

**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?**

Institute has adopted the reforms of the University and its directives for implementation in the benefit of students. Major reforms including Credit based evaluation system adopted by the Institute are as follows:

**University Assessment:**

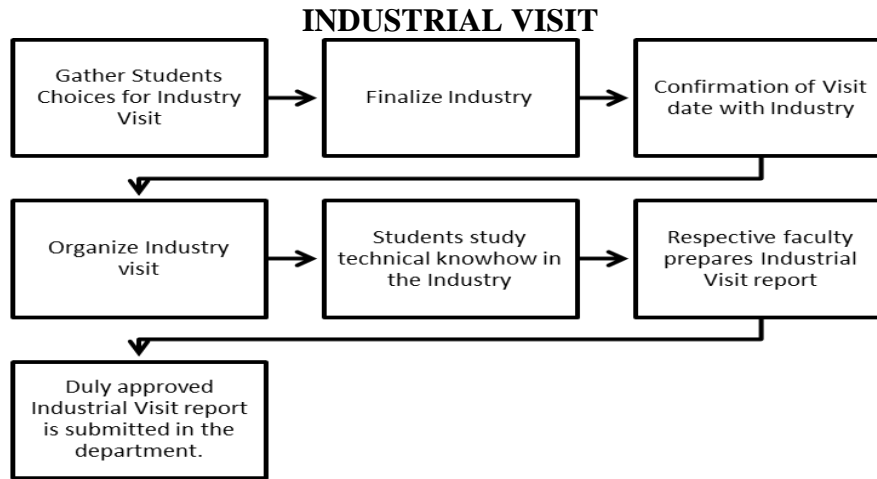
- 1: Assessment of University Theory Exam (CAP process)
- 2: Assessment of University Practical/Oral Exam
3. Student Project Assessment

**Internal Assessment:**

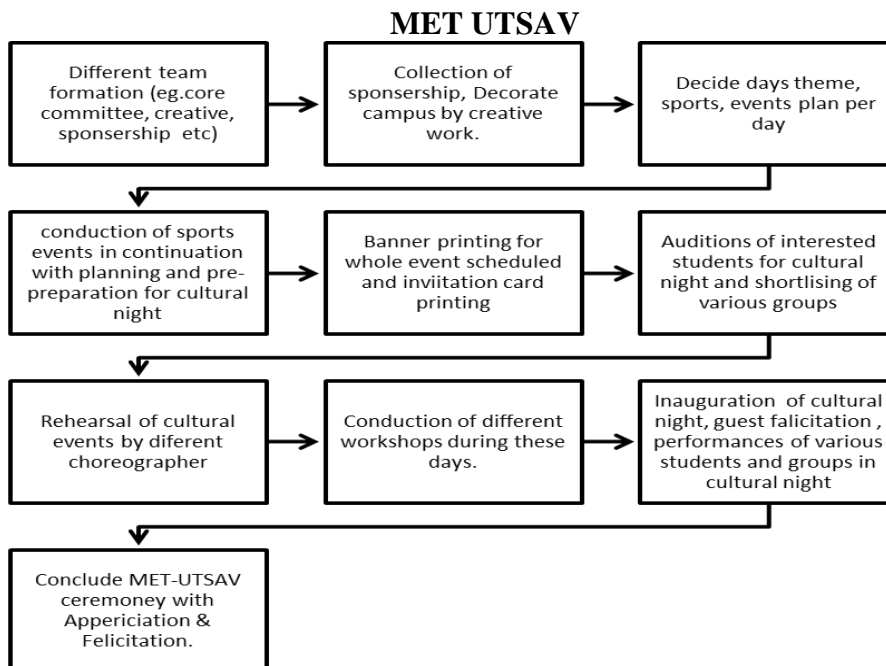
- 1: Insem Exam (online and written exam assessment)
- 2: Project submission / evaluation
- 3: Seminar Presentation
- 4: Term work Submission / Oral Examination

In addition to these reforms Institute initiated certain aspects of strengthening the students like:

1. Industrial Visit
2. MET Utsav
3. CSR
4. Technical Event (Metastorm / CSI /SAC) through respective department's student forums activities.

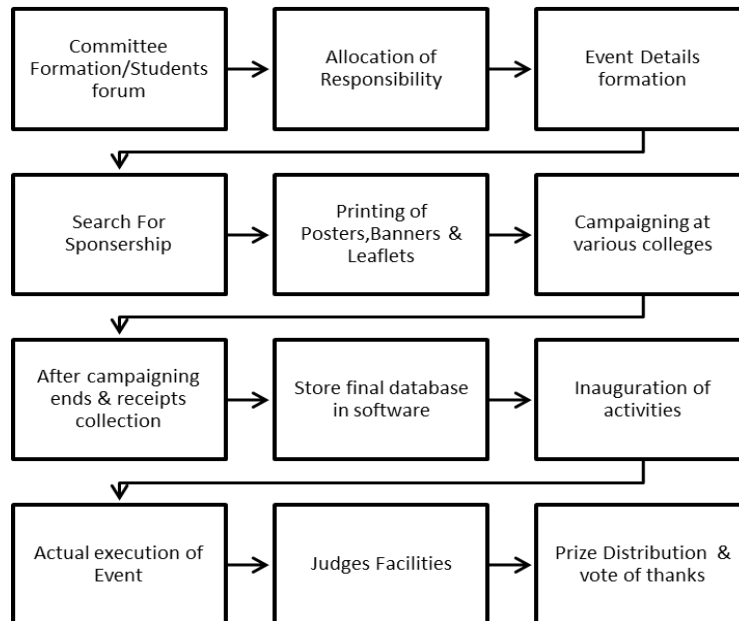


**Frequency:** Once per course duration during six semester of the course



**Frequency:** Once per year

### Technical Event / Engineers week celebration by different Student Forums



**Frequency:** Once per year

#### 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?

Institute has set a process of evaluating the effectiveness of reforms through their attainment levels. Impact of such reforms towards the improvement is analyzed. Participation of stake holders and improvements in their performance is monitored through the ERP system as a part of appraisal. Targets and projected improvements are normally discussed and assigned to the faculty members during the interactions. Half yearly follow up is taken to ensure the effective implementation of the evaluation reforms.

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

The regular monitoring of teaching learning process is done through following activities:

- i) Attendance register of each course (Theory and Laboratory) is entered in ERP as well as maintained by the faculty in the attendance register. Parents are informed about the attendance through ERP via SMS on regular basis. Every fortnight attendance of the students is prepared to ensure that the students are attending the classes regularly. If a student fails to meet the required attendance of 75% then he/she is

warned and parents are informed about necessity of further improvement.

- ii) Head of department takes review of the progress of the course at the end of each month. Corrective measures are taken in case some course is lagging in schedule. In-Semester Examination is conducted to assess the learning outcome of students. At the end of the course the attainment level of each course is calculated based on the performance of students and feedback given by the students.
- iii) The evaluation of students is done through the examinations conducted by the University which sets the question papers and does the assessment also. With revised syllabus, the assessment of students is done through two examinations viz. In-semester examination conducted in the middle of the semester and End-semester examination. A practical/Oral examination is conducted by the University in which an external examiner assesses performance of students along with an internal examiner.

**Process for measuring students achievements in SA and FA  
(University Examination)**

Sr. No	Assessment Process	Data Collection / Input	Verification Method / Parameters	Analysis / Observations	Decisions / Confirmation	Remarks
<b>University Assessment Process</b>						
1	Assessment of University Theory Exam	Question Paper and Model Answer Solutions from the CAP centre	Meeting of Subject Chairman, CAP Authorities and Evaluators	Marking scheme for step wise points in the Model Answer Solutions	Allocation of Marks as per Model Answer Solution	This confidential work is carried out at Centralized Assessment Program (CAP)
2	Assessment of University Practical / Oral Exam	Practical Assignment List for the subjects from the guidelines in syllabus scheme and	Verification of certified journal, External Examiner and Internal Examiner verify Practical Assignment	Practical Assignment Completed based on problem statement, time.	Marks assigned to Practical Assignment completed	Extension to the problem statement suggested by the External or Internal Examiner

		Assignments submission records,	conducted and as per syllabi guideline			
3	Student Project Assessment	Students Reporting to the guide (work book) progress follow-up of project development, Syllabus guideline, and Project Competition Participation, Project Report, Publication	External Examiner, Internal Examiner verifies the Project Report as per guidelines in the Syllabus.	Demonstration and Working of Project	Marks assigned to the project based on Presentation, Demonstration, Application and contribution to society.	Internal & External Examination
<b>Internal Assessment Process</b>						
1	Insem Exam	Question Paper and Model Answer Solutions from the CAP centre of Institute	Meeting of Subject Teachers, CAP Authorities.	Marking scheme for step wise points in the Model Answer Solutions	Allocation of Marks as per Model Answer Solution	University Appointed Examiner



2	Project Submission / Evaluation	Students Reporting to the guide (work book), Seminar Report, Publication and Project Competition Participation, Syllabus guideline	External Examiner, Internal Examiner verifies the Seminar Report as per guidelines in the Syllabus.	Demonstration and Methodology explanation of Project	Marks assigned to the project based on Presentation and demonstration.	Internal Examination
3	Seminar Presentation	Students Reporting to guide, Seminar Reports, Papers or supporting materials and Syllabus guidelines.	Panel of In-house Faculties verify seminar report.	Presentation, Contents and Knowledge of topic and Question Answer on Topic.	Marks assigned to the seminar based on Presentation & Contents.	Internal Presentation
4	Term work Submission / Oral Examination	Students Attendance, Assignments Completed,	Attendance records, Assignments records	Marking scheme to each and every category (Attendance, Assignments)	Summing and confirming the marks	Respective Subject incharge

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

All internal assessments are carried out by the University in the form of In-sem and End-sem examinations. Their results are displayed along with marks/credits achievements of the students. Normally for the evaluation of such examinations University appoints the examiners and evaluation is done by these examiners. Behavioral and communication aspects of the students are evaluated in the seminar/projects groups and collaborative learning processes.

**2.5.6 What are the graduates attributes specified by the Institute/affiliating university? How does the Institute ensure the attainment of these by the students?**

Institute follows the Graduate attributes while inculcating various processes. These attributes are mapped with course outcomes of different courses defined by the University curriculum. The attainment levels are defined based on the previous University results and the conduction of the academics to gain desired credits.

Engineering Graduates passing out from Institute will be able to stand with following Graduate attributes

1. Engineering knowledge
2. Problem analysis
3. Design/development of solutions
4. Conduct investigations of complex problems
5. Modern tool usage
6. The engineer and society
7. Environment and sustainability
8. Ethics
9. Individual and team work
10. Communication
11. Project management and finance
12. Life-long learning

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

As per the University provision, students can apply for revaluation of the answer sheets. They can opt for the photo copy of their answer sheets evaluated by the examiner. In case of any grievance, the above process is available for the students. As well they can confirm the answers from the subject experts and if required may further proceed towards rechecking of the answer sheets.

## **2.6. Student performance and Learning Outcomes**

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

Yes: It is a regular practice to display and make the stake holders aware of learning objective of various courses and disciplines. In accordance to the course outcomes and program objectives and as per the graduate attributes defined the learning objectives are generated and displayed at the prominent places in the respective departments/Institute. These objectives are also made known to the students and faculties through their ERP login, website of the Institute, printing on various learning material like syllabus. The learning objectives are further mapped with the course outcomes of the courses and their attainments.

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

Result Analysis is a regular practice at every department, the Examination section of the Institute provides copies of the University results to the Departments. Department proceeds further for the analysis of the result and compare it with the previous results. The result analysis is mainly focused on the percentage of the pass students, higher second class students, first class and distinction category students. Also the average marks of the respective subjects obtained by the students are entered in the ERP system for further analysis and information to the stake holders. Class In-charges communicate the results to the respective students while distributing their mark-sheets. The first three toppers of the classes are appreciated in the class for other students are encouraged for the improvements. Also during the regular course of the semester, students and parents are informed about the progress and attendance form time to time. SMS and letters are sent to the parents for making aware of the progress of the ward and the status of attendance for further improvements, if needed. Head of the Institute review the result analysis and suggest the remedial actions, if any for further improvement. There is direct weightage of the results of the students in the appraisal of the faculty member.

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

Institute follows the structured strategies for the achievement of learning outcomes as follows:

- Preparation of Academic Calendar;
- Workload Distribution and Time Table;
- Portfolio Distribution;

- Subject Teaching Plan and Laboratory Plan
- Laboratory Practical;
- Beyond Syllabus: Apart from Teaching Learning;
- Industrial Visit:
- Student's Feedback:
- Student's Counseling and Mentoring:
- Collaborative Learning:
- Student Encouragement:
- Online ERP System:
- Orientation Program:

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

In strengthening the social economic aspects, Institute has initiated various processes and monitors their outcomes and effectiveness. Some of the initiatives are:

- Training and Placement cell
- Counseling cell
- Industry Institute Interactions,
- Entrepreneurship cell
- Opting for the projects like RETC Rural Engineering Technology Club in association with IIT Madras.
- Final projects with Industry Sponsorships
- MoU with the Industries like ARES, ESDS, Intellidemics, for inculcating the training and Entrepreneurship among students.

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

Institute regularly monitors academic activities like student's attendance, syllabus coverage, practical conduction, class test conduction etc. Analysis of results is performed for the class tests, online examinations, In-semester examination to identify weak and bright students. Concept clearing sessions, practice question banks, counseling of weak students are carried out for the improvements. Faculty members are regularly updating the students' performance in ERP system which further is collected and analyzed for the monitoring of the progress of the students with communication to the parents. Bright students are encouraged through the conduction of further activities with improved nature.

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

- **Process of Confirming the learning outcomes:**

A process is focused with the participation and involvement of internal and external stake holders for monitoring and complying with course outcomes and learning objectives. Mapping of University curriculum with the learning outcomes for the respective courses is performed by every individual faculty. Basic inputs are obtained for this process from teaching and learning system, University curriculum and question papers, question banks generated by the faculty members, term work and practical assignments, seminars, and project presentations. University results are mapped with attainment of learning objectives based on the desired target levels.

It includes following steps

Process Step 1. (Suggestions and inputs from department staff): Meeting with department faculty is called for reviews, suggestions, and feedback on attainment of the learning objective and the corrective actions.

Process Step 2. (University Documents): Referring University syllabus, and interactions in various faculty, students, and laboratory In-charges to get the current updates about progress. This helps to keep the progress on the track of achievements in accordance to the University curriculum and defined learning objectives.

Process Step 3. (Formulation of improvement strategy): Head of the Department along with faculty members in consultation with Head of the Institute formulates/drafts appropriate corrective actions for improvements, to bridge the gaps, if any, in attaining the learning objectives

Process Step 4. (Feedback of students/parents/industries/): Obtaining the feedback from stake holders like students, parents, industries and proposing the corrective actions on gaps identified, to comply with attainment.

### **2.6.7 Does the institution and individual teachers use assessment/ evaluation? outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.**

Any other relevant information regarding Teaching-Learning and Evaluation which the Institute would like to include.

Yes normally every faculty sets the target level for individual subjects/courses based on the previous university results. This is discussed and confirmed with HODs and senior faculty members of the department. Academic audit committee reviews the same and suggests for achieving the targets. Tentative process in this line is as follows:

**Format and Process of Defining Target Attainment Level of Learning  
outcomes of the Courses**

**Course Name:**

**Course Code:**

**Process for Defining Target Attainment Level**

The process is defined in following steps at Institute level based on University Examination Results as no useful indicators about results like average marks or maiden marks are provided by the University.

1. **Select a Course** to find it's attainment by Students performance through University Examinations.
2. Find out number of **students appeared** for University Examinations.
3. **Find Average Marks** as...
  - a. If AppearedStudents = X and
  - b. Total Marks Scored by all students= Y then,
  - c. Average Marks=Y/X
4. Determine Course Average Marks as per University Results (**Course outcomes and learning outcomes Target Attainment**) using Average Marks, e. g.
  - a. If Average Marks = 43. 29 then,
  - b. COs Target set Attainment level = 43
5. Find out **count** of students, who have scored Marks equal to or greater than the COs set Attainment level.
6. Find out the **Percentage of students**, who have scored Marks equal to or greater than the COs set Attainment level out of Appeared students as...
  - a. Suppose COs set Attainment level = 42 and
  - b. Count(students) = 45 and
  - c. Appeared Students = 60then,
  - d. Percentage (Students) = Count / Appeared \* 100, Ex;45/60 \* 100= 75%
7. Course Outcome attainment through University Examinations can be determined using following guidelines. .
  - a. **Attainment level 1:** If number of students scoring more than average marks or set attainment level are 60% or above.
  - b. **Attainment level 2:** If number of students scoring more than average marks or set attainment level are 70% or above.
  - c. **Attainment level 3:** If number of students scoring more than average marks or set attainment level are 80% or above.

**Set Attainment Level for following academic year:**

**Expected number of students to appear:**

**Justification for setting Attainment Level:**

### **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 has a recognized research centre for two programs- **Computer Engineering and Mechanical Engineering**. The Institute has established Research laboratories for both the programs. The faculty and students from other programs are doing research activities through research projects funded by SPPU and other sources also.

##### **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 Institute. Academic research coordinator monitors the activity with the help of members of research committee. The details of the research committee are as follows:

<b>Sr. no</b>	<b>Name</b>	<b>Designation</b>
1	Mrs. Namita Kale	Academic Research coordinator
2	Dr. M U Kharat	Member
3	Mr. R B Rehpade	Member
4	Mr. D B Ahire	Member
5	Mr. Kishor Chobe	Member
6	Mr. Sushil Ingle	Member
7	Mr. P. D. Jadhav	Member
8	Dr. SambajiPatil	Member
9	Miss. Utkersha Mohite	Member

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

###### **Roles & Responsibilities.**

The Institute has established the Research and Development Cell (RDC), and the activities under RDC are -

- To create research culture in Institute and motivate students and teaching faculty to take up the research projects leading to innovation.
- To improve industry Institute and Institute -Institute interaction to work for mutual benefits in the area of research and innovation.
- To improvise the cooperation and support with other Institutes of national importance for faculty upgradation and resource sharing through faculty

development programmes, workshops, seminars, and special lectures on thrust area. Institute is having remote centre in association with IIT for ICT.

- To promote research in all departments of the Institute
- The RDC coordinates timely auditing and submission of utilization certificate to the funding authorities
- To coordinate the functioning of research activities of all the departments

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

- The Institutes provided the infrastructure and the required equipments for the purpose of research.
- The faculties are deputed for participation in workshops, seminars and conferences with financial assistance.
- The resources are made available like on line resource IEEE, ASME, British Library, NDL, NPTEL, etc
- Required Books, Handbooks and journal are also available in library
- The funds are allocated for research and development.
- the departments does the up gradations of laboratories in terms of latest technologies and the Institutes permits for purchase of equipments and required technological platforms
- Faculties are encouraged to participate as resource persons in various workshops, seminars and conferences as reviewer, session chair etc.

**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	Qualification	Specialization	No. of Ph. D. Students
1	Dr. V. P. Wani	Ph. D. (Mechanical)	Mechanical	03 + 06*
2	Dr. M. U. Kharat	Ph. D. (Computer)	Computer	03 + 05*
3	Dr. V. J. Gond	M. Tech. (EDT) Ph. D. (EC)	Optical Fiber Communication	05

\* Ph. D. Guided successfully



**Faculty Engaged in Research projects**

Sr. No	Name	Specialization
1	Dr. V. P. Wani	Supervisor in Mechanical engineering, presently 01 research scholar is doing research
2	Mr. H. A. Chavan	Pursuing Ph. D. in Sheet Metal forming
3	Mr. S. R. Suryawanshi	Pursuing Ph. D. in Tribology
4	Mr. D. K. Dond	Pursuing Ph. D. in IC Engines
5	Mr. D. D. Deshmukh	Pursuing Ph. D. in Material Characterization
6	Dr. M. U. Kharat	Supervisor in Computer engineering, presently 03 research scholars are doing research
7	Mr. P. M. Yawalkar	Pursuing Ph. D. in Image Processing
8	Dr. K. V. Metre	Pursuing Ph. D. in Query Processing
9	Mrs. R. P. Dahake	Pursuing Ph. D. in Image Processing.
10	Dr. V. J. Gond	Supervisor in electronics and telecommunication engineering, presently 05 research scholar are doing research under him
11	Mr. R. B. Rehpade	Pursuing Ph. D. in High Speed PC Board Design
12	Mr. D. B. Ahire	Pursuing Ph. D. in Electromagnetic & biomedical implant devices
13	Mrs. M. G. Shinde	Pursuing Ph. D. in Image Processing
14	Mrs. P. N. Metange	Pursuing Ph. D. in VLSI Design and the thesis is submitted
15	Mr. S. M. Dhekane	Pursuing Ph. D. in Neural Networks
16	Mr. A. B. Kotade	Pursuing Ph. D. in Communication & Signal Processing
17	Mr. M. P. Giri	Pursuing Ph. D. in speech processing
18	Mr. V. S. Khairnar	Pursuing Ph. D. in material science
19	Mr. R. S. Dhake	Pursuing Ph. D. in material science

**Faculty Engaged In Guiding PG Student Research****Faculty Engaged in Major Projects**

Sr. No.	Department	No. of Faculties Involved	No. of Research Projects
1	Computer Engineering	10	05
2	Information Technology	06	03
3	Mechanical	09	04
4	Electronics & Telecommunication	01	01

**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.**

**Programmes organized for Faculty and staff**

Sr. No.	Department	Conferences		Workshops	Training Program
		International	National		
1	Computer Engineering	--	03	03	--
2	Information Technology	--	02	03	01
3	Civil	--	--	01	--
4	Mechanical	01	--	07	--
5	Electronics & Telecommunication	--	--	05	--
6	MCA	--	03	03	--

**Programmes organized for Students**

Sr. No.	Department	Workshops	Training Program
1	Computer Engineering	03	24
2	Information Technology	04	18
3	Civil	09	--
4	Mechanical	07	37
5	Electrical	04	--
6	Electronics & Telecommunication	04	09
7	MCA	--	26

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

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 NI Lab view as centre of excellence.

Initiating and promoting MOUs with industries and R & D organizations.

<b>Sr. No.</b>	<b>Department</b>	<b>Expertise available with the institution</b>	<b>Research Area</b>
1	Computer	Dr. M. U. Kharat	Web Servers Computer Networking
2		Mr. P. M. Yawalkar	Character and Image Reorganization
3		Mr. R. P. Aher	Image Processing
4		Mr. V. D. Dabhade	Networking
5		Mr. S. C. Vidhate	Micro processor and Digital Electronics
6	Information Technology	Mrs. N. R. Kale	Image Processing Embedded Systems
7		Mrs. R. P. Dahake	Computer Network Cloud Computing
8		Mrs. K. V. Metre	Algorithms
9		Mrs. P. S. Lahane	DBMS
10		Mr. P. E. Patel	DBMS
11		Mr. R. D. Deokar	Operating Systems
12	Mechanical	Mr. S. V. Ingle	CAD/CAM
13		Mr. H. A. Chavan	Sheet Metal forming
14		Mr. S. R. Suryawanshi	Tribology
15		Mr. D. K. Dond	IC Engines
16		Mr. D. D. Deshmukh	Material Characterization
17	Civil	Mr. S. E. Tayade	Structures
18		Mr. S. Patil	Structures
19		Miss. Neha Pimpale	Structures
20		Mr. Vivek Wagh	Environmental
21		Mr. Mangesh Ambekar	Geotechnical Engineering
22	Applied Sciences	Dr. P. S. Raut	Environmental Chemistry
23		Mr. V. S. Khairnar	Material Science
24		Mr. R. S. Dhake	Material Science
25	Electronics & Telecommunication	Dr. V. J. Gond	Optical Fiber Communication
26		Mr. D. B. Ahire	Electromagnetic & biomedical
27		Mrs. M. G. Shinde	Image Processing
28		Mrs. P. N. Metange	VLSI Design
29		Mr. A. B. Kotade	Signal Processing

30		Mr. M. P. Giri	Speech processing
31	MCA	Mr. P. D. Jadhav	Image Processing
32		Mrs. M. V. Khond	Image Processing
33		Mrs. Remya Panikar	Big Data

**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 in association with Industries experts.
- Organizing International/National conferences and inviting expert advisory panel.
- Establishing the research lab with center of excellence for conducting various research activities.
- MOU's to enhance Industry Institution collaboration to explore research areas.
- Ph. D. Consortium activity.

**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?**

NIL

**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)**

Institute level initiatives are taken for creating awareness about research temperament in the student's community:

- Guest lectures by experts from the industry and renowned Institutions.
- Organize projects competition for final year students.
- Promoting participation of students in international/National/State/Regional level Institute technical events.
- Access to technical magazines in the Central Library.
- Industrial visits in core domain for live exposure.
- Wi-Fi Campus.
- Access to NPTEL/IIT Video resources.
- Industrial training program to make individual acquainted with latest technologies.
- Access to research material via e-journals such as IEEE, British Council and ASME journals etc.

### 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.

##### 2016-17

Item	Revised Budget (Rs. in lakhs)	Expenditure (Rs. in lakhs)	Percentage of Budget	Total Institute Budget (Rs. in lakhs)
Research and Development	8.0	7.07	0.48	1644.0

##### 2015-16

Item	Revised Budget (Rs. in lakhs)	Expenditure (Rs. in lakhs)	Percentage of Budget	Total Institute Budget (Rs. in lakhs)
Research and Development	7.50	6.98	0.46	1609.80

##### 2014-15

Item	Revised Budget (Rs. in lakhs)	Expenditure (Rs. in lakhs)	Percentage of Budget	Total Institute Budget (Rs. in lakhs)
Research and Development	5.30	4.66	0.35	1488.10

2013-14

Item	Revised Budget (Rs. in lakhs)	Expenditure (Rs. in lakhs)	Percentage of Budget	Total Institute Budget (Rs. in lakhs)
Research and Development	4.50	3.01	0.31	1429.80

**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 Rs. In Lakhs	Year
1	Control Channel allocation for Cognitive radio networks	Dr. M. U. Kharat	2.48	2014-16
2	Query Optimization and Execution of Dynamic data items in Network Aggregation environment	K. V. Metre	5.50	2014-16

**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 Institute.

**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 Institute has a Research Committee which supports research initiatives of individual departments. Each department of the Institute has faculty project coordinator for the B. E projects. Various departments/faculty members of the

Institute interact with the committee in undertaking inter-disciplinary research work. Number of UG/PG students is involved in various inter-disciplinary projects.

<b>Sr. No.</b>	<b>A. Y.</b>	<b>Name of projects</b>	<b>Inter-disciplinary Departments</b>	<b>Guide</b>
1.	2016-2017	Vertical axis wind turbine for roadway and street lightening.	Mechanical + ENTTC+Computer Engg.	Prof. N. S. Hyalij
2.	2016-2017	Effect of magnetic field on properties of fuel effect and emission on I. C. Engine	Mechanical +Pharmacy	Prof. D. K. Dond
3.	2016-2017	Gesture controlled Quadcopter	Mechanical +E&TC+Computer Engg.	Prof. V. P. Chaudhari
4.	2016-2017	Design of Automatic transfer line	Mechanical +E&TC	Prof. Y. S. More
5.	2016-2017	Design and fabrication of Motor current signature analysis	Mechanical +E&TC	Prof. R. R. Barshikar
6.	2016-2017	Design and fabrication of solar operated garbage collector	Mechanical +E&TC+Electrical	Prof. A. Y. Chaudhari
7.	2016-2017	Design and fabrication of seed sowing model	Mechanical +E&TC	Prof. H. A. Chavan
8.	2015-16	Performance improvement of double distillation glass unit through implementation of waste recovery system	Mechanical + Pharmacy	Prof. S. B. Patil
9.	2015-16	Design and fabrication of Advance Height Adjustable Suspension.	Mechanical +E&TC	Prof. S. P. Kakade
9.	2016-2017	DSP based Optical Character Recognition for Devanagri Script	Computer Engg. +E&TC	Prof. V. R. Khandve
10.	2016-2017	Implementation Of Malarial Parasite Detection Methods integarting morphological operations	Computer Engg. +Pharmacy	Prof. V. B. More

11	2014-15	Digital Fuel Indicator	E&TC+Mechanical	Prof. D B Ahire
12	2014-15	IVRS Based interactive voice recognition system & 3 ph. Motor control	E &TC+Electrical	Prof. R B Rehpade
13	2015-16	Detection control of gun using motion of helmet using Accelerometer	E&TC+Mechanical	Prof. K R Bhagat
14	2015-16	Speed control of 3 Phase slip ring induction motor using rotor voltage control	E &TC+Electrical	Prof. R B Rehpade
15	2016-17	Industrial conveyor belt using PLC automation system	E &TC+Mechanical	Prof. A S Ufade
16	2016-17	Tactical Military Suite	E&TC+Electrical	Prof. U B Barahate
17	2016-17	Efficient and intelligent LED lighting system	Computer Engg.+E&TC	Prof. R B Rehpade
18	2016-2017	Power Efficient IoT based system	Computer Engg.+Mechanical	Prof. A. R. Ugale
19	2016-2017	Advanced Embedded System for Automobile Safety.	Electrical+E&TC	Prof. A. J. Gosavi
21	2015-16	Smart Monitoring And Protection	Electrical+E&TC	Prof. Mohite U. L
22	2015-16	Solar Power Installation And Tracking	Electrical+E&TC	Prof. Kirti Kulkarni
23	2015-16	Hybrid Power Genration	Electrical+E&TC	Prof. Ankit Jain
24	2015-16	Solar Cell And Grid	Electrical+E&TC	Prof. Sai kiran Adapa
25	2015-16	Driverless Train With Automation	Electrical+E&TC	Prof. Nikam R. J
26	2016-17	Smart Monitoring And	Electrical+	Prof. vishal



		Protection Of Wind Mill By Using Sensor	Mechanical	pansare
27	2016-17	Off Grid Charging Of Electric Vehicle	IT+E&TC	Prof. Ankit Jain
28	2016-17	Petrol Pump Automation	IT &ENTC	Prof. Mayur Parmale
29	2016-17	Automatic TOLL Tax Collection	IT+E&TC	Prof. Mayur Parmale
30	2016-17	Utilization And Protection Of SKY Lighting	IT+E&TC	Prof. SaikiranAdapa
31	2016-17	Solar Powered Hybrid Electric Bicycle	Electrical+ Mechanical	Prof. Nitesh kumar
32	2014-15	Intelligent light traffic controller using embedded system	IT+E&TC	Prof. Namita Kale
33	2014-15	Voting system using DTMF and IVRS technique	IT+E&TC	Prof. Kunal Ahire
34	2015-16	Li-Fi Technology based data transmission through VLC	IT+E&TC	Prof. Kunal Ahire
35	2015-16	An Efficient Cross-Device Data Transfer System	IT+E&TC	Dr. K. V. Metre
36	2015-16	Smart Agriculture using Internet Of Things.	IT+E&TC	Prof. Namita Kale
37	2016-17	Ubiquitous Smart Home System	IT+E&TC	Prof. Namita Kale
38	2016-17	Armed Flash	IT+E&TC	Prof. Kunal Ahire
39	2016-17	E-learning with video searching	IT	Prof. Puneet Patel

### **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 equipment's and maintains equipment records on dead stock.
- Laboratories of each programme are well equipped with the state of the art equipment and accessories.
- The equipment and instruments are serviced and maintained regularly either by the department technicians or by EDP department.
- Laboratories are also utilized for technical add-on courses for students such as, IIT Spoken tutorial, Amrita University, FOSS labs.
- The Research Committee monitors the research activities and keeps track of the usage of various resources and facilities for research.
- The Institute central library maintains records of usage of References Book, National/International Journals, Magazines and soft copy student's material for further reference to faculties and students.

### **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 Seminars, Training, Workshops, Research and Extension activities in technical education.

- The Institute has received research grants from BCUD SPPU for conduction of research work.
- Institute has received grant from DST for Research Project.
- Centre for advance CAD, Nashik.
- For promoting Seminars, Training, Workshops, Research and Extension activities in technical education the Institute has signed MoUs with:
  - ✓ Zensor, Pune
  - ✓ ESDS, Nashik
  - ✓ NThreesoft Solutions, Nashik
  - ✓ Aress Software Solution, Nashik
  - ✓ Ingenious Solutions, Pune
  - ✓ Intellidemics, Nashik

### **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.**

Various research proposals as per required formats of funding agencies are prepared under the guidance of senior faculties, who promotes research activities among other faculties to upscale individual knowledge and contribute with the innovative work in their concern fields. These research proposals are send to various funding agencies for financial support.

Nature of The Project	Duration Year from to	Title of the Project	Name of the funding agency	Total grant		Total Grant Received till date
				Sanction	Received	
Minor Projects	2014-2016	DSP- Based optical character recognition system for devonagri characters	BCUD , SPPU, Pune	Rs. 90000/-	Rs. 45000/-	Rs. 45000/-
	2014-2016	Cognitive Radio networks: Group based control channel allocation	BCUD , SPPU, Pune	Rs. 230000/-	Rs. 195500 /-	Rs. 195500/-
	2014-2016	Query optimization and execution of dynamic data items in network aggregation environment	BCUD , SPPU, Pune	Rs. 240000/-	Rs. 120000 /-	Rs. 120000/-
	2015-2017	Performance and Comparative Analysis of Non-secular Hydrodynamic journal Bearing using various grades of oil	BCUD , SPPU, Pune	Rs. 190000/-	Rs. 950000 /-	Rs. 950000/-
	2015-2017	Corrosion of Metallurgical Investigation of simple & Heat treated duplex stainless steel exposed to corrosive environments	BCUD , SPPU, Pune	Rs. 250000/-	Rs. 125000/-	Rs. 125000/-
	2015-2017	Performance Analysis of CI & SI Engine by	BCUD , SPPU,	Rs. 190000/-	Rs. 950000 /-	Rs. 950000/-

		magnetic ionization of fuel	Pune			
	2015-2017	Critical issues in reduction of design and development cycle of electronic products	BCUD , SPPU, Pune	Rs. 240000/-	Rs. 120000/-	Rs. 120000/-
	2015-2017	Fabrication process simulation and characterization of capacitance modulated signal electron transistor for VLSI logic	BCUD , SPPU, Pune	Rs. 240000/-	Rs. 120000/-	Rs. 120000/-
	2015-2017	Smart Agriculture Using Internet of Things	BCUD , SPPU, Pune	Rs. 140000/-	Rs. 70000/-	Rs. 70000/-
	2015-2017	Face recognition from Video streaming using face name graph matching	BCUD , SPPU, Pune	Rs. 82000/-	Rs. 41000/-	Rs. 41000/-
	2015-2017	A framework for capturing workload statistics and replaying workload simulations to allow the assessment of framework improvements for various hadoop sites.	BCUD , SPPU, Pune	Rs. 48000/-	Rs. 24000/-	Rs. 24000/-
Major Projects	---	---	---	---	---	---

Interdisciplinary projects	---	---	---	---	---	---
Industry Sponsored	---	---	---	---	---	---
Students' research projects	---	---	---	---	---	---
Any other (specify)	---	---	---	---	---	---

### 3. 3: Research Facilities

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

Institute provides facilities like Wi-Fi campus, centre library and internet facilities to access various digital library contents, eBooks, journals, online resource material from reputed organizations. Apart from that sophisticated instruments, tools, data processing software's and modern equipments are provided to create infrastructural facilities to meet the needs of recent research trends.

Summary of the search facilities at various departments

SR. No	Research Facilities	Name of the Laboratory
<b>Department of Civil Engineering</b>		
1	Tilting Flume, Wind tunnel	Fluid Mechanics Lab
2	Compression testing machine, Universal Testing Machine	Testing of Material Lab
3	Triaxial Test Apparatus, Unconfined compression Test apparatus, California Bearing Ratio Test Apparatus	Geotechnical Lab
4	Staad Pro Software	CAD Lab
5	BOD Incubator, COD digester, Spectrophotometer, Titration Set, Nephelometer	Environmental Engineering Lab
<b>Department of Mechanical Engineering</b>		

1	Computerized Numerical Controlled Machine	Central Workshop
2	Autodesk, MATLAB, ANSYS, Pro E, Hypermesh, Unigraphics, MasterCAM, Automation Studeo etc.	CAD/CAM Lab
<b>Department of Electrical Engineering</b>		
1	Sphere gap Arrangement diameter 10cm, 100kv, 100mA Transformer, Control Panel & different types of Electrodes for high voltage solid breakdown test with connecting wire, Gauss Flux density Measurement Kit, Oil testing Kit 100 kv, Metres and Main ON HT ON lamps, Digital oscilloscope, Cathode ray Oscilloscope	Material ScienceLab
2	Stroboscope, Phase Shifting Transformer	Machine Lab
<b>Department of MCA</b>		
1	IIT Remote Centre, 150 Aakash Android Tablet, Server core i7, WIFI system to access points	MCA Lab
<b>Department of First Year Engineering</b>		
1	Calorimeter, PH metre, Muffle Furnace	Chemistry Lab
<b>Department of Electronics Engineering</b>		
1	CRO 25MHz 2CH 4 TraceLCRQ Meter 100MHz Dual DC Power Supply 0-32V	Basic Electronics Laboratory
2	Basic + Advanced PCB lab PCB artwork Film Maker, PCB Curing Machine Dip Coat Machine, Photo Resist UV Exposure Unit Double Sided Etching Machine, PCB Drilling Machine PCB Shearing Machine Roller Tinning Machine Developer Plate Through Hole (PTH)	PCB & Project Laboratory (EHW)

3	10KVA UPS with Battery & Rack DSP Starter Kit Lenovo Think Centre Desktop PCs	Software Lab 1 Laboratory
4	Lenovo Think Centre Desktop PCs VLSI Trainer Kits Xilinx FPGA Daughter Board	Software Lab 2 Laboratory
5	Digital Storage Oscilloscope Allen Bradley PLC Trainer II Pick & Place operation using Simulation Control Software	Mechatronics & Automation Laboratory
6	V2F 3 phase induction motor drive UP/UC based ThreePhasecontrolled DC drive	Power Electronics Laboratory
7	Microwave Test Bench (Nvis-9002) MicrowaveTest Bench (NV 9004) Gun Power supply, Gun oscillator, Microstrip Antenna , AT520A, Stepper motor controller	Optical Fibre & Microwave Communication Laboratory

<b>Department of Electronics and Telecommunication Engineering</b>		
<b>Sr. No.</b>	<b>List of Major Equipments</b>	<b>Name of The Lab</b>
1	CRO Function Generator Dual Power Supply Analog Trainer Linear IC Tester Lenovo Think Centre M73 Tiny Desktop	Electronic System Design Lab
2	Lenovo Think Centre M73 Tiny Desktop Embedded System Design Kit INFOCUS IN - 2104 WITH ACCESSORIES SCANNER HP 2400 10 KVA UPS WITH BATEERY & RACK SAMSUNG 2571PRINTER	Project & Simulation
3	Spectrum Analyzer DSO cum Logic Analyzer CRO Function Generator Antenna Trainer AMFM Signal Generator Analog & Digital Communication Trainer Voice Communication Trainer Microwave , Optical Trainer	Analog & Digital Communication
4	Digital Trainer Digital IC Tester	Digital System Design

	PIV Computer Systems	
5	Lenovo Think Centre M73 Tiny Desktop SAMSUNG 2571PRINTER	Software lab -3
6	Lenovo Think Centre M73 Tiny Desktop Microtutor 8086 Microprocessor 8051 Microcontroller ADC Interfacing DAC Interfacing	Microprocessor & Microcontroller lab (Software lab-4)
7	Colour TV Trainer Colour Pattern Generator PA System DTH Sytem Kit DVD System Kit	Audio & Video Lab

<b>Department of Computer Engineering</b>		
<b>Sr. No.</b>	<b>Research facilities</b>	<b>Name of the Laboratory</b>
1	Computer System - Lenovo Think Center Desktop M72e Tiny, Intel core i3 2120, 3.1 GHz Processor, 3 MB L2 cache 2C, 1333MHz FSB, 4GB DDR3 RAM, 500GB SATA HDD, Gigabit Ethernet, K/B, Optical Mouse with 3 Yr. Warranty	Computer Center and Advanced Computer Lab
2	Computer System - Lenovo Think Center 10AXA0CSIH Desktop & Lenovo 18.5" Wide Monitor - 60A7AAR1NP	PG Project Lab (ME-1)
3	Printer - Epson LX300+II	ME / Research Lab (ME-2)
4	Widows compatible IT-306WC PC webcam night vision 1/7" CMOS Sensor, Image Resolution, Frame Rating and Image Controlling, USB IO Interface with RGB 24, 1420 Image format.	Research Lab
5	USRP Research Trainer Kit (USRP N210 Kit, CBX USRP Daughterboard(1.2-6HGz), LP 0965 Log Periodic PCB Antenna (850 MHz -6.5 GHz), SMA Cable and 30 Db Attenuator Loop Back Cable Kit)	Research Lab
6	NVIDIA GPU -GEFORCE GT210, 1GB RAM	Research Lab
7	Raspberry Pi-2 Kit- Model B, Quad Core CPU, 1GB RAM, 4 USB Ports, 1 HDMI Port, 1 Audio port,	ME1/ ME2 Lab



8	D-Link Switch 8 Port Switch	Research Lab
9	All in one DSP Educational Board - TMS320C6748: Digital signal Processing H. B. 3 VOL SET (All-in-One DSP Educational Practice board with USB JTAG Emulator).	Research Lab

### **P. G. PROJECT LAB**

<b>Sr. No.</b>	<b>Item Description</b>	<b>Qty.</b>
1	Lenovo Think center3264A62 Desktop, Intel Core I3 Processor, 2 GB RAM, 500 GB HDD	PG Project Lab (ME-1)

### **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?**

- In order to facilitate the research in new and emerging areas, the Institute continuously improves its infrastructural facilities.
- Each department prepares a budget for laboratory requirements and other equipment required for either upgrading the existing facilities or including new additions to enrich the working environment and facilitate research and innovation in various technology domains.
- Provision is made in Institute budget for procurement of latest software and equipments to carry out research work across all departments.
- At the end of every year the stock verification of the existing infrastructure is taken and maintenance and repair is undertaken to keep the labs in good condition
- The subscription for print and e-journal are renewed and new subscriptions are made to cater to the reference requirement of the researchers.
- Faculty members are encouraged to visit reputed laboratories and R & D departments, workshops, conferences to know the latest developments in research.
- For identifying the research problem based on societal needs, research groups involving faculties and students are formed to carry out planning and research on such problem.

### **3.3.3. Whether the institution have received any special grants from the industry or other amenities in last four years.**

Yes, number of opportunities are created to enhance the quality knowledge, and to build a bridge between practical and theoretical concepts those are listed as below in the table:

<b>Sr. No.</b>	<b>Proposal Year</b>	<b>Grant Sanctioned</b>	<b>Equipment/title of proposal</b>	<b>Funding Agency</b>	<b>Dept .</b>
1	2014-2016	Rs. 2,40,000 /-	4TB Lenovo NAS V3700 with Dual Controller	BCUD, SPPU	IT
2	2016-	Rs. 82,000/-	Jetson Tx1 and other	BCUD,	

	2018		accessories	SPPU	
3	2016-2018	Rs. 1,40,000	Internet of Things Kit	BCUD, SPPU	
4	2015-2017	Rs. 1,90,000	performance and comparative Analysis of Nonsecular hydro dymine jurnal bearing	BCUD, SPPU	MECH
5	2015-2017	Rs. 2,50,000	Corrosion of metallurgical investigation of simple and heat treated duplex stainless steel exposed to corrosive environment	BCUD, SPPU	
6	2015-2017	Rs. 1,90,000	performance analysis of CI&SI engine by magnetic Ionization of fuel	BCUD, SPPU	
7	2016-2017	Rs. 2,40,000	Critical issues in reduction of design and development cycle of electronic product.	BCUD, SPPU	E&TC
8	2014-2016	Rs. 2,40,000	Query optimization and Execution of dynamic data items in NAE.	BCUD, SPPU	COMP
9	2014-2016	Rs. 90,000	DSP based optical character recognition system for devnagri character.	BCUD, SPPU	
10	2015-2017	Rs. 2,30,000	Face recognition from video straming using face name gragh matching.	BCUD, SPPU	
13	2015-2017	Rs. 48,000	A frame work for capturing workload statistics and replaying workload simulations to allow the assesment of framework improvements.	BCUD, SPPU	

14	2015-2017	Rs. 2,40,000	High performane computing for handlingbig data sets and comparison of linux HPC clusture MS compute clusture using multiple classifiers.	BCUD, SPPU	
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### 3.3.4. What are the research facilities made available to the students and research scholars outside the campus/other research laboratories.

- Institute arranges various industrial visits to leading industries for students to enhance their knowledge towards the culture of industries.
- Institute encourages the students and faculty for participating in various research competitions and exhibitions.

#### MCA

Sr. No	Name of Industry	Date of Visit	Location
1	ABB Pvt Ltd	16/3/2017	Nashik
2	Visual Media	19/3/2015	Chandigarh
	C-DAC	18/3/2015	Mohali
3	Myshore IT Solution Pvt Ltd	11/3/2014	Mysore
4	Indian Institute of Science	26/3/2012	Bangalore
	Infosys	24/3/2012	Mysore
5	STPI Ltd	16/2/2010	Hyderabad
1	Renuka Arts e sahitya sammelan	15/02/2017 (2017)	Nashik
2	NDNVP blood donation camp	22/02/2017	Nashik
3	Gokhale(iInnovision blind coding)	16-17 Feb	Nashik
4	Red hat certification	18/03/2017	Nashik
5	Bhonsla Techno Rise	03/01/2017	Nashik
6	KKW Ascent T Quiz	15/02/2017	Nashik
7	IT Seed Idol	12/02/2017	Nashik

8	KKW NMSC Workshop	12-13 sep 2014	Nashik
9	Code debugging KKW	5-6 Feb 2016	Nashik
10	Blind coding KKW	5-6 Feb 2017	Nashik
11	Quiz competition KKW	5-6 Feb 2016	Nashik

### Computer Engineering Department

1	Myshore IT Solutions Pvt. Limited	3/5/2014	Myshore
2	SAP , Bangalore	3/11/2015	Bangalore
3	Persistent, Pune (Cancelled IV)	2/12/2016	Pune
4	SAP TECHED 2015, Bangalore	3/11/2015	Bangalore
5	Technofest 2014	8th FEB. 2014	Sapkal Knowledge Hub
6	Enterpernership Awareness Camp	27 to 29 Jan. 2014	KKW W omen's Polytechnic
7	INSTRUBOYICS	14 TO 15 Feb. 2014	KBGT Institute of Engg. Nashik
8	Avensis	17 &18 Feb. 2014	PVG Institute of Engineering Nashik
9	SPARK IT 2K14	25Feb, 2014	KKWAGHWomens Polytechnic
10	Avishkar Essay Writing	2013	KKW Institute of Engg.
11	Avishkar Table Tennis Single	2014	KKW Institute of Engg.
12	Avishkar 'TECH. NOVA'-Paper Presentation	2014	KKW Institute of Engg.
13	I-Tech Systems - Inplant Training Certificate	02 To 17 May 2013	KK Wagh Polytechnic
14	C WAR	14 Jan, 2015	NDMVP
15	Avishkar: Table Tennis, Single Runnerup, Technova Paper Presentation 1st prize	2014	K K Wagh Women's Polytechnic
16	IT Expo organized by CSI	28-Dec-14	CSI Nashik Chapter, Institution of Engineers
17	MAVERICK 2K16	1st March 2016	KKW Institute of Engg.

18	Equinox 2016	17 &18 March 2016	KKW Institute of Engg.
19	Project-National LEVEL Project Competition	13 Feb. 2016	Institute of Technology, Management & Research, Nashik
20	Project-National LEVEL Project Competition	13 Feb. 2016	Institute of Technology, Management & Research, Nashik
21	Project-National LEVEL Project Competition	13 Feb. 2016	Institute of Technology, Management & Research, Nashik
22	Project-National LEVEL Project Competition	13 Feb. 2016	Institute of Technology, Management & Research, Nashik
23	Project-National LEVEL Project Competition	13 Feb. 2016	Institute of Technology, Management & Research, Nashik

### Electrical

1	Prathmesh Electroproduct Ltd.	24/03/2017	MIDC Nashik
2	Padghe Terminal Sub Station	18/03/2017	Padghe thane
3	MSEB Adgaon Sub-Station	5/10/2016	Adgaon, Nashik
4	Deshmukh Solar , Adgaon , Nashik	5/10/2016	Adgaon, Nashik
5	Rishabh Instruments,	23/09/2016	Satpur, Nashik
6	MS Fairdeal Transformer pvt ltd, Nashik	15/03/2016	Satpur, Nashik
7	Traction Machine Workshop, Nashik	12/3/2016	Nashik
8	MAHA SLDC Kalwa, Mumbai	28/09/2015	Mumbai
9	Deshmukh Solar , Adgaon , Nashik	10/9/2015	Nashik
10	132 kV Substation, Adgaon	10/9/2015	Adgaon, Nashik
11	Rishabh Instruments, Satpur, Nashik	9/9/2015	Satpur, Nashik

12	Gemini Instratech ltd, Ambad, Nashik	25/03/2015	Ambad, Nashik
13	Dahanu Reliance Thermal Power Plant, Mumbai	20/08/2015	Mumbai
14	MET's 11 kV Substation	13/01/2015	Nashik
15	220 kV Borivali Sub-Station (Gas insulated)	28/03/2014	Mumbai
16	Mother Dairy, Delhi	12/3/2014	Delhi
17	Honda Motors & Generators ltd, Delhi	10/3/2014	Delhi
18	EPI Transformer Electrical pvt ltd, Nashik	24/02/2014	Nashik
19	Eklahere Thermal Power Plant, Nashik	10/9/2013	Nashik

### Information Technology

1	IGNITE-13	12-13 Sept. 2013	MET's IOE Nashik
2	IGNITE-14	15-16 Sept. 2014	MET's IOE Nashik
3	IGNITE-15	21-22 Sept. 2015	MET's IOE Nashik
4	IGNITE-16	16-17 Sept. 2016	MET's IOE Nashik
5	MET NIRMAAN-14	24-25 March 2014	MET's IOE Nashik
6	MET NIRMAAN-16	16-17 March 2016	MET's IOE Nashik
7	MET NIRMAAN-17	24-25 March 2017	MET's IOE Nashik
8	Industrial Visit at L. S. Industries	28th March 2012	Simla
9	Industrial Visit at Maysoor IT solutions	5th March 2014	Mysor
10	Industrial Visit at ESDS, Nashik	27-Aug-14	Nashik

### Electronics and Telecommunication

1	93.5 RED FM	3/24/2017	Untwadi, Nashik
2	GMRT	2/28/2017	Khodad, Narayangaon, Pune
3	ICS Technologies	9/3/2016	Satpur MIDC, Nashik

4	Rishabh Instruments	10/6/2016	Satpur MIDC, Nashik
5	Suzlon windmills	3/5/2016	Sinnar, Nashik
6	ABB Indai, Limited	3/11/2016	Satpur MIDC, Nashik
7	JD Transformers	3/10/2015	Baddi, Himachal Pradesh
8	Thyssenkrupp Electrical Steel india PVT, LTD Thyssenkrupp Electrical Steel india PVT, LTD	10/2/2015	Igatpuri, Nashik
9	ICS Technologies	3/27/2014	Satpur MIDC, Nashik
10	Boost Electronics	4/2/2014	Ambad MIDC, Nashik
11	GMRT	2/28/2014	Khodad, Narayangaon, Pune
12	MVPS's Dr. Vasantao Pawar Medical Institute & research center	10/4/2014	Adgaon, Nashik
13	SNR Electronics	3/8/2014	Baddi, Himachal Pradesh
14	GMRT	3/1/2013	Khodad, Narayangaon, Pune

### Mechanical

1	HMT Machines Tools Ltd.	10 <sup>th</sup> March 2014	Banglore
2	Visvesvaraya Industrial and Technology Museum	10 <sup>th</sup> March 2014	Banglore
3	Tea factory and Tea museum	7 <sup>th</sup> March 2014	Coonoor
4	Bhatsa Hydropower station	Mar-16	Nashik
5	Vaitarna Hydropower station	30 <sup>th</sup> March 2017	Nashik
6	Vaitarna Hydropower station	02 <sup>nd</sup> March 2015	Nashik

### Civil

1	Residential Bungalow, Adgaon, Nashik	9/26/2016	Nashik
2	Behind Police Ground, Adgaon, Nashik	3/27/2017	Nashik
3	Vaitarna hydropower station, Igatpuri, Nashik	6/26/2016	Nashik
4	Manmad Railway Workshop	9/27/2016	Nashik

5	Someshwar, Nasik	1/31/2017	Nashik
6	Parksyde, Hanuman Nagar, Nashik	3/15/2017	Nashik
7	Chehadi Bridge, Nasik	9/30/2016	Nashik
8	Chehadi Bridge, Nasik	9/30/2016	Nashik
9	Nilgiri Baag, Panchavati, Nashik	4/6/2017	Nashik
10	Vaitarna Dam, Igatpuri, Nashik	3/20/2017	Nashik
11	Gangapur Dam, Nashik	3/27/2017	Nashik
12	Hydropower Stn. Vaitarna. Nashik	3/20/2017	Nashik
13	Residential Bunglow, Adgaon, Nashik	9/22/2016	Nashik
14	Nilgiri Baag, Panchavati, Nashik	3/12/2016	Nashik
15	Parksyde, Hanuman Nagar, Nashik	3/16/2016	Nashik
16	Prestressed bridge, Nagar Road, Ahmednagar	8/20/2015	Ahmednagar
17	Prestressed bridge, Nagar Road, Ahmednagar	8/20/2015	Ahmednagar
18	Vaitarna hydropower station, Igatpuri, Nashik	10/5/2015	Nashik
19	Manmad Railway Workshop	10/6/2015	Manmad
20	Bhatsa Dam, Palghar, Thane	3/11/2016	Thane
21	Gangapur Dam, Nashik	3/26/2016	Nashik
22	Hydropower Stn. Bhatsa, Thane	3/11/2016	Thane
23	Vaitarna hydropower station, Igatpuri, Nashik	10/9/2014	Nashik
24	Manmad Railway Workshop	10/7/2014	Manmad

**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, DOAJ, NPTEL and e-books.
- Reference books and hand books on various research topics and project.
- Institute has a membership of British council library, National digital library



**3.3.6 What are the collaborative research facilities developed/ created by the research Institutes in the Institute. For ex. Laboratories, library, instruments, computers, new technology etc.**

Research facilities have been enhanced and research laboratories have been developed in some departments through some research projects funded by government agencies like university, DST etc

The Institute is taking initiative for setting up collaboration with up industries, and R&D institutions. Following are few examples

- NVIDIA has provided hardware required for the research in computer engineering Department.
- Universal radio peripheral trainer kit for cognitive radio implementation in E&TC department.
- Research lab with CAD/CAM software facilities in Mechanical department.
- PCB fabrication lab in E&TC department.
- MATLAB 2014 with various necessary toolboxes required for research work.

**3.4 Research Publications and Awards**

**3.4.1 Highlight the major research achievements of the staff and students in terms of various research activities are carried out at Institute level to promote innovative work of faculties and students of concern department. The highlights of research achievements in terms of**

**Patents obtained and filed (process and product):** Two patents are in process based on project design of collaborative efforts of faculties and students.

**Original research contributing to product improvement**

- Institute has also received BUCD SSP University grant under quality improvement programme to enrich facilities.
- Institute has received grant from DST for performance measurements of SME's.
- Institute has signed MoU with industries and other agencies for conduct technical trainings, and to promote research activities.
- In all total 11 research grant have been received by faculties through BCUD SPP University for executing research work and to set-up research based lab with latest equipments.

**Research studies or surveys benefiting the community or improving the services:** Students and Faculties involved in CSR activities normally perform research survey for requirement gathering and analysis of tribal and rural areas. Based on the analysis the action plan for CSR activity are generated and executed.

**Research inputs contributing to new initiatives and social Development:** The projects like Rural Engineering & Technology Club are initiated for the cause of social development.

**3.4.2 Does the Institute publish or partner in publication of research journal(s)? If “Yes”, indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?**

No, The Institute has jointly published conference proceedings in International Journal entitled “**International Journal of Engineering Research & Technology**” (IJERT) ISSN No: 2278-0181.

**3.4.3 Details of publications by faculty & students**

Sr. No	Department	Faculty/ Student	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1	Civil Engg	Faculty	21	15	--	--	--	--	--	--	--	--	--
		Student	2	--	--	--	--	--	--	--	--	--	--
2	Computer Engg	Faculty	112	26	--	--	1	--	192	--	--	--	7
		Student	18	--	--	--	--	--	--	--	--	4.47	--
3	E&TC Engg	Faculty	20	5	--	--	--	--	8	--	0.21	1.27	8
4	Electrical Engg	Faculty	9	--	--	--	--	--	--	--	--	--	--

5	Mechanical Engg	Faculty	285	26	--	2	1	--	73	--	--	--	3
		Student	59	6	--	--	--	--	6	--	--	--	--
6	I. T. Engg	Faculty	115	3	--	--	--	--	--	--	--	--	--
		Student	19	--	--	--	--	--	--	--	--	--	--
7	M. C. A	Faculty	15	12	--	--	--	--	--	--	--	--	--

#### 3.4.4. Awards / Recognitions received by faculty

##### 1. Mr. A. B. Kotade:

- Awarded as Young Researchers' Award at IETE Conference.

##### 1. Mr. Arun Shankar Bhoje:

- Participated in various activities related to cycling sport.

##### 2. S. C. Vidhate:

- IIT-Spoken Tutorial Regional Promoter
- IIT-Spoken Tutorial SELF-WORKSHOP Ambassador

##### 3. V. D. Dabhade:

- Secretary, CSI- Nashik Chapter
- Longest Continuous SBC award
- IIT-Spoken Tutorial SELF-WORKSHOP Ambassador

##### 4. Mrs. Remya Panicker:

- Active Participation Women by CSI.

#### 3.5 Consultancy

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

There is a need of strong Institute-Industry linkage to bridge the gap the gap between the academia and the recent trends in the industry.

**System:** The Institute promotes the practice of signing of Memorandum of Understanding with leading industries for the exposure to the recent technologies and continuous growth of the students.

- To offer consultancy services to the industry.
- To produce technocrats/ engineers with Entrepreneurship skills.
- To arrange expert sessions of industry persons/experts on recent trends and practices in industry.

**Strategies: -**

- Arranging industrial visits for students.
- Organizing workshops on tools and technologies used in industry in collaboration with industry.

- Offering customized industry oriented certification Programmes to address the dynamic need of IT professionals in the industry.
- Conduction of Entrepreneurship skill development Programmes for students and faculties.
- Conduction of various technical and non-technical workshops for the overall growth of the students.

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

The Institute encourages consultancy works to provide the solutions to the industrial problems by sharing the expertise with outside agencies/industries

#### **Policy:**

- Consultancy work should be carried out along with teaching-learning process. Expertise of faculty would be used for consultancy in domain specific areas.
- A project taken up by the department or individual faculty member of the department may be referred as a Departmental Consultancy Project.
- A Departmental Consultancy Project will have at least two investigators drawn from one or more departments.
- All consultancy projects to be taken up by the departments of the respective Institute shall be examined from the point of view of its likely benefits to the academic and R&D activities at the Institute.
- Every consultancy project proposal would be examined and approved by an Institute Level Committee, before it is accepted for being conducted as Type-I or Type-II project.
- Depending upon the nature of project (Type-I/ Type-II), faculty involved in such consultancy work would be permitted to use Institute resources.
- A fixed percentage of the Consultancy Project / Sponsored Project amount is taken as Institute Overhead Charges (IOC). The IOC shall in turn be distributed into a number of funds to be maintained by the Institute for specific purposes.
- 50 % of the Institute Overhead Charges will go to the Internal Revenue generation fund at Institute Level and remaining 50% of the Institute Overhead Charges will go to Department Development Fund of the respective department.
- The objective of this fund is to provide additional grant to the department for its development activities as well as for funding its other academic activities for which adequate funds are not available from other sources.
- Individuals or Departments may take up consultancy work after intimation and approval of the Principal through the concern Head of Department. The PIs and HODs will sign the report of Departmental Consultancy Projects and the Principal Investigator will sign the report of the individual

Consultancy project.

**Expertise advocated and publicized in the following manner:**

Institute motivates the faculty members with exposure to recent technologies and adequate research experience for consultancy activities to industry.

- Training and Placement cell explores the opportunities of collaboration with industry by interactions and discussions with various industries.
- The areas of expertise are publicized from time to time on the Institute website in the departmental section as well as through technical events/Programmes conducted at departmental level and Institute level.

**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 manner:

- Faculty members who are expert in specific domains/areas are encouraged by motivating consultancy activities with the industries.
- Faculty members are encouraged to obtain consultancy work by visiting the industries and identifying their requirements and also through their personal and professional contacts.

**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 Institute has signed number of MoUs with different industries.

The details of revenue generated by the department are enlisted in the table below.

<b>Sr. No.</b>	<b>Revenue Generating Activities</b>	<b>Department</b>	<b>Amount Received in Rs</b>
1.	Course Conduction	Civil	1,99,104 /-
		Computer	22,04,644 /-
		E&TC	21,509 /-
		IT	15,000 /-
		Mechanical	47,800 /-
2.	Design & Development	Computer	1,50,000 /-
3	Infrastructural & Services	Computer	11,32,010 /-
<b>Total Revenue Generated</b>			<b>37,70,067 /-</b>

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

**Policy**

- Institute would charge a fixed percentage of the Consultancy Project / Sponsored Project amount as Institute Overhead Charges (IOC).
- The IOC shall in turn be distributed into a number of funds to be maintained by the Institute for specific purposes.
- The amount of IOC would depend upon the type of the consultancy project i. e 25% of the total revenue generated in case of Type-I projects and 40% of the total revenue generated in case of Type-II projects.
- The amount distributed among the staff of respective Institute would be 75 % (Type-I) and 60% (Type-II) of the project revenue. Distributed among the staff of respective Institute.
- A fixed percentage of the Consultancy Project / Sponsored Project amount is taken as Institute Overhead Charges (IOC). The IOC shall in turn be distributed into a number of funds to be maintained by the Institute for specific purposes.
- 50 % of the Institute Overhead Charges will go to the Internal Revenue generation fund at Institute Level and remaining 50% of the Institute Overhead Charges will go to Department Development Fund of the respective department.
- The objective of this fund is to provide additional grant to the department for its development activities as well as for funding its other academic activities for which adequate funds are not available from other sources.

### **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?**

By Knowing the social Responsibility against society a number of activities are organized by the Institute. The Institute believes in inculcating a strong sense of ethical and social values in its students.

**NSS:** Bhujbal Knowledge City has adopted some villages surrounding Nasik city for the overall development of population of rural part in the district.

**BKC** conducts various programmes for these adopted villages through **Institutional Social Responsibility (ISR)** and by means of **NSS Activities (Regular Activity and Special Winter Camps)**

The Institute has a very dynamic and passionate **NSS** team that regularly organizes **Blood donation camps** on the occasion of **National Youth Day** and **Birth Day** of our Trusty one in each semester in collaboration with **Saibaba Heart Institute** and **Nasik Blood Bank**. More than 300 students donate blood and participated in this camp. The **NSS** team has done **Gram Swach Abhiyans** and held awareness Programmes to implement social issues at various villages such as **Gaulane, Kone and Nagosali**. **Poster Exhibition for Awareness** was arranged for students of the Institute by **NSS**.

A team from **Tulsi Eye Hospital** visits our Institute campus and Adopted villages for the eye check-up and other eye related issues.

#### **Awareness Programme:**

- Thalasemia Detection Test was conducted in Institute and Adopted Villages by which Awareness about Thalasemia is done successfully
- Road Safety Programme was conducted in Institute by guest lecturer of Police department Mr. Tamboli (Deputy Commissioner of Police (Transport))
- Bring the Educational and social change through computer literacy , develop and promote computer literacy with dedication and commitment, spread computer literacy, awareness programme is conducted at 2 Z. P. Primary schools
- To avoid the Godavari River Pollution at the time of Ganesh Visarjan and Navaratri Utsav, Institute organise Ganesh Murty Sankalan and Nirmalya Sankalan Programme regular basis.
- For Awareness about Haemoglobin percentage in Females of our Institute campus and Adopted Villages Hb checkups conducted.
- Especially for Girls regarding their Gynaecological problems Institute arrange interactive sessions by Dr Ashwini Ghaisas (Gynaecologist) and to overcome such problems Institute also arrange interactive sessions by Dr. Himani Puri (Dietitian).
- Motivational and Mob counselling of students and staff by Hon. Bhishmaraj Bam sir (Ex Inspector General of Police Dept)
- Meditation Sessions of three days by RAMCHANDRA MISION
- Tree Plantation in Campus and in Adopted Villages is arranged each year regularly in Monsoon

### **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:
  - By organising the Awareness Programme The Institute is committed to attract students for participating in various social activities like NSS, blood donation, social awareness Programmes, by ensuring consistent support and inspiration.
  - The student committee members of NSS are appointed and monitored by senior faculty members.
  - NSS Special Winter camps are conducted for students where students promote awareness about issues related to
    - Excavation of C. C. T. for rain water harvesting.
    - Formation of Compost pits and formation of vermiculture pits in Adopted Villages.
    - Social, health and economic Survey for Women empowerment

- Importance of education
- Lectures by Eminent Personalities about social, cultural, technical and Economic

The Institute has motivated the students to maintain a Discipline of Road Safety by banning Entry in the campus without Helmet.

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

Stakeholders constitute an important part for smooth functioning and catering competitive environment, and also helps to improve the overall performance and quality of institution. Stakeholders such as Students, Parents, Faculty Members, University and the Society should have effective linkage between them which would contribute to the overall improvement in the existing system.

To establish effective linkages between these elements Parent Teacher meet along with certain forms and formats have been designed to collect feedbacks and interact with the stakeholders. This includes Alumni feedback form, Course exit form, student feedback form, etc

Feedback of the Alumni's are taken during the alumni meet and their suggestions are analysed and suitably implemented. Feedback is also collected from Recruiters who come for campus recruitment, the shortcomings are addressed in the Training and Placement (T & P) cell meetings.

Student feedback for the respective course is conducted in each semester.

Regular faculty meet is conducted for effective suggestions for improvement of Institute.

Also Placement survey, Result analysis, and feedback analysis are 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 as follows

- Blood donation camp
- Tree plantation
- Poster exhibition for Environmental Awareness
- Engineers Week
- Women 's Day
- Teachers Day
- National Yoga Day
- NSS Day
- NSS Special Winter Camp
- Awareness Programmes
- Eye Check-up Camp



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.

Sr. No	Activity	Targeted group	Number of Beneficiaries	Funding Agency
<b>Department of Civil Engineering</b>				
01	Health check -up Camp 26 DEC 2014	The girls, women and (specially) pregnant women in and around Gaulane Village	150	APOLO
02	A blood donation camp 27 DEC 2014	Gaulane Village	50	SaiBaba Heart Institute
03	Tree Plantation 29 DEC 2014	Gaulane Village	250	Institute/ NSS
04	The construction of "Vanarai Bandhara" 31 DEC 2014	Gaulane Village	02	NSS
05	Eye checkup camp 02 JAN 2015	Gaulane Village	100	Tulsi Eye Hospital
06	A blood donation camp 12 jan 2015	Institute Campus	100	Nashik Blood Bank
07	A blood donation camp 12 jan 2017	Institute Campus	60	Nashik Blood Bank
08	Health Check-up Camp 12 Jan 2017	Institute Campus	200	SaiBaba Heart Institute
09	Eye Check-up Camp 12 Jan 2017	Institute Campus	160	Tulsi Eye Hospital
10	A Blood Donation Camp 12 Jan 2017	Institute Campus	100	SaiBaba Heart Institute
11	Tree Plantation 1 July 2016	Institute Campus	300	Institute
12	HB AND Blood Check-up 23 Aug	Institute Campus	250	Institute

	2014			
<b>Department of Information Technology</b>				
13	MET –Dhyanada (Computer Traning Program)	School Student	400	Self Funded
14	TreePlantation	MET- Campus	--	Subhadra Estate, Nashik
<b>Department Of Mechanical Engineering</b>				
15	Clothes Distribution	Mentally challenged students	100	Mechanical Department
16	Snacks Distribution (Diwali Celebration)	Road side people	500	Mechanical Department
17	Blankets Distribution	Road side people	300	Mechanical Department
18	Food Distribution (Independence Day Celebration)	Mentally Challenged Students	100	Mechanical Department
19	Awareness regarding “Condition of Farmers in India” – by Drama	MET – BKC Students and Staff	1500 +	Mechanical Department
20	Tree Plantation	All MET Students and Staff	5000	SPPU
21	Celebration of International YOGA day.	All MET Students and Staff	5000	MET
22	Ganesh MurtiSanklan	All Citizens	1500	SPPU MET
23	NirmalyaSankalan	All Citizens	-	SPPU MET
24	Computer Donation	School from NakotAalefata	300	
<b>Department of Electrical Engineering</b>				
25	Z. P School Kurungwadi, Tal. Trimbkeshwar, Dist. Nashik	Standard-1 <sup>st</sup> to 8 <sup>th</sup>	213	Willingly Contribution from all the students, Staff of Institution of Engg. and

				revenue generated from technical & nontechnical events during Engineers week
26	Z. P. School Mulegaon, Tal. Trimbkeshwar, Dist. Nashik	Standard-1 <sup>st</sup> to 8 <sup>th</sup>	289	Willingly Contribution from all the students, Staff of Institution of Engg. and revenue generated from technical & nontechnical events during Engineers week
<b>Department of Electronics and Telecommunication</b>				
27	Eye Check Up and Blood Donation (12/10/16)	MET Institute staffs and students	215 Eye check up and 98 Blood Donation	SPPU and Tulsi Eye Hospital and Arpan Blood Bank
28	Ganesh Murti Sanklan & Nirmalya Sanklan (15/09/16)	Nasik crowd	2000+ people	SPPU and MET, Nashik
29	Heart Check Up & Blood Donation (12/01/17)	MET Institute staffs and students	400 members and 104 Blood Donation	SPPU and Saibaba Heart Institute and Arpan Blood Bank
30	Swachhata Abhiyaan (23/01/17)	MET Institute ground	140 students	SPPU and MET, Nashik
31	Women's Day Celebration (11/03/17)	MET Institute Ladies faculties and girls students	350 girls students	SPPU and MET, Nashik
32	Republic Day and Independence Day Celebration (15/08/16 & 26/01/17)	MET , Nasik	500+ students and staffs	MET, Nashik

33	Health and Hygiene Awareness (07/02/17-10/02/17)	Village ladies of Gaulane	400+ Ladies	SPPU and MET, Nashik
<b>Department of Computer Engineering</b>				
34	ZP School Malegaon	1 <sup>st</sup> to 7 <sup>th</sup> Std. Students	289	Willingly contribution from student & faculty & revenue generation from technical & non-technical activities
35	Golden TechBridge Programme	9 th August, 2014 for destitute students.	50	session basics of Computer were covered with demonstration & NEC facilities and Career guidance training on
<b>Department of MCA</b>				
36	Eco Friendly Ganpati Visarjan	Nashik Peoples	300	Self Funding
37	Van Mahotsav	Campus	-	Self Funding
38	Computer Awareness program for senior citizens.	senior citizens Nashik	10	Self Funding
39	Raksha-Bandhan for on duty Police of Kumbh-Mela.	On duty Police of Kumbh-Mela.	100	Self Funding
40	Health Check Up for Staff and students	Staff & students of MET	100	Self Funding
41	International Yoga Day	Staff & Students	50	Self Funding

**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 Institute 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 Institute notice board, Academic calendar, circulars, and web notifications and also by word of mouth.

**Conduction of NSS training camps:** NSS training camps are conducted for students. This imbues 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 Institute to ensure social justice and empower students from under-privileged and vulnerable sections of society?**

As a part of NSS activities, Institute had arranged NSS Camps to visit Gaulane Village, Tal: Nashik in the year 2016-17 and 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.**

Active participation of Future engineers is important as they are the backbone of the society. They should be aware of the strength and weaknesses of the society and the reforms required to evolve a better society. The extension activities organized by the institution 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. These programs make them aware of their role in the society, groom their personality and enable them to take part in the Nation building process.

Each engineering department has students associations which conduct various technical and non-technical activities. The Institute conducts various programs through NSS (National Social Service) for the betterment of the society. The extension activities boost the overall confidence of students, inculcate 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:

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

**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 Saibaba Heart Institute and Nashik Blood Bank
- Students from various departments actively participate in cultural Programmes at the inter-collegiate level.

**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.**

- Received 3 consecutive appreciation award for remarkable contribution to Nashik blood bank.
- Received 2 consecutive appreciation award for remarkable contribution to Arpan blood bank

**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/organization collaborations:

- ESDS Software Solutions.
- NPTEL Local Centre.
- IIT Remote Centre.
- Amrita Virtual Lab.
- FOSS tool lab.

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

- Organizing industrial visits for the students accompanied by the faculty

members.

- Guest lectures on various research trends by eminent industry experts.
- Utilization of laboratories by research candidates of other institutions.
- Faculty members are deputed to Universities and Institutes of higher learning for attending faculty development 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 assigned 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 institutions/ industries are as follows.

<b>Sr. No.</b>	<b>Name of the institutions /Industry</b>	<b>Activity</b>	<b>Benefits</b>
1.	IIT Remote Centre	Workshop Conduction	Knowledge sharing from experts.
2.	ESDS Software	Exchange of expertise, sharing of knowledge and industry resources	Infrastructure and resources sharing for projects.
3.	NPTEL Local Centre	Conduction of Online Workshop and certification Exam	Knowledge sharing from experts. Upgradation in relevant subjects.
4.	MANIT, Bhopal	Cluster Centric Business Incubation for Rural Development	Exchange of resources, Conferences, Seminars Workshops etc.
5.	IIT, Chennai	Rural Engineering Technology Club	Conference/ workshops for students to interact with experts

**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.

- NVIDIA has provided state of art hardware devices for high performance computing.
- NDL has provided access to various e-resources.
- Virtual Lab facility provided by Amruta University for performing the various experiments.
- IIT Spoken tutorials beneficial to the students.

**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 Institute during the last four years.**

Eminent personalities of National repute have visited the Institute.

- Hon'ble. K. Sankaranarayanan Governor of Maharashtra State
- Prof. Rajendra Singh, Waterman of India
- Prof. Dr. A. K. Jhunjhunwala, IIT Madras
- Prof. Dr. Appukuttan, Director MANIT Bhopal
- Prof. Dr. Mujumdar, Chairman Symbiosis, Pune
- Prof. Surjit Angra, ex-Director AICTE, NCT Kurukshetra
- Prof. Puneet Tandan, Dean IIT Jabalpur.
- Prof. Ramesh Narang, IFFCO, USA

**Conferences/Workshops organized in the Institute**

- 1) National Conference on "Recent Trends in Mechanical Engineering" (RTME -2013).
- 2) National workshop on "Research Trends in Engineering and MATLAB as a Scientific Tool for Research" (RTEMSTR-2013).
- 3) National Conference on "Innovations and Trends in Computer and Communication Engineering "(ITCCE-2014).
- 4) National Workshop on "Advance Databases" 2015.
- 5) International Conference on "Recent Trends in Mechanical Engineering for Sustainable Growth"(ICRTME -2016).
- 6) National Conference on "Innovations and Trends in Computer and Communication Engineering "(ITCCE-2016).



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

**Civil Department**

<b>Sr No</b>	<b>Name of eminent Person</b>	<b>Orgnization</b>	<b>Date</b>	<b>Remark</b>
1	Dr. Sunil Y. Kute	Prof. of KKWIEER Nashik Chairman BCUD Pune University	20/9/2015	Related to Academics
2	Dwarkanath Zambare	Executive Engineer PWD Government of Maharashtra	20/9/2015	Related to Academics
3	Mr. Anwar Hussain Khan Tadavi	Sub- Divisional Engineer Maharashtra Jivan Pradhikran	20/9/2015	Related to Academics
4	Sameer Alone	CEO, Infini Solutions	07/03/2016	Career Counseling
5	Dr. M. R. Wakchaure	Prof. AVCOE Sangamner	23/09/2016	Related to Academics
6	Mr. Mahesh Gunjal	Director, Parallel HR Solutions Pvt Ltd	23/09/2016	Employability Development & Soft Skills
7	Mr. Sanjiv Shelar	Director	1/10/2016	Technical Expertise

8	Bhishmaraj Bam	Chief Executive, Purushottam Academy	19/01/2017	Career Counseling
9	Sameer Alone	CEO, Infini Solutions	16/03/2017	Career Counseling

**Computer Engineering Department:**

Sr No	Name of Eminent Person	Organization	Date	Remark
1	Dr. D. V. Patil, Professor	GES's RH Sapat Institute of Engineering, Nashik	25/07/2016	Expert lecture on "Data Mining Techniques and Applications"
2	Dr. S. V. Gumaste, Professor,	GES's RH Sapat Institute of Engineering, Nashik	27/07/2016	Expert lecture on "Design and Analysis of Algorithms"
3	Dr. Narendra Shekokar, Professor and Head	D J Sanghavi Institute of Engineering, Vile Parle, Mumbai	12/09/2016	Expert lecture on "Handheld Operating System"
4	Dr. S. K. Shinde, Professor and Head, Dept of Comp Engg,	Lokmanya Tilak Institute of Engineering, Navi Mumbai	12/09/2016	Expert lecture on "Limitations of Computations in Tractable and Intractable Problems"
5	Dr. Uday Wad, Director	Datamatics Ltd, Nashik	17/09/2016	Expert lecture on "Support Vector Machines Based Classification"
6	Dr. R. B. Naik, Professor and Head, Dept. of Comp. Engg.	Marathwada Institute of Technology, Aurangabad	18/09/2016	Expert lecture on "BigData and Hadoop"
7	Dr. Hitendra D. Patil, Principal	SSVPS's Institute of Engineering, Dhule	19/09/2016	Expert lecture on "Security Issues in Pervasive Computing"

8	Dr. S. B. Wankhade, Professor and Head, Dept of Comp Engg.	Rajeev Gandhi Institute of Technology, Varsova, Mumbai	23/09/2016	Expert lecture on “Groups and Rings”
9	Dr. G. K. Patnaik, Professor and Head, Dept of Comp Engg.	Shram Sadhana Bombay Trust’s Institute of Engineering, Bhambori, Jalgaon	27/09/2016	Expert lecture on “Security Tools for Computer Forensic: Kali OS”
10	Dr R. S. Tiwari, Director	Intellidemics, Pvt. , Ltd. , Nashik	28/09/2016	Expert Lecture on “Audit Course: Smart City”

**E&TC Department:**

Sr No	Name of eminent Person	Organization	Date	Remark
1	Dr. M. V Pitke	GMRT, Narayangaon	23/02/17	Microwave Beyond Radar & communication
2	Suresh Kumar	GMRT, Narayangaon	22/02/17	Fiber optic Communication
3	Amar Thakare	Cyber IT Security Services	17/02/17	Cyber crime & Law
4	Mr. Chandrasingh Jadhav	JTI, Pune	10/02/17	PLC & Skada
5	Anirudh Kulkarni	Academica Lab Solution	30/01/17	Antenna Designing & Fabrication
6	Satish Pillai	Koso India Pvt ltd	28/09/16	Advancement & Opportunities in Computer networking
7	Sagar Nikam	ELC Pvt ltd	09/09/16	Aptitude & Logical Reasoning
8	Mahesh Gaware	Dell USA	22/07/16	Career opportunities in abroad
9	Prashant Pitale	Infosys USA	07/01/16	Opportunities in Telecom field

**Department of Information Technology**

Sr. No	Name of eminent Person	Organization	Date
1.	Mr. Pravin Bhise	Logic Bits Systems, Pune	16/7/2013 to 20/07/2013
2.	Mr. Kiran Bhosale	InGenious Solutions, Pune	25/07/2013 to 28/07/2013
3.	Mr. Dinesh Modi	Innovations Systems, Nashik	21/08/2013 to 22/08/2013
4.	Mr. Jaywant Desale	InGenious Solutions, Pune	6/08/2014 to 8/08/2014
5.	Mr. Rushikesh Jadhav	ESDS Pvt. Ltd.	27/08/2014
6.	Prof. Roopali Bora	KKW Collage of Engineering, Nashik	9/01/2015
7.	Mr. Tushar B. Kute	SITRC, Nashik	16/01/2015
8.	Dr. R. S. Tiwari	Director, Inteldemics, Nashik	4/03/2015
9.	Dr. U. S. Bhadade	SSBT COE, Jalgaon	23/02/2016
10.	Mr. Yogesh Kadam Mr. Satish Muthukumar	SS Technovention, Nashik	16/03/2016 to 17/03/2016
11.	Mayur Chandwadkar	InfoTech Website and Software developer	11/8/2016
12.	Prof. Shailesh Hule	PCCOE, Pune	31/8/2017 to 3/9/2017
13.	Mr. Kiran Pawar	K. P. Technobrics	16/2/2017 to 17/2/2017

**Electrical Department:**

Sr. No	Name of eminent Person	Organization	Date	Remark
1	Mr. Patil Amit	Energy Auditor & Owner Manik Solutions Nashik	06/10/2016	Audit Course I for SE Electrical Students

**MCA Department:**

Sr No	Name of eminent Person	Organization	Date	Remark
1	Mr. Swapnil Kulkarni	Kanaka Consultancy	18/07/14	Visitors
2	Dr. S. S. Sane	KKWEER	13/06/16	Academics

3	Dr. D. V. Patil	GHRCOE	26/12/16	Academicians
4	Mr. Vikas Naik	Investigator for Nashik Police	3/3/2017	Visitors
5	Mr. Girish Pagare	Ggraphite india	21/6/201 6	Visitors
6	Dr. S. V. Gumaste	GHRCOE	27/12/20 16	Academicians
7	Mr. Sandip Aher	Eluminous	04/09/20 10	Visitors
8	Mr. Shashank Todwal	UMS Technology Nashik	24/09/14	Visitors
9	Mr. Somnath Thigale	IBM trainer	18/02/20 13	IBM Trainer
10	Dr. Uday Wad	SEED Infotech	28/02/20 13	Visitors
11	Mr. D. B. Yawalkar	Samsonite	26/12/20 16	Visitors
12	Mr. Bhosale	Persistent system	06/02/20 13	Visitors
13	Lilesh Ghule	Mungi Engineers Pvt Ltd	24/02/20 16	Visitors
14	Adv. Sagar Raurkar	Asian School of Cyber law	9/4/2011	Visitors
15	Mr. Nilesh Alone	GHRCOE	15/9/201 4	Academicians
16	Mr. Yaw Kwakye	Glostream Nashik	04/08/20 14	Visitors
17	Prof. Rajesh V Nikam	KKW Pimplegaon	23/09/15	Academicians
18	Mr. Shastra Rashmi Pund	Mahendra & Mahendra	2/11/201 2	Scientists
19	Mr. Paresh Chitnis	Freelancer for Cyber Forensic	5/05/201 5	Visitors
20	Mr. Tanmay Dikshit	Freelancer for Cyber Forensic	5/05/201 5	Visitors

21	Mr. Prasad Pawatekar	GM Softetech Pvt. Ltd. & Services	02/02/20 15	Academicians
22	Mr. Shankar Narayan	DGM HAL Nashik	28/08/20 13	Scientists
23	Mr. Ajay Rajankar	Zensar Pune	10/02/20 15	Visitors
24	Mr. Nilesh jain	JCI Trainer	10/02/20 15	Visitors
25	Mr. Sarvesh Sonawane	Surun Infocore Pvt. Ltd. Pune	23/09/20 10	Visitors
26	Mr. Mohit Sharma	Accenture Mumbai	25/02/20 13	Visitors

**Mechanical Department:**

Sr No	Name of eminent Person	Organization	Date
1	Mr. S. R. Kothekar	NASSCOM Engg. Forum	08/03/2013
2	Mr. A. D. Sheth	GM, Lear Corporation	22/10/2010
3	Mr. Hiranman Aher	Vice Precident, Mahindra & Mahindra	05/03/2011
4	Mr. Purshi Doddanna	Plant Head, Eaton corporation	05/03/2011
5	Mr. Sanjay Chopane	Engg. Manager Eaton	02/01/2010
6	Ms. Hemangi Katare	NECC	16/09/2013
7	Mr. A. W. Lele	BOSH, Nashik	05/03/2011
8	Mrs. Salbir Brar	NECC, Ambad	28/07/2014
9	Satish Dubule	Eaton, Pune	05/03/2011
10	Mr. S. B. Bandekar	NTPS, Eklahare	04/05/2011
11	Dr. Punit Tandan	IITDM, Jabalpur	24/03/2014
12	Mr. Sanket Ambekar	BOSCH, Nashik	05/04/2014
13	Dr. Ramesh Narang	Purdu University	22/07/2011
14	Mr. Rakesh Ranjan	Sr. Manager, Mahindra & Mahindra	07/09/2012
15	Mr. S. B. Nangia	Rushabh Honda, Nashik	22/01/2015
16	Mr. Abhay Wankhede	Rushabh Honda, Nashik	22/01/2015
17	Vijendra Muddebahalkar	Epcos, Nashik	15/09/2012
18	Mr. Shantosh Totre	Jeevanvidya Mission India	17/03/2015
19	Prof. Rajendra S. Pawar	Dr. J. J. Magdum COE, Jaysingpur	09/06/2015

20	Prof. A. M. Naniwadkar	Dr. J. J. Magdum COE, Jaysingpur	09/06/2015
21	Prof. P. R. Patil	Dr. J. J. Magdum COE, Jaysingpur	09/06/2015
22	Mr. Manav Batra	Prigma Edutech Services, Pune	04/09/2015
23	Prof. L. V. Kamble	The M. S. Uni. Of Baroda	21/09/2015
24	Dr. A. G. Thakur	S. R. E. S. COE, Kopergaon	21/12/2015
25	Dr. Carolyn Heising	Professor, IOWA, State University of Science and Technology, Ames	31/07/2010
26	S. Ramalingam	Mackwins Education (p) Ltd.	23/03/2017
27	Dr. Appu Kuttan K. K.	Director, MANIT, Bhopal	15/09/2013
28	Dr. Rajesh Metkar	Govt COE, Amravati	26/03/2016
29	Dr. D. N. Raut	VJTI, Mumbai	31/03/2016
30	Dr. S. P. Shekhavat	SSBT COE, Jalgaon	07/04/2016
31	Dr. Sachin A. Mastud	VJTI, Mumbai	29/09/2016
32	Dr. Santosh Bhosale	MIT, Aurangabad	01/10/2016
33	Dr. Aadesh M. Jinturkar	MIT, Aurangabad	05/10/2016
34	Dr. N. R. Gilke	K. G. Somaiya COE, Mumbai	13/02/2016
35	Dr. R. R. Lekurwale	K. G. Somaiya COE, Mumbai	13/02/2016
36	Dr. R. R. Jaware	Datta Meghe COE, Airoli	27/02/2017
37	Dr. Rahul B. Barjibhe	Sant Gadge Baba COE, Bhusawal	27/02/2017

**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.**

Various MoU and linkages has been actively executed at various departments for upgrading technical and non technical skills of students and faculties

- Zensar Technologies
- Aress Software Solutions

- ESDS
- TIMES
- GateForum
- GMSoftech
- BSNL
- SAP
- Seed Infotech

These collaboration and linkage help students for Industry visits, Expert lecture, Placements, implant training, Event Sponsorship and consultancy. Few agencies also execute National/State level competitive examination which gives analysis of employability assessment for Institute to identify gaps and conduct remedial training programs.

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

- Established linkages/collaborations related to skill development and research activities for students and faculty members in various specializations.
- Signing of MoUs with leading industries.
- Initiatives are taken to explore the establishment of collaborations and its effectiveness.
- 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.



## **CRITERIONIV: INFRASTRUCTURE AND LEARNING RESOURCES**

### **4.1 Physical Facilities**

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

It has been policy of the Institute to follow all the norms subscribed by the regulating bodies viz AICTE, DTE, Savitribai Phule Pune University. Efforts have been made as and when required to upgrade the infrastructure required for effective teaching and learning.

The infrastructure facilities are upgraded as per the requirement of students and faculty members to support academic, research and other development needs.

Efforts made for same are as follows.

- Multimedia enabled Classrooms,
- Well equipped laboratories with Internet facility,
- Effective use of ERP system for e-learning,
- Well equipped library with online access to reputed National & International journals,

#### **4.1.2 Detail the facilities available for**

##### **a) The details of facilities for curricular activities:**

<b>Facilities for curricular activities</b>	<b>Details</b>
Classrooms	30 nos. digitalized classrooms
Laboratories	58 nos. well equipped laboratories for teaching-learning and research work
Library	<ul style="list-style-type: none"> <li>• 836sq. m. library with Digital Library for e-Learning facility.</li> <li>• Wi-Fi-enabled Central library facility, exclusive reading hall facilitating approximately 150 students.</li> </ul>
Computer Center	70 nos. computers with latest configuration with internet access
Seminar Hall	02 nos. state of art Seminar halls equipped with audio-visual aids having 100 plus seating capacity.
Specialized Facilities	<ul style="list-style-type: none"> <li>• Well equipped labs for experimentation facilities to UG/PG students in major/minor project as well as for Research work. These are labs having facilities beyond syllabus.</li> <li>• Institute has smart class rooms with projector and ERP support.</li> <li>• Institute has Amrita Virtual Lab, Spoken Tutorial,</li> </ul>

	FOSS lab, Remote Center under NMEICT, MHRD Project.
Centralized Workshop	400sq. m. Workshop equipped with state of the art machinery and equipments for practical and experimentation purpose.

**b) The details of facilities for co-curricular activities**

<b>Facilities for curricular activities</b>	<b>Details</b>
Gymkhana	<p>“<b>Department of physical education &amp; sports</b>” is established in the Campus to focus on physical fitness of the students. The department is headed by Physical Director along with fitness instructor.</p> <p>Following facilities are available.</p> <p><b>Outdoor Games:</b> Football, Netball, Kho-Kho, Athletics, Cricket.</p> <p><b>Indoor Games:</b> Table Tennis, Snooker, Chess, Carom.</p>
NSS	NSS cell is instrumental in inculcating the social awareness, and environmentally sensitive behavior amongst the students having strength of 150 volunteers.
Counseling and mentoring facility	Full time Professional counselor is made available within the Campus for counseling, mentoring sessions for student teacher interaction.
Health	<p>First Aid facility is available in each department.</p> <ul style="list-style-type: none"> <li>• For medical emergency Institute vehicle is available 24x7 to facilitate timely treatment in hospitals.</li> <li>• Separate doctors room in girl’s hostel to facilitate girl’s students and women staff. Lady doctor do visit every day.</li> <li>• Girl’s common rooms are provided in each building.</li> <li>• General Physician is visiting the Hostel premises as and when required. Physician is also made available if needed.</li> </ul>
Hygiene	<ul style="list-style-type: none"> <li>• RO purifier along with water cooler is available at every floor of Institute.</li> <li>• Adequate number of common rooms, toilet are available.</li> <li>• Housekeeping facility for regular cleanliness and maintenance.</li> <li>• Landscaping, gardening, tree plantation for healthy environment</li> </ul>
Canteen & Mess	Centralized canteen & mess facility with each is available.

Guest Room	10 well furnished Guest rooms are available for parents, examiners and guest.
Allied Facilities	<ul style="list-style-type: none"> <li>• Ramp facility, Lift facility is available for physical challenged people.</li> <li>• Power backup facility is available.</li> <li>• Provisions are made for security and housekeeping services</li> <li>• Sewage facility is available.</li> </ul>

**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).**

Since inception, Institute has grown steadily and slowly and accordingly matching infrastructure is created and developed as per the statutory requirement. The building is eco friendly, wherein maximum utilization of natural light is made. Institute has organized cPGCON under the aegis of SPPU, Pune, wherein 2700 plus PG students have participated and Institute has organized around 30 parallel sessions at a time without any interruption. Institute hold national level conference at every year smoothly.

The Institute is situated in Bhujbal Knowledge city campus having the total area of 32 acres. The total built up area of the building of Engineering Institute is 21499 sq. m.

The investments in the last four years for enhancing the various infrastructure facilities are as follows: Master plan of Institute is attached in Annexure II

Items	CFY 2016-17 (lakhs)	(CFY-1) 2015-16 (lakhs)	(CFY-2) 2014-15 (lakhs)	(CFY-3) 2013-14 (lakhs)
Building	Nil	0. 42	4. 54	24. 77
Furniture	19. 02	62. 99	7. 35	37. 92
Equipment	4. 95	18. 31	31. 55	59. 66
Computers and other Hardware	Nil	25. 76	142. 35	29. 36
Vehicles	Nil	Nil	Nil	Nil
Other	96. 86	22. 95	15. 71	22. 86
Total	120. 83	130. 44	201. 52	174. 60

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

Our entire campus is handicap friendly, Institute infrastructure facilities are made available for students with physical disabilities such as ramps, lifts so that they can attend their classes and laboratory sessions with

comfort. Facility of wheel chair is also 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– Girls: **150 students**      Boys' :**150 students**
- Recreational facilities, yoga center
- Computer facility including access to internet in hostel
- Facilities for medical emergencies
- Internet and Wi-Fi facility in the campus
- Recreational facility-common room with audio-visual equipment.
- Mess facility is also available in the hostel for students.
- Available residential facility for the staff and occupancy: 02 nos.
- Constant supply of safe drinking water with RO facility.
- 24 hours Security

**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?**

- SPPU Insurance of Rs. 50, 000/- for students
- National Insurance of Rs. 1, 00, 000/- for students
- Group Mediclaim Insurance of Rs. 2, 00, 000/- for employees
- Group Family Insurance of Rs. 1, 50, 000/- for employee and their family

A medical checkup is arranged for students taking admission in the Institute. Each department has first-aid kit for preliminary requirements. Besides this in case of emergencies, students are taken to the Dr. Vasant Pawar Hospital which is near to the Institute and hostel premises and equipped with all modern equipments and healthcare facilities. In case of emergency, vehicle is available for 24 hours to deal with the situation.

**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.**

<b>Sr. No.</b>	<b>Common Facilities Available</b>	<b>Status</b>
1	Women's Cell	Available
2	Counseling and Career Guidance Cell	Available
3	Placement Unit	Available
4	Gymnasium	Available
5	Canteen	Available
6	Recreational spaces	Available
7	Anti Ragging Cell	Available

8	Drinking water facility	Available
9	Auditorium	Available
10	IQAC	Available

#### 4.2 Library as a Learning Resource

##### Central Library Committee (Academic Year 2016-17)

Sr. No.	Name of Member's	Teaching Staff	Representative
1	Dr. Vijay P. Wani	Principal	Chairman
2	Dr. Madan U Kharat	Computer Engineering	Prof. I/C Library
3	Dr. Vitthal J Gond	E. & T. C. Engineering	Member
4	Mrs. Namita Kale	Information Technology	Member
5	Mr. Sushil Ingle	Mechanical Engineering	Member
6	Mr. Kishor Chobe	Civil Engineering	Member
7	Miss. Utkarsha Mohite	Electrical Engineering	Member
8	Mr. Pralhad Jadhav	M. C. A. Engineering	Member
9	Mr. Vinod Khairnar	F. E. Coordinator	Member
10	Dr. Sambhaji Patil	Librarian	Secretary

The committee is actively involved in library schemes that are intended to make the library user friendly.

#### 4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

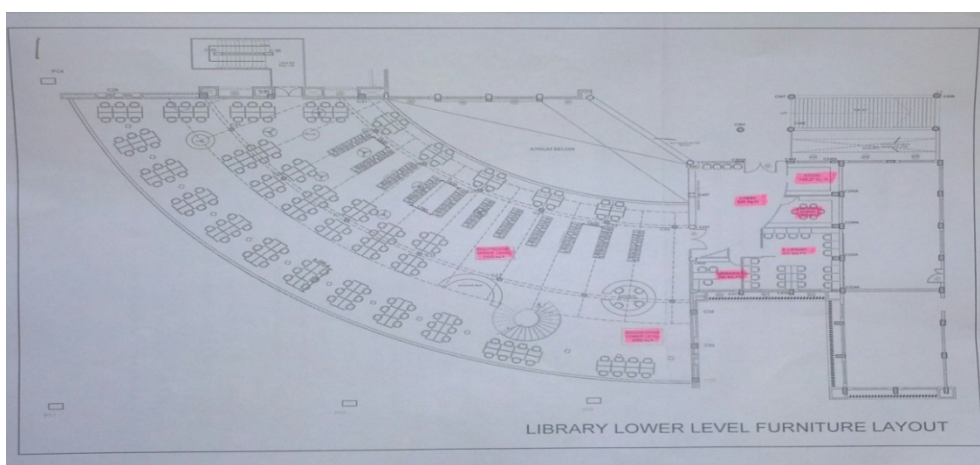
**Yes.** The Institute has constituted an Advisory Committee for the Library as above and taken initiatives as follows:

1. Initiated, planned and executed the library automation;
2. Assess the financial support required by the library based on library standards.
3. Serve as an interpreter of the requirements of the library to the committee and authorities and recommend for funds needed.
4. Provide support to the librarian in taking important decisions having implications for the users (Example: change in working hours, change in rules regarding membership and borrowing privileges etc.).
5. Bring better understanding of the role of the library among the users.
6. For the easy and smooth access of library services, the committee has resolved to develop a separate library website.
7. Make provision for sufficient funds for procurement of documents, employment of staff, purchase of equipment, maintenance etc.
8. To identify and to minimize the theft cases CCTV cameras are installed in the Library.

**4.2.2 Provide details of the following:**

Sr. No.	Details	Comments (if any)
1	Total Area of the Library	989.97 sqm.
2	Total Seating Capacity	155
3	Working Hours (Daily)	Monday – Saturday (2nd and 4th)
	Before Examination Days	9:00am to 6:00pm Saturday : 9:00am to 1:30pm
	During Examination Days	8:30am to 6:00pm
	During Vacations	9:00am to 6:00pm
	1st, 3rd and 5th Saturday, National Holidays & Holidays as per SPPU Calendar	Closed
4	Layout of the Library	Plan Attached

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



Sr. No.	Section	AreaSq. feet	Area Sq. M
01	Total Central Library Area	16081	1493. 96
02	MET-BKC-IOE Central Library Area	10656	989. 97
03	Block 1 – Old Question Paper and other store Room	148	13. 75
04	Block 2 – Processing Room	176	16. 35
05	Block 3 – Digital Library Room	477	44. 31
06	Block 4 – Librarian Cabin	140	13. 01
07	Open Space (Bag counter lobby)	625	58. 06

08	Circulation Counter + Magazine Section + Newspaper Section + Total Reading area + Stacking	9090	844. 48
09	Lounge area for browsing and relaxed reading	Available	
10	IT zone for accessing e-resources	Available	
11	Total PC available	14	
12	Intranet network	<b>2mbps</b> allotted to Library	

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

**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	2016-17		2015-16		2014-15		2013-14	
	Nos.	Total Cost	Nos.	Total Cost	Nos.	Total Cost	Nos.	Total Cost
Text books	550	273304	315	274366	1398	632397	487	558862
Reference Books	03	10000	12	12000	24	20000	17	15000
Journals/ Periodicals	113	316902	122	342548	121	338753	112	254957
e-resources	04	850984	01	188417	02	741377	00	00
British Library Membership Online and hard	02	9600	02	11100	02	11100	02	21100

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

Sr. No.	Details	Comments (if any)
1.	OPAC (online public access catalog)	Yes <ul style="list-style-type: none"> <li>• 1 dedicated PC for OPAC purpose</li> <li>• To check the availability of book in library.</li> <li>• Categorization of book either as reference or</li> </ul>

		general
2.	Electronic Resource Management package for e-journals	<ul style="list-style-type: none"> <li>• IEEE + ASPP - 161 e-journals (Current &amp; back dated issues) are available online.</li> <li>• ASME - 26 e-journals (Current &amp; back dated issues) are available online.</li> <li>• NPTEL Lecture Videos – 120 Videos are available.</li> </ul>
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	IP-Base Service and Online Services
6.	Library Automation	<p>Yes</p> <ul style="list-style-type: none"> <li>• In-house developed Library Software</li> <li>• Web OPAC</li> <li>• Barcode facility</li> <li>• Smart card reader</li> </ul>
7.	Total number of computers for public access	14 Computers (10 for Digital Library, 1 for OPAC and 3 for Staff)
8.	Total number of printers for public access	One
9.	Internet Bandwidth/Speed	<b>2mbps</b> allotted to Library
10	Institutional Repository	<ul style="list-style-type: none"> <li>• Institute has the repository for the various documents at the library premises.</li> <li>• Library has Planned to start DSpace. DSpace is the Best option for communication to library to their user via digital source. DSpace is Best and free software for Institutional Repositories.</li> </ul>
11	Content management systems for e-learning	No
12	Participation in Resource sharing networks/consortia (like Inflibnet)	No



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

Average number of Walk-ins	100 Per/Day
Average Number of Books Issued/Returned	60 Per/Day
Ratio of Library books to Students Enrolled	$30136/2059 = 14.63$
Average number of Books added during last three years	$30136/11 = 2740$
Average number of logins to OPAC	50 per working day
Average number of logins to e-resources	30 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	Nil
Details of —Weeding Out books and other material.	Yes
	Books – 146
	Magazines – Yearly
	Newspaper – Half Yearly

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

Services	Comments (if any)
Reference	<ul style="list-style-type: none"> <li>Department wise arrangement of reference books in cupboards.</li> <li>Staff or Students can issue one reference book for a day or they may refer to the book in the library</li> <li>No issuing of costly reference books, usage as read only facility</li> </ul>
Reprography	Canon 2525, Model No. imageRunner2525, Serial No. FRZ31805
ILL (Inter Library Loan Service)	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)
	Notice Boards are displayed at the entrance gate at the library
Download	Yes
Printing	Yes
Reading List/Bibliography compilation	Available (OPAC)

In-house/remote access to e-resources	IP-Base Service and Online Services
User Orientation and awareness	Yes
Assistance in searching Databases	Assistance provided by library staff to faculty and / or student to search database and books.
INFLIBNET/IUC facilities	No

**4.2.7 Enumerate the support provided by Library staff to the students and teachers of the Institute.**

The facilities in the library are as follows.

1. Internet facility.
2. Provide ILL support.
3. Property Corner (readers' belongings)
4. Maintaining a peaceful and academic environment
5. Support in e-resources searching.
6. The library provides extended hours of reading room service during and before the examination.
7. Availability of old examination University question papers.
8. The library staff co-operates the library users for searching the required sources of information.
9. Open access facility is available for the all Students.
10. Tie-up with British council library, Pune, Providing books, Magazines and CD/DVD's to all USER's.
11. Book Bank Facility for SC/ST Students
12. Institutional Book bank Facility for all students.
13. Collection of General Reading Books

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

Library provides special facilities to the physically challenged persons such as they do not need to stay in queue for books. They are offered direct access to the circulation counter.

1. The library staff takes care of the physically challenged persons when they visit in library.
2. Library staff assists them at personal level for searching the required sources of information.

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

Yes, the library gets feedback from its users. It contains all essential information regarding the services and functioning of the library. The formal feedback form includes facilities, services, ambience, suggestions and grievances. All the grievances and suggestions are critically analyzed to address them. LAC and the authorities are sorting the issues to facilitate the services.

### **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): 652 nos.
- Computer-student ratio: 3. 2
- Stand alone facility: Internet Broadband connection with dedicated leased line
- LAN facility: Available to all computers
- Wifi facility: Available
- Licensed software: MATLAB, Proteus, Red Hat, Windows Server Server 2003, Windows 7 OS, Windows Server CAL 2003, WinPro7 SNGL Upgrade OLP NL Acdmc
- Number of nodes/ computers with Internet facility: all 722 nos (Student + Staff).
- Any other: Online UPS backup to computer systems,

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

Computers Available for Students in Campus: 652 nos.

Staff: 70 nos.

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

The Institute has currently state-of-art Wi-Fi access points to provide the Wi-Fi internet access through Wi-Fi zones. The Institute has planned to extend this service to the entire campus.

The Institute has installed the ERP (Enterprise Resource Planning) for the effective management and smooth functioning of the processes. ERP system is developed and maintained by the staff members of the Institute.

Institute has separate Systems & IT support departments which is mainly concerned with the installation, maintenance of IT Infrastructure, and network management through technical staff. The department is headed by System Administrator. The basic maintenance and repair of Computers and peripherals, Local Area Network (LANs), Optical Fiber Ring Network, Network Switches, Wi-Fi network installed at various Laboratories and locations is properly maintained and monitored. A Server and Switching Room is equipped by air condition facility.

Software's are also upgraded and acquired as and when required due to changes in syllabus as per SPPU.

**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)**

<b>Items</b>	<b>CFY 2016-17 (lakhs)</b>	<b>(CFY-1) 2015-16 (lakhs)</b>	<b>(CFY-2) 2014-15 (lakhs)</b>	<b>(CFY-3) 2013-14 (lakhs)</b>
Building	Nil	0. 43	5	24
Furniture	20	63	6	40
Equipment	7	14. 54	34	50
Computers and other Hardware	30	44	113	30
Vehicles	Nil	Nil	Nil	Nil
Other	80	21. 87	15	25
<b>Total</b>	<b>137</b>	<b>143. 84</b>	<b>173</b>	<b>169</b>

**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?**

- Multimedia enabled classrooms for instructional methods;
- Teaching staff has loaded their notes, assignments in ERP system, students have access to these material;
- Question banks are loaded on the website, students can have practice over it;
- Use of online learning through membership of Journals.
- Institute is a authorized Remote Centre for conducting STTPs and Workshops under NMEICT MHRD for staff members through the mode of virtual classroom;
- Institute has Nodal Center of Amrita Vidyapeeth, wherein students have access to laboratories for hands on experiments;
- Institute has NPETL Nodal Center

**4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching -learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) By the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.**

Institute has ERP system which can be used by students for accessing notes and other study material provided by faculty members.

**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?**

Various workshops and STTPs are organized by the Institute which is conducted by IITs through video conferencing for staff members. National Digital library, plagiarism software like turnitin, Amrita University virtual lab (A-View) classroom.

#### 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)?**

Items	CFY 2016-17 (lakhs)	(CFY-1) 2015-16 (lakhs)	(CFY-2) 2014-15 (lakhs)	(CFY-3) 2013-14 (lakhs)
Building	33.49	29.67	216.35	22.49
Furniture	5.41	6.65	4.81	8.23
Equipment	0.66	0.69	0.36	0.15
Computers and other Hardware	0.37	0.10	0.51	0.63
Vehicles	3.74	1.91	1.21	1.17
Other	78.94	71.60	58.23	25.75
Total	122.62	110.63	281.47	58.43

Items	CFY 2016-17 Allocated Budget (lakhs)	(CFY-1) 2015-16 Allocated Budget (lakhs)	(CFY-2) 2014-15 Allocated Budget (lakhs)	(CFY-3) 2013-14 Allocated Budget (lakhs)
Building	35	30	25	24
Furniture	6	7	5	9
Equipment	1	1	0.5	0.5
Computers and other Hardware	0.5	0.5	1	1
Vehicles	4	2	2	1.5
Other	80	70	50	30
Total	126.5	110.5	83.5	66

**4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the Institute?**

- Institute has separate Maintenance Cell, who looks after and takes care of maintenance and operation of Civil and Electrical work;

- Institute has separate vendor for housekeeping, horticulture and security purpose;
- Institute has separate Annual Maintenance Contract for Electrical / Electronics / Civil installations;

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

Institute has Annual Maintenance Contract for Power Plant System;

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

- AC supply 250KVA Diesel generator backup
- Every computer laboratory is having online UPS facility in the Institute.
- 24/7 supply of drinking water through Municipal Corporation connection as well as Bore well.

## **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 on website the updated information on regular basis for new coming students also the every enrolled students having username and password of ERP which helps them getting the detail information. Dataavailable online on Institute website.

The website gives details of the Institute profile. Starting from a brief history of the Institution, it consists of Vision and Mission of Institute, 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 on the website. 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 on the website.

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

Yes, The Institute is keen in implementing all the government schemes for the larger benefits of the students

Year	Total No of Students	Freeship & Scholarship	Percentage of students
2013-14	2156	1105	51.25
2014-15	2291	1238	54.03
2015-16	2530	1478	58.41
2016-17	2090	1364	65.26

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

**Details of Scholarships / free ships**

2014-15										
	SC		ST		NT		OBC		SBC	
	No. of Students	%	No. of Students	%	No. of Students	%	No. of Students	%	No. of Students	%
Scholarship	106	4.63	30	1.32	135	5.89	407	17.76	15	0.65
Free ship	123	5.36	37	1.62	71	3.09	297	12.96	17	0.74

2015-16										
	SC		ST		NT		OBC		SBC	
	No. of Students	%	No. of Students	%	No. of Students	%	No. of Students	%	No. of Students	%
Scholarship	127	5.01	43	1.69	179	7.07	523	20.67	21	0.83
Free ship	144	5.69	40	1.58	68	2.68	316	12.49	17	0.67



2016-17										
	SC		ST		NT		OBC		SBC	
	No. of Students	%	No. of Students	%	No. of Students	%	No. of Students	%	No. of Students	%
Scholarship	133	6.36	39	1.86	157	7.51	511	24.44	16	0.76
Free ship	97	4.64	35	1.67	74	3.54	284	13.58	18	0.86

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

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 Institute in cooperation with the University enables the socially and economically disadvantaged students to earn small amounts of money by working in various Institute departments.
- **Students with physical disabilities:** Institute 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. Institute 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 Institutes. All necessary support and services are provided by the Institute like financial assistance, Wi-Fi facility and library facility. Faculty members are deputed to mentor and guide the students.

- **Medical assistance to students: health centre, health insurance etc.** :Institute Hostel has a Medical officer for medical emergency. Complete medical check-up is provided to all students of Institute when they are admitted to the Institute. General medicine and a first aid box are available with every department. Institute is situated adjoining to medical Institute hence those facilities are availed.
- **Organizing coaching classes for competitive exams** :To prepare students for competing in the GATE examinations Institute provides coaching to the interested students. Institute also provides infrastructural facilities to organize coaching classes for the same. Study material related to GATE and other competitive examinations is available in the Institute central library.
- **Skill development (spoken English, computer literacy, etc. ,)** : The Institute identifies students with poor communication skills and provides coaching to improve their skills. Institute conducts various seminars, workshops and guest lectures for the students by experts to enhance their skills. Institute 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 counselling and intense coaching. As and when required remedial classes, as well as concept clearing classes are arranged for such students.
- **Exposures of students to other institution of higher learning/ corporate/business house etc.** :Various workshops, seminars and guest lectures are arranged by the Institute to guide the students for their career, 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 Institute also arranges industrial visits to leading corporate houses for industrial exposure. The students are motivated to participate and present research papers in various national and international seminars, conferences and workshops.

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

- The efforts made by the Institution to facilitate Entrepreneurial skills among the students:
  1. Work shop on how to become an Entrepreneur on Friday, 27<sup>th</sup> July 2012.  
Total no of students participated : 188
  2. Seminar on IP rights & Patents by Mr .Sahastrarasmii Pund in 2013  
Total no of students participated : 120 (From All Institutes in BKC)
  3. Seminar on IP rights & Patents by Mrs. Mrudula Bele in 2015  
Total no of students participated: 100 (From All Institutes in BKC)

4. Workshop on Entrepreneurship Development by ecell IIT Mumbai in Oct 2016

Total no of students participated: 80

5. Industrial visit to Sahyadri Agro & Processing Pvt. Ltd. On 26<sup>th</sup> December 2016

Total no of students participated: 50

6. Guest Lecture of Mrs. Sitabai Mohite on “Entrepreneurship & Marketing” in January 2017.

Total no of students participated: 50

**Expected outcomes:**

- 1) Student emerging as entrepreneurs.
- 2) Understanding and implementation of acquired practical knowledge.
- 3) Students and faculty members can be encouraged to apply for Patents, Copyrights and trademarks

• **Impact of the efforts for Students who turned to Entrepreneurs:**

Sr. No.	Name of the Entrepreneur	Name of the firm/ company	Nature of Firm/ company	Registration No.	Qualification	Year of Establishment	Website URL/ Contact No.	Batch Year
1	Mr. Pratik Nikam – a student of dept. of Comp. Engg. Batch 2008 and vibrant blogger	Tech-Insect	A Leading IT company of software and web development		BE (Computer Engg.) & M. S. (App. at Binghamton University)	2010	<a href="http://www.techinsect.com/">www.TechInsect.com</a> ( <a href="http://www.techinsect.com/">http://www.techinsect.com/</a> )	2011-12
2	Mr. Mahesh Jadhav	Zenconix	Software Development Web Development & Graphic and Logo Development		BE (Computer Engineering)	2012		2010-11
3	Mr. Shubham Chinchole – current student of Dept. of Comp. Engg.	Loyal Peak Technologies	A Leading IT Firm of web and android development at Nashik	In Process	TE (Computer Engg.) pursuing	Oct 2013	<a href="http://www.loyalpeak.com">www.loyalpeak.com</a> ( <a href="http://www.loyalpeak.com/">http://www.loyalpeak.com/</a> )	2016-17
4	Miss Kashaf Sheikh	DET Solutions	An event management and software solutions company at	02/508/2015	BE (Computer Engg.) pursuing	Dec-14	<a href="http://www.detsolutions.in">www.detsolutions.in</a> ( <a href="http://www.detsolutions.in/">http://www.detsolutions.in/</a> )	2015-16

			Nashik					
5	Mr. Roshan Deshmukh	3 Colours	An Event management Company at Nashik	In Process	BE (Computer Engg.)	2016	7775044321	2014-15
6	Mr. Niraj Rekhawar	Webcrazystudio	Software Development and E-Commerce Portal Provider Company Nashik	part-2199e312094	BE (Computer Engg.)	Aug-14	<a href="http://www.webcrazystudio.com">www.webcrazystudio.com</a> ( <a href="http://www.webcrazystudio.com/">http://www.webcrazystudio.com/</a> )	2014-15
7	Mr. Ankit Agrawal	Nakshtra Technologies	PCB and LED Manufacturing Company at Nashik ISO 9001-2008		BE (Electronics Engg.)	August-2012	9021220633	2011-12
8	Mr. Chaitanya Mishra	The Inventum Horizon	R&D Firm at Nashik		BE(Electronics Engineering)	2014	9028125976	2015-16
9	Mr. Chaitanya Patil	Pixel Technologies	Service Provider of Security System and Software Development Company at Nashik	Part - 2 358 2015	BE (Electronics Engg.)	2014	pixeltechnologies@yahoo.com	2015-16
10	Mr. Prasad Kulkarni	Pixel Technologies	Service Provider of Security System and Software Development Company at Nashik	Part - 2 358 2015	BE (Electronics Engg.)	2014	9096221000	2016-17 Pursuing
11	Mr. Akshay	Pixel Technolo	Service Provider of	Part - 2 358 20	BE (Electronics	2014	9096221000	2016-17

	Patil	gies	Security System and Software Development Company at Nashik	15	Engg.)			Pursuing
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**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 support for sport activity, upcoming sport stadium, Well equipped Gymnasium etc
- Sports uniform and materials:Material provided to the student participating in district, regional, and state level competition
- Institute has a stress relief facility of music therapy at MET world of Music (MWM)
- Amphitheater/ Open air theater for conduction of cultural and other activity.
- Seminar hall and well equipped laboratory for conduction of quiz, debate competition

The institution is promoting students for participating in various extracurricular activities by ensuring consistent encouragement and motivation. Every department has its own student forum for conduction and effectiveness of these activities. The necessary facilities are provided and adequate funds are allotted. The sports and cultural committees arrange and coordinate the extracurricular activities. The Institute has 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 research work. Students are allowed to have access to hostel library for the preparation of competitive examinations. Students are helped by the teachers in matters of study materials and counselling for the 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. Institute plans and conduct expert lecture and seminar for preparation and motivation for such examinations.

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

The Institute provides regular counselling services to the students to address the issues related to their academic, personal as well as career awareness. Separate counselling cell is available for different types counselling needed to the students.

- **Academic & career counselling:**

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 counselled by class in-charge and Head of the department on academic and career prospects.

- **Personal & psycho-social counselling:**

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 counselled 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). Yes.**

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 Institute.

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, 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 Institute. 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 Job fairs since last two years and each time about 12-15 companies participated and approximately 37nos. of students are benefited from the Job fairs.

T & P Cell arranged many pool campuses as the Institute has infrastructure for conduction of —On Line test for around 100 plus students at a time. Companies that participated in the Job Fairs and pool campus.

**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 ground floor of Institute. 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. V. P. Wani	Principal
2	Prof. Rajesh Rahpade	HOD(ETX)
3	Dr. Madan U. Kharat	HOD (COMPUTER)
4	Prof. Mrs. N. R. Kale	HOD(IT)
5	Prof. Vinod Khairnar	FE(Coordinator)
6	Mr. Suhas L. Khairnar	Registrar

Besides this, the Institute has various 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?**

Institute 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. Continuous vigilance of Institute authority and strict punishment provisions to prevent sexual harassment of students / staff.

**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 Institute has an Anti-Ragging Committee, Anti Ragging Squad as well as other Student Counselling Committees as provisioned in UGC/AICTE

regulation 2009. Constitution of the Committee and the progress report sent to the University.

**Anti-ragging Committee:**

Sr. No.	Name	Designation	Cell No.
1	Dr. V. P. Wani	Chairman	9373670533
2	Mr. Dilip Khaire	Civil Society Representative	9822788233
3	By Designation: Police Inspector	Police Administration Representative	
4	Mr. Nitin Raka	Local Media Representative	9822118338
5	Ms. Rekha Nadgowda	NGO Representative	
6	Prof. Rajesh Rephade	Faculty Representative	9822202099
7	SadhvaniJitendra	Parent Representative	9881268904
8	SadhvaniJitendra	Students Representative (Fresher's)	7350952544
9	Rohan Saraf	Student Representative (senior's)	7767934940
10	Mr. S. L. Khairnar	Non Teaching Representative	9370245244
11	Mr. Bhupendra Kumar Bali	Boys Hostel Warden	9370245237
12	Ms. Pratiksha Raul	Girls Hostel Warden	9372341038

**Anti-ragging squad:**

Sr. No.	Name	Department	Internal Ext. No.	Cell No.
1	Prof. Vinod Khairnar	F. E.	959	9326666608
2	Prof. Rajendra Dhake	F. E.	959	9175495754
3	Prof. Kishor Bhagat	E & TC	886	8975092381
4	Prof. Raghvendra Barshikar	Mechanical	933	9623425810
5	Prof. Ms. Kirti Patil	IT	817	9579428424
6	Prof. Shailendra Vidhate	Computer	894	9372938921
7	Prof Amit ufade	Electronics	886	7620874109
8	Prof. Ms. jaya Shweta	MCA	901	8087944146



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

- **Insurance:**

All students of the Institute are covered under the insurance scheme provided by the Institute and /or university.

- **MET scholarship for poor and needy students**

- **Bus facility to the students**

- **Earn and learn scheme**

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

- **Bank service:**

The space and facilities are provided to HDFC Bank (ATM) in premises, Student and faculties are utilizing the facilities.

- **Health services:**

A health centre in the institution takes care of the basic health problems of the students. The Institute has made arrangements of a physician everyday in the Institute. The Institute has also having the transportation facility to reach to the hospital in case of any emergency.

The blood donation camp is organized under NSS activity. Also the eye check up haemoglobin checkups, and various other health camps are organized for students as well as staffs.

**5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development? Yes**

Institute has formed the Alumni Association and registration is in process. One alumni meet is held successfully and got a very good response from the former students. Some of the passout students are called for the expert lectures as well as to conduct the workshops and through this the alumina students interacts with current students.

**5.2 Student Progression**

Sr. No.	Academic Year	Total students for higher studies	Total Students	Percentage of students for higher studies
1	2015-16	28	700	4
2	2014-15	21	607	3.46
3	2013-14	21	514	4.09

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

Student progression(%)		2013-14	2014-15	2015-16
UG to PG		4.09	3.46	4
PG to M. Phil.		NIL	NIL	NIL
PG to Ph. D.		NIL	NIL	NIL
Employed	Campus selection	24.80	25.21	21.32
	Other than campus Recruitment	19.74	28.60	17.57
Entrepreneurship/Self-employment		0.63	3.18	2.54

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 Institutes of the affiliating university within the city/district.

Sr. No.	Year	Branch	No. of Students appeared	Passed Class	Ist class with distinction	Ist Class	IInd Class	% of Pass
1.	2012-2013	Comp.	64	00	21	35	04	93.75
		E&TC	48	00	18	24	00	87.50
		Mech.	53	00	20	25	03	90.56
		IT	61	00	19	24	12	90.16
		Civil	--	--	--	--	--	--
		Electrical	--	--	--	--	--	--
		MCA	57	00	18	28	03	85.96
		M. E.23		00	00	02	09	48.00
		ME MECH	--	--	--	--	--	--
2.	2013-2014	Comp.	62	00	16	33	06	88.71
		E&TC	87	00	23	45	12	91.95
		Mech.	121	00	26	50	17	76.85
		IT	61	00	30	31	0	100
		Civil	--	--	--	--	--	--
		Electrical	--	--	--	--	--	--

		MCA	51	00	17	24	08	96.08
		M. E.	22	00	11	09	00	90.91
		ME MECH	--	--	--	--	--	--
3.	2014-2015	Comp.	66	00	13	41	07	92.42
		E&TC	75	00	29	34	05	90.67
		Mech.	127	00	39	60	11	86.61
		IT	65	00	12	42	11	100
		Civil	--	--	--	--	--	--
		Electrical	--	--	--	--	--	--
		MCA	141	00	51	59	19	91.5
		M. E.	24	00	15	08	01	95.83
		ME MECH	12	00	03	09	00	100
4	2015-16	Comp.	84	00	42	32	07	96.43
		E&TC	78	00	39	17	07	80.77
		Mech.	176	00	57	60	06	69.88
		IT	88	00	44	37	05	97.33
		Civil	66	00	16	25	11	78.79
		Electrical	69	00	50	11	00	88.40
		MCA	126	01	37	59	27	98.4
		M. E.	17	00	08	06	00	82.35
		ME MECH	17	00	06	11	00	100

### 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 pre final and final year students. The personality and skill development programmes are arranged to prepare students for competition and for value addition to their previous knowledge. Institute placement cell is taking efforts employability enhancement of the student. 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, remedial as well as concept clearing classes.

### 5.3 Student Participation and Activities

The Cultural activities, games and sports are integral part of education. The Institute provides sufficient time and facilities for cultural, sports and

gymnasium. The annual cultural and sports meet is held every year as the part of —MET UTSAV. The different cultural, sports and extra-curricular activities are as follows:

- **Cultural:**

Every year Institute organize cultural week MET UTSAV and execute various events like annual social gathering, cultural and sports events.

<b>Sr.</b>	<b>Year</b>	<b>Event</b>	<b>Participation</b>
1.	2014-15	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
2.	2015-16	Singing, Music, Dance Drama and Fashion show	SE, TE, BE and ME All branches
		Traditional day celebrations	
		Drawing, Graffiti and Art Gallery	
3.	2016-17	Rangoli Competition, Art Gallery	
		Treasure Hunt Competition	37 Students from 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
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### NSS

Activity	Duration	No. of students	Participated
Tree Plantation	One week	150	5000
Celebration of International YOGA day.	One day	150	5000
Blood Donation camp	One day	50	100
Eye check up camp	One day	70	400
Heart check up camp	One day	50	350
Ganesh MurtiSanklan	One day	100	1500
NirmalyaSankalan	One day	100	Nil
Ladies Health Check up	One day	50	100
Sports Equipment Donation	One day	75	250
Computer Donation	One day	25	300

### Sports:

The Institute encourages the students to participate in various sports such as Chess, Badminton, Carom, Football, Cricket, and Table-tennis.

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	Description of the facility
1.	Badminton	6. 10 x 13. 10 m size two courts
2.	Carom	4 carom boards
3.	Chess	4 chess board
4.	Cricket	circle radius ground with matpitch
5.	Table-Tennis	2 Tables
6.	Foot ball	60 x 120 m one court

**5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.**

**2016-17**

Sr. No.	Students Name	Game	Branch	Inter Institute	Inter Group	Inter University
1.	Abhilash Chandrasekharan	Table Tannis	BE Comp.	Yes	Yes	--
2.	Shah Rushabh	Table Tannis	BE Comp.	Yes	Stand by	--
3.	Saad Ahamed	Table Tannis	SE Comp.	Yes	--	--
4.	Sawle Chaitanya	Table Tannis	SEIT	Yes	--	--
5.	Dharam Bhaskar	Cycling	TE E&TC	Yes	--	--
6.	Sawle Chaitanya	Cross Cuntry	SEIT	Yes	--	--
7.	Patel Dhaval	Cross Cuntry	SE Comp.	Yes	--	--
8.	Sharma Sachinkumar	Cross Cuntry	SE Comp.	Yes	--	--
9.	Sonar shivam	Chess	BE Mech.	Yes	--	--
10.	Rajput krushna	chess	BE Mech.	Yes	--	--
11.	Gaikwad Sahil	chess	BE Mech.	Yes	--	--
12.	Malpani Sawrabh	chess	BE Civil	Yes	--	--
13.	Deshmukh Ruchika	chess	TE E&TC	Yes	--	--
14.	Bharti Jadhav	Foot ball	FE COM.	Yes	Yes	Yes
15.	<b>Fargade Harshad</b>	Cricket	BE Mech.	Yes	--	--
16.	<b>Bohara Prakash</b>	Cricket	TE Mech.	Yes	--	--
17.	<b>Kawade Rohit</b>	Cricket	BE Mech.	Yes	--	--
18.	<b>Bagal Kaustubh</b>	Cricket	TE Mech.	Yes	--	--
19.	<b>Pardeshi Rohit</b>	Cricket	BE Civil	Yes	--	--
20.	<b>Kashmire Manish</b>	Cricket	BE Civil	Yes	--	--
21.	<b>Mahale Giridhar</b>	Cricket	MCA Fist Y.	Yes	--	--
22.	<b>Jha Munnakumar</b>	Cricket	TE Mech.	Yes	--	--
23.	<b>Chopra Aman</b>	Cricket	TE Civil	Yes	--	--
24.	<b>Dixit Rahul</b>	Cricket	BE COM.	Yes	--	--

25.	<b>Sali Harshal</b>	Cricket	BE Civil	Yes	--	--
26.	<b>Khapre Ajinkya</b>	Cricket	Be COM.	Yes	--	--
27.	<b>Jadhav Rohit</b>	Cricket	BE Mech.	Yes	--	--
28.	<b>Chikhle Pratik</b>	Cricket	TE Civil	Yes	--	--
29.	<b>Shah ebrarahmed</b>	Cricket	TE Mech.	Yes	--	--
30.	<b>Bhole Shrikant</b>	Cricket	SEE & TC	Yes	--	--
31.	<b>Kashmire Manish</b>	Handball	BE Civil	Yes	Yes	
32.	<b>Maid Amit</b>	Mallakham b	SE Mech.	Yes	Yes	Yes
33.	<b>Shinde Ruchita</b>	Cricket	BE Electronics	Yes	Yes	--
34.	<b>Girase Yogendrashing</b>	Atheletics	SE Mech.	Yes	--	--
35.	<b>Patil Gavrav</b>	Atheletics	SE Mech.	Yes	--	--
36.	<b>Dalvi Durgesh</b>	Atheletics	FE Mech.	Yes	--	--

**2016-17**

Sr. no.	Students Name	Game	Branch	Inter Institute E-2 Zone	Stat Level
1.	<b>Sanket katare</b>	<b>Basket Ball</b>	<b>TYCE</b>	<b>Yes</b>	<b>--</b>
2.	<b>Shubham Ghuge</b>	<b>Basket Ball</b>	<b>TYCE</b>	<b>Yes</b>	<b>--</b>
3.	<b>Satwik Wani</b>	<b>Basket Ball</b>	<b>SYCE</b>	<b>Yes</b>	<b>--</b>
4.	<b>Manav Joshi</b>	<b>Basket Ball</b>	<b>FYME</b>	<b>Yes</b>	<b>--</b>
5.	<b>Pravin Gaikawad</b>	<b>Basket Ball</b>	<b>TYME</b>	<b>Yes</b>	<b>--</b>
6.	<b>Vijay Nikam</b>	<b>Basket Ball</b>	<b>TYCO</b>	<b>Yes</b>	<b>--</b>
7.	<b>Ajay Nikam</b>	<b>Basket Ball</b>	<b>SYME</b>	<b>Yes</b>	<b>--</b>
8.	<b>Shubham Gowande</b>	<b>Basket Ball</b>	<b>TYCE( II)</b>	<b>Yes</b>	<b>--</b>
9.	<b>Vaibhav Shinde</b>	<b>Basket Ball</b>	<b>FYME( II)</b>	<b>Yes</b>	<b>--</b>
10.	<b>Akash Ghuge</b>	<b>Basket Ball</b>	<b>FYME( II)</b>	<b>Yes</b>	<b>--</b>

11.	Usama Khan	Carrom	TYME	Yes	Yes
12.	Dhavange Pratik	Carrom	SYME	Yes	Yes
13.	Rohit Palve	Carrom	FYCE	Yes	Yes
14.	Sachin Shirsath	Carrom	FYEE	Yes	Yes
15.	Wagh Sahebrao	Chess	TYME	Yes	--
16.	Vedant jaju	Chess	FYCO	Yes	--
17.	Ahire Chetan	Chess	FYEE	Yes	--
18.	Thorat Jayesh	Chess	FYCC	Yes	--
19.	Yash Wagh	Kabaddi	FYME(II)	Yes	--
20.	Nazaf Shaikh	Kabaddi	FYME	Yes	--
21.	Swapnil Sawkar	Kabaddi	TYCE	Yes	--
22.	Ajay Nikam	Kabaddi	SYME(II)	Yes	--
23.	Ravi Thakre	Kabaddi	SYEE(I I)	Yes	--
24.	Tejas Chavdhari	Kabaddi	SYEE(I I)	Yes	--
25.	Sanket Jamdade	Kabaddi	SYEE(I I)	Yes	--
26.	Rahul Nenade	Kabaddi	TYCE	Yes	--
27.	Tanmay Pathak	Cricket	TYME(II)	Yes	--
28.	Nayan Chhabhaiya	Cricket	TYME(II)	Yes	--
29.	Avinash Bhambre	Cricket	SYCE	Yes	--
30.	Harshal patil	Cricket	TYCE(II)	Yes	--
31.	Pratik Borade	Cricket	SYCE(I I)	Yes	--
32.	Somesh Bhor	Cricket	FYME	Yes	--
33.	Sanchit yeshwante	Cricket	SYME	Yes	--
34.	Subodh Satpute	Cricket	TYME	Yes	--
35.	Saurav pote	Cricket	SYME(II)	Yes	--
36.	Sharway Gawli	Cricket	FYME	Yes	--
37.	Atharv Kulkarni	Cricket	TYME	Yes	--
38.	Jay Vaisnav	Cricket	SYCE	Yes	--
39.	Atul Gavle	Cricket	TYME	Yes	--
40.	Darshan Mahale	Foot Ball	SYME	Yes	--
41.	Gitesh prate	Foot Ball	FYME	Yes	--
41.	Rahul Cavhan	Foot Ball	FYME	Yes	--
42.	Appu mahale	Foot Ball	TYME	Yes	--



43.	Anket Kate	Foot Ball	FYME	Yes	--
44.	Rushi Pote	Foot Ball	TYCE	Yes	--
45.	Saurav Dharanrav	Foot Ball	TYME	Yes	--
46.	Anish Ahire	Foot Ball	SYIF	Yes	--
47.	Sahil Tambet	Foot Ball	TYME	Yes	--
48.	Jay Vaishnav	Foot Ball	SYCE	Yes	--
49.	Rohit maida	Foot Ball	SYME	Yes	--
50.	Shubham Murkute	Foot Ball	SYCE	Yes	--
51.	Chetan Girase	Foot Ball	TYEE	Yes	--
52.	Amit Pure	Foot Ball	SYEE	Yes	--
53.	Sahil Bhalerao	Foot Ball	SYME	Yes	--
54.	Tejas sangle	Athletic	TYME	YES	--
55.	Sanket katare	Basket Ball	TYCE	Yes	Yes

**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.**

**2013-14**

Sr. no.	Game	Inter Institute	Inter group	Univercity	All india
1.	Foot ball (engg.)	16 students	-	-	-
2.	Cricket (engg.) 3 roundqualified	16 students	-	-	-
3.	Basket ball (engg.)	10 students	-	-	-
4.	Rope malkhamb (engg.)	01 students girls	-	-	-
5.	Table tannis (engg.) 3 roundqualified	04 students	-	-	-
6.	Hand ball (engg.)	01 students	Nandgaon Institute	Jaypour univercity	Jaypour univercity
7.	Athalitics (engg.)	02 students	-	-	-
8.	Sqash racket (engg.)	03 students	03 students	02 students mumbai univercity	-

**2014-15**

Sr.	Game	Inter	Inter	Univercit	All
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no.		Institute	group	y	indiya
1.	Table tannis (engg.) 3 roundqualified	04 students	-	-	-
2.	Rope malkhamb (engg.)	01 students girls	Sangamner Institute	-	-
3.	Hand ball (engg.)	01 students	Lasalgaon Institute	-	-
4.	Badminton (engg.)	03 students	-	-	-
5.	Sqash racket (engg.)	02 students	02 students nes wadiya pune Institute	01 students Channai Univercity	-

### 2015-16

Sr. no.	Game	Inter Institute	Inter group	Univercity	All india
1.	Table tannis (engg.) 3 roundqualified	03 students boys	-	-	-
2.	table tannis (engg.)	02 students girls	-	-	-
3.	chess (engg.)	05 students	-	-	-
4.	Hand ball (engg.)	01 students	Sangamner Institute	-	-
5.	malkhamb (engg.)	01 students	-	-	-
6.	Badminton (engg.)	06 students	-	-	-
7.	Sqash racket (pharmacy)	01 students	01 students nes wadiya pune Institute	-	-
8.	Cricket (engg.)Sami final qualified	16 students	02 students bmcc pune Institute	-	-
9.	Volley ball (engg.)	08 students	-	-	-
10.	Volley ball (m. b. a.)	12 students	-	-	-
11.	Boxing (engg.)	01 students	-	-	-

12.	Athletics (engg.)	06 students	-	-	-
13.	Foot ball (engg.)	13 students	-	-	-

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

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

**Yes**

The Newsletter of MET IOEMCA Department named "MCA Newsletter" was published on behalf of Department of MCA under Institute Of Engineering, Bhujbal Knowledge City The inauguration of the MCA News Letter Magazine during the 4th year of our State Level Event SPARX 2014. The idea for creating such a platform where all our Students, Alumni and Faculties share their valuable views, research and creativity.

The magazine will provide a forum for an open exchange idea among all our Students, Staff and alumni. It will include the Toppers Column, MET Ratna where it will a motivational aspect for all students. This magazine is also a reflection of the sincere efforts of our team comprising of our talented studentswho provided all the technical support to bring this magazine into reality.

This was both an exciting and a challenging point for being an Editor for the department's News Letter Magazine .I am sure this magazine will be a valuable source of information and inspiration.

**UNITY (United IT Youth) - E News Letter**

UNITY Established on 15<sup>th</sup> August 2012, UNITY has been creating waves ever since. UNITY is committed in generating, disseminating, and preserving

knowledge, and to working with others to bring this knowledge to bear on the world's great challenges.

The UNITY is Students Association was an idea, a challenge to create a platform for the students, by the students and of the students wherein students would come out of the shell to display their talent, innovation and help them to make a cut above the rest.

**5.3.5 Does the Institute 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, Institute 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 Institute.

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.

<b>Student Council Executive Committee</b>	<b>Year 2013-14</b>	<b>Year 2014-15</b>	<b>Year 2015-16</b>
Chairman	Dr. V. P. Wani	Dr. V. P. Wani	Dr. V. P. Wani
NSS Officer	Mr. K. S. Chobe	Mr. K. S. Chobe	Mr. K. S. Chobe
Physical Director	Mr. Shirsath Bhimrao	Mr. Shirsath Bhimrao	Mr. Shirsath Bhimrao
General Secretary	Rohit Sudhakar Khairnar	Jugal Patil	Saurabh Hirve
Sports Secretary	Shivani Naladkar & Jagannath Kuyte	Prashant Navale & Amiterag Dubey	Raj Tambat & Hitesh More

NSS Representative	Patil Jaydeep & Shivani Naladkar	Raj Tambat & Manav Bhatiya	Paresh Gangurde
Cultural Secretary	SaurabhR Jolar & Rushikesh Bhujbal	Mayuresh Choudhari & Sanskruti Jain	SwapnilHadole
Ladies Representative	Bhakti Deokar & Anju Parvithran	Priti Wankhede & Husna Sheikh	Pooja Kumar

**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 2014-15)	Year 2015-16	Year 2016-17
1.	Student Council	Rohit Sudhakar Khairnar	Jugal Patil	Saurabh Hirve
2.	Cultural committee	SaurabhR Jolar & Rushikesh Bhujbal	Mayuresh Choudhari & Sanskruti Jain	SwapnilHadole
3.	Sports Committee	Shivani Naladkar & Jagannath Kuyte	Prashant Navale & Amiterag Dubey	Raj Tambat & Hitesh More
4.	NSS Committee	Patil Jaydeep & Shivani Naladkar	Raj Tambat & Manav Bhatiya	Paresh Gangurde

**5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.**

The Institute organizes Alumni Meet every year since 2016. 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 Institute. Each department conducts guest lecture for which alumni of Institute are invited.

Any other relevant information regarding Student Support and Progression which the Institute would like to include. Online platforms like Google

groups, Facebook, Whats App, Alumni group, Linked in etc. are the few of the tools used for networking with alumni.

## **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. ?**

##### **Vision**

To develop Institute as center of excellence for developing globally accepted professionals having application orientation, lifelong learning approach, towards socio-economic growth of the society as a whole.

##### **Mission**

- Preparing Graduate capable enough to practice effectively and responsibly to technological changes and pursue advanced engineering.
- Inculcated applied research to support & contribute to the social & economic well-being of citizens and organization in nearby region.
- Cultivate the entrepreneurial as well as entrepreneurial spirit and linkage of engineering education & business for technology commercialization.
- Evolve thoughtfully to the changing needs of industry & surrounding world.
- MET's IOE's focus is on growing needs of society, industry and to groom professionals globally accepted through innovation.
- MET's IOE provide a platform to the students not only perform in academics but also overall development with changing needs of industry & surrounding world.
- The main focus of Institute is on the basic fundamentals of academic excellence, research and development and professionally competent environment.
- The mission of the Institute focuses on providing and grooming faculty and students to suit the need of industry and nation keeping in mind the various policies of the Government.

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

- The policies and the plans of the Institute are formulated by Governing Body on the suggestions and recommendations of Local Management committee, where in Head of the Institute (Principal), and Heads of the Departments are associated.
- The role of top managements: To decides vision and mission statements, long term goals and objectives of the Institute.
- The role of Principal: Principal as the head of Institute executes the policies decided by top management. His role is to keep the Management abreast of various initiatives, programmes and also the

changing need of Technology, requirements of statutory and regulatory authority.

- The role of Head of the departments: To act as coordinator between faculties and head of the Institute and recommends requirements of equipment due to changing technology, desired training to labs and manpower respectively. They also help the teachers to implement new methods in teaching, experimentation and also motivate the faculty and students through academic excellence.
- The role of faculties of the departments: Faculty interacts with the students for implementing teaching-learning processes and ensures the attainment of learning objectives of imparting quality education.

### **6.1.3 What is the involvement of the leadership in ensuring?**

- **The policy statements and action plans for fulfillment of the stated mission**
  - An integrated team of HOI and HODs implements the vision and mission of trustees and plays key role in formulating the long term policies for the same.
- **Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan**
  - On the basis of recommendations from HOI, trustees sanction the resources for the development of infrastructure required to meet the requirements mandated by statutory authorities. The same process is repeated for the development of manpower required as per the recruitment norms of AICTE and University.
  - Before the start of every academic year review of policies laid earlier and their execution is discussed and necessary instructions are given to the concerned by the Institute authorities.
- **Interaction with stakeholders**
  - Interaction with stake holders is a regular feature. Trustees, HOI and HODs interact with stake holders through various platforms as well as the bodies formed at the Institute level. The parents' meet is another platform which lets the Institute authorities to understand their views and expectations from the Institute.
- **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders**
  - The employers (Representatives of Companies) visit campus for seminars, conferences, and interact with Institute authorities, faculty, and the students.
  - The feedback received from the Industry professionals is used to update the laboratory infrastructure to meet the current needs of the Industry.
- **Reinforcing the culture of excellence**
  - The Institute authorities have imbibed the professional culture in the senior employees and is thoroughly disseminated through ranks and



file of the Institute. And this is very well reflected in the retention of the faculty

- **Champion organizational change**

- Number of portfolios are formed in the Institute for smooth functioning of academics and administration. Responsibilities are handled by senior faculty members. Responsibilities are churned at the department and the Institute level for effective growth of the Institute.

#### **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?**

- Heads of the department are conducting periodic meetings with the department faculties and reviews weekly progress about academics, value added programs and plan for the upcoming activities.
- Principal reviews the plans of the departments, and provide some corrective measures if necessary. Based on the activities a committee of various members is formed for the proper executions of the program.
- Students' activities as per the master timetable and monthly plan is monitored by class coordinator and other teaching faculties.
- Monthly attendance record is monitored and on basis of the mentoring system the lacking students are identified and mentoring is done by the concerning faculty/ mentor. A special mentoring cell/ counselling cell is available at the Institute.
- Result analysis of the each semester examination is carried out and action plan is prepared to improve the results.
- Academic audit committees monitor and governs the academic activities in the support of institutional goals and vision.

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

- Principal of the Institute is the Academic leader, working as catalyst in between Management and Institute. He is supported by Head of Departments, First Year Coordinator. Head of department ensures smooth functioning of the department by allotting different portfolios to the teaching staff.
- In association with Head of Departments, Institute Examination Officer, Librarian, Physical Education Director, Principal plans for the smooth conduction of academic programmes, evaluation process, R&D activities, as well requirements of statutory and regulatory authorities.
- Principal on recommendation of HOD's, allows staff for attending STTP/Workshop/FDP/Conferences for keeping them abreast with latest trends and technologies.

#### **6.1.6 How does the Institute groom leadership at various levels?**

- Students and faculty are given various leadership responsibilities by assigning them teams for year round functions, seminars, workshops at various levels, their expertise in various fields helps them to lead teams.
- During this activity a defined roles are assigned to various faculties, supporting staffs and students to perform well.
- Under the respective departmental Students Forum, they are encouraged to plan, organize different events in MET Utsav / Engineers' Week viz. Projects /Quiz Competitions, Seminars, Expert lecture by eminent personalities, various workshops and competitions. Staffs works as a facilitators to carry out these activities smoothly. For the purpose, every department has their student's forum, through this they are organizing the events.

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

- Definition of roles and responsibility leads to autonomy in operations. Each teacher has been assigned a set of responsibilities. Collaboration is encouraged and so is decision making. The decentralization extends to both academics and administration. The vertical structure of governance system ensures this.
- Every departmental students' forum has their own elected body, and it is authorized to plan and organize the programmes.

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

Yes. It encourages participative managements. In fact, the faculty at all levels participates in helping each other in academic pursuit, organization of events and programmes, in counselling students, in guiding them for interviews etc.

### **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 developed and formulated after discussions with the top management, Principal, Heads of the departments and staff members in order to improve quality of teaching, learning, research and development and achieve the vision and mission of the Institute. It is driven by the HODs and Principal through communication forums. The Institute undertakes various activities to fulfil the quality policies. All the activities are monitored by the committees through the result analysis of University examinations and informally from the stakeholders like industry, parents, alumni etc. The same is communicated to management to decide, discuss and review various quality issues. The Annual

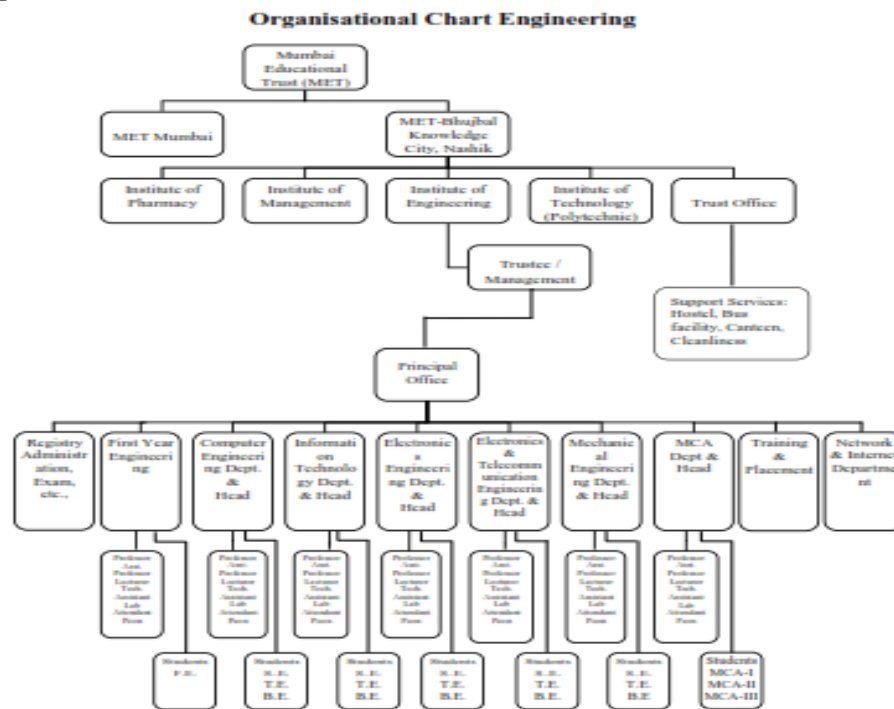
Appraisal system lays a lot of emphasis on fulfilment of the deliverables derived from the Quality Policy.

**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 internal and external stakeholder's perspective and takes steps to fulfil their requirements. Institute promotes research and consultancy activities in all departments.

- Inculcation of technical skills among the students
- Faculty empowerment
- Improvement in Teaching Methodology by visual aids, demonstration and reference literature
- Improvement in quality of research and research outcome
- Bridging the gap through industry Institute interaction
- Awareness of entrepreneurship development among the students
- Expand research centers to Computer Engineering and Mechanical Engineering.
- Establish Centers of Excellence in Technology domains with industry support
- Tie-Ups and Exchange programs with international Universities and industries
- Having more number of faculty Ph. D. s
- Increasing copyrights and patents

**6.2.3 Describe the internal organizational structure and decision making processes.**



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

- **Teaching & Learning**

In order to enhance quality in teaching and learning, the Institute has following steps:

- Practical exposure and industry interaction through industrial visits
- Use of NPTEL video lectures, presentations etc.
- Special classes for aptitude and soft skill
- Lectures of experts from industry / academia
- Exposure to skill based training programs
- Extra and remedial sessions for slow learners
- Open access for central library, computer laboratories, Wi-Fi and workshop
- Employment of qualified and keen staff
- Student feedback is taken every semester on the quality of teaching-learning which is utilized for improving the teacher's skills
- Social impact based innovative and industry sponsored projects for final year students
- Conduction and promoting FDP / Workshops / STTP / Seminars / Conference for improvement of faculty

- **Research & Development**

The Institute believes that research is an integral part of the professional growth and encourages it in all aspects. It is our constant endeavour to create an environment to foster creativity, innovation and lifelong learning.

- Institute promotes the staff to process the proposal submissions for availing the funding from different funding agencies such as DST, SPPU (BCUD), etc.
- Institute promotes to strengthen industry – Institute interaction by consultancy, testing and need based research & innovation activities.
- The key goal of the Institute is to provide a creative environment in which higher studies and research thrive
- State of art laboratories with all updated hardware and software facilities available
- Organization of national/ international seminars, conferences and workshops
- Innovative students are identified and promotes for acquiring patents

- **Community engagement**

The Institute believes that we have a responsibility towards society and through technological intervention, it can be of use to the society. National Service Scheme (NSS) activities make students responsible towards society, environment, global issues, etc and helpful in making them responsible citizens.

The Institute has adopted a village "Gaulane", near to Nashik and our students are identified various problems and following activities were conducted to improve life in the village

- Health, Eye check - up camp
- A blood donation camp
- Tree Plantation
- The construction of “VanaraiBandhara”

Along with this, Institute also participates and organized various activities such as –

- Ganapati Murti and nirmalya Collection
- A blood donation camp
- Tree Plantation
- Eye and Heart checkup camp
- Clothes, Blankets and Food Distribution to road side people
- Snacks Distribution (Diwali Celebration)
- Celebration of International YOGA day.

- **Human resource management**

A dedicated centralized HR Department ensures compliance to all statutory requirements of the employees. In addition various activities and management practices ensure uniform HR practices all across the campus.

Service rules, annual revisions, objective based appraisal, periodic reviews of performance and counselling are regular feature.

Further to promote employee engagement meetings are conducted to communicate and gain acceptance of various management decisions.

Various social events like Institute days, Diwali etc. regular feature.

All modern practices of HR are followed.

- **Industry interaction**

Industry interaction is achieved through following initiatives

- Deputing students for participating in joint industry – students projects, in areas of quality, productivity, safety, ergonomics etc. These are 9 to 10 months long projects and over the last 7 years various problems on the shop floor of leading industries in an around Nashik have been solved.
- Participation of industry experts to increase awareness of modern manufacturing practices, trends in technology etc.
- Conducting seminars and workshops.
- Conducting programs for employees in industries to enhance their knowledge in specific R&D and knowledge based subjects (For example CAD/CAM, CNC Programming, Android, Arduino etc.)
- MOUs with industry.

**6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?**

Principal provides all necessary information to management through Governing Body Meeting and Local Management Committee Meetings. Principal ensures the communication of adequate information through different meetings, circulars, notifications on websites. It is also conveyed at different events viz. Teachers Parent Meeting; Alumni meet; Interaction with recruiters, industry.

**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 formally appreciates staff through Principal by giving appreciation letters for their performance.
- The management promotes staff with all necessary support to organize and participate in various activities in the Institute
- Management helps in the personal development of faculty
- Staff is appointed as a in charge or members of various committees at Institute level.

They are encouraged to give suggestions during various seminars and workshops for making them more effective.

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

Sr. No.	Resolution	Status
1.	Apply for NBA	Applied and committee visited
2.	Apply for NAAC	In Process
3.	Recruitment of Senior Faculties	Some are joined
4.	Students welfare scheme	Implemented and Currently live
5.	Arranging alumni meet	Alumni meet is conducted

**6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If ‘yes’, what are the efforts made by the institution in obtaining autonomy?**

Yes, SPPU has provision, Institute is in the process for the same.

**6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?**

The Institute has following committees for hearing grievances/complaints from students, teaching and non-teaching staff.

- Anti-ragging Committee
- Women's Grievance Cell
- Student Council

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

No

**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, Institute has online feedback systems and feedback is taken every semester on the quality of teaching, administrative, and various facilities of the Institutes.

Principal in coordination with head of the Department goes through the feedback and convey it to respective members and decision is taken for the improvement if any.

### **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?**

Institute has well defined professional endeavours and their parameters for faculty. They are closely monitored during annual performance appraisal of the staff. Staff having remarkable endeavours is considered for special encouragement by different means. For achieving these endeavours, Institute encourages staff through different means as follows:

##### **Updating field knowledge:**

Enabling staff members to make use of latest technology by attending Various FDPs, workshops & seminars through providing paid duty leaves for the same.

##### **Participation in Conferences:**

Staffs are encouraged to publish and present their work at International conferences in various domains, which gives a prospect to faculty members to know the current research scenario.

##### **Conduction of STTP, FDPs, Conferences, Workshops and Seminars:**

Faculty is encouraged to conduct STTP, FDPs, conferences, workshops and seminars, which helps them to enhance professional skills like managerial skill, leadership, development and documentation etc.

##### **Inspiring staff to associate with various roles in professional societies (IEI, ISHREE, IEEE, SAEINDIA, CSD):**

**Inspiring staff** members work as the co-ordinators for various professional societies. This gives them opportunity to build expert network.

##### **The professional development of the non-teaching staff is enhanced in following way:**

Encourage non-teaching staff to upgrade qualification & then promoted as teaching faculty after acquiring necessary qualification.

#### **6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?**

Performance of Institute appraisal system consisting various parameters as:

##### **Self-appraisal:**

Every staff teaching & Non-teaching submits self-appraisal report for every academic year.

##### **Student feedback:**

At the end of every semester each student has to give feedback about their respective subject teachers.



### **Staff Appraisal by the Head of the Department:**

At every academic year, details of the staff contributions in various institutional activities and their performance is reported by the Head of the Department.

### **The effect of Performance Appraisal Reports:**

Staff Appraisal after the suggestion by Head of the Department is reviewed by Head of the Institute with HRD committee. Improvement on performance is suggested by the committee.

It is decided to provide incentives for eminence performance and quality publications.

### **6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.**

Performance appraisal system for faculty members is evaluate by the Institute as following:

ERP system is developed for updating the self-appraisal (Personal Endeavour) which is considered at the end of every academic year.

The process of appraisal includes self-appraisal followed by, evaluation From HOD, at the end of every academic year, HoDs and faculty members submit the appraisal forms to the

Principal for evaluation.

Following parameters are included in performance appraisal form of teaching faculty.

- Engaging Theory Lectures / practical / Tutorials as per university target.
- Attendance of Students in regular Theory Lectures / practical.
- Result Analysis of Theory Subjects.
- Marks Scored by Students in Theory Subjects.
- Comparison with 3 Years Average Result.
- Student's Feedback:
- Professional Endeavour like
  - Member / Office Bearer of All India Professional body / University.
  - Submitted Copy of Notes / PPT / Transparencies / Teaching Plan of one subject.
  - Improvement in qualification beyond eligibillity / written standard text book/Member of Editorial Board of Technical Journal.
  - No of Students Guided for M. Tech / ME / M. Pharm/ Ph. D.
  - Technical Papers Published at National / Inter-National Journals.
  - Technical Papers Presented at National / Inter-National Conferences.

- Worked as Reviewer for National / Inter-National Journals / Conferences.
- Chaired / Co-Chaired Technical Conferences:
- Active Involvement in various activities.
  - Proposals Submitted
  - Number of Sponsored projects / Project Proposal Received
  - Number of Presentation held under Journal Club
  - Number of Expert Lectures Delivered in a Year Beyond Syllabus
  - Efforts made to update Knowledge (Short Term Courses/ CEP/ Seminar/ Workshop attended) related to department
- Functional Performance analysed by head of department.

Special weight to be given by Head of Institute shall be based on extraordinary Contribution. Nature of subject thought (Marks Secured), Result Analysis based on nature of subject.

**6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?**

The performance appraisal report with recommendation is forwarded to the top management by Head of Institute after due evaluation.

Outcome of the review:

- The faculty members are awarded with additional increments and incentives in salary, whose performance is exceptionally well.
- Necessary corrective measures are discussed with the Head of Institute In case of poor performance in appraisal

**6.3.5 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

**Mediclaim Facility:** This service is available for all Staff members up to rupees one lakh in case of medical emergencies without any payment.

**Employees Provident fund:** As per the government rules maximum of Rs. 1800 is credited to employees PF account by Institute and the equal amount is contributed by the employee. All eligible staff members have availed advantage of the scheme.

**Group Mediclaim for the family:** Group mediclaim facility is provided for the family of employees.

**Staff Personal Loan:** Personal loan worth Rs. 20, 000/- will be provided without any interest to in need employees.

**Gratuity:** Gratuity is payable to all eligible staff members as per norms.

**Maternity leave:** Maternity leave is given to the eligible staff as per norms.

**Accidental Term Plan:** Accidental Term Plan is provided to employees.

**Medical Check-up Camps with Blood Donation:** Medical Check-up camps arranged twice in year for all the employees along with the blood donation camp.

#### **6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?**

Policies designed by the Institute for attracting and retention of eminent faculty members are as follows:

- Assigning challenging roles and responsibilities to improve their capabilities and making them to inspire further.
- According to experience & qualification faculties are promoted with good incentives.
- Provide essential infrastructure, IP based electronic library access, WiFi enabled campus, well equipped digital library and multiple knowledge facilities for adopting the environment of research.
- Executing various schemes for faculty like group gratuity, mediclaim insurance policy, group insurance & term plan etc.
- Institute considers the leave of employee for the research work and also adjusts their work load at department level.

Duty leaves along with funding is sanctioned to faculties to attending national/ international seminars and conferences.

### **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 financial resources.
- Departmental requirements such as equipment, apparatus, instruments, consumables, items are listed as per requirement by Head of Department. The details are given to Principal. Quotations are called from the at least three different suppliers /vendors. A comparative statement is prepared which is approved from the Principal. After negotiations, purchase order is placed to the supplier/vendor.
- After receipt of the material, entry is made in the central stores dead stock registers, then the entry is made in departmental dead stock register. After installation and testing, it is entered in the departmental dead stock register and bills are forwarded to the account section for audit and after audit payment may be released. Servicing, maintenance and repairs of instruments and equipment is carried out regularly.
- Yearly budget under different heads is carried out in advance of the academic year. Budget required for all departmental expenditure is generated. This Budget is approved by Local

Management Committee and forwarded to concern authority for the approval.

**6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.**

- The auditors are appointed by the Mumbai Educational Trust. The Institution is having qualified practicing Chartered Accountant as an auditor who audits the accounts. After the audit, the report is sent to the management for review.

Details of audit:

Table 6.4.2 (A) Details of Audit

Internal/External Audit	Last Audit date	Details of Compliance
External Audit by N. G. Jain & Co. (FRN 103941W)	25/06/2016	Nil
Internal Audit	12/05/2016	Nil

Table 6.4.2 (B) Objections of External Audit and compliance

Sr. No.	Period of audit	Particulars of objection	Compliance by Institute
1	25/06/2016	Nil	Nil

**6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.**

- The major source of institutional funding is from the tuition fees
- Development fees received from students
- Audited income and expenditure statement of academic and administrative activities of the previous last four years are available and listed below

Table 6.4.3 Audited Statement of Income & Expenditure

Sr. No.	Particulars (Rs.)	2016-17	2015-16	2014-15	2013-14
1	Total Income (Rs)	---	184118801	162502113	147212130
2	Total Expenditure (Rs)	---	160478225	144035339	134285446
3	Balance Amount (Rs)	---	23640576	18466774	12926684

**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 reputed agencies like SPPU (BCUD), IIT/MHRD and DST.

Table 6.4.4 (A) Details of received fund

Sr. No.	Particulars	2016-17 Amt Rs.	2015-16 Amt Rs.	2014-15 Amt Rs.	2013-14 Amt Rs.
1	DST (Rs)	--	--	1243000	--
2	BCUD, SPPU(Rs)	1813615	--	490200	635000
3	Student Welfare Activity, NSS (Rs)	80250	80250	80250	---
4	IIT/MHRD	--	332781	167768	546468
	Total Income	1893865	413031	1981218	1181468

Table 6.4.4 (B) Details of fund utilization

Sr. No	Particulars	2016-17 Amt Rs.	2015-16 Amt Rs.	2014-15 Amt Rs.	2013-14 Amt Rs.
1	DST (Rs)	--	--	1243000	--
2	BCUD, SPPU(Rs)	1813615	--	490200	635000
3	Student Welfare Activity, NSS (Rs)	80250	80250	80250	---
4	IIT/MHRD	--	332781	167768	546468
	Total Expenditure	1893865	413031	1981218	1181468

## 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?**

MET's Institute of Engineering, Bhujbal Knowledge city Nashik has taken the initiative for establishment of the Internal Quality Assurance cell to ensure quality in teaching learning process, specifically for implementing Outcome based Education. This cell is chaired by Principal of Institute. In the similar line Institute has its own local management committee and it has played an instrumental role in designing, framing, implementing and reviewing the Quality Policy and processes of the Institute.

In this regard Institute has developed its own ERP system to take carry of quality framework of the academic as well as administrative activities which includes the different modules as follows.

- Student admission module
- Student attendance Report
- Question bank
- Student feedback the teaching learning process

**b. How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?**

Management has provided the conducive environment and free hand to the head of the Institute to cater to the quality needs for excellence. Almost all the decisions related to the quality and academics are approved. Few of them are highlighted below

- ERP System
- Continuous assessment booklet
- Concept clearing classes
- Faculty development program
- Subject Course file
- Academic documentations
- Mentor for the students
- Counselling for the students

**c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them**

Yes, the contribution of the external members is present for the monthly academic audit.

**d. How do students and alumni contribute to the effective functioning of the IQAC?**

Feedbacks are the major sources to confirm the proper functioning of the IQAC.

Feedback is received from alumni regarding emerging trends in the industry, efforts to enhance employability, initiatives to promote research components and encouraging students for entrepreneurship.

**e. How does the IQAC communicate and engage staff from different constituents of the institution?**

IQAC has heads of the departments as members who represent the faculty of the department. Meetings are held once a semester. Progress of the Institute and various departments is monitored and assessed. Suggestions are given for discrepancies/shortfalls, if any. Decisions taken are communicated by the heads to the faculty and staff of their respective departments and are implemented.

**6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.**

Yes. The Institute operates through an integrated framework that assures quality in academic and administrative activities. The Institute has established a Local Management Committee (LMC) and IQAC.

These committees meet regularly to review academic and administrative matters to ensure monitoring of the programmes and to ensure improvement and enhancement of the quality of education.

**6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If ‘yes’, give details enumerating its impact.**

Yes, Institute sponsored the staff for training to the different course / STTP / FDP for effective implementation of the Quality assurance procedures. It is evident that the staff attending the course passed on the knowledge to the department staff / students by giving presentation. Impact of such practices resulted in improving academic performance.

**6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If ‘yes’, how are the outcomes used to improve the institutional activities?**

Yes. The Institute believes that audits, both internal and external are to be conducted periodically to ensure effective implementation of academic and administrative policies.

- Regular meetings are conducted by Principal, HOD with all teaching faculty and staff.
- Academic review of the department is carried out at the end of semester in academic year by HOD.
- Institute takes the review of academic audit through reports from the departments and result analysis at the end of semester and remedial measures are taken for improvement.
- Practices like self-appraisal reports and its review by HOD, Principal and management helps for continuous assessment of faculty, staff and resulted in significant improvement of the Institute.

**6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?**

The Institute IQAC updates itself regularly with the new Mechanisms / requirements of external quality assurance agencies / regulatory bodies through their circulars/ notifications.

The institution follows guidelines given by AICTE, DTE and SPPU. All the academic activities and processes are as per the instructions given by above authorities from time to time.

- Curriculum and its implementation, evaluation is as per the University guidelines.
- The infrastructure & staff is as per the norms laid down by AICTE, DTE.
- The admission to the program is governed by the directives given by DTE, Maharashtra state.
- The Institute is monitored by SPPU & AICTE committees for compliance.

**6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

Principal, Heads and academic coordinators of the departments take continuous review of teaching learning process in the Institute.

- Preparation of Academic and Activity Calendar.
- Time table preparation as per work load assigned to faculty.
- Preparation and implementation of teaching plan (Theory and practical).
- Conduct of FDP by course coordinator/senior faculty before the commencement of a semester for effective and uniform delivery of course content.
- Periodic review of syllabus covered in course coordinators and department meetings.
- Concept clearing class.
- Mid-term submission is conducted to review practical performance and continuous assessment of term work.

**6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?**

Institute has mechanism for communication of the initiative to the different stake holders through different means as follow

- Industry employer feedback about students' performance is communicated to respective department for further improvement and employability enhancement.
- Students' feedback about teaching learning as well as about Institute/ departmental facilities is communicated to respective teaching staff, concern department; corrective measures are brought to the notice of the stakeholders.
- Parents' feedback taken during teacher parent meet is noted and corrective measures are taken by way of improvement in teaching style, counseling to student at different level.



## **CRITERIA 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 is located in a huge campus with greenery in and around the campus. The Institute is environmentally conscious and monitors the up keep and maintenance of the greenery in the campus. The tree plantation is the major concern of the management to maintain the immaculate purity and beauty of the Institute to provide a pleasant atmosphere.

- The campus has been made as green as possible by planting variety of trees and other plants, with an exclusive team of gardeners.
- Sprinkler system is used to give optimum water to garden and lawns.
- Most of the work is paperless as Institute has been utilizing ERP software.
- Generators are located at remote location in the campus, so that no noise disturbance is created.
- Special contract is given to outside agency to keep campus neat and clean.

#### **7.1.2 What are the initiatives taken by the Institute to make the campus Ecofriendly?**

##### ➤ **Energy conservation**

- The Classrooms and Labs in the Institute are provided with large windows to allow natural light, hence the classrooms and Labs have good ventilation and light, thus usage of electric lights is minimized.
- Each Block has been monitored regularly with separate electrical maintenance staff. Defects in electrical system are monitored and replaced immediately.
- The teaching, nonteaching staff and students are made aware about saving of electricity by switching off the switches whenever not required. Lab attendants are strictly instructed to switch off the main switch while closing the lab.
- All the computers are with LCD monitors that reduces the power consumption.
- Section-wise UPS systems for computers and equipment.
- Students are motivated to prepare their projects on Energy Conservation.

- Waste bins are kept at strategic locations and segregation of waste is consistently done. Thus maintaining the campus clean and green.
- **Use of Renewable Energy**
  - The Institute has taken initiatives to use renewable energy. Solar water heater for Boys Hostel.
  - Students are encouraged to carry out their projects on Renewable Energy Sources.
- **Water Harvesting**
  - All the buildings have rainwater-harvesting structure and the rainwater is allowed to go underground through the structures. The runoff water collected on the roads is drained and conveyed to a pond in order to increase the water table, as a part of conservation and preservation of water resource.
  - The lawn, plants and flowers are watered by drips/sprinklers.
  - The water taps, leakages are regularly supervised to avoid wastage of water.
- **Check Dam Construction**
  - Not Applicable
- **Efforts for Carbon Neutrality**
  - The major efforts are taken to reduce the carbon foot print in the campus mainly through planting trees and steps are taken to conserve energy. The Institute is a beautiful serene campus full of greenery which improves the aesthetics, reduces global warming and green house effects. They provide shade in summer and act as wind breakers in winter season. It minimizes the use of air conditioners, fans and heaters. Trees are effective cleansers and remove pollutants from air and soil, thus minimizing the carbon footprint.
  - The waste in the campus is disposed in eco-friendly manner without polluting the environment.
  - Burning of papers, plastic is strictly prohibited in the Institute campus area.
  - Institute has separate parking zone for vehicles.
- **Plantation**
  - Intense efforts are taken for making the campus green by planting various trees and lawns.
  - NSS unit is also carrying out tree plantation as regular activity in campus and nearby villages during NSS camps.
  - During construction stage, care was taken not to chop down the old, large trees, and they were integrated into the Institute as a part of the campus, and stand tall even today.

- The Institute also maintains a variety of on-campus plant life, both potted and otherwise, keeping the campus cool even in the summer heat.
- In support of the environment, guests to the Institute are gifted ornamental potted plants grown in the gardens, as opposed to flowers cut from plants.
- **Hazardous Waste Management**
  - Hazardous Chemicals are kept separately away from the reach of students. Lab In-charge takes care of the chemicals and safety norms in the laboratory and is strictly followed.
  - Students are made aware of the hazardous chemicals and safety aspects when they are given instructions before utilizing the chemicals.
  - The labs are well ventilated and spacious with 24 hour water supply available in science labs and safety of the students is given top priority in planning a facility.
  - The chemicals used in science laboratory are directly drained out in soak pit.
  - Wastes are properly tunneled with appropriate plumbing. All the toilets and bathrooms waste water lines are directly connected to the municipal drainage system.
- **e-Waste Management**
  - The e-waste management has become an integral part due to technological advancement. The waste material are treated as scraps and disposed kept in the store for further process. The UPS batteries are replaced with the local dealer.
  - The e-waste generated is given to the authorized dealers who purchase the scrap and reuse the useful components.

## **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.**

- Institute is recognized as Remote Center for Faculty development programs (T10KT) under NME-ICT (MHRD, Govt. of India)
- Institute a Nodal Center in RETC Project of IIT Chennai.
- Institute has IIT Spoken Tutorials which is talk to teacher initiative activity of National Mission on Education through ICT used by faculties and students for skill development.
- Counselor: Academic and personal counseling to students.
- As a part of E-governance in academics and administration the Institute has developed its own ERP software which facilitates automation of various activities such as Student section, Fee

collection, Financial Accounts, Exam Section, staff Attendance and appraisal system, Online students Attendance, etc.

- A well established Training and Placement Cell catering to the placement requirements of the students.
- The staff members are encouraged to attend Faculty development programs, STTP, Workshops and seminars for developing their knowledge to teach current trends to the student and motivate them to carry out open end learning projects and the project in socially relevant areas.
- The Institute library is computerized with its OPAC system. There is a separate E-Library facility available for the faculty and students.
- Every year the orientation programme is organized for newly admitted First year students to get aware of the facilities available at Institute and the core departments.
- The Institute uniform is mandatory for the entire students which generate discipline and uniformity in the campus. Identity cards are provided to students and Institute staff.
- Department invites eminent scholars, academicians and industrialists for guest lectures.
- Director of physical education to take care of all the sports activities.

### **7.3 Best Practices**

#### **1. Title of the Practice: Counseling & Students Development cell.**

- **Goal**  
Counseling & Students Development cell tries to enable the students through individual a Group counseling to make them a confident person with the positive attitude to face the professional & Personal life situations.
- **The Context**  
The main object of cell is to build more inner resources within the students to create more awareness about their individual potentials through the Behavioral, Career planning related, study related & Creativity & Innovation support related counseling.
- **The Practice**  
Students have actively participate in the counseling programs & resolve their issues of any kind related to behavior, career, study & intellectual. In group counseling the awareness is given to the first year engineering students about “Managing the life for better future” a dialogue with students. Also the scope is given to final year students to asked unnamed questions and the questions are address to resolve their mind conflicts. Through the mentoring programs identified students are send for counseling & for the above said areas remaining students

attend the individual counseling based on their requirement time to time. This support to the students to come out from the situation which he is facing & positively develop himself for the academic challenges.

- **Evidence of Success**

There are numbers of evidences of the individual counseling. These structured & the program design helps to the students to prove himself in a better way.

- **Problems Encountered and Resources Required.**

Academic time tables & shortage of time are the constraints. Hence students appear based on their adjustment of time for individual or group counseling.

## 2. Title of the practice: ERP Development Cell

- **Goal:**

Bringing transparency in the system and provide a state-of-the-art technical infrastructure to better serve students, faculty, staff, and other stakeholders of the institution.

- **The Context:**

The main objective of the cell is to develop an intranet based applications for Employee and Students to bring transparency and e-governance under the system. To provide enhanced services for students, faculty, and staff along with parents of students. To provide improved communications and flow of information with less dependency on paper forms using automated approval queues. Providing more streamlined processes and easier access to information. Better support for institutional planning, analysis, assessment, compliance efforts, and reporting. Better use of the resources. Improve cooperation and coordination between offices.

- **The Practice:**

ERP development cell developed following modules in the view of various processes like:

- **Admission** – After allotment of admissions by DTE, students are reporting to the Institute and filling up the admission information. Student credentials are created and issued to student. Student use this credentials to give online feedback, online test and accessing e-material. Identity card is issued to the student after furnishing necessary formalities. Students and faculty have an access to Vision-Mission and Objectives of the Institute.
- **Attendance** – Faculties fill up attendance of their class conduction on regular basis in their login. Attendance reports are generated and necessary messages are sent to concerned. Authorities also perform academic monitoring using this attendance facility. Letter of the students with less attendance can be generated in the system and further sent to the parents.

- **Lecture Notes** – Faculties upload lecture notes, reference material including e-material on ERP through their login. Student access these material through respective login.
- **Student’s feedback** – Student provide feedback on faculty for about 10 parameters related to the teaching and learning processes. The summary of this feedback generated on specified intervals. Authorities call upon faculties for exceptional issue for further improvement.
- **Accounts** – Under this module fees are allocated to student. Fees are collected and outstanding reports are generated. These reports are available in the login of authorities.
- **Library** – Libraries of all the Institutes in this campus are integrated through this module. Circulation of books and journals are made available to students and faculties. Special OPAC module helps students and faculties for searching library material.
- **Leaves** – Faculties apply leaves through their login. Leave management are carried out by authorities. Leave reports are generated that are helpful for administrative purpose.
- **Faculty Performance Appraisal** – In this module theory lecture conduction, students attendance preparation, result comparison, faculty academic achievement, research achievements, course attended / conducted, faculty contribution at department / Institute level are recorded and appraisal reports are generated.
- **Evidence of Success** – Accurate admission information is available to the authorities without delay. Regular follow-up is possible through the attendance system by sending SMS and letters to the parent. Lecture notes prepared by the faculties are made available to the students. Improvement in the faculty on the highlighted points by students through feedback. Closed follow-up is possible on fee collection. Fee recovery is improved. Easy library material search and issuable from any library from the campus. Leave report of balance leaves are available to employees with respective login. Authorities observe the performance of faculty and students from time to time. The necessary inputs are provided based on the facts recorded. The ERP system helps to improve the performance of every individual stake holder of the system.

## Evaluative Report of the Department of Civil Engineering

1. Name of the department : **CIVIL ENGINEERING**
2. Year of Establishment : **2012**
3. Names of Programmes / Courses offered (UG, PG, M. Phil., Ph. D, Integrated Masters; Integrated Ph. D., etc.):  
**UG: Civil Engineering**
4. Names of Inter disciplinary courses and the departments / units involved:

Sr. No.	Course	Department
1	Basic Electrical Engineering	Electrical Engineering Department
2	Basic Electronics Engineering	E & TC Engineering Department
3	Basic Mechanical Engineering	Mechanical Engineering Department
4	Engineering Graphics	Mechanical Engineering Department
5	Computer Fundamental and Programming Languages	Computer Engineering Department
6	Engineering Mathematics	First Year Engineering Department
7	Applied Sciences	First Year Engineering Department
8	Workshop Practices	Central Workshop
9	Soft Skills	Computer Engineering Department

5. Annual / semester / choice based credit system (programme wise):  
**UG: SEMESTER & CREDIT BASED SYSTEM**
6. Participation of the department in the courses offered by other departments:

Sr. No.	Course	Department
1	Basic Civil and Environmental Engineering	FE All Departments
2	Engineering Mechanics	FE All Departments

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:

Sr. No.	Course	Name of Institution / Company
1	Auto Cad & Staad Pro	Center for Advance CAD, Nasik
2	MSP Software	Inifini Solutions, Pune

8. Details of courses / programmes discontinued (if any) with reasons  
: **NIL**

9. Number of teaching posts

	Sanctioned	Filled
Professors	01	00
Associate Professors	03	01
Asst. Professors	12	11

10. Faculty profile with name, qualification, designation, specialization, (D. Sc. / D. Litt. / Ph. D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience		No. of Ph.D. Students
				Teaching	Industry	
Mr. Kishor S. Chobe	BE	Assistant Professor	Civil	29.05	3	NA
Dr. Suhas E. Tayade	PhD	Associate Professor	Structures	9.02	06.11	NA
Mr. Sachin S. Patil	ME	Assistant Professor	Structures	7.00	1.00	NA
Mr. Manoj R. Avhad	ME	Assistant Professor	Construction Management	4.09	-	NA
Mr. Navnath T. Shinde	ME (Pursuing)	Assistant Professor	Geotech	3.02	-	NA



Mr. Jay A. Deotarse	ME (Pursuing)	Assistant Professor	Geotech	2.08	4.02	NA
Mrs. Neha R. Pimpale	ME	Assistant Professor	Structures	3.06	-	NA
Mr. Vivek S. Wagh	ME	Assistant Professor	Environment	6.03	-	NA
Mr. Mangesh S. Ambekar	ME	Assistant Professor	Geotech	04.10	-	NA
Mr. Avinash V. Deshmukh	ME (Pursuing)	Assistant Professor	Construction Management	02.02	-	NA
Mr. Pavan N Ghumare	ME, Phd (Pursuing)	Assistant Professor	Construction Management	08.08	-	NA
Mr. Prashant S Patil	ME (Pursuing)	Assistant Professor	Environment Engineering	03.06	7.04	NA
Mr. Vinod S. Khairnar	M.Sc Ph.D. (Pursuing)	Assistant Professor	Physics	14	-	NA
Mr. Rajendra S. Dhake	M.Sc , B.Ed, M.Phil, Ph.D	Assistant Professor	Physics	20	-	NA
Dr. P. S. Raut	M.Sc , B.Ed, M.Phil, Ph.D	Assistant Professor	Chemistry	14.1	-	NA
Mrs. Seema Nikam	M.Sc., M.Phil	Assistant Professor	Chemistry	9.9	-	NA

11. List of senior visiting faculty :

Sr. No	Name	Qualification	Subject	Class
1	Dr. K. T. Patil	Ph. D. (Geology)	Engineering Geology	SE (Civil)

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : **NIL**

13. Student-Teacher Ratio (programme wise) : **UG : 17.14:1**

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Technical Assistant	04	04
Laboratory Attendant	03	03

15. Qualifications of teaching faculty with DSc / D. Litt / Ph. D. / MPhil / PG. :

Qualification	Number of Teaching Faculty
Ph. D	01
PG	09
UG	04

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 :NA

19. Publications:

**A) Publications: Faculty**

Sr. No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Total Citation	S N I P	SJ R	Impact factor	h-index
1	Mr. Vivek S. Wagh	2	2	-	-	-	-	-	-	-	-	-
2	Mr. Suhas E. Tayade	6	6	-	-	-	-	-	-	-	-	-
3	Mr. Manoj R. Avhad	1	1	-	-	-	-	-	-	-	-	-
4	Mr. Jay A.	3	3	-	-	-	-	-	-	-	-	-

	Deotarse											
5	Mr. Navnath T. Shinde	3	3	-	-	-	-	-	-	-	-	-
6	Mr. Sachin S. Patil	1	1	-	-	-	-	-	-	-	-	-
7	Mrs. Neha R. Pimpale	1	1	-	-	-	-	-	-	-	-	-
8	Mr. V. S. Khairnar	1	-	-	-	-	-	-	-	-	-	-
9	Dr. P. S. Raut	7	6	-	-	-	-	-	-	-	-	-
10	Mr. R. S. Dhake	2	-	-	-	-	-	-	-	-	-	-
11	Mr. P N Ghumare	4	4	-	-	-	-	-	-	-	-	-

#### B) Publications: Students

Sr No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Total Citation	S N I P	SJ R	Impact factor	h-index
1	Ms. Dhanshree D. Bagul	1	-	-	-	-	-	-	-	-	-	-
2	Sanskruti Jain	1	-	-	-	-	-	-	-	-	-	-

#### 20. Areas of consultancy and income generated

Sr. No.	Area Consultancy	Income Generated
1	Course Conduction & Expert Services	1,99,104/-

21. Faculty as members in

a) National committees

b) International Committees

c) Editorial Boards....

Sr. No.	Committee	Number of Faculties
1	National	---
2	International	---
3	Editorial Boards	---
4	Reviewer / Judge / Evaluator	01

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	2016-17	Nil	Nil
2	2015-16	Nil	Nil

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 Sponsored Projects	% of Sponsored Projects
1	2016-17	Nil	Nil
2	2015-16	Nil	Nil

23. Awards / Recognitions received by faculty and students

A) Awards / Recognitions received by faculty

Sr. No	Name of Faculty	Award	Remark
1	Mr. Arun Shankar Bhoje	1) Participated in Nasik Peleton 2016 2) Participated in Velo Raid 2016 3) Participated in parli Cyclothon Balaghat Raid 2016 4) Participated in 5th State level Nasik MVP Marathon 2013 5) Participated in 5th State level Nasik MVP Marathon 2013 6) Participated in 23rd Thane	

		<p>Mahapour VarshaMarathon 2012</p> <p>7) Participated in Nasik Peleton 2017</p> <p>8) Participated in University Zonal Level Matches 2015</p> <p>9) Participated in Nasik festival for Cyclothon 2014</p> <p>10) Secured Second position in Decathlon 36 Km Cycling + 6 Km Running Vilholi 2015.</p> <p>11) Participated in Velo Raid, (180 Km Cycling)2014</p> <p>12) Secured Third position Peleton 150 Km cycle Race 2015.</p> <p>13) Secured Second position Peleton 140 Km cycle Race 2014.</p> <p>14) Winner in Nasik Festival 2014.</p> <p>15) Winner in Nasik Kasara Cycle race 2014.</p>	
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B) Awards / Recognitions received by students

Sr. No	Name of Student	Award	Remark
1	Miss. Ankita N. Ugale	<p>1) Achieved Gold Medal in 1st District level karate Championship July. 2012.</p> <p>2) Achieved Gold Medal in 1st District level karate Championship Sept. 2012.</p> <p>3) Achieved Silver Medal in 1st State level karate Championship Dec. 2012.</p> <p>4) Winner at 34th MKA Maratha State karate Championship 2013.</p> <p>5) Achieved Silver Medal in 13th SQAY Maharashtra State level karate Championship Dec. 2012.</p> <p>6) Winner at 9th District level karate Championship 2016.</p> <p>7) Achieved Silver Medal in 8th State level Open karate Championship 2016.</p> <p>8) Winner at 12th NKFI - National</p>	

		level open karate & Kickboxing Championship 2016.	
2	Mr. Manish Kashmire	<p>1) Selected as a member of the Handball Pune University team which was qualified in the All India Inter University Championship. 2014.</p> <p>2) Selected as a member of the Handball Pune University team which was qualified in the West zone Inter University Tournament 2014.</p> <p>3) Member of Runner up team of University Zonal Matches 2014-2015.</p> <p>4) Selected for the Inter zone handball Tournament 2015 -16.</p> <p>5) Selected for the Inter zone handball Tournament 2016 -17.</p> <p>6) Member of Winning team of Inter zone handball tournament 2013-14.</p>	

24. List of eminent academicians and scientists / visitors to the department

Sr No	Name of eminent Person	Orgnization	Date	Remark
1	Dr. Sunil Y. Kute	Prof. of KKWIEER Nashik, Chairman BCUD Pune University	20/9/2015	Related to Academics
2	Dwarkanath Zambare	Executive Engineer PWD Government of Maharashtra	20/9/2015	Related to Academics
3	Mr. Anwar Hussain Khan Tadavi	Sub-Divisional Engineer Maharashtra Jivan Pradhikran	20/9/2015	Related to Academics
4	Sameer Alone	CEO, Infini Solutions	07/03/2016	Career Counseling
5	Dr. M. R. Wakchaure	Prof. AVCOE Sangamner	23/09/2016	Related to Academics

6	Mr. Mahesh Gunjal	Director, Parallel HR Solutions Pvt Ltd	23/09/2016	Employability Development & Soft Skills
7	Mr. Sanjiv Shelar	Director	1/10/2016	Technical Expertise
8	Bhishmaraj Bam	Chief Executive, Purushottam Academy	19/01/2017	Career Counseling
9	Sameer Alone	CEO, Infini Solutions	16/03/2017	Career Counseling
10	Dr. Sunil Y. Kute	Prof. of KKWIEER Nashik, Chairman BCUD Pune University	21/07/2017	Career Counseling

25. Seminars / Conferences / Workshops organized & the source of funding

a) National                      b) International

Sr. No	Programme Title	National/ International	Source of Funding
1	Introduction to Structural Engineering	National	IIT, Kharakpur

26. Student profile programme/course wise:

Name of the Course/programme	Academic Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
UG: Civil Engineering	2016-17	54	54	40	14	Appeared
	2015-16	64	64	46	15	100
	2014-15	59	59	43	16	89.83
				43		
2013-14	58	58	44	14	84.48	
UG: Civil Engineering Lateral DES	2016-17	28	28	19	09	Appeared
	2015-16	32	32	23	09	81.25
	2014-15	26	26	19	07	100
	2013-14	30	30	20	10	96.67

\*M=Male\*F=Female

### 27. Diversity of Students

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Name of the Course	Academic Year	% of students from the same state		% of students from other States	% of students from abroad
		HU	OHU		
UG : Civil Engineering	2016-17	72.22	25.93	1.85	Nil
	2015-16	62.29	36.06	1.63	Nil
	2014-15	62.71	32.20	5.08	Nil
	2013-14	62.06	34.48	3.44	Nil
Lateral DES	2016-17	100	00	00	00
	2015-16	100	00	00	00
	2014-15	100	00	00	00
	2013-14	100	00	00	00

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Sr. No	Name of competitive examinations	Year	Number of students
1	GATE	2013-14	--
		2014-15	--
		2015-16	02
2	CMAT / MBA-CET	2013-14	--
		2014-15	--
		2015-16	--
3	IES/GRE/GMAT/TOEFL	2013-14	--
		2014-15	--
		2015-16	02

### 29. Student progression

Student progression	Against % enrolled
UG to PG	03
PG to M. Phil.	0



PG to Ph.D.	0
Ph.D. to Post-Doctoral	0
<b>Employed</b>	
• Campus selection	Nil
• Other than campus recruitment	07
Entrepreneurship/Self-employment	05

30. Details of Infrastructural facilities

**A) Library**

**A1. Central Library**

Sr. No.	Library Resources	UG & PG
1	Total Number Books (Volumes)	494
2	Total Number Title	1717
3	Indian Journals	09
4	Magazines	01
5	E-Resources	04

**A2. Departmental Library**

Sr. No.	Library Resources	UG & PG
1	Total Number Books (Volumes)	--
2	Total Number Title	--
3	Indian Journals	--
4	Magazines	--
5	Educational CD's	--

**B) Internet Facility for Staff and Students**

Institute has strong IT infrastructure in the support of various Activities and their needs:

1. An Internet lease line of 20 MBPS 1:1
2. Tata tele services Ltd. 10Mbps 1:1 Internet Leased Line
3. BSNL-VPN-AICTE-NMICT Internet of 20 MBPS

**C) Class Rooms with ICT facility: 03**

**D) Laboratories**

Sr. No.	Name of the Laboratory	Name of the Important equipment
1	Basic Civil & Environmental Engg	1) Digital Planimeter : Measurement of regular and irregular areas 2) Total Station: linear and angular Measurement on ground 3) Laser level : Determination of Reduced levels
2	Engineering Mechanics	All the instruments required for engineering Mechanics practical's are available like Reaction of beam, Force table, Coefficient of restitution, curvilinear motion, Belt Friction etc.
3	Geotechnical Lab	All the instruments required for Geotechnical Engineering are available like Direct Shear test apparatus, C. B. R. Test apparatus, Unconfined Compression test, Tri-axial testing etc.
4	Testing of Materials	All the instruments required for Testing of Materials are available like Digital Universal Testing Machine (UTM), Digital compression Testing machine (CTM), Vibrating table, Concrete Pan Mixer etc. <b>Note:</b> The instruments like Izoid and Charpy, Tile abrasion & flexure, torsion test and are in Sharing with Mechanical and Polytechnic Civil Department
5	Fluid Mechanics (I & II)	All the instruments required for Fluid Mechanics are available like Pressure Measuring Devices, Metacentric Height Apparatus, Electrical Analogy Apparatus, Bernouli's Apparatus, Venturimeter & Orifice Meter, Reynold's Apparatus, Wind Tunnel, Tilting flume etc. <b>Note:</b> The instruments like Centrifugal Pump, Pelton wheel Turbine, redwood viscometer are in Sharing with

		Mechanical Department
6	Geology Lab	All of required rock samples and models for study of Engineering Geology are available like Habit Collection, form & structure, Colour & Lustre
7	Environment Engineering I & II	All the instruments required for Environment Engineering are available like Autoclave, Fine dust Sampler, UV-VIS Digital Spectrophotometer, Microcontroller Based Flame Photometer, COD Digester, BOD Incubator, Flocculator Jar Test, Muffale Furnace
8	Surveying	All the instruments required for Surveying Engineering are available like Nikon Total Station Model DTM-322, Digital Theodolite, Autolevel etc
9	CAD Lab	Total number of available Machines are 22 and required software are like Staad Pro, Bhugol GIS, Gram++ GIS, Auto Cad, Cognifront (Engineering Mechanics)
10	Transportation Lab	All the instruments required for Transportation Engineering are available like Los Angeles Abrasion Testing, Marshal Stability, Bitumen Extractor, Ductility Testing, Ring & Ball apparatus
11	Physics Lab	All the instruments required for Physics Lab are available like Ultrasonic interferometer, laser, Magnetic susceptibility, Hall effect etc.
12	Chemistry Lab	All the instruments required for Chemistry Lab are available like Digital balance, muffle furnace, hot air oven, etc.

31. Number of students receiving financial assistance from Institute, university, government or other agencies

Sr. No.	Type of Assistant	Source Agency	Number of Students (FE to BE)		
			2016-17	2015-16	2014-15
1	Scholarship	Samaj Kalyan (Government)	186	192	134
2	EBC	DTE, (Government)	25	25	23
3	MET Scholarship	MET Trust	--	--	--
4	Minority	Government	02	02	--

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr. No.	Activity	Topic/Area	Date	Targeted Group
1	Special Lecture	Structures	23/9/2016	TE & BE
2	Special Lecture	Career Counseling	7/3/2016 & 16/03/2017	TE & BE
3	Special Lecture	Employability and Soft Skills	23/9/2016	TE & BE
4	Special Lecture	Docks and Harbours	30/09/2016	TE
5	Special Lecture	Civil Engg. Skill Training Program	30/06/2017	TE & BE
6	Special Lecture	What Industry want from you	21/07/2017	TE & BE
7	Special Lecture	Docks and Harbours	26/09/2017	TE

33. Teaching methods adopted to improve student learning

Sr. No	Method Adopted
1	Theory lectures taken by professors
2	Oral question by teacher answer orally by student
3	Presentation/seminar by student on specific topic
4	Assignment given to outline certain supplementary readings
5	Laboratory experiment performed student working together
6	Use of projector for dynamic explanation

7	Use of tutorials to cover extensive typical problems
8	Use of PPT presentations, Software for visual learning

#### 34. Participation in Institutional Social Responsibility (ISR) and Extension Activities

Sr. No	Activity	Targeted group	Number of Beneficiaries	Funding Agency
01	Health check - up camp 26, Dec 2014	Girls, women and (specially) pregnant women in and around Gaulane Village	150	APOLLO Hospital
02	A blood donation camp 27, Dec 2014	Gaulane Village	50	Saibaba Heart Institute
03	Tree Plantation 29, Dec 2014	Gaulane Village	250	College /NSS
04	The construction of "Vanarai Bandhara" 31, Dec 2014	Gaulane Village	02	NSS
05	Eye checkup camp 02 Jan 2015	Gaulane Village	100	Tulsi eye hospital
06	A blood donation camp 12, Jan 2015	College campus	100	Nashik Blood Bank
07	A blood donation camp 12, Jan 2017	College campus	60	Nashik Blood Bank
08	health check - up camp 12, Jan 2017	College campus	200	Saibaba Heart Institute
09	Eye checkup camp 12, Jan 2017	College campus	160	Tulsi eye hospital
10	A blood donation camp 12, Jan 2017	College campus	100	Saibaba Heart Institute
11	Tree Plantation 1, July 2016	College campus	300	College
12	HB and Blood Check Up 23, Aug 2014	College campus	250	College
13	Tree Plantation July 2017	College campus	300	College

### 35. SWOC analysis of the department and Future plans

#### **Strengths:**

- Qualified and experienced faculty members
  - Adequate infrastructure
  - Excellent team work among faculty and students
  - Good performance of students in examination
  - Revised and updated curriculum of UG programme
  - Academic calendar is strictly adhered to the schedule.

#### **Weakness:**

- Inadequate no. of faculty and supporting staff
- Lack of proactive placement activity
- Lack of proactive approach to enhance consultancy activity
- Inability to attract larger research projects for the want of trained / committed students.

#### **Opportunities:**

- Enhanced consultancy
- International collaboration
- Improved campus placement
- Starting new courses
- Increased revenue generation
- Development of faculty and supporting staff
- Networking with National R & D labs. , IITs

#### **Challenges :**

- Low level of competency of supporting staff.
- Poor remuneration / employment opportunities for fresh graduates.
- Collaboration with Industry

## Evaluative Report of the Department of Computer Engineering

1. Name of the department : **COMPUTER ENGINEERING**
2. Year of Establishment : **2006**
3. Names of Programmes / Courses offered (UG, PG, M. Phil., Ph. D. ,Integrated Masters; Integrated Ph. D., etc.) :  
**UG : Computer Engineering**  
**PG : Computer Engineering**  
**Research : Doctor of Philosophy in Computer Engineering**
4. Names of Inter disciplinary courses and the departments / units involved :

UG

Sr. No.	Course	Department
1	Basic Electrical Engineering	Electrical Engineering Department
2	Engineering Mechanics	Civil Engineering Department
3	Basic Civil Engineering	Civil Engineering Department
4	Basic Mechanical Engineering	Mechanical Engineering Department
5	Engineering Graphics	Mechanical Engineering Department
6	Engineering Mathematics	First Year Engineering Department
7	Applied Sciences	First Year Engineering Department
8	Workshop Practices	Central Workshop Department

PG

Sr. No.	Course	Department
1	Elective-II	IT Engineering Department
2	Operating System Design	IT Engineering Department
3	Applied Algorithm	IT Engineering Department

5. Annual / semester / choice based credit system (programme wise) :

**UG : SEMESTER & CREDIT BASED SYSTEM**

**PG : SEMESTER & CREDIT BASED SYSTEM**

6. Participation of the department in the courses offered by other departments :

<b>Sr. No.</b>	<b>Course</b>	<b>Department</b>
1	Computer Fundamental and Programming Languages	Civil, Mechanical, Electrical, IT, E&Tc Engineering Department

7. Courses in collaboration with other universities, industries, foreign institutions, etc. :

<b>Sr No</b>	<b>Course</b>	<b>Name of Institution / Company</b>
1	Opportunity in Higher Education after Engineering	Akshay Study Abroad, Nashik
2	Essentials of GCC for DSPS and OSA	Mr. Nikhil Kulkarni, Vipan Technologies Pvt. Ltd. Nashik
3	Cyber Forensic & Ethical Hacking	Mr. Vidit Baxi, Director Lucideus Tech Pvt. Ltd. New Delhi
4	Google Apps and Cloud Computing	Mr. Shashank Todwal, UMS Tech-Labs, Pvt. Ltd. , Nashik
6	Kick off the Code-WordPress Workshop	Mr. Shubham Chinchole , LeadMe Technologies Pvt. Ltd. Nashik
5	How to crack Apti, GD, PI and why MBA after engineering seminar	Mr. Sagar Nikam, Director, ELC Learning Center Nashik
7	Workshop on "How to Face Personal Interviews"	Mrs. Sapna Karia Manager Corporate Relation NEC, Nashik
8	Android Development Workshop	Mr. Guruprasad Bhavsar, Freelance Software Developer, Nashik
9	Career Guidance Workshop on "How to crack GATE/IES/ILTS/PSUs etc."	Mr. Satish Kumar Yadav. , Faculty, ACE Academy Pune.



10	Android Development Workshop	Mr. Prasad Pawtekar, GMS Softech Pvt. Ltd. Nashik
11	Expert Session on "Red Hat Linux"	Mrs. Monika , Senior Technical Consultant with Red Hat India in Platform, Middle ware and Cloud Portfolio
12	Seminar on "Networking and CISCO Certification"	Mr. Rahul Makasare, Technocraft Pvt. Ltd. Nashik

8. Details of courses / programmes discontinued (if any) with reasons  
: **NIL**

9. Number of teaching posts

	Sanctioned	Filled
Professors	02	02+01*
Associate Professors	04	02
Asst. Professors	14	13

\* Emeritus Professor

10. Faculty profile with name, qualification, designation, specialization, (D. Sc. / D. Litt. / Ph. D. / M. Phil. etc.)

Sr. No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D. Students guided for the last 4 years
1	Dr. M. U. Kharat	Ph. D.	Professor & Head	Web Servers & N/W	24.00	03 Completed 05 Registered
2	* Mr. P. M. Yawalkar	ME	Associate Professor	Character & Image Recognition	21.01	
3	* Dr. R. S. Tiwari	Ph. D.	Emeritus Professor	Big Data	1.00	
4	Mr. V. B. More	ME	Assistant Professor	Data mining	24.04	

5	Mr. S. C. Vidhate	M Tech	Assistant Professor	Networking	10.04	
6	Mr. R. P. Aher	ME	Assistant Professor	Image Processing	16.04	
7	Mr. V. D. Dabhade	ME	Assistant Professor	Networking	8.10	
8	Ms. A. R. Ugale	ME	Assistant Professor	Data Mining	12.11	
9	Ms. V. R. Khandave	M Tech	Assistant Professor	Digital Signal Processing	8.06	
10	Ms. M. V. Shinde	M Tech	Assistant Professor	Image Processing	7.05	
11	Mr. S. W. Jadhav	ME	Assistant Professor	Web Mining	6.10	
12	Mr. A. J. Gosavi	ME	Assistant Professor	Data Mining	9.05	
13	Ms. R. V. Chaudhari	ME	Assistant Professor	DBMS	5.07	
14	Mr. T. G. Patil	ME	Assistant Professor	Mobile Computing	6.03	
15	Mr. P. B. Devre	ME	Assistant Professor	Embedded system	8.06	
16	Ms. S. B. Borse	ME	Assistant Professor	Image Processing	9.03	
17	Mr. A. S. Kale	ME	Assistant Professor	Cryptography	7.06	

\*PG Faculty

11. List of senior visiting faculty :
  - **MR. R. S. JADHAV (Industry - UG & PG)**
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : **NIL**
13. Student-Teacher Ratio (programme wise) : **UG : 17.14:1**  
**PG : 16:1**
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	<b>Sanctioned</b>	<b>Filled</b>
Technical Assistant	06	06
Laboratory Attendant	02	02
Administrative Staff	03	03

15. Qualifications of teaching faculty with DSc / D. Litt / Ph. D. / MPhil / PG.

Qualification	Number of Teaching Faculty
Ph. D	02
PG	15

16. Number of faculty with ongoing projects from  
a) National b) International funding agencies and grants received

Number of Faculty with ongoing projects.	Grant Received	Funding Agency
02	Rs. 2,40,000/-	BCUD, Savitribai Phule Pune University, Pune
02	Rs. 90,000/-	
03	Rs. 2,30,000/-	
02	Rs. 48,000/-	
01	Rs. 2,40,000/-	

17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received

Sr No	Propo sal ID	Title of the Research Project	Name of PI/Co-PI	Funding Agency	Amount Sanction ed	Year
1	14EN G0011 97	Query Optimization and Execution of Dynamic Data Items in Network Aggregation Environment	1. Prof. P. E. Patel (Principal Investigator) 2. Prof. K. V. Metre (Co-Investigator)	BCUD, Savitribai Phule Pune University, Pune	<b>Rs. 2, 40, 000/-</b>	2014 To 2016
2	14 ENG0 01161	DSP-Based Optical Character Recognition System for Devanagari Characters	1. Prof. V. K. Khandve (Principal Investigator) 2. Prof. P. M. Yawalkar (Co-	BCUD, Savitribai Phule Pune University, Pune	<b>Rs. 90, 000/-</b>	2014 To 2016

			Investigator)			
3	14EN G0004 28	Cognitive Radio Networks: Group based Control Channel Allocation	1. Dr. M. U. Kharat (Principal Investigator) 2. Prof. Dipali Suryawanshi (Research Scholar) 3. Prof. N. P. Sonawane (Research Scholar)	BCUD, Savitriba i Phule Pune Universi ty, Pune	<b>Rs. 2, 30, 000/-</b>	2014 To 2016
4	15EN G0004 84	A Framework for capturing workload statistics & replaying workload simulation to allow assessment of framework improvement for various Hadoop sites	1. Prof. R. P. Aher (Principal Investigator) 2. Prof. V. D. Dabhade (Co- Investigator)	BCUD, Savitriba i Phule Pune Universi ty, Pune	<b>Rs. 48, 000/-</b>	2016 To 2018
5	15EN G0002 39	Fabrication process simulation & characterizat ion of capacitance modulated single electron transistors	Prof. S. C. Vidhate	BCUD, Savitriba i Phule Pune Universi ty, Pune	<b>Rs. 2, 40, 000/-</b>	2016 To 2018

18. Research Centre / facility recognized by the University

<b>Research LAB</b>		
<b>Sr. No.</b>	<b>Item Description</b>	<b>Qty.</b>
1	Computer System - Lenovo Think Center Desktop M72e Tiny, Intel core i3 2120, 3. 1 GHz Processor, 3 MB L2 cache 2C, 1333MHz FSB, 4GB DDR3 RAM, 500GB SATA HDD, Gigabit Ethernet, K/B, Optical Mouse with 3 Yr. Warranty	15
2	Computer System - Lenovo Think Center 10AXA0CSIH Desktop & Lenovo 18. 5" Wide Monitor - 60A7AAR1NP	9
3	Printer - Epson LX300+II	1
4	Windows compatible IT-306WC PC webcam night vision 1/7" CMOS Sensor, Image Resolution, Frame Rating and Image Controlling, USB IO Interface with RGB 24, 1420 Image format.	1
5	USRP Research Trainer Kit (USRP N210 Kit, CBX USRP Daughterboard(1. 2-6HGz), LP 0965 Log Periodic PCB Antenna (850 MHz -6. 5 GHz), SMA Cable and 30 Db Attenuator Loop Back Cable Kit)	1
6	NVIDIA GPU -GEFORCE GT210, 1GB RAM	3
7	Raspberry Pi-2 Kit- Model B, Quad Core CPU, 1GB RAM, 4 USB Ports, 1 HDMI Port, 1 Audio port,	16
8	D-Link Switch 8 Port Switch	5
9	All in one DSP Educational Board - TMS320C6748: Digital signal Processing H. B. 3 VOL SET (All-in-One DSP Educational Practice board with USB JTAG Emulator).	1

**P. G. PROJECT LAB**

<b>Sr. No.</b>	<b>Item Description</b>	<b>Qty.</b>
1	Lenovo Think center3264A62 Desktop, Intel Core I3 Processor, 2 GB RAM, 500 GB HDD	24

19. Publications:

**A) Publications: Faculty**

**1. Patents Registered:**

S.N.	Date-of-Filing	CBR No.	Title	Name of Faculty/Student	Current Status
1	09-09-17	17903	Optimal Resource Management strategies:A virtual machine migration perspective	Dr.M.U.Kharat Prof.Shrinivas K.Sonkar	Registered
2	07-05-17	14175	Frequent Itemset Mining using PFP-Growth via Smart Splitting	Prof.V.B.More Neha V.Sonparate	Registered
3	07-05-17	14181	Mining Top K High Utility Item sets Without Generating Candidates	Prof.V.B.More Lekha I.Surana	Registered
4	07-05-17	14180	Cluster Based Aggregate Key & Fine Grained Index Searching Over Encrypted Cloud Data	Prof.V.B.More Vrushali R.Kadam	Registered
5	07-05-17	14182	Novel Approach For Text Compression	Prof.V.B.More Pallavi Surwade	Registered
6	14/06/2017	13032	Implementation of Malarial Parasite Detection Methods Integrating Morphological Operations	Prof.V.B.More Pranita Ghule	Registered
7	05-06-17	12481	Centralized Smart Card	Prof.V.D.Dabha de Aman Sharma	In Progress

**2. Paper Published:**

Sr. No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Total Citation	SNIP	SJR	Impact factor	h-index
1	Dr. M. U. Kharat	54	26	--	--	1	--	192	-	-	--	7

2	Prof. T. G. Patil	02	--	--	--	--	--	--	-	-	--	--
3	Prof. A. J. Gosavi	02	--	--	---	--	--	--	-	-	--	--
4	Dr. D. V. Patil	05	--	--	--	--	--	--	-	-	--	--
5	Prof. P. M. Yawalkar	22	--	--	--	--	--	--	-	-	--	--
6	Prof. M. A. Bhalekar	08	--	--	--	--	--	--	-	-	--	--
7	Prof. S. C. Vidhate	02	--	--	--	--	--	--	-	-	--	--
8	Prof. R. P. Aher	01	--	--	--	--	--	--	-	-	--	--
9	Prof. V. D. Dabhade	01	--	--	--	--	--	--	-	-	--	--
10	Prof. M. V. Shinde	02	--	--	--	--	--	--	-	-	--	--
11	Prof. V B More	04	--	--	--	--	--	--	-	-	--	--

**B) Publications: Students  
Year 2016-17**

Sr. No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SN IP	SJ R	Impact factor	h-index
1	Rupali Patil Diksha	- -	01	--	--	--	e- ISSN 2395- 0056,	--	--	--	4.45	--

	Namga wali Snehal More Priyanka Suryawanshi .						e- ISSN 2395- 0072					
2	Sandeep Misal Sagar Jadhav Tushar Jore		01	--	--	--	e- ISSN 2395- 0056, e- ISSN 23950 072	--	--	--	5.181	--
3	Kajal Gade Madhuri Mogal Heena Sindhani Prajakta Sonawane		01	--	--	--	IJARI IE- ISSN 2395- 4396	--	--	--		--
4	Sneha Baviskar Shamli Dangar		01	--	--	--	ISSN 2320- 088X	--	--	--		--



	e Shruti Gaikwad  Shraddha Gosavi												
5	Shubham Chinchole  Rohan Saraf  Pradip Chaudhari			01	--	--	--	e- ISSN 2395- 0056, e- ISSN 23950 072	--	--	--	5.181	--
6	Krina Parmar  Kiran Misal  Neha Nemad e  Prajakta Kulkarni			01	--	--	--	ISSN 2456- 0006	--	--	--		--
7	P.S.Ela ke  Thavil J.K.			01	--	--	--	e- ISSN 2395- 0056, e- ISSN	--	--	--	5.181	--

	Durdha walw V.P.						23950 072						
8	Darsha na Jadhav  Dhansh ree Jadhav  Harshal i Nikam  Pooja More		01	--	--	--	e- ISSN 2395- 0056, e- ISSN 2395- 0072	--	--	--	5.181	--	
9	S.S.Kha ndale  F.A. Kadri  A.S.Gai kwad  N.I.Tav a		01	--	--	--	e- ISSN 2395- 0056, e- ISSN 23950 072	--	--	--	5.181	--	
10	Vrushal i Deore  Pooja Kamble  Reshma Bendku le		01	--	--	--	e- ISSN 2395- 0056, p- ISSN 2395- 0072	--	--	--	5.181	--	

11	Manisha Dhatrak  Mohini Somvan shi  Aishwa rya Dhamn e  Dipali Jadhav			01	--	--	--	e- ISSN 2395- 0056, p- ISSN 2395- 0072	--	--	--	5.181	--
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**Year 2015-16**

Sr No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Total Citation	SNIP	SJR	Impact factor	h-index
1	Jain Vivek V. Gawale Mahesh R. Kulkarni Mayur S. Ujjwal Kumar	01	--	--	--	--	--	--	--	-	4.45	--
2	Gopale Kiran N. Bachhav Monali G. Bhamare Pratiksha Wable	01	--	--	--	--	--	--	--	- -	4.45	--

	Lalita											
3	Harshala Donde Chaitali Borse Minal More Minal Phalak	01	--	--	--	--	--	--	--	-	4.45	--
4	Namarata Butch Navnath Jadhav Kiran Kuwar Nauman Sayyed	01	--	--	--	--	--	--	--	-	4.45	--
5	Tanaya Deshmukh Rutuja Rathod Ashwini Sawant	01	--	--	--	--	--	--	--	-	4.45	--
6	Nivedeta Jagtap Sukanya Mule Yogita Ahuja Neeraj Ganani	01	--	--	--	--	--	--	--	-	4.45	--
7	Bhakti Jadhav Aarti Mor Snehal Jadhav Pooja Kulthe	01	--	--	--	--	--	--	--	-	4.45	--
8	Wagh Paresh Hemant Khankari Vidhate	01	--	--	--	--	--	--	--	-	4.45	--
9	Priyadarsh ani Waghmar e Shraddha Dhande Deesha Desle Iram Syed	01	--	--	--	--	--	--	--	-	4.45	--

10	Malay Modi Prashant Thorat Vivek Icham Pandurang Umrekar	01	--	--	--	--	--	--	--	--	4.45	--
11	Nikhil Gujrathi Shubham Agrwal Mohit Mahajan Suhas Suryawan shi	01	--	--	--	--	--	--	--	--	4.45	--
12	Pranjal Pagar Kanchan Pawar Snehal Sagaonkar Sanjana Zagade	01	--	--	--	--	--	--	--	--	4.45	-
13	Komal Agrawal Shikha Raghuwan shi Avanti, Dhumal Pooja Kadlag	01	--	--	--	--	--	--	--	--	4.45	--
14	Azaj Ahmed Mukul Tilak Shefali Kolage Amit Kolhe	01	--	--	--	--	--	--	--	--	4.45	--
15	Pooja Gawale Pooja Shubhangi Kumavat Rutuja Jadhav	01	--	--	--	--	--	--	--	--	4.45	--
16	Manish Kothe Harshal Karandika r Nikhil Wani Sumit Tamkhane	01	--	--	--	--	--	--	--	--	4.45	--

17	Diksha Bhusal Mohini Nemade Rutuja Lohokare	01	--	--	--	--	--	--	--	--	- -	4.45	--
18	Sonali Bendke Pooja Adhav Vandana Benke Manisha Kukkar	01	--	--	--	--	--	--	--	--	- -	4.45	--

20. Areas of consultancy and income generated

Sr. No.	Area Consultancy	Income Generated
1	Course Conduction & Expert Services	22, 04, 644/-
2	Testing	---
3	Design & Development	1,50,000/-
4	Infrastructural & Services	11, 32, 010/-

21. Faculty as members in

- a) National committees  
c) Editorial Boards....

- b) International Committees

Sr. No.	Committee	Number of Faculties
1	National	01
2	International	--
3	Editorial Boards	02
4	Reviewer / Judge / Evaluator	09

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	2017-18	03	16.00
2	2016-17	17	89.47
3	2015-16	13	59.10
4	2014-15	13	72.22
5	2013-14	11	65.00

- 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 Sponsored Projects	% of Sponsored Projects
1	2017-18	16	84.00
2	2016-17	02	10.53
3	2015-16	09	40.90
4	2014-15	05	27.78
5	2013-14	06	35.00

23. Awards / Recognitions received by faculty and students

A. Awards / Recognitions received by faculty

Sr. No	Name of Faculty	Award	Remark
1	Dr. M. U. Kharat	<ul style="list-style-type: none"> <li>• Regional Students Branch Coordinator, CSI</li> <li>• Fellow IEI</li> <li>• Nodal Centre Incharge (Amrita Virtual Lab)</li> <li>• Member BOS-IT &amp; CE (Govt. COE, Karad, GHRCEM, Pune, SPPU, Pune)</li> <li>• Ex-Member, Faculty of Engineering. SPPU, Pune</li> </ul>	
2	P. M. Yawalkar	Subject Chairman for TOC & MIT Lab Discrete Structures Member, Institute Management Committee, ITI Surgana.	
3	A. R. Ugale (Banait)	Subject Chairman for Computer Organization	
4	S. C. Vidhate	IIT-Spoken Tutorial Regional Promoter IIT-Spoken Tutorial SELF-WORKSHOP Ambassador	
5	V. D. Dabhade	Secretary, CSI- Nashik Chapter Longest Continuous SBC award	

		IIT-Spoken Tutorial SELF-WORKSHOP Ambassador	
6	CSI Accredited Wing 2016-17	CSI Accredited Wing 2016-17	
7	IIT FOSS Lab	IIT FOSS Lab	National Level
8	IIT-Spoken Tutorials Super Resource Centre	IIT-Spoken Tutorials Super Resource Centre	Regional Level
9	Nodal Centre of Amrita Virtual Lab	Nodal Centre of Amrita Virtual Lab	National Level
10	Computer Society Of India, Students Convention,	Computer Society Of India, Students Convention,	Regional Level (MS and GOA)
11	cPGCON-15 Conference of total 2700 participants by BOS	cPGCON-15 Conference of total 2700 participants by BOS	University Level

B. Awards / Recognitions received by students

Sr. No	Name of Student	Award	Remark
1	Aman Sharma, Rishabh Shah, Suraj Gharate, Abhilash Chandrashekharan	Project "Smart Card" shortlisted for 2nd Round in CSI Regional Competition	Regional Level (MS & Goa) (2016-17)
2	MET's IOE CSI Student Branch	Best Student Branch Award	National Level (2012-13, 13-14, 15-16)
3	Kashaf Shaikh	Highest Committed Student Branch Activist Award, CSI	Regional Level (MS & Goa)
4	Arpit Kale, Jaspreet Kaur	Winner, CSI National Project Competition "M-learning"	National Level (2011-12)
5	Mr. Rohan Saraf	Silver medal in State Olympiad in "Project Management" By Tech Trainer and Testers, Pune	Nashik Region (2016-17)
6	Kumavat Kavita	Best Paper – cPGCON 2014	University Level
7	Pingale Ashwini	Best Paper – cPGCON 2014	University



			Level
8	Kholambe Sandip	Best Paper – cPGCON 2014	University Level
9	Sarika Sarode	Best Paper – cPGCON 2017	University Level
10	Vrushali Kadam	Best Paper – cPGCON 2017	University Level
11	Neha Belekar	Best Paper – cPGCON 2017	University Level
12	Shawn Colonnell	Google Ambassador	Regional Level

24. List of eminent academicians and scientists / visitors to the department

**Year 2017-18**

<b>Sr. No</b>	<b>Resource Person With Designation</b>	<b>Organization</b>	<b>DATE</b>	<b>Remark</b>
1	Mr. H.B. Gangurde	PG Student MET's IOE Nasik	27/05/2017 To 02/06/2017	Internship Training C, C++ (Object Oriented Prog.)
2	Mr. N.B. Shaikh Mr. R.D. Pahadi	Seed Infotech Nasik Oxitech Nasik	27/05/2017 To 01/06/2017	Internship Training Java
3	Mr. Syed Aamer Mr. Mukhtar sari	Kalsekar Tech. Campus, School of Engg & Tech, Navi Mumbai,	27/05/2017 To 29/05/2017	Internship Training Android Application Development
4	Mr. P.S. Lokhande	Ramrao Adik Institute of Technology, Navi Mumbai,	30/05/2017 To 02/06/2017	Internship Training Cyber Security, Digital Forensic
5	Mr. S.V. Ghorpade	GES's RH Sapat College of Engineering, Nashik	27/05/2017 To 31/05/2017	Internship Training Python

**Year 2016-17**

<b>Sr No</b>	<b>Name of Eminent Person</b>	<b>Organization</b>	<b>Date</b>	<b>Remark</b>
1	Dr. D. V. Patil, Professor	GES's RH Sapat Institute of Engineering, Nashik	25/07/2016	Expert lecture on "Data Mining Techniques and Applications"
2	Dr. S. V. Gumaste, Professor,	GES's RH Sapat Institute of Engineering, Nashik	27/07/2016	Expert lecture on "Design and Analysis of Algorithms"
3	Dr. Narendra Shekokar, Professor and Head	D J Sanghavi Institute of Engineering, Vile Parle, Mumbai	12/09/2016	Expert lecture on "Handheld Operating System"
4	Dr. S. K. Shinde, Professor and Head, Dept of Comp Engg,	Lokmanya Tilak Institute of Engineering, Navi Mumbai	12/09/2016	Expert lecture on "Limitations of Computations in Tractable and Intractable Problems"
5	Dr. Uday Wad, Director	Datamatics Ltd, Nashik	17/09/2016	Expert lecture on "Support Vector Machines Based Classification"
6	Dr. R. B. Naik, Professor and Head, Dept. of Comp. Engg.	Marathwada Institute of Technology, Aurangabad	18/09/2016	Expert lecture on "BigData and Hadoop"
7	Dr. Hitendra D. Patil, Principal	SSVPS's Institute of Engineering, Dhule	19/09/2016	Expert lecture on "Security Issues in Pervasive Computing"
8	Dr. S. B. Wankhade, Professor and Head, Dept of Comp Engg.	Rajeev Gandhi Institute of Technology, Varsova, Mumbai	23/09/2016	Expert lecture on "Groups and Rings"
9	Dr. G. K. Patnaik, Professor and Head, Dept of Comp Engg.	Shram Sadhana Bombay Trust's Institute of Engineering,	27/09/2016	Expert lecture on "Security Tools for Computer Forensic: Kali

		Bhambori, Jalgaon		OS”
10	Dr R. S. Tiwari, Director	Intellidemics, Pvt. , Ltd. , Nashik	28/09/2016	Expert Lecture on “Audit Course: Smart City”

### Year 2015-16

Sr No	Name of Eminent Person	Organization	Date	Remark
1	Dr. R. S. Tiwari, Director	Yashwantrao Chavan Maharashtra Open University, Nashik	22/07/2015	Expert lecture on “Entrepreneurship Development and Job Availability in Advanced Computing Technology”
2	Dr. G. K. Patnaik, Professor and Head, Dept of Comp Engg	Shram Sadhana Bombay Trust’s Institute of Engineering, Bhambori, Jalgaon	20/09/2015	Expert lecture on “Open Source: A Bright Future for the Developer”
3	Dr. S. K. Shinde, Professor and Head, Dept of Comp Engg.	Lokmanya Tilak Institute of Engineering, Navi Mumbai	20/09/2015	Expert lecture on “Cloud Computing: An Opportunistic Business Model”
4	Dr. S. B. Wankhade, Professor and Head, Dept of Comp Engg.	Rajeev Gandhi Institute of Technology, Varsova, Mumbai	26/09/2015	Expert lecture on “3D Reconstruction in Computer Vision and Image Watermarking with its applications”
5	Dr Satish Devane, Professor and Head, Dept of Comp Engg,	Datta Meghe Institute of Engineering, Airoli	28/09/2015	Expert lecture on “Big Data Management”
6	Dr. S. B. Wankhade, Professor and Head, Dept of Comp Engg.	Rajeev Gandhi Institute of Technology, Varsova, Mumbai	31/03/2016	Expert lecture on “Information Security”
7	Dr. G. K. Patnaik, Professor and Head, Dept of	Shram Sadhana Bombay Trust’s Institute of	03/04/2016	Expert lecture on “Advancements in Parallel

	Comp Engg.	Engineering, Bhambori, Jalgaon		Computing”
8	Dr. Uday Wad, Director	Datamatics Ltd. , Nashik	03/04/2016	Expert lecture on “Software Design and Testing”

### 2014-15

Sr. No	Name of Eminent Person	Organization	Date	Remark
1	Mr. Swapnil Kulkarni, Sr. Software Engineer,	Kanaka Software Consulting Pvt Ltd, Pune	13-14 /09/2014	Two days workshop on “Java Programming”
2	Dr. G. K. Patnaik, Professor and Head, Dept of Comp Engg, SSBT COE, Bhambori, Jalgaon	Shram Sadhana Bombay Trust’s Institute of Engineering, Bhambori, Jalgaon	29/09/2014	Expert Lecture on “Advances in Computer Architecture”
3	Dr. R. S. Tiwari, Director	Yashwantrao Chavan Maharashtra Open University, Nashik	30/09/2014	Expert Lecture on “Intelligent System”
4	Dr. Nitin Choube Professor and Head, Dept of Comp Engg.	Narsee Monjee Institute of Management Studies, Shirpur	01/10/2015	Expert Lecture on “Design And Analysis Of Algorithm”
5	Mr. Kedar Ghogale Technical Officer	C-DAC, Pune	11/10/2014	Expert Lecture on “Distributed Computing”
6	Dr. P. M. Javandhia Principal	Pankaj Laddhad Institute of Technology and Management Studies, Buldana	19/10/2014	Expert Lecture on “Research Methodology”
7	Dr. Uday Wad, HR Manager	Cell Bean Technologies, Nashik	21/10/2014	Expert Lecture on “Preparing Students For Software Industries”

**2013-14**

<b>Sr. No</b>	<b>Name of Eminent Person</b>	<b>Organization</b>	<b>Date</b>	<b>Remark</b>
1	Mr Nikhil Kulkarni, Director	TechnoWings solutions, Nashik	23-26 /08/2013	Four days workshop on “Essentials of GCC for DSPS and OSA”
2		Lucideus Tech. Pvt. Ltd. , New Delhi	21-22 /09/2013	Two days workshop on “Ethical Hacking” in Hack X-Plloit

25. Seminars / Conferences / Workshops organized & the source of funding  
a) National                      b) International

<b>Sr. No</b>	<b>Programme Title</b>	<b>National/ International</b>	<b>Source of Funding</b>
1	<b>ITCCE</b> A National Conference on Innovative trends in Computer and Communication Engineering on 4 <sup>th</sup> and 5 <sup>th</sup> September 2014	National	Rs. 1000/- for PG Student and Rs. 1500/- for Faculty Members and Industry person Rs. 2000/-
2	<b>A Doctoral Consortium</b> A Doctoral Conference for all Ph. D..Persons and Ph. D..Aspirants organized by Dept. Of Computer and Mechanical Engineering from 5 <sup>th</sup> to 7 <sup>th</sup> January 2015	National	Rs. 1000/- for Research Scholar and Rs. 1500/- for Faculty Members and Industry person Rs. 2000/-
3	<b>CPGCON'15</b> A Fourth Post Graduate Symposiums for PG Students on 13 <sup>th</sup> and 14 <sup>th</sup> March 2014	University	Rs. 2000/- for presentators, Rs. 1000/- for Attendees and Rs. 2000/- for Research Scholars and Ph. D.Personnel

26. Student profile programme/course wise:

Name of the Course / programme	Academic Year	Applications Received	Selected	Enrolled		Pass Percentage
				*M	*F	
UG : Computer Engineering	2017-18	The admission process is governed by DTE, number of applications are for total intake of Maharashtra state	56	30	26	Admitted
	2016-17		59	36	23	66.10%
	2015-16		63	35	28	49.20 %
	2014-15		59	33	26	62.71 %

Name of the Course / programme	Academic Year	Applications Received	Selected	Enrolled		Pass Percentage
				*M	*F	
PG : Computer Engineering	2017-18	The admission process is governed by DTE, number of applications are for total intake of Maharashtra state	03	01	02	Appeared
	2016-17		04	00	04	Appeared
	2015-16		17	03	14	100 %
	2014-15		24	05	19	100 %

\*M=Male\*F=Female

27. Diversity of Students

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Name of the Course	Academic Year	% of students from the same state		% of students from other States	% of students from abroad
		HU	OHU		
UG : Computer Engineering	2017-18	76.78%	23.21%	Nil	Nil
	2016-17	61.67 %	23.33 %	13.33 %	Nil
	2015-16	66.67 %	25.00 %	12.70 %	Nil
	2014-15	56.67 %	31.67 %	10.00 %	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Sr. No	Name of competitive examinations	Year	Number of students
1	GATE	2013-14	5
		2014-15	4
		2015-16	4
		2016-17	38
2	CMAT / MBA-CET	2013-14	4
		2014-15	2
		2015-16	--
3	IES/GRE/GMAT/TOEFL	2013-14	--
		2014-15	1
		2015-16	1

29. Student progression

Student progression	Against % enrolled 2016-17	2015-16	2014-15	2013-14
UG to PG	---	12.12 %	23.53 %	23.81 %
PG to M.Phil.	---	---	---	---
PG to Ph.D.	---	---	---	---
PhD to Post-Doctoral	---	---	---	---
<b>Employed</b> * Campus selection * Other than campus recruitment	46.93%	40.00 %	66.67 %	54.35 %
Entrepreneurship/Self-employment	---	1	2	---

30. Details of Infrastructural facilities

**A) Library**

**A1. Central Library**

Sr. No.	Library Resources	UG & PG
1	Total Number Books (Volumes)	4921 + 641 = 5562
2	Total Number Title	1382 + 184 = 1566
3	Indian Journals	06 + 07 = 13
4	Magazines	01

**A2. Departmental Library**

Sr. No.	Library Resources	UG & PG
1	Total Number Books (Volumes)	80
2	Total Number Title	72
3	Indian Journals	01
4	Magazines	01
5	Educational CD's	14



## B) Internet Facility for Staff and Students

Institute has strong IT infrastructure in the support of various Activities and their needs:

1. An Internet lease line of 20 MBPS 1:1
2. Tata tele services Ltd. 10Mbps 1:1 Internet Leased Line
3. BSNL-VPN-AICTE-NMICT Internet of 20 MBPS

## C) Class Rooms with ICT facility: 06

## D) Laboratories

Sr. No.	Name of the Laboratory	Name of the Important equipment
1	Computer Center and advance computer lab	Lenovo Think center M72E Tiny Desktop, Intel Core i3 2120 3. 1GHz Processor, 4GBRAM , 500GB SATA HDD, Epson LX 300, 9 Pin, 80 Cal. Printer, Epson LQ 1150, 24 Pin, 136 Cal. Printer
2	PG Project Lab Second Floor (ME1)	Lenovo Think center 3264A62 Desktop, Intel Core I3 Processor, 2 GB RAM, 500 GB HDD
3	ME / Research Lab Second Floor (ME2)	Lenovo Think center Desktop, Intel Core I3, 2120 3. 1 GHz Processor, 4 GB RAM, 500GB HDD, Epson LX-300+II Printer
4	Data Structure Lab, Fifth Floor (L1)	Intel Core 2 Duo 2. 8 GHz P-IV Computer System, 2 GB RAM, 160 GB HDD, EPSON LX-300 Printer 40 KVA UPS System with Battery 12V, 40AH, SFU 100A, Battery
5	Digital & Microprocessor Lab First Floor (DMP 1)	Intel Core 2 Duo 2. 8 GHz P-IV Computer System, & EPSON LX-300 Printer
6	Digital & Microprocessor Lab First Floor (DMP 2)	Digital & Analog IC Tester, Digital Trainer Kit, Dyna 8051, 8251, 8253, 8255, 8259, 8279, ADC, DAC, Stepper Motor Study Cards, Dyna 8086 Trainer

		Kit
7	Language and Programming Lab C1	Lenovo Think Center M73 Tiny Desktop, Core I3, 4 GB RAM, 500 GB HDD, Epson LX 300, 9 pin, 80 Col Printer
8	Project Lab PL1	Lenovo Think center 315QRT9 Desktop, Intel Core i3 2100, 4GB DDRIII, 320 GB Sata HDD, 19" TFT Monitor
9	Project Lab PL2	
10	Programming Lab C2	Lenovo Think Center M73 Tiny Desktop, Core I3, 4 GB RAM, 500 GB HDD

31. Number of students receiving financial assistance from Institute, university, government or other agencies

Sr. No.	Type of Assistant	Source Agency	Number of Students (FE to BE)		
			2016-17	2015-16	2014-15
1	Scholarship	Samaj Kalyan (Government)	166	169	143
2	EBC	DTE, (Government)	28	30	22
3	MET Scholarship	MET Trust	-	-	-

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

<b>E-news Letters / Magazine Details</b>					
<b>Sr No</b>	<b>Activity</b>	<b>Date</b>	<b>Topic/Area</b>	<b>Benefits</b>	<b>Target</b>
1	Launch of First Edition of SAC E-newsletter Issue 1 Volume 1 on 15 <sup>th</sup> September 2013 and Issue 1 Volume 2 on 2nd April 2014	2013-14	Information about an annual event "METASTORM'13" and all other activities conducted by SAC throughout the year	To make students aware of various activities like workshops/ seminars/ expert lectures organized by students and for students under the guidance of faculty coordinator. Also to make them aware about the importance of such activities in their education and professional life.	SE,TE, BE Students
2	Launch of Second Edition of SAC E-newsletter Issue 2 Volume 1 on 15 <sup>th</sup> September 2014 and Issue 2 Volume 2 on 2nd April 2015	2014-15	Information about an annual event "METASTORM'14" and all other activities conducted by SAC throughout the year	To make students aware of various activities like workshops/ seminars/ expert lectures organized by students and for students under the guidance of faculty coordinator. Also to make them aware about the importance of such activities in their education and professional life.	SE,TE, BE Students

3	Launch of Third Edition of SAC E-news letter Issue 3 Volume 1 on 10th October 2015 and Issue 3 Volume 2 on 4th April 2016	2015-16	Information about an annual event "METASTORM'15" and all other activities like seminars/workshops/expert lectures etc. conducted by SAC throughout the year	To make students aware of various activities like workshops/seminars /expert lectures organized by students and for students under the guidance of faculty coordinator. Also to make them aware about the importance of such activities in their education and professional life.	SE,TE , BE Students
4	Launch of Fourth Edition of SAC E-news letter Issue 4 Volume 1 in 10th October 2016 and Issue 4 Volume 2 on 3rd April 2017	2016-17	Information about an annual event "METASTORM'16" and all other activities like seminars/workshops/expert lectures etc. conducted by SAC throughout the year	To make students aware of various activities like workshops/seminars /expert lectures organized by students and for students under the guidance of faculty coordinator. Also to make them aware about the importance of such activities in their education and professional life for	SE,TE , BE Students

The various activities carried out for content beyond syllabus are as follows:

Sr. No	Activity	Students/ Faculty Involved
1	Industrial Visits	TE, BE& ME Student
2	Expert Lectures / Guest Lectures	SE, TE, BE& ME Students
3	Involvement in R&D Projects through DST and University Grants	Faculty
4	Virtual Labs / NPTEL Video Lectures and other value addition courses	SE, TE, BE & ME Students

5	Courses on Communication Skills/Soft Skills	SE, TE, BE & ME Students
6	IIT spoken Tutorials for the students for development of soft skills	SE, TE, BE & ME Students
7	Training on Aptitude and Interview Techniques	SE, TE, BE Students
8	Various co-curricular and extracurricular activities conducted and organized for the students.	SE, TE, BE & ME Students
9	Activities conducted through professional societies.	SE, TE, BE & ME Students

### Expert Lectures Organized

#### Year 2013-14

Sr. No	Activity	Topic/Area	DATE	Targeted Group
01	Workshop and Expert Lecture	Advance Computer Network	22/03/2014	ME(52/64) + TE(60/78) = 79.08%

#### Year 2014-15

Sr. No	Activity	Topic/Area	DATE	Targeted Group
01	Expert Lecture	Advances in Computer Architecture	29/09/2014	ME(43/46) + BE(70/84) =88.40%
02	Expert Lecture	Intelligent System	30/09/2014	ME(29/46) + BE(50/64) =74.55%
03	Expert Lecture	Distributed Computing	11/10/2014	ME(37/46) + BE(50/66) =78.09%
04	Expert Lecture	Research Methodology	19/10/2014	ME(29/46) + BE(50/66) = <b>69.70%</b>

05	Expert Lecture	Preparing Students For Software Industries	21/10/2014	ME(21/46) + BE(60/66) =68. 28%
06	Expert Lecture	Challenges Ahead On Personality Development, Time Management And Result Oriented Attitude	19/01/2015	TE (65/74) = 87. 83%

### Year 2015-16

Sr. No	Activity	Topic/Area	DATE	Targeted Group
01	Expert Lecture	Open Source: A Bright Future for the Developer	20/09/2015	ME(29/41) + BE(84/84) =85. 36%
02	Expert Lecture	Cloud Computing: An Opportunistic Business Model	20/09/2015	ME(25/41) + BE(84/84)= 80. 48%
03	Expert Lecture	3D Reconstruction in Computer Vision and Image Watermarking with its applications	26/09/2015	ME(22/24) + BE(84/84)= 95. 83%
04	Expert Lecture	Big Data Management	28/09/2015	ME(19/24) + BE(84/84) +TE(70/79)= 89. 25%
05	Expert Lecture	Design And Analysis Of Algorithm	01/10/2015	ME(32/46) + BE (70/84) =76. 44%
06	Expert Lecture	Information Security	31/03/2016	ME(15/ 17) + BE(84/84) =94. 11%
07	Expert Lecture	Advancements in Parallel Computing	03/04/2016	ME(25/ 25) + BE(84/84) =100%

08	Expert Lecture	Software Design and Testing	03/04/2016	ME(25/25) + BE(84/84) + TE(79/79)=100%
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### Year 2017-18

Sr. No	Activity	Topic/Area	DATE	Targeted Group
01	Internship Program	Internship Training C, C++ (Object Oriented)	27/05/2017 To 02/06/2017	SE
02	Internship Program	Internship Training Java	27/05/2017 To 01/06/2017	TE
03	Internship Program	Internship Training Android Application	27/05/2017 To 29/05/2017	BE
04	Internship Program	Internship Training Cyber Security, Digital	30/05/2017 To 02/06/2017	TE
05	Internship Program	Internship Training Python	27/05/2017 To 31/05/2017	BE
06	Induction Program	Induction Training Number System, Boolean Algebra, Set Theory	15/06/2017 To 16/06/2017	SE
07	Induction Program	Induction Training Discrete Structure, Data Structure	15/06/2017 To 16/06/2017	TE
08	Induction Program	Induction Training Research Methodology	15/06/2017 To 16/06/2017	BE

Regular interaction among faculty and industry experts on various aspects is ensured by following activities.

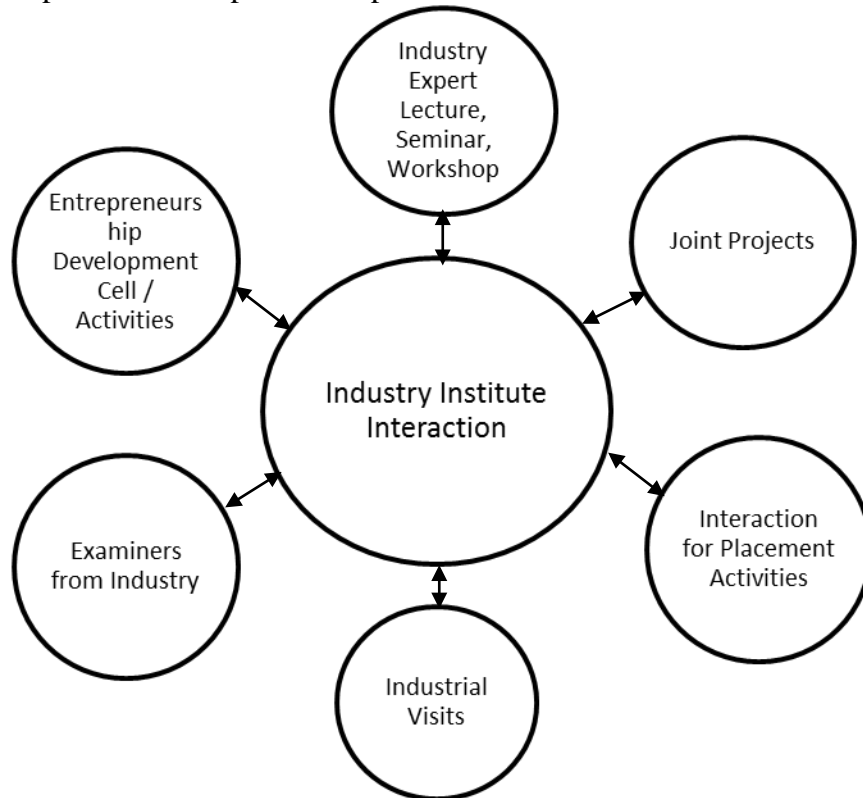
#### 2. Joint research projects:

Department of Computer Engineering has signed Memorandum of Understanding (MoU) with few companies for joint collaborative research, organization of workshops/symposia/projects and training programs for the students and faculty.

#### 2. Industry experts lectures, seminars and workshops:

Department organizes guest lectures, workshop and seminars of eminent personalities to give professional information on various areas like Personality

& Soft Skills Enhancement Program me, Scientific & Educational Resources, Social Awareness, Career Guidance & Higher Education prospectus so that these experts share their practical experiences with the students.



**Fig. Industry institute interaction**

### **3. Industrial Visits:**

Industrial visits are organized for all Third and final year students every year. Visit to industry / organization is done to get exposure to industrial environment, interaction with industry experts, team work etc.

### **4. Examiners from Industry:**

In strengthening the relationship between Industry and Institute University has also initiated the process of appointing examiners from Industry specifically for the evaluation of BE projects. The Industry experts evaluate and interact with the students for major project development.

### **5. Entrepreneurship Development Activities:**

- To create awareness and interest of being an entrepreneur and consider entrepreneurship as a lucrative, preferred and viable career option, Institute has developed Entrepreneurship Development cell. ED cell organizes seminars, workshops for the students with the help of Entrepreneurs. The



initiatives provide opportunities to blend student passion with support, structure and resources to address challenges of innovations. Opportunities including design challenges, conferences, workshop, venture accelerators and an Entrepreneur-in-Residence program support students in building their personal and professional frameworks.

- To orient and prepare students for an entrepreneurship career by imparting knowledge and aptitude for entrepreneurship; Institute invites successful businessman from diverse background as resource persons to share their knowledge and experience with the students.

The details of various activities carried out in last 3 years are as follows:

**(A) Various activities carried out**

<b>Sr. No</b>	<b>Initiatives</b>	<b>Date</b>	<b>Implementation details</b>	<b>No of Students Participated (%)</b>	<b>Details of the Resource person</b>	<b>Impact analysis based on feedback and result</b>
1	Zensar Employability Skills Development Training	1 <sup>st</sup> June to 20 <sup>th</sup> June 2015  (2013-14, 2014-15 and 2016-17 Batch)	Technical Training on Core JAVA, SQL, RDBMS, PLSQL	22 (2013-14) 30 (2014-15) 21 (2015-16)	Satish Mahajan And Ms Upasna From Seed Infotech and GTT	It helped students get placed in Zensar as well as other companies
2	Aptitude Training program by T. I. M. E.	In the academic year 2014-15 & 2015-16	Quantitative, Logical, Verbal Aptitude, Soft Skills	26	Mr. Krunal Dhakte From T. I. M. E. Group	Helped students to crack the 1 <sup>st</sup> selection process of companies
3	In-house Employability Skills Assessment	In-house technical and aptitude assessment is	Technical as well as General Aptitude Assessment	All the final year students	In-house faculties	To prepare on required platform before

	Platform (ESAT)	carried out.				any campus recruitment process
4	IIT Spoken Tutorial Certification	2013-14 2014-15	Technical Course along with IIT Certification	All Students	IIT Study Material	This is essential for students to scale up their technical skill

**(B)Other Efforts**

Sr. No	Initiatives	Implementation details	Details of the Resource person	Impact analysis
1	MOUs with industries	1. MoU with Zensar Technologies for technical training as well as soft skills training. 2. MoU with ESDS Software Solutions. 3. MoU with Intellidemics.	1. Mr. Mukund and Mr. Satish Mahajan from Zensar 2. Ms. Radhika Malik, HR, ESDS. 3. Mr. R. S. Tiwari, Director.	The program helped students to get placed in Zensar as well as other companies from relevant domain. Hands-on for students on IoT
2	Association with industry for faculty and industry training in general	Association for System Administrator program. (2015-16)	Ms. Kavita from Aress Software Solutions.	To training system administrator on open source operating system advance technologies.
3	Industry persons called as Experts/Judge for various events	1. Interview Skills (2014-15) 2. Android Technical Workshop STTP. (2015-16)	1. Ms. Sapna Karia, BDE, NEC. 2. Prasad from	Students got an idea about how to face personal interview and with Android

			GM Soft-tech	program students were comfortable doing projects in android and fetch opportunities from the same domain
4	Invited industry personnel for may be mock interviews/judge etc.	1. For BeRFI Event (2014-15) Judge panel of ELC 2. For BeRFI Event (2015-16) Judge panel of APART	---	Students got over all idea about the entire selection process carried out by any IT industry.

### **Initiatives related to industry internship/summer training**

*(Mention the initiatives, implementation details and impact analysis)*

<b>Initiatives related to industry internship/Summer training and its Implementation details</b>	<b>Impact analysis &amp; No of students participated</b>
e. 15 to 35 days leave is given for the internship f. Students are informed on email groups / briefing by placement officer regarding internship opportunities. g. Internships are obtained through Placement Cell. h. Industry interaction also helped in obtaining Industry projects for the BE students	Students will get oriented for industry culture and professional and engineering ethics. Industrial Visit: 2014-15      42 2013-14      57 2012-13      45 Industry Projects: 2015-1609 2014-15      03 2013-14      06 2012-13      03

### 33. Teaching methods adopted to improve student learning

1. Adherence to Academic Calendar
2. Use of various instructional methods and pedagogical initiatives

3. Methodology to support weak students and encourage bright students
4. Quality of class room teaching
5. Conduction of Experiments
6. Continuous assessments in laboratory
7. Student feedback of teaching learning process and action taken
8. Collaborative Learning
9. Seminar finalization
10. Elective Subject Selection
11. Teaching Work Load Distribution
12. Monitoring of Teaching Learning Process

34. Participation in Institutional Social Responsibility (ISR) and Extension Activities

<b>Sr. No</b>	<b>Activity</b>	<b>Targeted group</b>	<b>Number of Beneficiaries</b>	<b>Funding Agency</b>
01	ZP School Malegaon	1 <sup>st</sup> to 7 <sup>th</sup> Std. Students	289	Willingly contribution from student & faculty & revenue generation from technical & non-technical activities

35. SWOC analysis of the department and Future plans

<b>Strength</b>	Dedicated faculties, Encouraging work culture Progressive support from authorities & management
<b>Weakness</b>	Lack of senior faculty, Nonresidential campus,
<b>Opportunity</b>	Good scope for Higher Education & Research
<b>Challenges</b>	Hiring of senior faculties, Industry tie-ups for bridging the gap.

## Evaluative Report of the Department of Electronics and Telecommunication Engineering

1. Name of the department : **ELECTRONICS AND TELECOMMUNICATION ENGINEERING**
2. Year of Establishment : **2006**
3. Names of Programmes / Courses offered (UG, PG, M. Phil. ,Ph. D. , Integrated Masters; Integrated Ph. D. , etc.) :  
**UG : Electronics & Telecommunication Engineering**
4. Names of Inter disciplinary courses and the departments / units involved :

UG

Sr. No.	Course	Department
1	Basic Electrical Engineering	Electrical Engineering Department
2	Engineering Mechanics	Civil Engineering Department
3	Basic Civil Engineering	Civil Engineering Department
4	Basic Mechanical Engineering	Mechanical Engineering Department
5	Engineering Graphics	Mechanical Engineering Department
6	Computer Fundamental and Programming Languages	Computer Engineering Department
7	Engineering Mathematics	First Year Engineering Department
8	Applied Sciences	First Year Engineering Department
9	Workshop Practices	Workshop Department

5. Annual / semester / choice based credit system (programme wise) :  
**UG : SEMESTER & CREDIT BASED SYSTEM**

6. Participation of the department in the courses offered by other departments:

Sr. No.	Course	Department
1	Electrical and Electronics Engineering	Mechanical Engineering Department
2	Microcontrollers and Advance microcontrollers	Electrical Engineering Department
3	Basic Electronics Engineering	First Engineering Department

7. Courses in collaboration with other universities, industries, foreign institutions, etc. :

Sr No	Course	Name of Institution / Company
1	Antenna Design and Fabrication	Akademica Lab Solution , Mumbai
2	IBM Watson IOT	Persistent Systems, Pune
3	PLC and SCADA	Jadhav Training Institute, Pune
4	OSCAD	Spoken Tutorials, IIT, Pawai, Mumbai

8. Details of courses / programmes discontinued (if any) with reasons: **NIL**

9. Number of teaching posts

	Sanctioned	Filled
Professors	02	02
Associate Professors	04	04
Asst. Professors	22	18

10. Faculty profile with name, qualification, designation, specialization, (D. Sc. / D. Litt. / Ph. D. / M. Phil. etc.)

Sr. No	Name	Qualification	Designation	Specialization	No. of Years of Experience		No. of Ph. D. Students guided for the last 4 years
					Teaching	Industrial	
1	Dr. V. J. Gond	M.Tech. (EDT) Ph.D. (EC)	Professor	Optical Fiber Communication	28	-	05
2	Mr. R. B. Rehpade	M. Tech(ECE) Ph. D. (Pursuing)	Professor	Micro-electronics	25	-	NA
3	Mr. D. B. Ahire	M E.(EC) Ph. D. (Pursuing)	Assistant Professor	Electromagnetic & Signal Processing	18	-	NA

4	Mr. P. A. Patil	M. E. (EC)	Assistant Professor	Biomedical signal processing & Communication	19.11	-	NA
5	Mrs. M. G. Shinde	ME Electronics Ph. D. (Pursuing)	Assistant Professor	Image Processing	16.9	-	NA
6	Mrs. P. N. Metange	M. E. (Digital Electronics) Ph. D. (Pursuing)	Assistant Professor	VLSI Design	9.2	1.6	NA
7	Mr. S. M. Dhekane	MTech (Digital System & Comm. Engg), Ph. D. (Pursuing)	Assistant Professor	VLSI Design & PIC Microcontroller	7	4.1	NA
8	Mrs. S. P. Deore	M. E. (E & TC)	Assistant Professor	Digital Electronics	7.7	7.6	NA
9	Mrs. P. V. Chaudhari	M. E. (Electronics)	Assistant Professor	Electronics	14.5	-	NA
10	Mr. A. S. Ufade	M. E. (E & TC)	Assistant Professor	Digital Electronics	8.4	05	NA
11	Mrs. M. S. Wagh	ME (E & TC)	Assistant Professor	Signal Processing	8	5	NA
12	Mrs. K. D. Mahajan	M. E. (Communication)	Assistant Professor	Antenna & Microwave Communication	9.8	1.7	NA
13	Mrs. M. N. Jadhav	M. E. (Electronics)	Assistant Professor	Communications	10.4	-	NA

14	Mr. A. B. Kotade	M. E. (EC) Ph. D. (Pursuing)	Assistant Professor	Communication & Signal Processing	8	2	NA
15	Mrs. U. B. Barahate	M. E. (EC)	Assistant Professor	Microcontroller	9.2	-	NA
16	Mrs. D. S. Suryawanshi	M. E. (EC)	Assistant Professor	Embedded systems Design	9.1	-	NA
17	Mr. N. L. Ahire	M. E. (E&TC)	Assistant Professor	VLSI & Embedded System	7.7	1.5	NA
18	Mr. K. T. Ugale	M. Tech (EC)	Assistant Professor	Digital Communication	9	-	NA
19	Mr. M. B. Kadlag	M. E. (E&TC)	Assistant Professor.	Signal Processing	7.2	1	-
20	Mr. K. R. Bhagat	M. Tech (EC)	Assistant Professor	Digital Communication	8.0	-	NA
21	Mrs. A. U. Gupta	M. Tech (E&TC)	Assistant Professor.	Communications	7.8	-	NA
22	Mr. N. P. Sonawane	M. E. (Signal Processing)	Assistant Professor.	Communication & Signal Processing	5	1	NA
23	Mr. M. P. Giri	M. Tech (Electronics.) Ph. D. Pursuing.	Assistant Professor.	Digital System	2.5	0.10	N. A

11. List of senior visiting faculty : **NIL**
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : **NIL**
13. Student-Teacher Ratio (programme wise) : **UG : 18.26:1**



14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	<b>Sanctioned</b>	<b>Filled</b>
Foreman	01	01
Technical Assistant	06	06
Laboratory Attendant	02	02

15. Qualifications of teaching faculty with DSc / D. Litt / Ph. D. / MPhil / PG. :

<b>Qualification</b>	<b>Number of Teaching Faculty</b>
Ph. D	02
PG	21

16. Number of faculty with on going 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

<b>Sr No</b>	<b>Propo sal ID</b>	<b>Title of the Research Project</b>	<b>Name of PI/Co-PI</b>	<b>Funding Agency</b>	<b>Amount Sanctioned</b>	<b>Year</b>
1		Reduction in design cycle of Electronic Product	Prof. Rajesh Rehpade	SPPU	2, 40, 000	2016-17

18. Research Centre / facility recognized by the University : **NA**

## 19. Publications:

## A) Publications: Faculty

Sr. No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Total Citation	S N I P	SJ R	Impact factor	h-index
1	Dr. V. J. Gond	20	--	--	--	--	---	21	--	--	--	03
2.	Mr. R B Rehpade	08	--	--	--	--	--	--	--	--	--	--
3.	Mr. D B Ahire	05	--	--	--	--	--	--	--	--	--	--
4	Mrs. P. N. Metange	12	--	--	--	--	--	03	--	--	--	01
5	Mrs. M. G. Shinde	2	--	--	--	---	--	01	--	--	---	01
6	P A Patil	04	--	--	--	---	--	--	--	--	--	--
7	Mrs. M. N. Jadhav	07	--	--	--	---	--	09	--	--	--	01
8	Mrs U B Barhate	03	--	--	--	--	--	--	--	--	--	--
9	Mr. K T Ugale	05	--	--	--	--	--	--	--	--	--	--
10	Mr A S Ufade	04	--	--	--	--	--	09	--	--	--	02
11	Mrs M S Wagh	08	--	--	--	--	--	--	--	--	--	--
12	Mr. A. B. Kotade	03	1	--	--	---	--	--	--	--	--	--
13	Mr. K R Bhagat	04	--	--	--	---	--	01	--	--	--	01
14	Mr M P Giri	03	--	--	--	--	--	--	--	--	--	--
15	Mr. N P Sonwane	08	--	--	--	--	--	01	--	--	--	01



Sr. No	Year	No. of Sponsored Projects	% of Sponsored Projects
1	2016-17	02	7.42
2	2015-16	00	00
3	2014-15	01	3.5

23. Awards / Recognitions received by faculty and students

A) Awards / Recognitions received by faculty

Sr. No	Name of Faculty	Award	Remark
1	Mr. A. B. Kotade	Young Researchers' Award	IETE Conference.

B) Awards / Recognitions received by students

Sr. No	Name of Student	Award	Remark
1	Divya Bhandarkar (BE)	2 <sup>nd</sup>	National conference paper presentation (MCA, MET)
2	Divya Bhandarkar (BE)	Runner Up	National Entrepreneurship (IIT Bombay)
3	Ruchta Shahu (BE)	1 <sup>st</sup>	Paper Presentation METEORITE' 16
4	Poonam Shelar (BE)	1 <sup>st</sup>	Paper Presentation METEORITE' 16
5	Ruchta Shahu (BE)	1 <sup>st</sup>	Paper Presentation Telekinesis (KKW COE)
6	Poonam Shelar (BE)	1 <sup>st</sup>	Paper Presentation Telekinesis (KKW COE)
7	Bhavana Gabale (BE)	1 <sup>st</sup>	Paper Presentation Telekinesis (KKW COE)
8	Ruchta Shahu (BE)	2 <sup>nd</sup>	Paper Presentation Equinox (KKW COE)
9	Poonam Shelar (BE)	2 <sup>nd</sup>	Paper Presentation Equinox (KKW COE)
10	Bhavana Gabale (BE)	2 <sup>nd</sup>	Paper Presentation Equinox (KKW COE)
11	Vishakha Tambat (TE-B)	1 <sup>st</sup>	Circuit Debugging (Meteorite 16)
12	Neha Laximan Shinde (TE-B)	1 <sup>st</sup>	Circuit Debugging (Meteorite 16)

13	Siddharth Tejale Shinde (TE-B)	1 <sup>st</sup>	Free Kick (Meteorite16)
14	Ingale Kiran (TE-B)	1 <sup>st</sup>	Futsal (Comp Engg. 16)
15	Siddharth Tejale Shinde (TE-B)	2 <sup>nd</sup>	Free Kick (Meteorite16)
16	Dharam Bhaskar(TE-A)	2 <sup>nd</sup>	Paper Presentation (KKWCOE, Nashik)
17	Shaikh Zishan (SE)	2 <sup>nd</sup>	Project Competition ELICIT'16 at NDMVP
18	Eknath Bhore(SE)	2 <sup>nd</sup>	Project Competition ELICIT'16 at NDMVP
19	Ravi Adole (SE)	2 <sup>nd</sup>	Project Competition ELICIT'16 at NDMVP
20	Bhaskar Dharam (SE)	2 <sup>nd</sup>	Project Competition ELICIT'16 at NDMVP
21	Priyanka Chaudhari (TE)	2 <sup>nd</sup>	Circuit Mania at Teleknesis'16 (KKWagh COE)
22	Akshay Jadhav (TE)	2 <sup>nd</sup>	Hexagon Teleknesis'16 (KKWagh COE)
23	Dipali Sarode (TE)	2 <sup>nd</sup>	Circuit Mania at Teleknesis'16 (KKWagh COE)
24	Dipali Sarode (TE)	2 <sup>nd</sup>	Hexagon Teleknesis'16(KKWagh COE)
25	Pooja Kolamkar (TE)	3 <sup>rd</sup>	Placement Bonanza Teleknesis'16 (KKWagh COE)

24. List of eminent academicians and scientists / visitors to the department  
Year 2016-17

Sr No	Name of Eminent Person	Organization	Date	Remark
1	Dr. M. V. Pitke	IEEE, Mubai section,	23/02/17	Microwave Beyond Radar & communication
2	Suresh Kumar	GMRT, Narayangaon	22/02/17	Fiber optic Communication
3	Amar Thakare	Cyber IT Security Services	16/02/17	Cybercrime & Law
4	Mr. Chandrasingh	JTI, Pune	10/02/17	PLC & SCADA

	Jadhav			
5	Anirudh Kulkarni	Academica Lab Solution	30/01/17	Antenna Designing & Fabrication
6	Satish Pillai	Koso India Pvt ltd	28/09/16	Advancement & Opportunities in Computer networking
7	Sagar Nikam	ELC Pvt ltd	09/09/16	Aptitude & Logical Reasoning
8	Mahesh Gaware	Dell USA	22/07/16	Career opportunities abroad
9	Prashant Pitale	Infosys USA	07/01/16	Opportunities in Telecom field

25. Seminars / Conferences / Workshops organized & the source of funding

a) National                      b) International

Sr. No.	Programme Title	National/ International	Source of Funding	Amount (Rs.)
1	Two Week ISTE workshop on “Analog Electronics” under NMEICT, MHRD, New Delhi (4 <sup>th</sup> – 14 <sup>th</sup> June, 2013)	National	IIT Kharagpur	1,03,980/-
2	Two Week ISTE workshop on “Signals and Systems” under NMEICT, MHRD, New Delhi. (2 <sup>nd</sup> -12 <sup>th</sup> Jan, 2014)	National	IIT Kharagpur	83,373/-
3	Two Week ISTE workshop on “Control Systems” under NMEICT, MHRD, New Delhi (2 <sup>nd</sup> – 12 <sup>th</sup> Dec, 2014)	National	IIT Kharagpur	98,357/-
4	Two week ISTE workshop on “Technical Communication” under NMEICT MHRD, New Delhi (30 <sup>th</sup> Nov to 5 <sup>th</sup> Dec , 2015)	National	IIT Bombay	44,000/- Self-Financed
5	Two Week ISTE workshop on “CMOS, Mixed Signal & Radio Frequency VLSI Design” under NMEICT, MHRD, New Delhi. (30 <sup>th</sup> Jan. , to 4 <sup>th</sup> Feb. 2017)	National	IIT Kharagpur	50,434/-

National Seminar and Workshop for Students

Sr. No	Programme Title	Total No	National/ International	Source of Funding
1	Seminars	09	National	Self
2	Workshops	04	National	Self

26. Student profile programme/course wise:

Name of the Course / programme	Academic Year	Applications Received	Selected	Enrolled		Pass Percentage
				*M	*F	
UG : Electronics & Telecommunication Engineering	2013-14	57	57	24	33	73.68 %
	2014-15	36	36	15	21	55.55 %
	2015-16	44	44	25	19	45.45 %
	2016-17	17	17	12	5	Appeared
Electronics & Telecommunication Engineering (Direct Second Year)	2013-14	25	25	8	17	92.00 %
	2014-15	41	41	5	36	95.12 %
	2015-16	118	118	34	84	77.11 %
	2016-17	93	93	26	67	90.32%

\*M=Male\*F=Female

27. Diversity of Students

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Name of the Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
UG : Electronics & Telecommunication Engineering	2013-14	82.46	17.54	Nil
	2014-15	86.12	13.88	Nil
	2015-16	65.91	34.09	Nil
	2016-17	00	100	Nil



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Sr. No	Name of competitive examinations	Year	Number of students
1	GATE	2013-14	--
		2014-15	--
		2015-16	02
2	CMAT / MBA-CET	2013-14	01
		2014-15	--
		2015-16	02
3	IES/GRE/GMAT/TOEFL	2013-14	02
		2014-15	01
		2015-16	02
4	C-DAC	2013-14	02
		2014-15	01
		2015-16	02

29. Student progression

Student progression	Against % enrolled			
	13-14	14-15	15-16	16-17
UG to PG	4.34	1.1	5.12	Appeared
PG to M. Phil.	NA	NA	NA	NA
PG to Ph. D.	NA	NA	NA	NA
Ph. D. to Post-Doctoral	NA	NA	NA	NA
<b>Employed</b>	Nil	13.63%	35.08%	36.76%
• Campus selection				
• Other than campus recruitment	17.24%	24.24%	14.03%	1.47%
Entrepreneurship/Self-employment	2.29	Nil	Nil	Nil

### 30. Details of Infrastructural facilities

#### A) Library

##### A1. Central Library

Sr. No.	Library Resources	UG & PG
1	Total Number Books (Volumes)	7335
2	Total Number Title	1496
3	Indian Journals	13
4	Magazines	03
5	E-Resources	04
6	Reports	155

##### B) Internet Facility for Staff and Students

Institute has strong IT infrastructure in the support of various Activities and their needs:

Sr No	No. of PCs	Bandwidth	Service Provider	Remark
1	130	20Mbps	BSNL	NMICTE Line (MET IOE)
2	-	50Mbps	Tata	Shared with all Institutes

##### C) Class Rooms with ICT facility: 06

##### D) Laboratories

Sr. No.	Name of the Laboratory	Name of the Important equipment
1	Electronic System Design	Major Equipment for Designing
2	Analog & Digital Comm	Trainer Kit & DSO
3	Optical & Microwave	Satellite link, OFC Link
4	Digital Signal Processing	DSP Processor trainer kit
5	VLSI	Microwind, Xilinx Software & FPGA trainer kit
6	Project & Simulation	Arm7, Arm9, Arm Cortex, GSM Modem
7	Microprocessor & Microcontroller	PIC18F, 8051 trainer kit, Interfacing Kit
8	Basic Electronics	LCRQ Meter & Basic Instruments
9	Printed Circuit Board	Single Sided, Double Sided, Plated Through Hole Man. Drill Machine, Design Software
10	Mechatronics & Automation	PLC, Robots, Air Compressor, Electrical testing Inst, Ph measurement, PID Controller

11	Digital System Design	Digital Trainer kit& Xilinx
12	Power Electronics	Powerscope, Inverter, Induction Motor
13	Software -1	Licensed Matlab, proteas
14	Audio Video	TV trainer, HDTV, Color Pattern Generator

31. Number of students receiving financial assistance from Institute, university, government or other agencies

Sr. No .	Type of Assistance	Agency Providing Financial Assistance	Academic Year		
			2014-15	2015-16	2016-17
1	GOI Scholarship	Social Welfare Dept. and Tribal Development	101	142	136
2	GOI Free ship		79	95	84
3	EBC Concession	Jt. Director of Tech. Education	33	34	40
4	Minority Scholarship	Dept. of Minority Welfare	0	2	2
5	STC/PTC	Zilha Parishad	0	1	0
6	J&K Special Scholarship	AICTE	0	0	0
7	Pvt. Scholarship	MET's; NGO	3	0	--

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr. No	Activity	Topic/Area	DATE	Targeted Group
1	Seminar	Arduino Uno ATMEGA328	Thu, 12 <sup>th</sup> Feb, 2015	T. E. and B. E.
2	Workshop	Arduino Uno Microcontroller	6, 7, 8, 9 <sup>th</sup> March, 2015 (Fri, Sat, Sun & Mon)	T. E. (E & TC)
3	Seminar	MSP430	Mon, 23 <sup>rd</sup> Feb. , 2015	B. E. (EnTC & ETX)
4	Seminar	Opportunities in Telecom Field	Thu, 7 <sup>th</sup> Jan. , 2016	B. E. (EnTC & ETX)
5	Seminar	Opportunities in Abroad & Challenges for	Friday, 22 <sup>nd</sup> July, 2016	T. E. (E & TC)

		Quality Product		
6	Seminar	Aptitude and Logical Reasoning	Friday, 9 <sup>th</sup> Sept, 2016	T. E. & B. E. (E & TC, ETX)
7	Seminar	Advancements and Opportunities in Computer Networking	Wed, 28 <sup>th</sup> Sep. 2016	B. E. (E & TC, ETX)
8	Workshop	Antenna Design and Fabrication	Monday, 30 <sup>th</sup> Jan, 2017	T. E. & B. E (E & TC & ETX)
9	Workshop	IBM Watson IOT	Tue, 7 <sup>th</sup> Feb , 2017	T. E. and B. E. (E & TC and ETX)
10	Workshop	PLC and SCADA	Fri & Sat, 10 <sup>th</sup> & 11 <sup>th</sup> Feb, 2017	B. E (E & TC, ETX)
11	Seminar	Cyber Crime and Law	Thu, 16 <sup>th</sup> Feb. 2017	S. E. (E & TC)
12	Seminar	Fiber Optic Communication	Wed, 22 <sup>nd</sup> Feb. , 2017	B. E. (E & TC, ETX)
13	Seminar	Microwaves... Beyond Radar and Communications	Thu, 23 <sup>rd</sup> Feb. , 2017	B. E. (E & TC, ETX)

33. Teaching methods adopted to improve student learning

Sr No	Methods adopted
1	Use of White board for conduction of Theory classes
2	Recitation of Oral questions in Laboratory sessions
3	Presentation / Seminar by students' panel on specific topic
4	Assignment given to outline certain supplementary readings
5	Hands on Online Examination session for all subjects-Objective
6	Laboratory experimentation and hands on practices
7	Use of projector for dynamic explanation
8	Use of tutorial to cover extensive numerical problems
9	Class Notes, Assignments, Practice Numerical, PPT are made available to all students on Institute's ERP through students login

34. Participation in Institutional Social Responsibility (ISR) and Extension Activities

<b>Sr. No.</b>	<b>Activity</b>	<b>Targeted Group</b>	<b>Number of Beneficiaries</b>	<b>Funding Agency</b>
1.	Tree Plantation (05/06/16-13/06/16)	MET Institute ground	150 students	SPPU and MET, Nasik
2.	Eye Check Up and Blood Donation (12/10/16)	MET Institute staff and students	Eye checkup (215) and Blood Donation (98)	SPPU and Tulsi Eye Hospital and Arpan Blood Bank
3.	Ganesh Murti Sanklan & Nirmalya Sanklan (15/09/16)	Nasik crowd	2000+ people	SPPU and MET, Nasik
4.	Heart Check Up & Blood Donation (12/01/17)	MET Institute staff and students	400 members and Blood Donation (104)	SPPU and Saibaba Heart Institute and Arpan Blood Bank
5.	Swachhata Abhiyaan (23/01/17)	MET Institute ground	140 students	SPPU and MET, Nasik
6.	Artillery Firing Exhibition(06/01/17)	MET, NSS students	50 girls students	SPPU and MET, Nasik
7.	Computer Donation To Z. P. School (28/02/17)	Z. P. School, Khodad, Pune	Z. P. School students-500	SPPU and MET, Nasik
8.	Women's Day Celebration (11/03/17)	MET Institute Ladies faculties and girls students	350 girls students	SPPU and MET, Nasik
9.	Independence Day, Republic Day and Celebration (15/08/16 & 26/01/17)	MET, Nasik	500+ students and staffs	MET, Nasik
10.	Engineers Week (15/09/16)	All Engg. Institutes of Nasik	2500+ students	SPPU and MET, Nasik

		Region.		
11	NSS Camp (05/02/17-11/02/17)	Village-Gaulane, Dist-Nasik	2000+ village crowd and 500+Z. P. school students	SPPU and MET, Nasik
12.	Health and Hygeine Awareness (07/02/17-10/02/17)	Ladies of Gaulane village	400+ Ladies	SPPU and MET, Nasik

### 35. SWOC analysis of the department and Future plans

#### **Strengths**

- Infrastructure facility available is very good.
- Average teaching staff experience (Academic & Industrial) is 12+ years.
- Staff retention ratio is excellent.
- Management is very supportive.
- Working environment is very good.
- MOU with National Institute of Technology Bhopal for staff development.

#### **Weakness**

- Less number of publications of student & junior staff.
- Industry institute interaction.
- Consultancy needs to be improved.
- Deficiencies in certain outcome with student, like communication skills.

#### **Opportunities**

- Sufficient funding FDP/STTPS.
- Environment for pursuing higher studies/research.
- Support for organizing workshop/conference.
- Incentives for conduction of in-house workshops.

#### **Challenges**

- Fast pace of development in technology.
- Inadequate public awareness for engineering profession & job opportunities.
- Lack of sufficient number of quality students with strong interest in engineering.
- To keep ahead with ever changing requirements of industries.

**Future plans**

- To establish research center.
- Enhancing industry institute interaction for student's project & training.
- To apply for more major research projects.
- To offer consultancy services.
- To have more number of doctorate faculty.

## Evaluative Report of the Department of Electrical Engineering

1. Name of the Department: **ELECTRICAL ENGINEERING**
2. Year of Establishment : **2012**
3. Names of Programmes / Courses offered (UG, PG, M. Phil., Ph. D., Integrated Masters, Integrated Ph. D., etc.):

### UG: Electrical Engineering

4. Names of Inter disciplinary courses and the departments / units involved:

Sr. No.	Course	Department
1	Basic Electronic Engineering	E&TC Engineering Department
2	Engineering Mechanics	Civil Engineering Department
3	Basic Civil Engineering	Civil Engineering Department
4	Basic Mechanical Engineering	Mechanical Engineering Department
5	Engineering Graphics	Mechanical Engineering Department
6	Computer Fundamental and Programming Languages	Computer Engineering Department
7	Engineering Mathematics	First Year Engineering Department
8	Applied Sciences	First Year Engineering Department
9	Workshop Practices	Workshop Department

5. Annual / semester / choice based credit system (programme wise):

### UG: SEMESTER & CREDIT BASED SYSTEM

6. Participation of the department in the courses offered by other departments:

Sr. No.	Course	Department
1	Basic Electrical Engineering	F. E. (All Dept.)
2	Electrical & Electronics Engg.	Mechanical Department

7. Courses in collaboration with other universities, industries, foreign institutions etc. :**NIL**
8. Details of courses / programmes discontinued (if any) with reasons :**NIL**



9. Number of teaching posts

	Sanctioned	Filled
Professors	01	01
Associate Professors	03	00
Asst. Professors	12	10

10. Faculty profile with name, qualification, designation, specialization, (D. Sc. / D. Litt. / Ph. D. / M. Phil. etc.)

Sr. No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D. Students guided for the last 4 years
1.	Dr Kadam Deepak P.	Ph D	Professor & Head	Power System	18+2 =20	
2	Ms. Mohite Utkarsha L.	M. E	Assistant Professor & Incharge	Control Systems	7	-
3	Mr. Pansare Vishal P.	M. E	Assistant Professor	Power Electronics & Drives	4.9+0.3 = 5	-
4	Mr. Nitesh Kumar	M. E (Pursuing) B-Tech	Assistant Professor	Power Systems	4.3	-
5	Mr. Patni Yogesh	M. E (Pursuing) B. E	Assistant Professor	Power Systems	4.7+2.2 =6.9	-
6	Mrs. Kulkarni Kirti S.	M. E	Assistant Professor	Elec. Machines & Drives	7	-
7	Mr. Jain Ankit S.	M. E	Assistant Professor	Control Systems	3.9	-
8	Mr. Nikam Rahul J.	M. E (Pursuing) B. E	Assistant Professor	Power Systems	7.3	-

9	Mr. Pandhi Tushar	M. E	Assistant Professor	Power Systems	3.4	-
10	Mr. Saikiran Adapa	M. E	Assistant Professor	Power Electronics & Drives	3.4	-
11	Mr. Parmale Mayur C.	M-Tech (Pursuing) B. E	Assistant Professor	Power Systems	1.8	-
12	Mr. S. S. Sanap	MSc	Assistant Professor	Mathematics	5.8	-
13	Mr. C. V. Deshmukh	MSc	Assistant Professor	Mathematics	5.8	-
14	Ms. A. S. Shirsath	MSc	Assistant Professor	Mathematics	4	-

11. List of senior visiting faculty : **NIL**  
 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : **NIL**  
 13. Student-Teacher Ratio (programme wise) : **UG: 18.46:1**  
 14. Number of academic support staff (technical) and administrative staff sanctioned and filled:

	Sanctioned	Filled
Technical Assistant	04	04
Laboratory Attendant	01	01

15. Qualifications of teaching faculty with DSc / D. Litt / Ph. D. / MPhil / PG.:

Qualification	Number of Teaching Faculty
Ph. D	01
PG	10
UG	03

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: **NA**

19. Publications:

**A) Publications: Faculty**

Sr. No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	S N I P	S J R	Impact factor	h-index
1	Dr. Kadam Deepak P.	10	-	-	-	01	-	63	-	-	-	5
2	Ms. Mohite Utkarsha L.	05	-	-	-	-	-	-	-	-	-	-
3	Mr Pansare Vishal P.	02	-	-	-	-	-	-	-	-	-	-
4	Mr. Nitesh Kumar	-	-	-	-	-	-	-	-	-	-	-
5	Mr. Patni Yogesh	-	-	-	-	-	-	-	-	-	-	-
6	Mrs. Kulkarni Kirti S.	01	-	-	-	-	-	-	-	-	-	-
7	Mr. Jain Ankit S.	-	-	-	-	-	-	-	-	-	-	-
8	Mr. Nikam Rahul J.	01	-	-	-	-	-	-	-	-	-	-
9	Mr. Pandhi Tushar	-	-	-	-	-	-	-	-	-	-	-
10	Mr. Saikiran	01	-	-	-	-	-	-	-	-	-	-



- 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 Sponsored Projects	% of Sponsored Projects
1	2015-16	02	11. 11
2	2016-17	03	16. 67
2	2017-18	04	23.52

23. Awards / Recognitions received by faculty and students

A) Awards / Recognitions received by faculty

Sr. No	Name of faculty	Award	Remark
1	Dr. D.P.Kadam	Award for Teaching Excellence	The INDUS Foundation, Indo-Global Education Summit & Expo 2017, Mumbai
2	Dr. D.P.Kadam	Academic Excellence Award	5 <sup>th</sup> Science & Technology-17 Award, Bangalore
3	Ms.Mohite U. L.	“GOLD” Medalist	M.E Electrical Control Systems College Topper Year 2014-15
4	Mr. Saikiran Adapa	GATE Qualified	Year :2016-17 Gate Score: 351 Marks Obtain: 25.39 / 100

B) Awards / Recognitions received by students

Sr. No	Name of Student	Award	Remark
1	Mr. Akshay Khadse Mr. Jadhav Prashant Mr. Sonawne Rakesh Mr. Lokhande	3 <sup>rd</sup> Prize in the event of Project Competition	<b>Title:</b> Smart Wind Mill Control & Protection MET –“Nirmaan-17” Date: 24 <sup>th</sup> to 25 <sup>th</sup>

	Yogesh		March 2017
2	Mr. Patil Jaideep Mr. Rahul Lindayat Mr. Saindane Gaurav	3 <sup>rd</sup> Prize in the event of Project Competition	<b>Title: Segway Transporter</b> MET –“Nirmaan-16” Date: March 2016
3	Mr. Nagargoje Datta	2 <sup>nd</sup> Prize in Cyclotron Race	<b>MET BKC Nashik</b> MET UTSAV-14 Date: January 2014
4	Ms. Naladkar Shivani S.	Winner in Cricket Competition as Captain	MET BKC Nashik Utsav’15 Date 21 <sup>st</sup> -24 <sup>th</sup> January 2015
5	Ms. Naladkar Shivani	Winner in Cricket Competition as Captain	MET BKC Nashik Utsav’15 Date 13 <sup>th</sup> -16 <sup>th</sup> January 2016
6	Mr. Ajinkya Patil	Participated in National Level Project, Paper & Poster Competition for Engg. Students	G. H. Raisoni Institute of Engg. & management INNOVATION-14 & RGI-TRPCS-14 Date: 21 <sup>st</sup> –22 <sup>nd</sup> February 2014
7	Ms. Surawar Aayushi	1 <sup>st</sup> Place in the event BFF Test	MET BKC Nashik IGNITE 16 Date: 16 <sup>th</sup> -17 <sup>th</sup> September 2016
8	Mr. Patil Jaideep Mr. Rahul Lindayat Mr.Saindane Gaurav Mr. Bhushan Maid	3 <sup>rd</sup> Prizeintheeven tof Project Competition	3 <sup>rd</sup> Prizeintheeventof Project Competition
9	Ms. NaladkarShivani	WinnerinCricket Competitionas Captain	WinnerinCricketComp etitionas Captain
10	Ms. Naladkar Shivani S.	WinnerinCricket Competitionas Captain	WinnerinCricketComp etitionas Captain
11	Mr.Ajinkya Patil	Participated in National Level Project,Paper & Poster Competition	Participated in National Level Project, Paper & Poster Competition
12	Mr.NagargojeDatta	Second Prize in Cyclotron Race	Second Prize in Cyclotron Race

24. List of eminent academicians and scientists / visitors to the department

<b>Sr No</b>	<b>Name of Eminent Person</b>	<b>Organization</b>	<b>Date</b>	<b>Remark</b>
1	Anil Suradkar	GM of Reylon Solar Pvt Ltd Pune	29/9/2017	Workshop on Wind Technology
2	Anil Suradkar	GM of Reylon Solar Pvt Ltd Pune	28/9/2017	Workshop on Solar Technology
3	Mr Shrikant Jadhav	Centre for Advance Electrical Technology and Design, Nashik	22/9/2017	Deliver a seminar on Electrical panel design
4	Mr. Pramod Dashpute	Faculty from Petroleum Conservation & Research Association	21/09/2017	Deliver a seminar on Energy Conservation
5	Mr Nachiket Kulkarni	N Kennin Transformer, Latur	28/8/2017 To 01/09/2017	Workshop on Design and testing of 3 phase transformer
6	Mr. Patil Amit	Energy Auditor & Owner Manik Solutions Nashik	06/10/2016	Audit Course I for SE Electrical Students

25. Seminars / Conferences / Workshops organized & the source of funding

a) National

b) International

: **NIL**

26. Student profile programme/course wise:

Name of the Course / programme	Academic Year	Applications Received	Selected	Enrolled		Pass Percentage
				*M	*F	
UG: Electrical Engineering	2017-18	56	56	40	16	Appeared
	2016-17	53	53	36	17	65.38
	2015-16	62	62	43	19	50 %
	2014-15	57	57	39	18	64.91%
Lateral Intake (DSE) Electrical Engineering	2017-18	26	26	12	14	Appeared
	2016-17	31	31	19	12	100%
	2015-16	25	25	15	10	84.00%
	2014-15	25	25	17	8	100%

\*M=Male\*F=Female

27. Diversity of Students

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Name of the Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
		HU+OHU		
UG: Electrical Engineering	2017-18	100	0	0
	2016-17	100	0	0



	2015-16	98.39	1.61	0
	2014-15	100	0	0
Lateral Intake (DSE) Electrical Engineering	2017-18	100	0	0
	2016-17	100	0	0
	2015-16	100	0	0
	2014-15	100	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Sr. No	Name of competitive examinations	Year	Number of students
1	GATE	2014-15	NA
		2015-16	--
		2016-17	04
2	CMAT / MBA-CET	2014-15	NA
		2015-16	--
		2016-17	04
3	IES/GRE/GMAT/TOEFL	2014-15	NA
		2015-16	--
		2016-17	01

29. Student progression

<b>Student progression</b>	<b>2016-17</b>	<b>(2015-16)</b>	<b>2014-15</b>	<b>2013-14</b>
UG to PG	-	2.89 %	---	---
PG to M. Phil.		---	---	---
PG to Ph. D.		---	---	---
Ph. D. to Post-Doctoral		---	---	---
Employed				
Campus selection	3/47 = 6.38%	5.79 %	---	---
Other than campus recruitment	1/47 = 2.13%	10.14 %		
Entrepreneurship/Self-employment		1/63 = 1.59%	---	---

30. Details of Infrastructural facilities

**A) Library**

<b>Sr. No.</b>	<b>Library Resources</b>	<b>UG &amp; PG</b>
1	Total Number Books (Volumes)	2599
2	Total Number Title	536
3	Indian Journals	06
4	Magazines	01
5	E-Resources	05

**B) Internet Facility for Staff and Students**

Institute has strong IT infrastructure in the support of various activities and their needs:

<b>No. of P. C.</b>	<b>Bandwidth</b>	<b>Service Provider</b>
Staff: 02	20 Mbps	BSNL
Student: 22	20Mbps	BSNL

**C) Class Rooms with ICT facility:**

<b>Class</b>	<b>Room No.</b>	<b>ICT Facility</b>
SE	301	1 Projector with Screen
TE	311	1 Projector with Screen

BE	011	1 Projector with Screen
----	-----	-------------------------

#### D) Laboratories

Sr. No	Name of Laboratory	Location (Core Building)	Facilities
1	Basic Electrical Engineering Lab	(C104-A) First Floor	KCL, KVL, Superposition theorem, Thevenins theorem, House wiring, Study of Fluorescent, Mercury & Sodium vapour lamp, RTC kit, Single Phase X'mer, 3 phase & 1phase Autotransformer, Lamp load.
2	Electrical Machine Lab.	(C005-A&B) Ground Floor	1) D. C. Shunt Motor - 5 HP /220V/9A/1500RPM Coupled to 3PH Alternator -5KVA / 415V/1500RPM/50Hz/ Salient. 2) D. C. Power Supply Unit Working in 3PH /415V/50Hz. Input & Output 220V/50A D. C. 3) 5 HP / 220 V / 1500 RPM / Dc Shunt Motor coupled with 3. 0KW / 220 V / 1500 RPM DC Shunt Generator with base and couplings. *Slipring induction motor, *3 ph induction motors, *Single ph Induction Motor , *DC series motor etc *3 ph autotransformer, 1Ph autotransformer, *1ph/3ph Resistive , capacitive, inductive load *Alternator synchronization kit. *3ph X'mer, 1 ph X'mer Measuring Instrument: Ammeters, Voltmeters, Wattmeters, Tachometers, Tong Tester, Multimeter.
3	Materials Science Lab.	(C006-A) Ground Floor	1) Oil testing kit 100KV with two oil containers, Meters & Main ON HT ON Lamps (Model : Motorized with auto manual switch) 2) Sphere gap arrangement Diameter 10cm, 100KV, 100mA Transformer, Control Panel & Different types of

			Electrodes for High voltage solid breakdown Test with connecting wire. 3) Gauss flux density Measurement Kit 4) RTD Kit 5) BH Curve Measurement Kit
4	Electrical Measurements & Instrumentation's Lab.	(C005-C) Ground Floor	Kelvin Double bridge, LVDT, Anderson Bridge, Diff Types of CT & PT. Wattmeter, Ammeter, Millivoltmeters, Voltmeters (AC & DC).
5	Analog & Digital Electronics Lab.	(C103-A) First Floor	Analog & Digital Trainer Kit, Dual Power Supply, CRO, Different types of Experimental Kits like Schmitt Trigger, Comparator, flip-flop.
6	Control System Lab.	(C105-A) First Floor	*A. C. Servo Motor/DC. Servo Motor- modeling, Transfer function and characteristics *Kit of time response characteristics of second order control system using Software, PI / PID controllers, Lead & Lag compensator, Servo amplifier Trainer, Dual tank Interfacing system. *Frequency response of a closed loop system, etc.
7	Power System Lab.	(C007-A) Ground Floor	1) Measurement of ABCD parameters of a medium transmission line & Measurement of ABCD parameters of a long transmission line. 2) Study of the effect of VAR compensation using capacitor bank. 3) Static measurement of sub-transient reactance's of a salient-pole alternator. 4) Measurement of sequence reactance's of a synchronous machine (Negative & Zero).
8	Network Analysis Lab.	(C104 - B) First Floor	1) Verification of Millman thm. , 2) Determination of time response of R-L ckt. To a step D. C I/P vtg. (Rise & Decay of a current in an

			<p>inductive ckt.)</p> <p>3) Time response of R-L-C circuit to a step D. C vtg.</p> <p>4) Determination of parameter of a two port N/w</p> <p>5) R-L-C series resonance, Bandwidth &amp; Q factor</p> <p>6) Determination of resonance of R-L-C parallel ckt.</p> <p>7) Three phase voltage source inverter using 120 and 180 degree mode</p> <p>8) Three phase AC-DC fully controlled bridge converter</p>
9	Power Quality Lab.	(C006- B) Ground Floor	<p>1) Study of power quality monitor / analyzer</p> <p>2) Measurement of harmonic distortion of CFL or FTL with electronic ballast and magnetic ballast,</p> <p>3) Analysis of performance of three phase induction motor operated with sinusoidal supply and under distorted supply conditions supplied by 3 phase inverter (Single Phase Transformer with rectifier, 12V DC Motor as a Load. Branded Three Phase Inverter 415V, 50Hz, 2KVA)</p> <p>4) Analysis of performance of single phase transformer operated with sinusoidal supply and under distorted supply conditions supplied by 1 phase inverter. (Branded Single Phase UPS/Inverter 50Hz, 230V &amp; Single Phase Transformer with rectifier, 12VDC Motor as a Load.)</p> <p>5) Measurement of sag magnitude and duration by using digital storage oscilloscope.</p>
10	Power Electronics Lab.	(C103- B) First Floor	<p>1) Static VI characteristic of SCR and TRIAC,</p> <p>2) VI Characteristic of MOSFET and IGBT,</p> <p>3) Static VI characteristic of GTO,</p> <p>4) Single phase A. C. Voltage</p>

			<p>regulator</p> <p>5) DC step down chopper,</p> <p>6) 1- phase full bridge type PWM based VSI using transistor devices</p> <p>7) 3-phase full bridge type PWM based VSI using transistor devices</p> <p>8) Three phase voltage source inverter using 120 and 180 degree mode</p> <p>9) Three phase AC-DC fully controlled bridge converter</p> <p>10) Single phase fully controlled converter with R and RL load</p> <p>11) Single phase half controlled converter with R and RL load, etc</p>
11	PLC and Scada Lab.	(C004 - B) Ground Floor	<p>1) Advance PLC Training Kit, Containing AB Micrologix 1400 PLC with 20 DI, 12 DO with Ethernet port + expansion module of 2 AI &amp; 2 AO, Encoder, Ethernet Cable Mounted on Moving Trolley (Kit Covers all the practical for PLC, i. e. 1-18)</p> <p>2) AB Micrologix 1400 PLC with 20 DI, 12 DO properly mounted on panel with all necessary I/O facility, various 8 no. of switch, push buttons as Input and 8no. of Indicating Lamps as Output. No analog Input provided</p> <p>3) Water Level controller unit with capacitive level sensor, pump to control flow of water, water tank etc. This kit gives basic idea on tank level control using PLC &amp; SCADA.</p> <p>4) Pressure measurement By using Air pressuresensor, along with Mini compressor.</p> <p>5)Unlicensed Demo SCADA Software support, etc.</p>
12	Power Electronics & Control Drives Lab.	(C103-C) First Floor	<p>1) Study of Electrical braking of D. C. Shunt motor (Rheostatic, plugging)</p> <p>2) Study speed control characteristics of single phase fully converter fed separately excited D. C. motor</p> <p>3) Study speed control characteristics</p>

			<p>of three phase fully converter fed separately excited D. C. motor</p> <p>4) Study of Chopper fed D. C. series/separately motor</p> <p>5) speed control characteristics.</p> <p>6) Study of control characteristic of BLDC drive</p> <p>7) Study of electrical braking of 3 phases Induction Motor (DC Dynamic Braking, Plugging).</p> <p>8) Study of VSI fed 3 phase Induction motor (using V/f control PWM inverter) speed control characteristics.</p> <p>9) Study of Solid state stator voltage control of 3 phase Induction motor (Using AC voltage Regulator).</p> <p>10) Study of constant torque and constant power characteristic of Induction motor.</p>
13	Switchgear & Protection Lab.	(C007- B) Ground Floor	<p>1) Study of switchgear testing kit.</p> <p>2) Study of fuse, MCB &amp; their testing</p> <p>3) Study &amp; testing of contractor.</p> <p>4) Study &amp; testing of MCCB.</p> <p>5) Study &amp; testing of ACB.</p> <p>6) Study &amp; testing of Thermal Overload Relay for 3 Ph Induction Motor protections.</p> <p>7) Study &amp; Plotting Characteristics of IDMT type Induction over current relay.</p> <p>8) Percentage Differential Protection of transformer</p> <p>9) Protection of alternator.</p> <p>10) Three Phase Shifting Transformer</p>
14	Computer Lab. 3 (Numerical Method & Computer Programming)	(C004- A) Ground Floor	Think center M73 tiny Intel core I3 4 <sup>th</sup> Gen. Processor , 4GB DDR3 RAM, 500GB SATA HDD, Classic Professional Keyboard Optical Mouse, Onboard Serial Port 10/100/1000 Ethernet, DOS, Mounting Kit,
15	Computer Lab. 1 (HVDC FACTS)	(C002) Ground Floor	Think center M73 tiny Intel core I3 4 <sup>th</sup> Gen. Processor , 4GB DDR3 RAM,

		(Sharing with Computer Dpt.)	500GB SATA HDD, Classic Professional Keyboard Optical Mouse, Onboard Serial Port 10/100/1000 Ethernet, DOS, Mounting Kit,
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31. Number of students receiving financial assistance from Institute, university, government or other agencies

Sr. No.	Type of Assistant	Source Agency	Number of Students (FE to BE)		
			2016-17	2015-16	2014-15
1	Scholarship	Samaj Kalyan (Government)	222	210	156
2	EBC	DTE, (Government)	33	23	22
3	MET Scholarship	MET Trust	-	-	-

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr.No.	Date	Topic	Name of Expert/Guest
1	22/09/2017	Seminar on Topic Electrical Control Panel Designs with Power Circuits	Shrikant Jadhav AETAD, Nashik
2	29/08/2017	Seminar on Topic GATE & Other Competitive Exam	N.N.Kulkarni Nashik
3	28/08/2017 to 01/09/2017	Workshop on Topic Design & Testing of Three Phase Transformers	Nachiket Kulkarni, Aurangabad
4	21/08/2017	Workshop on Topic Electrical Safety	Shri P.R.Dhawale Dy. Exe. Engg. MSEDCL, Nashik
5	21/08/2017	Seminar on Topic Employment Registration	Unmesh Chitte, Nashik



6	27/07/2017	Workshop on Topic Goal Setting	Hemant Patil Nashik
7	30/03/2017 to 31/03/2017	Workshop on Topic ARDUINO	Prof. Bhagat Kishor MET IOE E&TC Dpt.
8	10/08/2016 to 12/08/2016	Workshop on PLC & SCADA for BE Electrical Students	Mr. Milind Bhavsar Senior Engineer Visionary Pvt. Ltd. Satpur MIDC
9	10/02/2016	Expert Session on Design of Solar Panels	Mr. Sunil Chandak Owner of Solar Power Pvt. Ltd.
10	02/02/2016	Power System and its Applications	S.S. Wagh Owner of Dhyanda Electrotech, Nashik

### 33. Teaching methods adopted to improve student learning

The faculty In-charge for the course begins the semester by preparing a teaching plan for the entire course. The faculty has to plan the delivery of the content depending on the no. of teaching hours allotted per week. All the topics covered in the 6 units are separated into lecture hours. The books and other materials that are to be referred for every topic are identified.

The Teachers keep a record of the date in which the corresponding topic is taught. This ensures that the teacher covers the entire syllabus within the stipulated time period in a coherent manner.

- Lectures
- Tutorial Hours
- Quality assessment
- Assignments
- Innovative Labs
- DLP, OHP in the class rooms
- High Speed Internet
- Models, charts etc
- Industrial visits
- Expert lectures

### 34. Participation in Institutional Social Responsibility (ISR) and Extension Activities:

Sr. No	Activity	Targeted group	Number of Beneficiaries	Funding Agency	Year
01	Z. P School Kurungwadi, Tal. Trimbkeshwar, Dist. Nashik	Standard-1 <sup>st</sup> to 8 <sup>th</sup>	213	Willingly Contribution from all the students, Staff of Institution of Engg. and revenue generated from technical & nontechnical events during Engineers week	2015-16
02	Z. P School Mulegaon, Tal. Trimbkeshwar, Dist. Nashik	Standard-1 <sup>st</sup> to 8 <sup>th</sup>	289	Willingly Contribution from all the students, Staff of Institution of Engg. and revenue generated from technical & nontechnical events during Engineers week	2016-17

35. SWOC analysis of the department and Future plans:

**Strengths**

- Positive reputation in the external community.
- Positive experience with those who interact with the Department.
- Faculty and staff support the campus mission
- Proactive student support.
- Access to services.
- Faculty involvement with students.
- Student leadership programs.
- Learning communities developing to enhance learning and student-faculty interaction.

- Facilities include new and well- maintained, attractive buildings and grounds with growth potential.
- Potential for growth.
- Friendly and safe.
- Diverse student body.
- Dedicated and Expert faculty.
- Campus wide involvement in planning.
- Healthy shared governance.
- Artistic and Cultural Performances (concerts/seminars/exhibits)

### **Weaknesses**

- Research, publication and consultancy work needs improvement.
- Professional skills needs to be further improved among students.
- Lack of senior Faculties
- Communicationskillsamongruralbased students'needs improvement
- Adjusting to pressures of growth.
- Student preparedness at entrance.
- Lack of feeding programme.

### **Opportunities**

- Diversity of region (students –industry).
- Readiness of leading industries to collaborate with institution through MOU.
- Strengthen the Industry-Institution interaction for better placements of students.
- To improve the soft skills of the students to make them ready to face interviews.
- Societal trends Increased value of higher education completion
- Growing demand for graduates.
- Match between curricular & societal interests.
- Increased interest in global initiatives.
- Growth potential.
- Technological advances.
- Professional development for teaching assistants in all areas.
- Increase demand for mid-career redirection and lifelong learning.

### **Challenges**

- Reporting requirements absorb a large percentage of resources.
- Societal and student perception of education as solely a means to a job.
- Hiring Senior Faculty.

- Technological advancement update.
- Competition and funding.
- Community.
- Continually changing standards.

**Future plans of the department.**

- To initiate new Techniques in developing the students to face modern methods of Personality Tests and Interviews.
- To Organize State / National level Conferences, Paper Presentations & project competition.
- To start PG Courses in Institute, and carrying out activities for the development of Faculty.
- To Organize various short term courses, workshops, seminars from experts under various Departments.
- To further upgrade the Quality of Guest lecturers on current Topics and Emerging Trends, so as to prepare our Students as Entrepreneurs and Professionals for the Global Market.
- To make the Department vibrant and a Hub for ‘Entrepreneurship’ and ‘Placement’.
- To improve placement ratio with the help of Alumni
- To contribute to the growth of the Institution as an eminent ‘Resource Centre for providing True – Professionals and thus meet the expectations of the Industries at International Level.
- To contribute to the growth of the Institution as an eminent ‘Resource Centre for providing True – Professionals’ and thus meet the expectations of the Industries at International Level.

## Evaluative Report of the Department of Information Technology

1. Name of the department : **INFORMATION TECHNOLOGY**
2. Year of Establishment : **2006**
3. Names of Programmes / Courses offered (UG, PG, M. Phil., Ph. D., Integrated Masters; Integrated Ph. D., etc.):  
**UG : Information Technology**
4. Names of Inter disciplinary courses and the departments / units involved:

Sr. No.	Course	Department
1	Basic Electrical Engineering	Electrical Engineering Department
2	Engineering Mechanics	Civil Engineering Department
3	Basic Civil Engineering	Civil Engineering Department
4	Basic Mechanical Engineering	Mechanical Engineering Department
5	Engineering Graphics	Mechanical Engineering Department
6	Computer Fundamental and Programming Languages	Computer Engineering Department
7	Engineering Mathematics	First Year Engineering Department
8	Applied Sciences	First Year Engineering Department
9	Workshop Practices	Workshop Department

5. Annual / semester / choice based credit system (programme wise) :  
**UG : SEMESTER & CREDIT BASED SYSTEM**
6. Participation of the department in the courses offered by other departments :

Sr. No.	Course	Department
1	Applied Algorithms	ME Computer Engineering
2	High Performance Database System	
3	Operating System Design	
4	Cloud Computing	
5	Advance Unix Programming	

6	Laboratory Practices -II	
7	Business Intelligence & Data Mining.	
8	Advance Storage Structure and Infrastructure Management	
9	Advance Computer Network	

7. Courses in collaboration with other universities, industries, foreign institutions, etc. :

Sr No	Course	Name of Institution / Company
1	Internet of Things	InteliDemics, Nashik.

8. Details of courses / programmes discontinued (if any) with reasons : **NIL**

9. Number of teaching posts

	Sanctioned	Filled
Professors	01	01
Associate Professors	02	02
Asst. Professors	12	10

10. Faculty profile with name, qualification, designation, specialization, (D. Sc. / D. Litt. / Ph. D. / M. Phil. etc.)

Sr. No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D. Students guided for the last 4 years
1	Dr. S V Gumaste	Ph. D.	Professor	Networking	24	NIL
2	Prof. N. R. Kale	M. E. (Electronics) Ph. D. (Pursuing)	Associate Professor	1) Image Processing 2)Internet of Things	17	NIL

3	Prof. K. V. Metre	M. Tech. (CE), Ph. D. (Pursuing), Ph. D. (Management)	Assistant Professor	1)Algorithms 2)Database	16	NIL
4	Prof. R. P. Dahake	ME(CSE) Ph. D. (Pursuing)	Assistant Professor	Image Processing	12	NIL
5	Prof. K. A. Patil	ME(CSE)	Assistant Professor	1)Software Engineering 2)IOT 3)Web Mining	11	NIL
6	Prof. P. S. Lahane	ME(CSE)	Assistant Professor	1)Data Mining 2)Big Data	12.7	NIL
7	Prof. P. E. Patel	ME(Computer Engineering)	Assistant Professor	1)Data Structures 2)Database	9	NIL
8	Prof. K. R. Ahire	M. Tech(IT)	Assistant Professor	1)Networking 2)Distributed Systems	8.07	NIL
9	Prof. R. D. Deokar	M. E(IT)	Assistant Professor	1)Distributed Systems 2)Operating System 3)IOT	10.8	NIL
10	Prof. R. C. Sonwane	ME(IT)	Assistant Professor	1)Wireless Sensor Network	6.07	NIL
11	Prof. K. B. Dhomse	ME(Computer Engineering)	Assistant Professor	1)Data Mining	4.09	NIL
12	Mr. K. M. Mahale	ME	Assistant Professor		0.5	NIL
13	Mr. A. S. Chaudhary	ME	Assistant Professor		1.2	NIL

14	Ms. J. S. Gore	MSc	Assistant Professor	Mathematics	5	NIL
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11. List of senior visiting faculty : **NIL**
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : **NIL**
13. Student-Teacher Ratio (programme wise) : **UG : 17.28:1**
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Technical Assistant	02	02
Laboratory Attendant	01	01

15. Qualifications of teaching faculty with DSc / D. Litt / Ph. D. / MPhil / PG. :

Qualification	Number of Teaching Faculty
Ph. D	1+1*
PG	14

\* NOTE: One faculty member having Ph. D in Management faculty.

16. Number of faculty with ongoing projects from  
a) National b) International funding agencies and grants received

Number of Faculty with ongoing projects.	Grant Received	Funding Agency
06	Rs. 4, 62, 000/-	BCUD, Savitribai Phule Pune University, Pune



17. Departmental projects funded by DST-FIST, UGC, DBT, ICSSR, etc. and total grants received

Sr No	Proposal ID	Title of the Research Project	Name of PI/Co-PI	Funding Agency	Amount Sanctioned	Year
1	14EN G001 197	Query Optimization and Execution of Dynamic Data Items in Network Aggregation Environment	1. Prof. P. E. Patel (Principal Investigator) 2. Prof. K. V. Metre (Co-Investigator)	BCUD, Savitribai Phule Pune University, Pune	<b>Rs. 2, 40, 000/-</b>	2014 To 2016
2	15EN G000 396	Face Recognition from Video Streaming using Face Name Graph Matching	1. Prof. R. P. Dahake 2. Prof. P. S. Lahane	BCUD, Savitribai Phule Pune University, Pune	<b>Rs. 82, 000/-</b>	2016 To 2018
3	15EN G001 276	Smart Agriculture using Internet of Things (IoT)	1. Prof. N. R. Kale 2. Prof. K. A. Patil	BCUD, Savitribai Phule Pune University, Pune	<b>Rs. 1, 40, 000/-</b>	2016 To 2018

18. Research Centre / facility recognized by the University :NIL

19. Publications:

**A) Publications: Faculty**

Sr. No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	S N I P	S J	Impact factor	h-index
1	Dr. S.V. Gumaste	48	-	-	-	-	-	-	-	-	-
2	Prof. N.R. Kale	05	01	-	-	-	-	-	-	-	-
3	Prof. K.V. Metre	42	-	-	-	-	-	-	-	-	-
4	Prof. R.P. Dahake	35	-	-	-	-	-	-	-	-	-
5	Prof. K.A. Patil	07	-	-	-	-	-	-	-	-	-
6	Prof. P.S. Lahane	10	-	-	-	-	-	-	-	-	-
7	Prof. P.E. Patel	03	01	-	-	-	-	-	-	-	-
8	Prof. K.R. Ahire	01	-	-	-	-	-	-	-	-	-
9	Prof. R.D. Deokar	04	-	-	-	-	-	-	-	-	-
10	Prof. R.C. Sonwane	04	-	-	-	-	-	-	-	-	-
11	Prof. K.B. Dhomase	04	01	-	-	-	-	-	-	-	-
12	Prof. K. M. Mahale	04	-	-	-	-	-	-	-	-	-
13	Prof. A. S. Chaudhary	03	-	-	-	-	-	-	-	-	-
14	Prof. J. S. Gore	01	-	-	-	-	-	-	-	-	-

## B) Publications: Students

Sr. No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1	Dipali Ahire, et al	1	-	-	-	-	-	-	-	-	-
2	Priyal Reja,et al	1	-	-	-	-	-	-	-	-	-
3	Megha Baviskar. et al	1	-	-	-	-	-	-	-	-	-
4	Komal Dhadiwal, et al	1	-	-	-	-	-	-	-	-	-
5	Harshali Jadhav,et al	1	-	-	-	-	-	-	-	-	-
6	Ashwini Aher,et al	1	-	-	-	-	-	-	-	-	-
7	Monali Shrinath, et al	1	-	-	-	-	-	-	-	-	-
8	Agrani Nehra,et al	1	-	-	-	-	-	-	-	-	-
9	Sagar Dhomse, et al	1	-	-	-	-	-	-	-	-	-
10	Maithali Jain,et al	1	-	-	-	-	-	-	-	-	-
11	Dilip Rathod,et al	1	-	-	-	-	-	-	-	-	-

12	Nikita Bodke,et al	1	-	-	-	-	-	-	-	-	-
13	Dipak Kawarkhe, et al	1	-	-	-	-	-	-	-	-	-
14	Vinita Aher,et al	1	-	-	-	-	-	-	-	-	-
15	Monali Agale,et al	1	-	-	-	-	-	-	-	-	-
16	Sonali Patel,et al	1	-	-	-	-	-	-	-	-	-
17	Kashmira Bagul,et al	1	-	-	-	-	-	-	-	-	-
18	Jayesh M. Pagar, et al	1	-	-	-	-	-	-	-	-	-
19	Nisha Dey,et al	1	-	-	-	-	-	-	-	-	-
20	Harchelle Aghalte, et al	1	-	-	-	-	-	-	-	-	-
21	Abhang Mayuri, et al	1	-	-	-	-	-	-	-	-	-
22	Shital Jadhav,et al	1	-	-	-	-	-	-	-	-	-
23	Aishwarya Mandlik, et al	1	-	-	-	-	-	-	-	-	-
24	Rishikesh D.Chavan, et al	1	-	-	-	-	-	-	-	-	-
25	Chetna Padmane, et al	1	-	-	-	-	-	-	-	-	-
26	Akash Bonde, et al	1	-	-	-	-	-	-	-	-	-
27	Viral Mandiliya, et al	1	-	-	-	-	-	-	-	-	-
28	Reemi Shirsath,	1	-	-	-	-	-	-	-	-	-

	et al.										
29	Tushar Korde, et al.	1	-	-	-	-	-	-	-	-	-
30	Deepen Saha, et al.	1	-	-	-	-	-	-	-	-	-
31	Sayali Kinage, et al.	1	-	-	-	-	-	-	-	-	-
32	Himanshi Ganatra, et al	1	-	-	-	-	-	-	-	-	-
33	Akash Shukla, et al.	1	-	-	-	-	-	-	-	-	-
34	Saurabh Hirve, et al.	1	-	-	-	-	-	-	-	-	-
35	Gaikwad Ishwari, et al.	1	-	-	-	-	-	-	-	-	-
36	Dani Pallavi, et al	1	-	-	-	-	-	-	-	-	-
37	Namrata A.Chaudhari, et al.	1	-	-	-	-	-	-	-	-	-
38	Mohan Kadam, et al.	1	-	-	-	-	-	-	-	-	-
39	Asmita Nikam, et al.	1	-	-	-	-	-	-	-	-	-
40	Shital Shinde, et al	1	-	-	-	-	-	-	-	-	-
41	Prince Gupta, et al.	1	-	-	-	-	-	-	-	-	-
42	Supriya Brahme,	1	-	-	-	-	-	-	-	-	-



Sr. No	Year	No. of Sponsored Projects	% of Sponsored Projects
1	2017-18	8	61.53%
1	2016-17	0	0
2	2015-16	0	0
3	2014-15	13	72.22%

23. Awards / Recognitions received by faculty and students

A. Awards / Recognitions received by faculty

Sr. No	Name of Faculty	Award	Remark
1	--	--	--

B. Awards / Recognitions received by students

Sr. No	Name of Student	Award	Remark
1	Bhushan Ahire	1 <sup>st</sup> in Maharashtra State for MPSC Exam conducted during the year 2016-17	BEIT (2011-12)
2	Harshad Dighe	Central Excise Inspector (Govt. of India)	BEIT (2011-12)
3	Abhish Mahajan	Consolation Prize at state Level Project competition and Exhibition PROJIT	BEIT (2012-13)
4	Abhish Mahajan	Got First Prize in National Level Project competition for Project Metagalaxy	BEIT (2012-13)
5	Guruprasad Bhavsar	Awarded as Highest Committed Student Branch Activist Award (2012-13) by Computer Society of India- Regon VI	TE IT (2013-14)
6	Vikram Bodake.	Selected as "Google Student Ambassador" by Google India	TE IT (2012-13)
7	Abhishek	Got 2 <sup>nd</sup> Prize in State	BE IT

	Talekar Sagar Shirsath Deepak Kawarkhe Nikhil Malwal	level Project competition MET NIRMAAN-2017 held at MET's IOE Nashik	(2016-17)
8	Sagar Shirsath	2 <sup>nd</sup> Prize of Placement Practice Event during IGNITE-2016 held at MET's IOE Nashik	BE IT (2016-17)

24. List of eminent academicians and scientists / visitors to the department  
**Year 2016-17**

Sr. No	Name of eminent Person	Organization	Date	Remark
1	Mr. Vikram Arjun Bodake	Director, Engenius Park, Nashik	22/09/2017	
2	Mr. Hemkant Gangurde	Former Employee, Amdox, Pune	08/09/2017 to 10/09/2017	
3	Mr. Shrikant R. Karode	Fellow Member, CSI India	08/09/2017	
4	Mr. Ajinkya Chopade	Target Campus, Nashik	24/08/2017	
5	Mr. Trajiv Shirsalkar	Director, Lo Tech Pro. Nashik	21/07/2017	
6	Mr. Nilesh Chellare,	MET's IOM Nashik	20/03/2017	
7	Mr. Kiran Pawar	K. P. Technobrics, Nashik	22/2/2017 to 23/2/2017	
8	Akshay Padmane	Think Quotient Software Pvt. Ltd. Pune	24/12/2016	
9	Mayur Chandwadkar	InfoTech Website and Software developer, Nashik	08/11/2016	
10	Prof. Parag Achaliya	SNJB's COE, Chandwad	28/09/2016	
11	Mrs. Archana Vaidya	GES COE, Nashik	02/09/2016	
12	Prof. Shailesh Hule	Professor PCCOE, Pune	31/8/2016 to 3/9/2016	
13	Mr. Satish Muthukumar Mr. Yogesh Kadam	SS Technovention, Nashik	16/03/2016 to 17/03/2016	



14	Dr. U. S. Bhadade	SSBT COE, Jalgaon	23/02/2016	
15	Sunil Goradhe	Suma Soft, Nashik	21/9/2015	
16	Prof. Roopali Bora	KKW Collage of Engineering, Nashik	01/09/2015	
17	Mr Guruprasad Bhavsar	ESDS Pvt. Ltd. Nashik	01/08/2015	
18	Dr. R. S. Tiwari	Director, Inteldemics, Nashik	03/04/2015	
19	Mr. Tushar B. Kute	SITRC, Nashik	16/01/2015	
20	Nilesh Dalvi	Infinity, Nashik	15/09/2014	
21	Mr. Rushikesh Jadhav	ESDS Pvt. Ltd. Nashik	27/08/2014	
22	Mr. Jaywant Desale	InGenious Solutions, Pune	06/08/2014 to 8/08/2014	
23	Mohammed Kasif	N3Soft, Nashik	09/12/2013	
24	Mr. Sagar Nikam	ELC(Excellence Learning Centre) pvt ltd, Nashik	09/12/2013	
25	Mr. Dinesh Modi	Innovations Systems, Nashik	21/08/2013 to 22/08/2013	
26	Mr. Kiran Bhosale	InGenious Solutions, Pune	25/07/2013 to 28/07/2013	
27	Mr. Pravin Bhise	Logic Bits Systems, Pune	16/7/2013 to 20/07/2013	
28	Mr. Prashant Sahu	Tech Smart System, Pune	8/02/2013 to 10/02/2013	
29	Kavita Waikar	Techcorp Ltd, Pune	03/01/2013 to 3/03/2013	
30	Mr. Santosh Ukade	Infosys Pune	08/11/2012	
31	Mr. Rajesh Seth	Cyberedge web Solutions Pvt. Ltd.	07/07/2012	

25. Seminars / Conferences / Workshops organized & the source of funding

a) National                      b) International

**Academic Year: 2010-11**

Sr. No	Programme Title	National/ International	Source of Funding
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1*	National Conference on “Innovations and Trends in Computer and Communication Engineering ITCCE-2011” Two Days (25/02/2011 to 26/02/2011)	National	BCUD, SPPU, Pune
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\*Jointly organized by department of Information Technology, Computer Engineering Department& MCA.

**Academic Year: 2011-12**

Sr. No	Programme Title	National/ International	Source of Funding
1*	National Conference on “Innovations and Trends in Computer and Communication Engineering ITCCE-2012” Three Days (23/02/2011 to 25/02/2011)	National	BCUD, SPPU, Pune

\*Jointly organize by department of Information Technology, Computer Engineering Department& MCA.

**Academic Year: 2012-13**

Sr. No	Programme Title	National/ International	Source of Funding
1	A project guidance workshop by Mr. Rajesh Seth One Day (7/07/2012)	--	Self-Funded
2	Expert session on “Software Testing and Quality Assurance (STQA)” by Mr. Santosh Ukade One Day (11/08/2012)	--	Self-Funded

3	Seminar by Step Ahead for TE and BE students One Day (11/09/2012)	--	Self-Funded
4	A national level workshop on “Research trends in Engineering and MATLAB as scientific tool for research” 3 Days (8/02/2013 to 10/02/2013)	National	BCUD, SPPU, Pune
5	A workshop on “Advanced Java” by Techcorp Ltd, Pune 3 Days (1/03/2013 to 3/03/2013)	--	Self-Funded

**Academic Year: 2013-14**

<b>Sr. No</b>	<b>Programme Title</b>	<b>National/ Internatio nal</b>	<b>Source of Funding</b>
1	A workshop on “PHP Technology” by Mr. Pravin Bhise 5 Days (16/07/2013 to 20/07/2013)	--	Self-Funded
2	A workshop on “Linux Operating System” by Mr. Kiran Bhosale 4 Days (25/07/2013 to 28/07/2013)	--	Self-Funded
3	“Weave your Web” Two days intensive training on Web Design and Development by Mr. Dinesh Modi 2 Days (21/08/2013 to 22/08/2013)	--	Self-Funded

4	State Level Students Convention MET IGNITE-13 2 days (21/09/2013 to 22/09/2013)	--	BCUD, SPPU, Pune
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**Academic Year: 2014-15**

Sr. No	Programme Title	National/ International	Source of Funding
1	Two week ISTE-IITB workshop on Computer Programming 2 Week (16/06/2014 to 21/06/2014)	National	Indian Institute of Technology Bombay
2	A workshop on "Recent trends in Advanced Database" by Mr. Jaywant Desale 3 Day (6/08/2014 to 8/08/2014)	--	BCUD, SPPU, Pune
3	A workshop on "Cloud computing" by Mr. Rushikesh Jadhav One Day (27/08/2014)	--	Self-Funded
4	Expert session on "System Programming: A practical approach" by Prof. Roopali Bora One Day (9/01/2015)	--	Self-Funded
5	One day workshop on "Operating System: Multithreading and IPC in Linux" by Mr. Tushar B. Kute One Day (16/01/2015)	--	Self-Funded

6	Expert session on “IT Revolution” by Dr. R. S. Tiwari One Day (4/03/2015)	--	Self-Funded
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**Academic Year: 2015-16**

Sr. No	Programme Title	National/ International	Source of Funding
1	Android Application Development workshop by Mr Guruprasad Bhavsar 2 Days (1/08/2015 to 2/08/2013)	--	Self-Funded
2	Expert session on Advanced microprocessor (80386) and microprocessor based systems by Dr. U. S. Bhadade One Day (23/02/2016)	--	Self-Funded
3	FDP on “Internet of Things” 3 Days (13/06/2016 to 15/06/2016)	--	Self-Funded

**Academic Year: 2016-17**

Sr. No	Programme Title	National/ International	Source of Funding
1	Four days’ workshop on “Web development” by Prof. Shailesh Hule (31/08/2016 to 3/09/2017)	--	Self-Funded
2	Seminar on “Wordpress- A code less design” by Prof. Parag Achaliya (28/09/2016)	--	Self-Funded

3	Two day workshop on “JAVA” by K P Technobricks (16/02/2017 to 17/02/2017)	--	Self-Funded
4	One day Seminar on “8051 Interfacing with ADC, DAC andLCD ” by Mr. Kishor Bhagat (27/03/2017)	--	Self-Funded

**Academic Year: 2017-18**

Sr. No	Programme Title	National/ International	Source of Funding
1	Expert session on “Project Development” by Mr. Rajiv Shirsalkar (21/07/2017)	–	Self Funded
2	Expert session on “Aptitude Preparation” by Mr. Ajinkya Chopade (24/08/2017)	–	Self Funded
3	Expert session on “Employability Skill Development” by Mr. Shrikant R. Karode (8/09/2017)	–	Self Funded
4	Three days workshop on “Programming and Problem Solving Approach” by Mr. Hemkant B. Gangurde (8/09/2017 to 10/09/2017)	–	Self Funded

26. Student profile programme/course wise:

Name of the Course / programme	Academic Year	Applications Received	Selected	Enrolled		Pass Percentage
				*M	*F	
UG: Information Technology	2016-17	54	54	30	24	Appeared
	2015-16	44	44	24	20	59. 25
	2014-15	27	27	11	16	55. 55
UG: Information Technology (DSE)	2016-17	43	43	16	27	Appeared
	2015-16	55	55	15	40	74. 54
	2014-15	47	47	12	36	93. 75

\*M=Male\*F=Female

27. Diversity of Students

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Name of the Course	Academic Year	% of students from the same state		% of students from other States	% of students from abroad
		HU	OHU		
UG: Information Technology	2016-17	34	20	0	Nil
	2015-16	26	12	6	Nil
	2014-15	19	7	1	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Sr. No	Name of competitive examinations	Year	Number of students
1	GATE	2013-14	--

		2014-15	3
		2015-16	3
2	CMAT / MBA-CET	2013-14	--
		2014-15	4
		2015-16	4
3	IES/GRE/GMAT/TOEFL	2013-14	--
		2014-15	--
		2015-16	--

29. Student progression

Student progression	Against % enrolled (2015-16)	2014-15	2013-14
UG to PG	6.81 %	12.30 %	4.41 %
PG to M. Phil.	---	---	---
PG to Ph. D.	---	---	---
Ph. D. to Post-Doctoral	---	---	---
<b>Employed</b>			
* Campus selection	30.68 %	18.46 %	25.00 %
* Other than campus recruitment	17.04 %	23.06 %	29.41 %
Entrepreneurship/Self-employment	3	1	---

30. Details of Infrastructural facilities

A) Library

Sr. No.	Library Resources	UG
1	Total Number Books (Volumes)	2742
2	Total Number Title	942



3	Indian Journals	30
4	Magazines	--
5	Reports	94

### B) Internet Facility for Staff and Students

Institute has strong IT infrastructure in the support of various Activities and their needs:

1. An Internet lease line of 20 MBPS 1:1
2. Tata tele services Ltd. 10Mbps 1:1 Internet Leased Line
3. BSNL-VPN-AICTE-NMICT Internet of 20 MBPS

### C) Class Rooms with ICT facility: 05

### D) Laboratories

Sr. No.	Name of the Laboratory	Name of the Important equipment
1	Software Lab- I (IT -01)	Lenovo Thinkcenter Desktop M73 Tiny, Intel Core i3-4130T2. 90 GHz Processor, 3MB L2 Cache 2C, 1333 MHz FSB, 4GB DDR3 RAM, 500GB SATA HDD, Giganit Ethernet, Keyboard, Optical Mouse.
2	Network Lab (IT -02)	Lenovo Thinkcenter Desktop M73 Tiny, Intel Core i3-4130T2. 90 GHz Processor, 3MB L2 Cache 2C, 1333 MHz FSB, 4GB DDR3 RAM, 500GB SATA HDD, Giganit Ethernet, Keyboard, Optical Mouse.
3	Operating System Lab (L2 Lab)	Lenovo tiny M700 Desktop Core i3-6100 processor, 8GB DDR4 RAM, 500GB SATA HDD, Lenovo keyboard, Lenovo Optical Mouse, 18.5 TFT Wide Lenovo monitor mounting kit, Power cord, Power Adaptor of CPU.
4	Software Lab (L4 Lab)	Intel E7400 Core 2 Duo 2.93 GHz, Intel Original DG41RQ Motherboard, 2 GB DDR2 RAM 800 MHz, 320 GB SATA HDD, MS Key Board Mouse, Cabinet VIP 350, 20" AOC LCD Monitor
5	Programming Lab	Lenovo Thinkcenter Desktop M73 Tiny,

	(IT- 01)	Intel Core i3-4130T2. 90 GHz Processor, 3MB L2 Cache 2C, 1333 MHz FSB, 4GB DDR3 RAM, 500GB SATA HDD, Gigabit Ethernet, Keyboard, Optical Mouse.
6	Digital & Microprocessor Lab (sharing with Computer Engineering Department)	Digital & Analog IC Tester, Digital Trainer Kit, Dyna8051, 8251, 8253, 8255, 8259, 8279, ADC, DAC, Stepper motor Study Cards, Dyna 8086 Trainer kit
7	Software Lab- II (IT -02)	Lenovo Thinkcenter Desktop M73 Tiny, Intel Core i3-4130T2. 90 GHz Processor, 3MB L2 Cache 2C, 1333 MHz FSB, 4GB DDR3 RAM, 500GB SATA HDD, Gigabit Ethernet, Keyboard, Optical Mouse.

31. Number of students receiving financial assistance from Institute, university, government or other agencies

Sr. No.	Type of Assistant	Source Agency	Number of Students (FE to BE)		
			2016-17	2015-16	2014-15
1	GOI PM Scholarship	Social Welfare Dept. and Tribal Development	69	91	97
2	GOI PM Free ship		60	72	65
3	EBC Concession	Joint Director of Technical Education	36	35	20
4	Minority Scholarship	Department of Minority Welfare	2	1	1
5	STC/PTC	Zilha Parishad	0	1	0
6	Pvt scholarship	Trust/NGO	0	0	13

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr. No	Activity	Topic/Area	DATE	Targeted Group
1	Workshop	“A project guidance workshop” by Mr. Rajesh Seth	7/07/2012	BE IT and Faculties

2	Special lecture	“Software Testing and Quality Assurance” by Mr. Santosh Ukane	11/08/2012	BE IT
3	Seminar	by Step Ahead	11/09/2012	BE IT
4	Workshop	“Advanced Java” by Techcorp Ltd, Pune	1/03/2013 to 3/03/2013	TE IT
5	Workshop	“PHP Technology” by Mr. Pravin Bhise	16/07/2013 to 20/07/2013	BE IT and Faculties
6	Workshop	“Linux Operating System” by Mr. Kiran Bhosale	25/07/2013 to 28/07/2013	TE IT and Faculties
7	Workshop	“Weave your Web” Two days intensive training on Web Design and Development” by Mr. Dinesh Modi	21/08/2013 to 22/08/2013	SE to BE All Branches, Faculties
8	Workshop	“Recent trends in Advanced Database” by Mr. Jaywant Desale	6/08/2014 to 8/08/2014	TE IT
9	Workshop	“Cloud Computing” by Mr. Rushikesh Jadhav	27/08/2014	TE IT
10	Special lecture	“System Programming: A practical approach” by Prof. Roopali Bora	9/01/2015	TE IT
11	Special lecture	“Operating System: Multithreading and IPC in Linux” by Mr. Tushar B. Kute	16/01/2015	TE IT
12	Special lecture	“IT Revolution” by Dr. R. S. Tiwari	4/03/2015	TE IT
13	Workshop	“Android Application Development workshop” by Mr Guruprasad Bhavsar	1/08/2015 to 2/08/2013	BE IT
14	Special lecture	“Advanced microprocessor (80386) and microprocessor based systems” by Dr. U. S. Bhadade	23/02/2016	SE IT
15	Seminar	“Internet of Things:	28/9/2016	SE IT

		Smart City” (Audit Course Activity) by Dr. R. S. Tiwari		
16	Special lecture	Expert Session on “8051 Interfacing with ADC, DAC and LCD” by Prof. Kishor Bhagat	27/03/2017	SE IT
17	Workshop	“Web Application development using NoSql” by Prof. Shailesh Hule PCCOE, Pune	31/8/2017 to 3/9/2017	TE IT
18	Seminar	“Wordpress: Codeless Desing” by Prof. Parag Achaliya	28/9/2017	TE IT
19	workshop	“Training of Core Java” by K. P. Technobrics	16/2/2017 to 17/2/2017	BEIT
20	Special lecture	(Audit Course Activity) “The Science of Happiness” by Mr. Nilesh Chellare, MET’s IOM	20/3/2017	SE IT
21	Seminar	“Building Online Income Portal” by Mayur Chandwadkar, InfoTech Website and Software developer	11/8/2016	TE IT and BE IT

33. Teaching methods adopted to improve student learning

- Class lectures along with associated hand-outs and supporting material for concern subject.
- Lecture Notes available to students in ERP Login.
- MyExamo portal login for MCQ Practice.
- Real Time Industry Oriented Project-based learning.
- Guest Lecturers, Seminars for recent trends in subject.
- Discussion Groups and Mentoring for overall performance of student.
- In tutorial session, problems are given as assignment to improve the problem solving skills.
- Remedial classes for improving the results.

34. Participation in Institutional Social Responsibility (ISR) and Extension

### Activities

Sr. No	Activity	Targeted group	Number of Beneficiaries	Funding Agency
1	MET –Dnyanada (Computer Training Program)	School Students	400	Self-Funded
2	TreePlantation	MET-Campus	--	Subhadra Estate, Nashik
3	NSS Activity For Eco-friendlyGanpati Irrosion.	General Public in Nashik	1000	SPPU, Pune
4	NSS Camp (Awareness about Clealiness, Education)	People of Gaulane Village	200	SPPU, Pune

### 35. SWOC analysis of the department and Future plans

#### Strengths

- Well experienced and dedicated faculty members.
- Industry standard hardware equipment's and Software.
- World Class Infrastructure and smart class rooms.
- Collaborative interaction of students and faculty with Industry Experts.
- Good faculty retention.

#### Weakness

- Fewer number of consultancy services.
- Lack of Senior Staff Members.
- Tie-up with professional bodies needs to be strengthened.
- Sponsored research projects have to be initiated.
- No patent rights so far.
- Bridging the gap between the curriculum and frequently changing Industry needs.

#### Opportunities

- Getting more funded projects.
- Converting student project to products.
- Developing socially useful projects.
- Research activities initiation.

#### Challenges

- Poor communication skills of student admitted from rural area.

- To cope up with the frequently changing technologies and the demand from Industry.
- To place more students in different IT companies.
- Students admitted with weak CET score so producing good academic results and offering placement to them become difficult.

**Future Plans**

- To introduce additional post graduate programs in Information Technology.
- To enroll more students to benefit from professional societies.
- To increase the number of students placed in core IT Industries.
- To get accredited by National Board of Accreditation.
- To draw more funded projects from various funding agencies.

## Evaluative Report of the Department of Mechanical Engineering

1. Name of the department : **MECHANICAL ENGINEERING**
2. Year of Establishment : **2007**
3. Names of Programmes / Courses offered (UG, PG, M. Phil. ,Ph. D. , Integrated Masters; Integrated Ph. D. , etc.) :  
**UG : Mechanical Engineering**  
**PG : CAD, Manufacture and Engineering**  
**Research : Doctor of Philosophy in Mechanical Engineering**
4. Names of Inter disciplinary courses and the departments / units involved :

UG

Sr. No.	Course	Department
1	Basic Electrical Engineering	Electrical Engineering Department
2	Engineering Mechanics	Civil Engineering Department
3	Basic Civil Engineering	Civil Engineering Department
4	Computer Fundamental and Programming Languages	Computer Engineering Department
5	Engineering Mathematics	First Year Engineering Department
6	Applied Sciences	First Year Engineering Department

5. Annual / semester / choice based credit system (programme wise) :

**UG : SEMESTER & CREDIT BASED SYSTEM**

**PG : SEMESTER & CREDIT BASED SYSTEM**

6. Participation of the department in the courses offered by other departments:

Sr. No.	Course	Department
1	Basic Mechanical Engineering	First year Engineering for all branches
2	Engineering Graphics	
3	Workshop Practices	

7. Courses in collaboration with other universities, industries, foreign institutions, etc. :

Sr No	Course	Name of Institution / Company
1	Skill Development programme on vehicle overhauling.	Prigma Edutech (P) Ltd. , Pune
2	Unigraphics	CAD –GENX, Mumbai.

8. Details of courses / programmes discontinued (if any) with reasons : **NIL**

9. Number of teaching posts

	Sanctioned	Filled
Professors	03	01
Associate Professors	07	02
Asst. Professors	25	22

10. Faculty profile with name, qualification, designation, specialization, (D. Sc. / D. Litt. / Ph. D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. V. P. Wani	Ph. D.	Principal	Industrial Engineering	35	6
Dr. M P Ray	Ph D	Professor	Design	30	NA
Mr. S. V. Ingle	M. E. Mechanical	Head of Dept	CAD/CAM	16	NA
Mr. S. B. Patil	M. E. Thermal Power Engineerin	Associate Professor	Thermal Engineering	23	NA



	g, Ph. D. (Pursuing)				
Mr. S. K. Dahake	M. E. Mechanical	Assistant Professor	CAD/CAM	12	NA
Mr. V. A. Upadhye	B. E. Mechanical	Workshop Superintendent	Industrial Engineering	48	NA
Mr. H. A. Chavan	M. Tech. (CAD/CAM), Ph. D. (Pursuing)	Assistant Professor	CAD/CAM	10	NA
Mr. A. Y. Chaudhari	M. E. Machine Design	Assistant Professor	Machine Design	08	NA
Mr. R. S. Jain	M. Tech (Design)	Assistant Professor	Machine Design	28	NA
Mr. D. K. Dond	M. Tech. (Mechanical), Ph. D. (Pursuing)	Assistant Professor	Automobile Engineering	9.4	NA
Mr. N. S. Hyalij	M. Tech. (Mechanical)	Assistant Professor	Thermal Engineering	16	NA
Mr. V. P. Chaudhari	M. E. Machine Design	Assistant Professor	Machine Design	07	NA
Mr. A. B. Varandal	M. Tech. (Mechanical Engineering)	Assistant Professor	Thermal Engineering	08	NA
Mr. R. R. Barshikar	M. E. (Mechanical Engineering)	Assistant Professor	Design Engineering	08	NA
Mr. S. R. Suryawanshi	M. E. (Design Engineering)	Assistant Professor	Design Engineering	07.8	NA
Mr. S. V. Karanjkar	M. Tech.	Assistant Professor	Machine Design	17	NA

Mr. R. J. Pawar	M. E. CAD&ME	Assistant Professor	CAD&ME	14	NA
Mr. A. S. Patil	M. E. CAD&ME	Assistant Professor	CAD&ME, Advance Manufacturing	6.5	NA
Mr. P. V. Deosant	M. E. CAD&Me	Assistant Professor	CAD&ME	04	NA
Ms. S. V. Shewale	M. E. CAD&ME	Assistant Professor	CAD&ME	07	NA
Mr. D. D. Deshmukh	M. E. (Production & Automation ) , Ph. D (Persuing)	Assistant Professor	Materials and Welding	08	NA
Mr. N. B. Ahire	M. E. Mechanical	Assistant Professor	Design Engineering	06	NA
Mr. D. P. Panchave	M. E. (Heat & Power Engineerin g)	Assistant Professor	Heat & Power Engineering)	09	NA
Mr. A. D. Patil	M. E. (Design Engineerin g)	Assistant Professor	Design Engineering	07	NA
Mr. S. P. Kakade	M. E. (Design Engineerin g)	Assistant Professor	Design Engineering	09	NA
Mr. Y. S. More	M. E. (Design Engineerin g)	Assistant Professor	Design Engineering	08	NA

11. List of senior visiting faculty :

Sr. No.	Name of Staff	Subject
01	Dr. Bhati	Mathematics (ME-CAD&ME)

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : **NIL**

13. Student-Teacher Ratio (programme wise) : **UG : 16.55:1**  
**PG : 18:1**

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	<b>Sanctioned</b>	<b>Filled</b>
Foreman	01	01
Technical Assistant	10	10
Laboratory Attendant	05	05

15. Qualifications of teaching faculty with DSc / D. Litt / Ph. D. / MPhil / PG. :

<b>Qualification</b>	<b>Number of Teaching Faculty</b>
Ph. D	02
PG	23
UG	01

16. Number of faculty with ongoing projects from  
a) National b) International funding agencies and grants received

<b>Sr. No.</b>	<b>Name of Faculty with ongoing projects.</b>	<b>Grant Received</b>	<b>Funding Agency</b>
01	Mr. Amol Y. Chaudhari	2. 5 Lacs	<b>National funding agency (SPPU)</b>
02	Mr. Dhiraj D. Deshmukh		
03	Mr. Sachin P. Kakade		
04	Mr. Shubham R. Suryawanshi	1. 9 Lacs	<b>National funding agency (SPPU)</b>
05	Mr. Harshal A. Chavan		
06	Mr. Dipak K. Dond	1. 9 Lacs	<b>National funding agency (SPPU)</b>
07	Mr. Dinesh P. Panchave		
08	Mr. Sandip B. Patil		

17. Departmental projects funded by DST-FIST, UGC, DBT, ICSSR, etc. and total grants received

Sr No	Title of the Research Project	Name of PI/Co-PI	Funding Agency	Amount Sanctioned	Year
1	Implementation of Quality Management practices in Performance improvement of Micro, Small and Medium Enterprises through Academic Intervention; A step towards Industry Institute Interaction	Dr. V. P. Wani Dr. S. D. Kalpande	DST (NSTMIS)	12, 43, 000/-	2014

18. Research Centre / facility recognized by the University : **YES**

19. Publications:

**A) Publications: Faculty**

Sr. No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN /ISSN numbers with details of publishers	Total Citation	S N I P	SJ R	Impact factor	h-index
1	Dr. V. P. Wani	78	05	--	02	01	--	61	--	--	--	03
2	Mr. S. V. Ingle	10	--	--	--	--	--	--	--	--	--	--

3	Mr. S. B. Patil	16	01	--	--	--	--	01	--	--	--	--
4	Mr. S. K. Dahake	18	09	--	--	--	--	05	--	--	--	--
5	Mr. V. A. Upadhye	02	--	--	--	--	--	--	--	--	--	--
6	Mr. H. A. Chavan	26	10	--	--	--	--	06	--	--	--	--
7	Mr. A. Y. Chaudhari	07	--	--	--	--	--	--	--	--	--	--
8	Mr. R. S. Jain	03	--	--	--	--	--	--	--	--	--	--
9	Mr. D. K. Dond	07	--	--	--	--	--	--	--	--	--	--
10	Mr. N. S. Hyalij	02	--	--	--	--	--	--	--	--	--	--
11	Mr. V. P. Chaudhari	03	--	--	--	--	--	--	--	--	--	--
12	Mr. A. B. Varandal	06	--	--	--	--	--	--	--	--	--	--
13	Mr. R. R. Barshikar	07	--	--	--	--	--	--	--	--	--	--
14	Mr. S. R. Suryawanshi	30	--	--	--	--	--	--	--	--	--	--
15	Mr. S. V. Karanjkar	07	--	--	--	--	--	--	--	--	--	--
16	Mr. R. J. Pawar	04	--	--	--	--	--	--	--	--	--	--
17	Mr. A. S. Patil	02	--	--	--	--	--	--	--	--	--	--
18	Mr. P. V. Deosant	04	--	--	--	--	--	--	--	--	--	--
19	Ms. S. V. Shewale	03	--	--	--	--	--	--	--	--	--	--
20	Mr. D. D. Deshmukh	11	--	--	--	--	--	--	--	--	--	--
21	Mr. N. B. Ahire	06	--	--	--	--	--	--	--	--	--	--
22	Mr. D. P. Panchave	04	--	--	--	--	--	--	--	--	--	--
23	Mr. A. D. Patil	07	01	--	--	--	--	--	--	--	--	--
24	Mr. S. P. Kakade	07	--	--	--	--	--	--	--	--	--	--
25	Mr. Y. S. More	04	--	--	--	--	--	--	--	--	--	--

26	Dr. S. G. Patil	04	03	--	1	1	--	--	--	--	--	--
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**B) Publications: Students**

Sr No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Total Citation	S N I P	SJ R	Impact factor	h-index
1.	Pramod Mahale	01	--	--	--	--	--	--	--	--	--	--
2.	Amol Suradkar	02	--	--	--	--	--	--	--	--	--	--
3.	Pankaj Shirsath	04	--	--	--	--	--	--	--	--	--	--
4.	Sharad Nirgude	04	--	--	--	--	--	--	--	--	--	--
5.	Ashish Lande	03	01	--	--	--	--	01	--	--	--	--
6.	Sachin Jadhav	02	--	--	--	--	--	--	--	--	--	--
7.	Dipak Sancheti	04	--	--	--	--	--	--	--	--	--	--
8.	Sujoy Deb Berma	01	--	--	--	--	--	--	--	--	--	--
9.	Satish Bachav	03	--	--	--	--	--	--	--	--	--	--
10.	Dhage Kalyani	01	--	--	--	--	--	--	--	--	--	--
11.	Gangurde Harshal	01	--	--	--	--	--	--	--	--	--	--
12.	Nagare Pratik	02	--	--	--	--	--	--	--	--	--	--
13.	Niphade Amol	02	--	--	--	--	--	--	--	--	--	--

14	Rikame Ravindra	03		--	--	--	--	--	--	--	--	--
15	Netke Avanti	01		--	--	--	--	--	--	--	--	--
16	Akshay Dalvi	01		--	--	--	--	--	--	--	--	--
17	Naikaj Pandya	01		--	--	--	--	--	--	--	--	--
18	Dishank Bari	01		--	--	--	--	--	--	--	--	--
19	Pankaj Avhad	01		--	--	--	--	--	--	--	--	--
20	Sumit Fanse	02		--	--	--	--	--	--	--	--	--
21	Snehal Bhoknal	01		--	--	--	--	--	--	--	--	--
22	Priti Tembhurnikar	02		--	--	--	--	--	--	--	--	--
23	Vaibhav Kothavade	02		--	--	--	--	--	--	--	--	--
24	Virendra Kalmegh	01		--	--	--	--	--	--	--	--	--
25	Sayali Kulkarni	01		--	--	--	--	--	--	--	--	--
26	Sagar Ghuge	01	--	--	--	--	--	--	--	--	--	--
27	Amit Sutar	01	--	--	--	--	--	--	--	--	--	--
28	Sambhaji Nandre	01	--	--	--	--	--	--	--	--	--	--
29	Sachin Sonawane	02	--	--	--	--	--	--	--	--	--	--
30	Sachidana nd Nimankar	01	01	--	--	--	--	--	--	--	--	--
31	Avinash Bankar	02	01	--	--	--	--	--	--	--	--	--
32	Prashant Bagmar	02	01	--	--	--	--	--	--	--	--	--
33	Rameshwar Hagote	02	02	--	--	--	--	05	--	--	--	--





A. Awards / Recognitions received by faculty

Sr. No	Name of Faculty	Award	Remark
1	Mr. Amol B. Varandal	Bharat Shiksha Ratan	
2	Mr. Sandip B. Patil	University level Award for Project in Avishkar 2010, and selected for National level	

B. Awards / Recognitions received by students

Sr. No	Name of Student	Award	Remark
1	Naikaj Pandya	Patent in Turbopipe	
2	Amol Bibe	2 <sup>nd</sup> Prize in Face off Competition in METASTORM-13	
3	Jagannath Kuyte	Selected as a member of University of Pune in Squash Racket	
4	Nikhil Esai	1 <sup>st</sup> prize in Paper presentation	
5	Kalim Kadri	Patent in "Balloon Aerogenerator" CBR No. 3335 dated 13. 02. 2017 201721005032	
6	Kunal Khairnar	Winner at ASBC project competition 2016 held at Kashibai Nawale COE , Pune	

24. List of eminent academicians and scientists / visitors to the department

Sr No	Name of Eminent Person	Organization	Date	Remark
1	Mr. S. R. Kothekar	NASSCOM Engg. Forum	08/03/2013	
2	Mr. A. D. Sheth	GM, Lear Corporation	22/10/2010	
3	Mr. Hiranman Aher	Vice President, Mahindra & Mahindra	05/03/2011	
4	Mr. Purshi Doddanna	Plant Head, Eaton corporation	05/03/2011	
5	Mr. Sanjay	Engg. Manager Eaton	02/01/2010	

	Chopane			
6	Ms. Hemangi Katare	NECC	16/09/2013	
7	Mr. A. W. Lele	BOSH, Nashik	05/03/2011	
8	Mrs. Salbir Brar	NECC, Ambad	28/07/2014	
9	Satish Dubule	Eaton, Pune	05/03/2011	
10	Mr. S. B. Bandekar	NTPS, Eklahare	04/05/2011	
11	Dr. Punit Tandan	IITDM, Jabalpur	24/03/2014	
12	Mr. Sanket Ambekar	BOSCH, Nashik	05/04/2014	
13	Dr. Ramesh Narang	Purdu University	22/07/2011	
14	Mr. Rakesh Ranjan	Sr. Manager, Mahindra & Mahindra	07/09/2012	
15	Mr. S. B. Nangia	Rushabh Honda, Nashik	22/01/2015	
16	Mr. Abhay Wankhede	Rushabh Honda, Nashik	22/01/2015	
17	Vijendra Muddebahalkar	Epcos, Nashik	15/09/2012	
18	Mr. Shantosh Totre	Jeevanvidya Mission India	17/03/2015	
19	Prof. Rajendra S. Pawar	Dr. J. J. Magdum COE, Jaysingpur	09/06/2015	
20	Prof. A. M. Naniwadkar	Dr. J. J. Magdum COE, Jaysingpur	09/06/2015	
21	Prof. P. R. Patil	Dr. J. J. Magdum COE, Jaysingpur	09/06/2015	
22	Mr. Manav Batra	Prigma Edutech Services, Pune	04/09/2015	
23	Prof. L. V. Kamble	The M. S. Uni. Of Baroda	21/09/2015	
24	Dr. A. G. Thakur	S. R. E. S. COE, Kopergaon	21/12/2015	
25	Dr. Carolyn Heising	Professor, IOWA, State University of Science and Technology, Ames	31/07/2010	
26	S. Ramalingam	Mackwins Education (p) Ltd.	23/03/2017	
27	Dr. Appu Kuttan K. K.	Director, MANIT, Bhopal	15/09/2013	

28	Dr. Rajesh Metkar	Govt COE, Amravati	26/03/2016	
29	Dr. D. N. Raut	VJTI, Mumbai	31/03/2016	
30	Dr. S. P. Shekhavat	SSBT COE, Jalgaon	07/04/2016	
31	Dr. Sachin A. Mastud	VJTI, Mumbai	29/09/2016	
32	Dr. Santosh Bhosale	MIT, Aurangabad	01/10/2016	
33	Dr. Aadesh M. Jinturkar	MIT, Aurangabad	05/10/2016	
34	Dr. N. R. Gilke	K. G. Somaiya COE, Mumbai	13/02/2016	
35	Dr. R. R. Lekurwale	K. G. Somaiya COE, Mumbai	13/02/2016	
36	Dr. R. R. Jaware	Datta Meghe COE, Airoli	27/02/2017	
37	Dr. Rahul B. Barjibhe	Sant Gadge Baba COE, Bhusawal	27/02/2017	

25. Seminars / Conferences / Workshops organized & the source of funding

a) National                      b) International

Sr. No.	Programme Title	National/ International	Source of Funding	Date	Amount of Funding
01	National Workshop on CAD/CAM/CAE	National	BCUD, SPPU, Pune	24/03/2014 to 25/03/2014	50000/-
02	ISTE Workshop on "Fluid Mechanics" by IIT Kharagpur.	National	IIT	20/05/2014 to 30/05/2014	1,11,272/-
03	Doctoral Consortium for Research Scholar	National	BCUD, SPPU, Pune	05/01/2015 to 07/01/2015	200200/-
04	A one week STTP on Skill Development in CNC machining	State	Self-Funding	25/05/2015 to 30/05/2015	
05	A one week STTP on CAD/CAM/CAE	State	Self-Funding	01/06/2015 to	

				06/06/2015	
06	Two days state level workshop on “Finite Element Analysis Using Ansys”	State	BCUD, SPPU, Pune	10/02/2017 to 11/02/2017	100000/-
07	International Conference on Recent trends in Mechanical engineering for sustainable Growth	International	BCUD, SPPU, Pune	29/12/2016 to 30/12/2016 (SRS)	300000/-

26. Student profile programme/course wise:

Name of the Course/programme	Academic Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
UG: Mechanical Engineering	2016-17	109	109	101	08	Appeared
	2015-16	124	124	109	15	68.55%
	2014-15	114	114	96	18	78.95
UG: Mechanical Engineering (Direct Second year)	2016-17	57	57	42	15	Appeared
	2015-16	47	47	36	11	84.35
	2014-15	35	35	27	08	93.15

\*M=Male \*F=Female

Name of the Course/programme	Academic Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
PG: CAD-CAM	2016-17	7	7	5	2	Appeared
	2015-16	12	12	9	3	100
	2014-15	18	18	16	2	77.77

\*M=Male \*F=Female

# 2015 – 16 Only 9 Student appeared for Examination.

## 27. Diversity of Students

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Name of the Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
UG	2016-17	100%	0	0
	2015-16	99.20%	0.8%	0
	2014-15	98.24%	1.76%	0
UG: Mechanical Engineering (Direct Second year)	2016-17	100%	0	0
	2015-16	100%	0	0
	2014-15	100%	0	0
PG	2016-17	100%	0	0
	2015-16	100%	0	0
	2014-15	100%	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Sr. No	Name of competitive examinations	Year	Number of students
1	GATE	2013-14	02
		2014-15	02
		2015-16	02
2	CMAT / MBA-CET	2013-14	01
		2014-15	03

		2015-16	05
3	IES/GRE/GMAT/TOEFL	2013-14	01
		2014-15	04
		2015-16	04

29. Student progression

Student progression	Against % enrolled (2015-16)	2014-15	2013-14
UG to PG	15/185 = 08.10%	08/125 = 06.40%	09/111 = 08.10%
PG to M. Phil.	NA	NA	NA
PG to Ph. D.	Nil	Nil	Nil
Ph. D. to Post-Doctoral	NA	NA	NA
<b>Employed</b>			
* Campus selection	09/185 = 04.86%	07/125 = 05.60%	27/111 = 24.32%
* Other than campus recruitment	24	20	16
Entrepreneurship/Self-employment	06/185 = 3.2%	01 /125 = 0.8%	01/ 111 = 0.9%

30. Details of Infrastructural facilities

A) Library

Sr. No.	Library Resources	UG & PG
1	Total Number Books (Volumes)	4625
2	Total Number Title	815
3	Indian Journals	--
4	Magazines	--
5	Reports / Proceeding	125/03

**B) Internet Facility for Staff and Students**

No of PC	Band width
115	20 + 50 Mbps*

\* Common at institute level

**C) Class Rooms with ICT facility: 05**

**D) Laboratories**

Sr. No	Name of Laboratory	Location	Facility
1	Work Shop	Ground Floor	Study and demonstration of Lathe, CNC, Milling Machine
2	Turbo Machine (Shared with Civil Department)	Ground Floor	To find the performance of water turbine and pumps.
3	IC Engine	Ground Floor	Measurement of rated power and thermal efficiencies of heat engines.
4	Power Plant Engineering	Ground Floor	Measurements of thermal efficiency of Steam power plant
5	Heat Transfer	First Floor	Measurement of heat transfer coefficient in three modes Heat Transfer.
6	SOME (Shared with Civil Engineering Department)	First Floor	Measure the different properties and testing of material under action of load.
7	Hydraulics and Pneumatics	First Floor	Study and demonstration of hydraulic and pneumatic valves by using trainer
8	Dynamics of Machinery	First Floor	Study & experimentation for measurement of balancing and vibration. Force transmissibility of shock absorber.
9	Theory of Machine	First Floor	Observe CAM Jump phenomena. Measurement of load and speed using Epicyclic Gear Train
10	Metrology & Quality Control	First Floor	Profile projector for measure the profile of small gear.

11	Engg. Metallurgy	First Floor	Impact tests for find the toughness of the metal. Furnace for study of different heat treatment
12	Refrigeration and Air Conditioning	Second Floor	Measure COP of VCR systems and RAC equipment
13	Mechatronic	Second Floor	Study and demonstration of PLC and PID controller and Automation
14	Fluid Mechanics (Share with Civil Engineering Department)	Second Floor	Determination of pressure head and discharge
15	Basic Mechanical Engg.	Third Floor	Study and demonstration of Machines & elements

31. Number of students receiving financial assistance from Institute, university, government or other agencies

Sr. No.	Type of Assistant	Source Agency	Number of Students (FE to BE)		
			2016-17	2015-16	2014-15
1	Scholarship	Samaj Kalyan (Government)	354	345	304
2	EBC	DTE, (Government)	46	43	42
3	Earn and Learn scheme	SPPU Pune	11	-	-

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr. No.	Activity	Topic/Area	Date	Targeted Group
01	Special Lecture	To develop leadership qualities in students	30/07/2014	Students
02	Special Lecture	Pyramid development & leadership.	06/08/2014	Students
03	Special Lecture	Pyramid formation and conceptualization	06/08/2014	Students
04	Special Lecture	Interview skill Part-I	13/08/2014	Students



05	Special Lecture	Communication & presentation skill	27/08/2014	Students
06	Special Lecture	Soft Skill & Six Sigma	03/09/2014	Students
07	Workshop	Know our Workshop	05/09/2014 to 07/09/2014	All Related Staff
08	Special Lecture	Leadership Development Module & Awareness	19/11/2014	Students
09	Special Lecture	Contribution of soft skill Kizen, Six Sigma & Technical Corporate Awareness	07/01/2015	Students
10	Special Lecture	Rapid Prototyping	20/01/2015	Students
11	Special Lecture	Virtual Driving	21/01/2015	All staff & students
12	Special Lecture	Total Quality Management	12/02/2015	All staff & students
13	Special Lecture	CAD/CAM & Analysis	27/02/2015	All staff & students
14	Workshop	Workshop on Vehicle Overhauling	03/09/2015 to 05/09/2015	All staff & students
15	Special Lecture	Opportunities in higher education in German	23/03/2017	B. E. Students
16	Special Lecture	Introduction to skill development training	24/03/2017	B. E. Students
17	Workshop	Safety Driving		All Students
18	Special Lecture	Aptitude Training Session		B. E. Students
19	Special Lecture	Current scenario of automotive industries & job perspectives	16/03/2017	B. E. & T, E. Students
20	Workshop	Matercam (Turn mill & Multi axis)	09/09/2016 to 10/09/2016	Students & Staff

33. Teaching methods adopted to improve student learning  
Audio-Visual methods, Models, Power point presentations, Video lectures from NPTEL, Visits to sites, related Industries, Laboratories.

34. Participation in Institutional Social Responsibility (ISR) and Extension Activities

Sr. No.	Activity	Targeted group	Number of Beneficiaries	Funding Agency
1.	Clothes Distribution	Mentally challenged students	100	Mechanical Department
2.	Snacks Distribution (Diwali Celebration)	Road side people	500	Mechanical Department
3.	Blankets Distribution	Road side people	300	Mechanical Department
4.	Food Distribution (Independence Day Celebration)	Mentally Challenged Students	100	Mechanical Department
5.	Awareness regarding "Condition of Farmers in India" – by Drama	MET – BKC Students and Staff	1500 +	Mechanical Department

Sr. No.	Activity	Targeted group	Number of Beneficiaries	Funding Agency
1	Tree Plantation	All MET Students and Staff	5000	SPPU
2	Celebration of International YOGA day.	All MET Students and Staff	5000	MET
3	Blood Donation camp	All MET Students and Staff	100	Nashik Blood Bank
4	Eye checkup camp	All MET Students and Staff	400	
5	Heart checkup camp	All MET Students and Staff	350	Saibaba Heart Institute
6	Ganesh MurtiSanklan	All Citizens	1500	SPPU MET
7	NirmalyaSankalan	All Citizens	-	SPPU MET
8	Ladies Health Check up	Ladies from Gaulane Village	100	MET

9	Sports Equipment Donation	Children's from Gaulane Village	250	MET
10	Computer Donation	School from NakotAalefata	300	MET

### 35. SWOC analysis of the department and Future plans

#### **S-Strength**

Mechanical Engineering department, MET's IOE has notable strengths in the field of Mechanical Engineering stream. Backed by excellent infrastructure which is a hallmark of Bhujbal Knowledge City, the serene atmosphere adds to the strength making it an environment which promotes academic pursuit in all its earnestness.

The department has well equipped workshop staffed by experienced experts in the field. It boasts of machinery which helps the student to develop skills in Turning, milling, welding, carpentry and bench work. It is equipped with a battery of basic lathes, an advanced model of CNC lathe, milling and welding machines. The students practice on these machines and acquire valuable skills which help them to grow as skilled engineers.

The department has all other basic laboratories. It has Pneumatic and hydraulic lab, IC lab, boiler, and compressor and modern software Exposure to these is essential to make the student understand the mechanism and also the theory behind their functioning.

The department has qualified staff with rich experience in teaching. Teachers with long experience in leading industries are also a part of the faculty. They bring in rich practical experience from industry and enrich the process of learning and teaching.

Along with competent faculty and infrastructure, strength is the multifaceted approach of the Management to encourage overall personality development of the students.

Various seminars, workshops, conferences are organized round the year where industry experts, talented academicians from all over the world participate, contribute and enrich the knowledge of both students and faculty.

#### **W-Weakness**

One of the major weaknesses is paucity of experienced veterans in the field of teaching. We have not been able to attract top talent since most of the opportunities exist in metros.

We have not been able to groom students who top the University examinations.

Further, we need to have a permanent tie-up with some industries so that the students can get exposure to actual and best practices. This would also expose our good talent to leading industries and therefore improve their employability in the long run.

### **O-Opportunities**

With the Indian economy growing at a rate of more than 7%, the demand for good students and Institutes which imparts quality education is bound to grow. In light of this, the quality of our current infrastructure and staff should be a facilitating factor. We need to enhance whatever we have.

Further, Nasik is poised to grow as an industrial hub. This provides us an opportunity to invest and grow. This investment will be both in infrastructure and knowledge Management.

Expansion of industries like Bosch, Siemens, M&M to name a few leading ones, provides us an opportunity to partner with them to learn and expand. Similarly, it is an opportunity for these industries to associate themselves to develop a basic scientific approach of R&D and development rather than simply assimilation.

### **C-Challenges**

The acceptance of surrounding Institutes with a history of excellence owing to their long presence in the field of academics in Mechanical Engineering poses a challenge.

Our not so notable academic performance poses a challenge to us to overcome this and groom our students not only in University examinations but also other co-curricular activities like National level Quizzes, Science and Technology Competitions and also innovative activities.

## Evaluative Report of the Department of Master of Computer Applications (Engg.)

1. Name of the Department : **MASTER OF COMPUTER APPLICATIONS (ENGG.)**
2. Year of Establishment : **2007**
3. Names of Programmes / Courses offered (UG, PG, M. Phil. ,Ph. D. , Integrated Masters; Integrated Ph. D. , etc.) :  
**PG : Master of Computer Applications (Engg.), 3 Years Full Time**
4. Names of Inter disciplinary courses and the departments / units involved : **NIL**
5. Annual / semester / choice based credit system (programme wise) :  
**PG : SEMESTER & CREDIT BASED SYSTEM**
6. Participation of the department in the courses offered by other departments : **NIL**
7. Courses in collaboration with other universities, industries, foreign institutions, etc. :

Sr No	Course	Name of Institution / Company
1	Student Training	Zensar Technologies Ltd Pune
2	Student Training	ESDS Nashik
3	Staff Training	CPAG Nashik
4	Staff Training	SEED Infotech
5	Staff Training	IBM Software Education

8. Details of courses / programmes discontinued (if any) with reasons : **NIL**
9. Number of teaching posts

	Sanctioned	Filled
Professors	03	0
Associate Professors	05	0
Asst. Professors	16	09

10. Faculty profile with name, qualification, designation, specialization, (D. Sc. / D. Litt. / Ph. D. / M. Phil. etc.)

Sr. No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D. Students guided for the last 4 years
1	Mr. P. D. Jadhav	M. E.	Asst. Professor	Computer Engineering	13	Nil
2	Mrs. M. V. Khond	M. Tech	Asst. Professor	Computer Engineering	14.3	Nil
3	Mr. Javed Attar	MCA	Asst. Professor	Computer Application	10.1	Nil
4	Mrs. JayaSweta Shrivastava	MPM	Asst. Professor	Management	11.5	Nil
5	Mrs. Remya S. Panickar	MCA	Asst. Professor	Computer Application	9	Nil
6	Mrs. Apeksha R. Gawande	MCA	Asst. Professor	Computer Application	14.8	Nil
7	Mrs. Meenakshi Gautam	MCA	Asst. Professor	Computer Application	7	Nil
8	Mrs. Shilpa M. Divate	MCA	Asst. Professor	Computer Application	9	Nil
9	Mrs. Nita V. Shinde	MCA	Asst. Professor	Computer Application	9.2	Nil
10	Mr. PravinKumbhar	MCA	Asst. Professor	Computer Application	4	Nil
11	Mrs. MadhuriR. More	MCA	Asst. Professor	Computer Application	3	Nil

11. List of senior visiting faculty : **NIL**

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : **NIL**

13. Student-Teacher Ratio (programme wise) : **PG : 32.7:1**

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	<b>Sanctioned</b>	<b>Filled</b>
Technical Assistant	04	04
Laboratory Attendant	02	02

15. Qualifications of teaching faculty with DSc / D. Litt / Ph. D. / MPhil / PG. :

<b>Qualification</b>	<b>Number of Teaching Faculty</b>
Ph. D.	00
PG (ME/M. Tech /MCA)	11

16. Number of faculty with ongoing projects from  
a) National b) International funding agencies and grants received

<b>Name of Project</b>	<b>Grant Received</b>	<b>Funding Agency</b>
Financial support for additional infrastructure set up for smooth conduction of T10kT workshops held by IIT Bombay.	2, 80, 000 /-	MHRD , IIT Bombay
Up gradation of Infrastructure	1, 00, 000 /-	MHRD , IIT Bombay

17. Departmental projects funded by DST-FIST, UGC, DBT, ICSSR, etc. and total grants received : **NIL**

18. Research Centre / facility recognized by the University:**NIL**

19. Publications:

**A) Publications: Faculty**

Sr. No	Name	Number of papers published in peer reviewed journals	Number of publications listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Total Citation	S N I P	SJ R	Impact factor	h-index
1	Dr. Aruna Deogire	6	6	--	--	--	--	--	--	--	--	--
2	Prof. P. D. Jadhav	1	0	--	--	--	--	--	--	--	--	--
3	Prof. J. Srivastava	2	2	--	--	--	--	--	--	--	--	--
4	Prof. Remya Panicker	5	3	--	--	--	--	--	--	--	--	--
5	Prof. Meenakshi Gautam	1	1	--	--	--	--	--	--	--	--	--

**B) Publications: Students**

**NIL**

20. Areas of consultancy and income generated:

**NIL**

21. Faculty as members in

a) National committees

b) International Committees

c) Editorial Boards....

Sr. No.	Committee	Number of Faculties
1	National	--
2	International	--
3	Editorial Boards	01
4	Reviewer / Judge / Evaluator	01
5	Session Chair	03



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	2016-17	0	0
2	2015-16	1	0.77 %
3	2014-15	1	0.70 %

- 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 Sponsored Projects	% of Sponsored Projects
1	2016-17	1	100%
2	2015-16	128	99.33%
3	2014-15	140	99.30%

23. Awards / Recognitions received by faculty and students

A. Awards / Recognitions received by faculty

Sr. No	Name of Faculty	Award	Remark
1	Mrs. Remya Panicker	Active Participation Women	CSI

B. Awards / Recognitions received by students

Sr. No	Name of Student	Award	Remark
1	SwapnilHadole	MCA Topper in Nashik region	IT day by CSI chapter
2	Poonam Satbhai	2nd	Blind Coding in State Level Event
3	Chetana Bahmare	1st	Paper Presentation in State Level Event
4	Mayur Kadbhane	1st	ASCEND-2K16 held in KKW(Debugging)State Level Event
5	Medha Sanap	2nd	CSI
6	Devkant Chinchole	1 <sup>st</sup>	Q Warrior –Technowar 2011 in State Level Event

7	Jagdish Chopade	1 <sup>st</sup>	Technowar 2010 in State Level Event
8	Manoj Fegde	2 <sup>nd</sup>	Software Quiz in State Level Event Contest
9	Samidha Rane	2 <sup>nd</sup>	Software Quiz Contest
10	Sneha Sable	2 <sup>nd</sup>	Essay Competition in State Level Event
11	Jagdish Chopade	2 <sup>nd</sup>	Web Designing Competition in State Level Event
12	Jagdish Chopade	3 <sup>rd</sup>	C programming contest in State Level Event

24. List of eminent academicians and scientists / visitors to the department

<b>Sr No</b>	<b>Name of Eminent Person</b>	<b>Organization</b>	<b>Date</b>	<b>Remark</b>
1	Mr. Swapnil Kulkarni	Kanaka Consultancy	18/07/14	Visitors
2	Dr. S. S. Sane	KKWEER	13/06/16	Academicians
3	Dr. D. V. Patil	GHRCOE	26/12/16	Academicians
4	Mr. Vikas Naik	Investigator for Nashik Police	3/3/2017	Visitors
5	Mr. Girish Pagare	Ggraphite india	21/6/2016	Visitors
6	Dr. S. V. Gumaste	GHRCOE	27/12/2016	Academicians
7	Mr. Sandip Aher	Eluminous	04/09/2010	Visitors
8	Mr. Shashank Todwal	UMS Technology Nashik	24/09/14	Visitors
9	Mr. Somnath Thigale	IBM trainer	18/02/2013	IBM Trainer
10	Dr. Uday Wad	SEED Infotech	28/02/2013	Visitors
11	Mr. D. B. Yawalkar	Samsonite	26/12/2016	Visitors
12	Mr. Bhosale	Persistent system	06/02/2013	Visitors
13	Lilesh Ghule	Mungi Engineers Pvt Ltd	24/02/2016	Visitors

14	Adv. Sagar Rahurkar	Asian School of Cyber law	9/4/2011	Visitors
15	Mr. Nilesh Alone	GHRCOE	15/9/2014	Academicians
16	Mr. Yaw Kwakye	Glostream Nashik	04/08/2014	Visitors
17	Prof. Rajesh V Nikam	KKW Pimplegaon	23/09/15	Academicians
18	Mr. Shastra Rashmi Pund	Mahendra& Mahendra	2/11/2012	Scientists
19	Mr. Paresh Chitnis	Freelancer for Cyber Forensic	5/05/2015	Visitors
20	Mr. Tanmay Dikshit	Freelancer for Cyber Forensic	5/05/2015	Visitors
21	Mr. Prasad Pawatekar	GM Softetech Pvt. Ltd. & Services	02/02/2015	Academicians
22	Mr. Shankar Narayan	DGM HAL Nashik	28/08/2013	Scientists
23	Mr. Ajay Rajankar	Zensar Pune	10/02/2015	Visitors
24	Mr. Nilesh jain	JCI Trainer	10/02/2015	Visitors
25	Mr. Sarvesh Sonawane	Surun Infocore Pvt. Ltd. Pune	23/09/2010	Visitors
26	Mr. Mohit Sharma	Accenture Mumbai	25/02/2013	Visitors

25. Seminars / Conferences / Workshops organized & the source of funding

a) National                      b) International

Sr. No	Programme Title	National/ International	Source of Funding
1	ITCCE16	National	BCUD, SPPU , Pune
2	Workshop on Computer Programming	National	IIT Bombay
3	Workshop on Database	National	IIT Bombay
4	Workshop on Research Methodology	National	IIT Bombay
5	ITCCE 12 (Comp / IT/ MCA)	National	Self-Funding
6	ITCCE 11(Comp / IT/ MCA /E&TC)	National	SPPU and Self-Funding

26. Student profile programme/course wise:

Name of the Course/ programme	Academic Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
PG: Master of Computer Applications (Engg.)	2016-17	20	20	11	9	Appeared
	2015-16	50	50	28	22	100%
	2014-15 (Direct SY)	108	108	40	68	100%
	2013-14(FY)	21	21	14	7	100%
	2013-14 (Direct SY)	76	76	39	37	98.6 %

\*M=Male\*F=Female

27. Diversity of Students

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Name of the Course	Academic Year	% of students from the same state		% of students from other States	% of students from abroad
		HU	OHU		
PG: Master of Computer Applications (Engg.)	2016-17 (FY)	85%	15%	0 %	NIL
	2015-16 (FY)	80%	20%	0 %	NIL
	2014-15 (Direct SY)	78.70 %	21.30 %	0 %	NIL
	2013-14 (FY)	72.36%	27.64 %	0 %	NIL
	2013-14 (Direct SY)	72.36 %	27.64 %	0 %	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Sr. No	Name of competitive examinations	Year	Number of students
1	GATE	2013-14	--
		2014-15	--
		2015-16	--
2	CMAT / MBA-CET	2013-14	--
		2014-15	--
		2015-16	01
3	IES/GRE/GMAT/TOEFL	2013-14	--
		2014-15	--
		2015-16	--

29. Student progression

Student progression		Against % enrolled	Against % enrolled	Against % enrolled	Against % enrolled
		2013-14	2014-15	2015-16	2016-17
<b>PG to Ph.D.</b>		Nil	Nil	Nil	Nil
<b>Ph.D. to Post-Doctoral</b>		Nil	Nil	Nil	Nil
<b>Employed</b>	<b>Campus selection</b>	49.01	39.71	27.69	100
	<b>Other than campus Recruitment</b>	49.02	58.15	50	0
<b>Entrepreneurship/Self-employment</b>		1.97	2.14	1.54	0

30. Details of Infrastructural facilities

**A) Library**

**A1. Central Library**

<b>Sr. No.</b>	<b>Library Resources</b>	<b>PG</b>
1	Total Number Books (Volumes)	2367
2	Total Number Title	665
3	Indian Journals	25
4	Magazines	--

**A2. Departmental Library**

<b>Sr. No.</b>	<b>Library Resources</b>	<b>PG</b>
1	Total Number Books (Volumes)	144
2	Total Number Title	92
3	Indian Journals	02
4	Magazines	--
5	Reports	10

**B) Internet Facility for Staff and Students**

Institute has strong IT infrastructure in the support of various Activities and their needs:

1. An Internet lease line of 20 MBPS 1:1
2. Tata tele services Ltd. 10Mbps 1:1 Internet Leased Line
3. BSNL-VPN-AICTE-NMICT Internet of 20 MBPS

**C) Class Rooms with ICT facility: 05**

**D) Laboratories**

Sr. No	Name of Laboratory	Location	Facilities (Purpose)
1	M2(Software Lab)	5 <sup>th</sup> Floor	For regular practical , For Project Work, To conduct workshops, To conduct Online Test & Exams
2	M1 (Programming Lab)	5 <sup>th</sup> Floor	
3	L3 (Software Lab)	5 <sup>th</sup> Floor	
4	L4 (Computer Lab) * Shared with IT department	5 <sup>th</sup> Floor	

31. Number of students receiving financial assistance from Institute, university, government or other agencies:

Sr. No.	Type of Assistant	Source Agency	Number of Students (FE to BE)		
			2016-17	2015-16	2014-15
1	EBC	DTE	4	9	15
2	OBC	Social Welfare	8	61	77
3	SC	Social Welfare	0	13	23
4	NT/VJ	Social Welfare	3	10	16
5	SBC	Social Welfare	0	0	1
6	ST	Aadiwasi Vikas Bhavan	0	1	2

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

**2016 -2017**

Sr. No.	Activity	Topic/Area	Date	Targeted Group
1	Expert talk	Entrepreneurship development Talk on Innovating India	21/06/2016	SYMCA & TYMCA Students
2	Expert talk	Mind Map	23/08/2016	SYMCAStud

				ents
3	Seminar	Cyber Security	3/7/2016	SYMCA
4	Workshop	Mozilla Web Maker & Word Press	24/06/2016	SYMCA Students
5	Workshop	Advanced Java	29/02/2016	SYMCA Students
6	Spoken Tutorial	IIT Spoken Tutorial Test on C & Cpp	25/10/2016	SYMCA Students
7	Seminar	Counseling Sessions	27/06/2016 to 29/09/2016	SYMCA Students
8	Aptitude Sessions	Aptitude Sessions	27/06/2016 to 19/09/2016	SYMCA Students
9	Workshop	International Yoga day	21/06/2016	FYMCA & SYMCA Students
10	Seminar	STQA	30/01/2017	SYMCA Students
11	Seminar	Networking & career as network engineer	2/2/2017	SYMCA Students
12	Expert talk	Cyber security & Cyber law	3/3/2017	SYMCA Students
13	Workshop	PHP	23/3/17 to 25/3/17	FYMCA & SYMCA Students
14	Workshop	Android Workshop	7&8/2/17	SYMCA Students
15	Aptitude Sessions	Technical Aptitude Sessions	15/12/16 to 17/3/17	SYMCA Students

**2015-2016**

<b>Sr. No.</b>	<b>Activity</b>	<b>Topic/Area</b>	<b>Date</b>	<b>Targeted Group</b>
1	Seminar	System Analysis & Design & Recent Trends in IT	23/09/15	TYMCA Students
2	Seminar	Personality Development	13/2/16	SYMCA Students
3	Workshop	Latex	28-02-15	SYMCA Students
4	Workshop	HTML5 & CSS3	29/2/16	FYMCA



				Students
5	Lecture	IIT Spoken Tutorial Test on C & Cpp	25/11/2016	FYMCA Students
6	Seminar	Software Engineering		SYMCA Students
7	Seminar	Probability and statistics	05/10/15 & 06/10/15	FYMCA Students
8	CSR activity	Raksha Bandhan for on duty Police of Kumbh-Mela	14/9/ 2015	SYMCA Students
9	Seminar	Cyber Security	14-02-15	SYMCA Students
10	workshop	Advance Java		SYMCA Students
11	Workshop	Androidworkshop	11/08/2015 to14/08/2015	SYMCA Students
12	Seminar	Synergy I	11/7/2015	SYMCA & TYMCA Students
13	Seminar	Synergy II	22/8/2015	SYMCA& TYMCA Students
14	Seminar	Aptitude Session	15/12/14 to 31/03/15	SYMCA Students
15	Workshop	International Yoga Day	21/6/15	AllStudents
16	Seminar	Counseling Sessions	15-12-14 to 31-03-15	SYMCA Students

**2014-2015**

<b>Sr. No.</b>	<b>Activity</b>	<b>Topic/Area</b>	<b>Date</b>	<b>Targeted Group</b>
1	Seminar	ERP	18, 19/07/14	TYMCA
2	Expert Talk	Entrepreneurialism & Technology Trends	4/8/14	TYMCA
3	Expert Talk	Project management (Patent & Trademark)	11/08/14	SYMCA, TYMCA
4	workshop	Session on Mock Interview	24/09/14	TYMCA

5	Online Test	IIT Spoken Tutorial Test on C & Cpp	13/01/15	SYMCA
6	workshop	Mozilla Web Maker	9/8/14	SYMCA
7	Competition	Essay Writing Competition	11/07/14	All students
8	Event	Parent Meet	7/12/2014	FYMCA
9	CSR	Street Play Eco Friendly Ganesh Visarjan	1/8/2014	All students
10	Competition	The Golden TechBridge – Across the Nation	9/8/ 14	All students
11	Website	eNews Letter for MCA Dept	15/09/14	All students
12	Event	Teachers Day	5/9/14	Staff , Student
13	Competition	Quiz competition	12/3/15 to 2/3/15	SYMCA
14	CSR	Eye Check up	19/01/15	All students
15	CSR	Organ Donation camp	24/03/15	All students
16	Workshop	Zensar training	10/02/15 to 31/3/15	TYMCA
17	Visit	Industry Visit	13/3/15 to 20/3/15	SYMCA
18	Session	Counseling Sessions	Academic Year	All students
19	Session	Mentoring Sessions	Academic Year	All students
20	Session	Aptitude Sessions	Academic Year	All students
21	Activity	News Paper Reading	Academic Year	All students

**2013-14:**

<b>Sr. No.</b>	<b>Activity</b>	<b>Topic/Area</b>	<b>Date</b>	<b>Targeted Group</b>
1	Lecture	Guest Lecture on "Probability and Statistics"	11/10/13 to 12/10/13	FYMCA

2	Workshop	Android Workshop	26/07/13 to 27/07/13	TYMCA
3	Workshop	Expert Talk on "Google Apps"	20/03/2014	SYMCA
4	Workshop	Android Workshop	17/01/14 to 19/01/14	SYMCA
5	Workshop	Linux Workshop	27/09/2013 to 30/09/2013	SYMCA
6	Seminar	Senior Student Interactions	22/03/2014	SYMCA
7	Workshop	IIT Spoken Tutorial Test on Latex.	20/09/2013	TYMCA
8	Workshop	IIT Spoken Tutorial Test on Linux.	7/10/2013	TYMCA
9	Seminar	"Software Engineering"	3/3/2014	SYMCA
10	Workshop	PHP Workshop	29/01/14 to 01/02/14	FYMCA , SYMCA
11	Contest	SEED IT IDOL	12/2/2014 to 8/3/2014	SYMCA

33. Teaching methods adopted to improve student learning

- a. Classroom with Modern Teaching aids like LCD Projectors.
- b. For easy understanding of the subject with the help of Power point presentation.
- c. Guest Lectures, workshops, Seminars delivered by Specialized Faculties from industry.
- d. High Speed Internet for reading sessions, and wi-fi facility in campus.
- e. Expert lectures, Field Visit, Mini-projects, Projects, and Assignments.
- f. Various Technical CD's & reference books are available in the departmental library.
- g. Through Institute ERP resources

34. Participation in Institutional Social Responsibility (ISR) and Extension Activities

- a. Eco Friendly Ganpati Visarjan
- b. Tree Plantation.
- c. Computer Awareness program for senior citizens.
- d. International Yoga Day.
- e. Raksha-Bandhan for on duty Police of Kumbh-Mela.
- f. The Golden TechBridge – Across the Nation for students
- g. Street Play Eco Friendly Ganesh Visarjan
- h. Health Check Up for Staff and students

- i. Eye Checkup for staff and students
- j. Self Defense for students

### 35. SWOC analysis of the department and Future plans

#### **Strengths:**

- Dedicated faculty.
- Good Culture in campus.
- High retention ratio.
- World class Infrastructure.
- Hands on workshop for students by Industry Experts.
- Extracurricular Activities for students and staff.

#### **Weaknesses:**

- Lack of senior faculty.

#### **Opportunities:**

- Good scope for excellence.

#### **Challenges:**

- Hiring senior faculty members.
- Bridging the gap between Industry and Institute.

#### **Future Plans:**

- Inculcating knowledge of the appropriate technology to provide contribution towards society.

### Declaration by the Head of the Institution

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


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

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

Place: Nashik

Date: 31/03/2017



  
Principal  
**Principal**  
MET's Institute of Engineering,  
Bhujbal Knowledge City  
At. Adgaon, Tal. & Dist.: Nashik-3



Ref No.: MET/BKC/IOE/NAAC/2017/1898  
Date: 31/03/2017

### Certificate of Compliance

This is to certify that MET Institute of Engineering, Bhujbal Knowledge City, Adgaon, Nashik – 422 003 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: 31/03/2017  
Place: Nashik



  
Principal  
MET's Institute of Engineering  
Bhujbal Knowledge City  
Adgaon, Nashik – 422 003

Adgaon, Nashik - 422 003  
Mobile : (91) 09881100099 | Tel. : (0253) 2303515 | Telefax : (0253) 2303203  
E-mail : enquiries@bkc.met.edu | www.metbhujbalknowledgcity.ac.in  
ISO 9001-2008 certified MET is an NGO in Special Consultative Status with United Nations (ECOSOC)

## Annexture

### Annexture I:

## Savitribai Phule Pune University

(Formerly University of Pune)

Telephone Nos. :  
020-25691233  
25601258  
25601259  
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ACADEMIC SECTION  
Ganeshkhind, Pune - 411007, INDIA  
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E-mail : [dyracademic@unipune.ac.in](mailto:dyracademic@unipune.ac.in)

Ref. No. : CA/274

Date : 27/03/2017

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mumbai Educational Trust Institute of Engineering, Bhujbal Knowledge City, Adgaon, Nashik is affiliated to the Savitribai Phule Pune University, since 2006 (PU/NS/Engg/96/2006) and the following courses are taught in the said college as per approval.

Courses	Duration of the Course	Affiliation (Permanent / Temporary)	Validity Period
<b>Under Graduate</b>			
Information Technology	4 Year	Temporary	Upto 2016-17
Electrical Engineering	4 Year	Temporary	Upto 2016-17
Electronics and Telecommunication Engineering	4 Year	Temporary	Upto 2016-17
Computer Engineering	4 Year	Temporary	Upto 2016-17
Mechanical Engineering	4 Year	Temporary	Upto 2016-17
Civil Engineering	4 Year	Temporary	Upto 2016-17
<b>Post Graduate</b>			
Computer Engineering	2 Year	Temporary	Upto 2016-17
Mechanical Engineering	2 Year	Temporary	Upto 2016-17
M.C.A.	3 Year	Temporary	Upto 2016-17
Ph.D. - Computer Engineering	-----	Temporary	2016-17 to 2019-20
Ph. D.- Mechanical Engineering	-----	Temporary	2016-17 to 2019-20

The said certificate is issued as per the request application received from the Principal of the college Ref. No. MET/BKC/IOE/NAAC/2017/1894 dated 25/03/2017 so as to submit it to the National Assessment and Accreditation Council (NAAC), Bangalore.

  
Dy. Registrar  
(Academic Section)

