

G.S. Mandal's

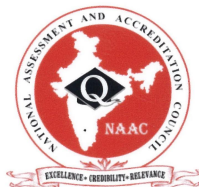
MARATHWADA INSTITUTE OF TECHNOLOGY

Aurangabad, Maharashtra - 431010, India



SELF STUDY REPORT (SSR)

Submitted to



**NATIONAL ASSESSMENT AND
ACCREDITATION COUNCIL**

Bangalore, India

March – 2017

Website: engg.mit.asia



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MARATHWADA INSTITUTE OF TECHNOLOGY AURANGABAD

Approved by All India Council for Technical Education (AICTE), New Delhi
Affiliated to Dr.BabasahebAmbedkar Marathwada University, Aurangabad

Ref No: MIT/NAAC/SSR/2017/1

Date: 06/05/2017

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

Subject: Submission of Self Study Report

Track ID: MHCOGN27539

Respected sir,

With reference to your email dated 25/4/2017, regarding approval of LOI, you are kindly requested to accept the SSR in hard copies for further processing. The submission includes five hard copies and one soft copy in CD of SSR along with applicable Assessment & Accreditation fees of Rs. 3,45,000 (Rs. Three lakh forty five thousand only) in the form of demand draft No. **848824** dated 06/05/2017 of State Bank of India, Aurangabad Branch.

I request you to accept the same and oblige.

Thanking you,

Yours Sincerely,

Dr.Nilesh G.Patil
Principal

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PREFACE

Gramaudyogik Shikshan Mandal (GSM), Aurangabad, Maharashtra, India is the parent trust (Organization) established in 1975 under Bombay Public Trust Act and also registered under Society Registration Act. Late Shri. Anandrao Deshmukh, Freedom fighter of this region has founded this organization solely to promote the technical education. Over last three and half decades, GSM has established 19 institutes and 5 centres of learning at multiple locations in India. GSM has grown organically in three important provinces of India, viz. Maharashtra (Western India), Delhi (National Capital) & Uttar Pradesh (Northern India). More than 12000 full time and 2500 part time students are on different campuses for primary to post graduate education and vocational training.

OBJECTIVE

The Gramaudyogik Shikshan Mandal 's objective is not solely to promote the technical education, but to create opportunities for the unprivileged and underprivileged young generation to have meaningful education and training.

By,
Late Shri. Anandrao Deshmukh
Founder, GSM, Aurangabad

The Society has established Marathwada Institute of Technology (MIT), an Engineering College at Aurangabad (M.S) in the year 1984. MIT offers wide range of courses at UG and PG level in faculty of - Engineering & Technology and Architecture, for post graduation programs in Engineering & Technology, Master of computer applications, and Architecture. MIT has developed state of the art infrastructure, computer centres, learning aids and research laboratories and it is supported by qualified and dedicated staff members.

MIT is one of the pioneering engineering institutes in the Marathwada region which is being recognized as students centric and faculty driven organization.

More than 12000 alumni are spread out across the globe and performing well in different walks of life. They are the real brand ambassadors of MIT, as their success reflects contribution of their education to their career and life.

MIT has developed strong linkages between industry, government & non government organization. MIT is a pioneer in establishing mutually beneficial triangular partnership among academic institutions, industry and government organizations. MIT has been associated with hundreds of companies for imparting students training and placement. It also provides solutions to live problems and works on research projects of industries.

By serving as catalyst for industry-academic partnerships, MIT attempts to bring intellectual capital and emerging technologies together to improve quality of engineering & technology education. This in turn contributes to build India's capacity for intellectual and economic growth.

MIT follow all the norms of the regulating bodies inclusive of the salary and other benefits. The institute runs totally as per the norms and regulation laid by AICTE, UGC, DTE and Government of Maharashtra. MIT has setup Centers of Excellences (CoE) like Center of Excellence in Software Development, Center of Excellence in Automation and Mechatronics, Center of Excellence in Green Energy, Center of Excellence in Energy Management, Center of Excellence in Open Source Technologies, Center of Excellence in Metallurgy and Material Engineering and Center of Excellence in Computer Aided Engineering.

The recent technology like, digital classroom, virtual learning centre, digital library, self-designed student centric software's, Red-Hat certification facility, Big-Data Academy, Infosys Campus Connect facility, MIT software park and Outcome Based Education(OBE) software are set up in the institute. The institute has state-of-art facilities and the academic of the institute is solely based upon the path and vision of the GSM and provides a complete set up to offer quality education to the aspirant.

Dr. Nilesh G. Patil
Principal

Marathwada Institute of Technology,
Aurangabad-(M.S.)

EXECUTIVE SUMMARY

The Marathwada Institute of Technology, Aurangabad campus is located nearby the Aurangabad railway station and on the national highway connecting Dhule-Solapur via Beed City, known as Beed Bypass. The campus was established in 1984 as a pioneering institute of Gramaudyogik Shikshan Mandal (GSM). The GSM has always undertaken the responsibility of providing quality education to the students of Marathwada region. Nowadays, it is not restricted to the said region only. It has played a very significant role in growing of the students from all corners of the society to fulfill the requirements of the industries. Teaching-learning process is designed to cater the need and requirements of all stakeholders.

1. Curricular aspects:

The institute is the affiliated institute to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. The institute has well defined Mission, Vision and Quality Policy. The mission and vision statements are published on the website and all published documents like brochures and displays. The institute participates in the curriculum development of the University. The selected faculty members are the members of faculty and Board of Studies (BoS) on the university. The institute also takes initiative in organizing the workshop based on the curriculum of the university. As the institute is affiliated to the university, the academic flexibility is followed in lines with the university guidelines in words and spirits. The curriculum enrichment programmes are conducted at institute level to bridge the gap between practice and theory. Every year the workshops, expert lectures, industrial visits and training programmes are conducted. The institute collects the feedback from the students and alumni on curriculum development, campus life and delivery of contents in theory and practical sessions.

2. Teaching-Learning process:

The teaching learning process is well driven as per the academic calendar of the University and Institute. The departments prepare teaching plans of theory and practical/laboratory sessions. Moreover, remedial as well as additional session are conducted as and when required based on the difficulty level of the course. The use of ICT in the class room and laboratory is provided. The institute has faculty members as per the AICTE norms and qualifies. Good numbers of adjunct and visiting faculty members are invited from academics and industry to share the advanced knowledge and practical inputs to the students. The institute follows the University norms of evaluation. The institute has also initiated the OBE in teaching-learning. The learning outcomes are defined at programme level and course level. The student's performance is tracked on the basis of these outcomes. As a result of

institutional efforts and OBE implementation, it has been experienced that the students performance is enhancing both in the examination, placement and higher education.

3. Research, Consultancy and Extension programmes:

The Research Evaluation Committee exists at the institute, The management has appointed Dean for research and Development to focus on the research activities. The Institute promotes different activities and programmes for promoting of research. The faculty members are promoted for higher education and research by the management by way of leave and/or sponsorship. The University has approved the research centre to the institute in Mechanical engineering department.

The institute motivates the students and faculty members for the publication of technical articles and attend inter/national conferences. Outcome of this, almost every faculty has publications in conferences and journals. Some of the departments of Institute also contribute to the industry by providing consultancy. Institute is involved in collaborative research projects with not only industries in and around the region, but also at national level. Moreover, some of the projects are being in progress with institutes from abroad. The institute has NSS unit, through which regular activities are conducted like blood donation camp, service to the needy students, Tree plantation etc. Regular training programmes are conducted for the students.

4. Infrastructure and Learning Resources:

The institute has sufficient land, building and infrastructure facilities as per norms of AICTE and other governing authorities. The institutional learning resources and requirements are also following the AICTE norms. The boys and girls students' hostels are available. The library in institute is fully equipped with the electronic accession and credentials for sharing e-resources. Digital library and reading room is available. The library facility is made available for 24x7 hours during exam period. The library has required and adequate number of text book, reference books, journals, e-resources and magazines.

The institute is also equipped with computer and digital SMART class room. The website of the institute is developed and maintained by the institute. Along with the adequate number of computers and software license, the institute has Wi-Fi network. The entire campus is maintained by the contractual labour.

5. Student Support and progression:

The student-teacher mentor system exists in the institute. Each teacher mentors 15-20 students. As a process of monitoring, the students learning

difficulties and progress are monitored and they are guided for examination, learning and career development. As a result of constant monitoring and close interaction with the students, the students' progression in examination, placement and higher education is enhancing gradually. Every year the institute student is appeared in the merit list of the University. The institute promotes the participation of students in seminar, workshops, conference and sports & cultural activities. Every department has established Student cell for the promotion of academic development. NSS unit of the institute help in development of social concern amongst the students. The NSS unit conducts different activities across the year. NCC is also part of main students activities, which enables students to enter into defense services.

6. Governance, Leadership and Management:

The institute mission and vision is articulated through the scientific method. The publication of these statements is done on website as well as some prominent locations in the institute. The propagation of the mission and vision is done during many programmes conducted by the institute. The support from top management has been reflected in the organization structure of the institute and also in future planning of the institute. The management empowers the faculty members through education & training, promoting research, allocation of duties, sufficient empowerment, etc. The financial management of institute is down-top approach. The department prepares the budget which get consolidated and validated at institute level and then presented to the management for approval. The budgetary provisions are adequately provided by the management.

The institute is applying for NAAC Cycle-I, and has the IQAC set up at the institute from AY 2015-16. This cell focuses on the academic development of the institute. The post of Vice-Principal (Academics) and Vice-Principal (Administration) are also created and working towards smooth functioning at academics and administration level for student and staff.

7. Best Practices:

The institute follows the environmental norms as per the guidelines of NAAC, AICTE, UGC, DTE and Government of Maharashtra. Regular energy audit and green audit is carried. The measures like, energy conservation, renewable energy, plantation is done on campus. The institute has well developed and maintained green campus and self-sufficient renewable energy source in the form of solar rooftop plant. The institute always aimed for innovations. Lots of initiatives are taken by the institute and individual teachers in innovating the ideas and activities. The institute has Smart Digital Classroom and regular classrooms as per standards and duplication of model classroom prescribed by NAAC in every department, the campus management system software exists and used by student and faculty. The institute has taken up the innovative step

by linking the bio-metric attendance of the faculty. Academic and administrative audit and performance appraisal mechanism are regular practices. Institute takes the corrective measures based on these audit reports and feedback system. MIT has many such regular practices for strengthening academic excellence.

The SWOC Analysis of the Institution

- **Strengths:**

1. The institute has well qualified and experienced faculty members.
2. We are one of the oldest and top rank technical institutes in the region of Marathwada.
3. The institute has strong association with industries and industrial associations.
4. Good work culture and cohesive relationship between faculty and students.
5. Centralized and departmental libraries with e-journal and rich reference section are one of our major strengths.
6. State-of-the-art laboratories and Centre of Excellence in the technologically vital areas such as materials, automation, and computer aided engineering.

- **Weaknesses**

1. Research outcomes such as publications, patents and consultancy are not matching to the true potential of the institute.
2. The current facilities are ageing. Moreover, the demands of rapidly changing technological scenario needs up-gradation of laboratories, and other learning facilities to implement modern methods of teaching learning.
3. Although the institute is connected to the industry, these associations are yet to be explored to all levels of faculty and students to realize the real potential of industry connect.
4. Although, large numbers of alumni are connected to the institute, the potential of this relationship is yet to be realized to the fullest.
5. The retention of faculty, especially, young faculty member is not very encouraging.

- **Opportunities**

1. Highly qualified faculty members can work in collaboration with industry and explore inter-disciplinary research and produce great outcomes such as publications, patents and technology development.
2. Involve industry in the activities of teaching learning through novel learning methods to realise the potential of faculty and students in the mutual benefit of the institute and industry.

3. To encourage faculty and students to start-up their own technology based venture and contribute to the national cause.

- **Challenges**

1. Local job opportunities are relatively limited compare to metro and tire-1 cities. This is a great challenge in motivating students.
2. Lack of academic freedom for collaborative and inter-disciplinary learning and research, due to University curriculum.
3. Students are getting distracted due to too much fascination of activities such as social media. This reduces their focus on learning.
4. Lack of entrepreneurial aspiration in the students.

Profile of the Affiliated / Constituent College

1. Name and Address of the College:

Name:	G.S. Mandal's Marathwada Institute of Technology		
Address:	MIT Campus, Satara Village Road, Beed Bypass		
City:	Aurangabad	Pin - 431010	Maharashtra
Website:	engg.mit.asia		

2. For Communication:

Designation	Name	Telephone With STD Code	Mobile	Fax	Email
Principal	Dr. Nilesh G. Patil	0240-2375111	9028887885	0240-2376154	principal.mite@mit.asia
Vice Principal (Academics)	Dr. Dipak V. Nehete	0240-2375115	9422711408	0240-2376154	vpacad.mite@mit.asia
Steering Committee Coordinator	Dr. Ajij D. Sayyad Dr. Manish S. Dixit	0240-2375150 0240-2375130	9175902905 9226155784	0240-2376154	ajij.sayyad@mit.asia manish.dixit@mit.asia

3. Status of the Institution:

- Affiliated to: Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
- Approved by: All India Council for Technical Education, New Delhi
- Approved by: Director of Technical Education, Maharashtra state

4. Type of Institution:

a. By Gender -

Co-education

Run under public trust

b. By Shift –

Regular as well as Second Shift

5. It is a recognized minority institution? - No

6. Sources of funding: Self-financing

7. a. Date of establishment of the college: 23/07/ 1984

b. University to which the college is affiliated:

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.)		
Under Section	Date, Month and Year (dd-mm-year)	Remarks (If any)
2 (f)	-----	-----
12 (B)	-----	-----

c. Details of UGC Recognition: NIL

d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE)

Under Section (Ref. No.	Recognition / Approval Details Institution / Department/ Programme	Date, Month and Year (dd-mm- year)	Validity
AICTE: F.No. Western /1-1392776134 /2013/EOA	UG/PG Engg, MCA	19.03.2013	One Year
AICTE: F.No. Western /1-2018731933 /2014/EOA	UG/PG Engg, MCA	04.06.2014	One Year
AICTE: F.No. Western /1-2453904033 /2015/EOA	UG/PG Engg, MCA	07.04.2015	One Year
AICTE: F.No. Western /1-2809355914 /2016/EOA	UG/PG Engg, MCA	25.04.2016	One Year
Council of Architecture: CA/5/Academic-MH08	B. Arch	26.07.2012	Five Years

Encl : AICTE and Council Approval / Extension of Approval letters

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

☐ Yes

☐

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

☐
☐ No

9. Is the college recognized-?

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

☐
☐ No

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

- b. For its performance by any other governmental agency?

☐
☐ 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 in sq.mts:	10117 SQM
Built-up area in in sq.mts:	26164 SQM

- 11 Facilities available on the campus:

- Auditorium/seminar complex with infrastructural facilities: Yes

- **Sports facilities:**
 - ✓ **Play ground:** Yes
 - ✓ **Swimming pool:** No
 - ✓ **Gymnasium:** Yes

 - **Hostel:**
 - **Boys' hostel –**
 - ✓ **Number of hostels:** Two.
 - ✓ **Number of inmates:** 222, Capacity : 240
 - ✓ **Facilities :** Recreation Room, Wi-Fi facility, indoor game stations

 - **Girls' hostel –**
 - ✓ **Number of hostels:** Two.
 - ✓ **Number of inmates:** 156, Capacity : 160
 - ✓ **Facilities :** Recreation Room, internet, indoor game stations

 - **Working women's hostel –**
 - ✓ **Number of hostels:** NA
 - ✓ **Number of inmates:** NA
 - ✓ **Facilities :** NA

 - **Residential facilities for teaching and non-teaching staff:** (give numbers available cadre wise)
- Facilities available are – 1/2 BHK residential house, Health Centre, Cafeteria**

Sr. No.	Cadre	Number
1.	Professor	03
2.	Associate Professor	00
3.	Assistant Professor	02
4.	Clerk	00
5.	Peon	01

- **First aid, Inpatient, Outpatient, Emergency care facility, Ambulance:**
Health centre staff details are –

Qualified Doctor	Full time		Part-time	✓
Qualified Nurse	Full time		Part-time	✓

1. Facilities like banking, post office, book shops: **Banking Branch: SBI, MIT, Aurangabad Branch, ATM facility: ATM of SBI and ICICI banks.**
2. Transport facilities to cater to the needs of students and staff: **Yes**
3. Animal house : **Not Applicable**
4. Biological waste disposal : **No**
5. Generator or other facility for management/regulation of electricity and voltage: **Yes**
6. Solid waste management facility: **Yes**
7. Waste water management: **No**
8. Water harvesting: **No**

(-)

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

Sr. No.	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of Instruction	Sanc-tioned / Approved Student Strength	No. of Stu-dents Admi-tted
01.	Under Graduate	Civil Engg	4 Years	12 th Science	English	60	54
02.	Under Graduate	Civil Engg (Second Shift)	4 Years	12 th Science	English	60	52
03.	Under Graduate	Computer Science Engg	4 Years	12 th Science	English	120	86
04.	Under Graduate	Electrical & Electronics Engg	4 Years	12 th Science	English	60	16
05.	Under Graduate	Electronics & Tele-communication	4 Years	12 th Science	English	60	06
06.	Under Graduate	Electronics & Telecommunication Engg	4 Years	12 th Science	English	120	00
07.	Under Graduate	Mechanical Engg	4 Years	12 th Science	English	120	95
08.	Under Graduate	Mechanical Engg (Second Shift)	4 Years	12 th Science	English	60	34

09.	Under Graduate	Architecture	5 Years	12 th Sci. & Commerce	English	40	40
10.	Post Graduate	Computer Applications (MCA)	3 Years	BCA and BCS	English	60	43
11.	Post Graduate	Electrical Drives & Controls	2 Years	BE / B. Tech	English	18	03
12.	Post Graduate	Automation	2 Years	BE / B. Tech	English	18	03
13.	Post Graduate	Heat Power Engg	2 Years	BE / B. Tech	English	18	03
14.	Post Graduate	Manufacturing Engg	2 Years	BE / B. Tech	English	18	02
15.	Post Graduate	Embedded Systems	2 Years	BE / B. Tech	English	24	02
16.	Post Graduate	Communication Engg	2 Years	BE / B. Tech	English	18	01
17.	Post Graduate	Software Engg	2 Years	BE / B. Tech	English	18	00
18.	Post Graduate	Comp. Science and Engg	2 Years	BE / B. Tech	English	24	02
19.	Post Graduate	Structural Engg	2 Years	BE / B. Tech	English	18	15

(--)

13. Does the college offer self-financed Programmes?

Yes ☒ No ☐

If yes, how many?

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

Yes ☒ No ☐

15. List the departments:

Faculty	Departments	UG	PG	Research
Engineering	Civil Engineering	BE (Civil)	ME (Structural Engg)	----
	Computer Science Engineering	BE (CSE)	ME (Software Engg), ME (Comp Science and Engg)	----
	Electrical & Electronics Engg	BE (EEE)	ME (Electrical Drives & Controls)	----

	Electronics & Tele-communication	BE (ETC)	ME (Embedded Systems), ME (Comm. Engg)	----
	Mechanical Engg	BE(Mech)	ME (Automation) ME (Heat Power Engg), ME (Manufacturing Engg)	Research Centre in Mechanical Engg
Computer Applications	MCA	-----	MCA	-----
Architecture	Architecture	B. Arch	-----	-----
General	Basic Science and Humanities	-----	-----	-----

16. Number of Programmes offered under

- 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 (Marking system for B. Arch)

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

Yes No ☒

If yes,

- a. Year of Introduction of the programme and number of batches that completed the programme:
- b. NCTE recognition details (if applicable)
- c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?

Yes No ☒

19. Does the college offer UG and/or PG programmes in Physical Education?

Yes ☐ No ☒

If yes,

a. Year of Introduction of the programme and number of batches that completed the programme:

NA

b. NCTE recognition details (if applicable)

NA

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

Yes ☐ No ☒

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

Positions	Teaching faculty						Non-Teaching		Technical staff	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University / State Government <i>Recruited</i>	1	0	0	0	34	34	19	01	5	0
Yet to Recruit	-	-	-	-	-	-	-	-	-	-
Sanctioned by the Management/ society or other authorized bodies <i>Recruited</i>	8	1	18	4	52	39	7	3	7	2
Yet to Recruit	-	-	-	-	-	-	-	-	-	-

(* M-Male , F-Female)

21. Qualifications of the teaching staff:

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							
Ph. D	3	0	5	0	1	0	9
PG	0	0	3	4	22	30	59
UG	0	0	1	0	0	0	1
Temporary Teachers							

Ph. D	2	1	4	0	1	1	9
PG	3	0	5	0	62	39	109
UG	1	0	0	0	2	1	4
Adjunct Faculty							38

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

Faculty	Male	Female	Total
Adjunct Faculty	35	03	38
Visiting Faculty	03	04	07
Total	38	07	45

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

Categories	Year- 1 2013-14		Year- 2 2014-15		Year- 3 2015-16		Year- 4 2016-17	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	293	131	264	117	268	115	251	93
ST	15	05	08	03	05	02	05	02
OBC	739	347	693	262	686	223	680	223
General	1445	627	1503	731	1227	685	1068	618
Others (NT/SBC)	0	0	0	0	0	0	0	0
Total	3602		3581		3211		2940	

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

Type of students	UG	PG	M. Phil.	Ph.D.	Total
Students from the same state where the college is located	733	74	-----	-----	807
Students from other states of India	08	-----	-----	-----	08
NRI students	-----	-----	-----	-----	-----
Foreign students	-----	-----	-----	-----	-----
Total	741	74	-----	-----	815

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

UG	72
----	----

PG	25
----	----

26. Unit Cost of Education:

Academic-Year: 2015-16

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

(a) including the salary component

Rs. 99,146

(b) excluding the salary component

Rs. 53,303

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

Yes

☐

No

☒

If yes,

a) Is it a registered centre for offering distance education programmes of another University?

Yes

☐

No

☒

b) Name of the University which has granted such registration:

c) Number of programmes offered:

00

d) Programmes carry the recognition of the Distance Education Council

Yes

☐

No

☒

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

1:15:

Programme	Teacher-student ratio
UG (Engineering)	1.:15
PG (Engineering)	1:12
UG (Architecture)	1.:15
PG (MCA)	1.:15

29. Is the college applying for Accreditation :

Cycle-I

☐
☐
☐

30. **Date of accreditation*:** Cycle-I in process

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

240

32. **Number of teaching days during the last academic year:**

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

180

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

IQAC is established on **Date: 06.05.2015** & it has been reconstituted on **Date: 08.03.2017**.

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

Not Applicable

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

CRITERION – I

CURRICULAR ASPECTS

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:

To inculcate, through engineering education, human values by character building and development of multidimensional personality.

Mission:

MIT is committed to be a premier educational institute with a mission to create, continuous improvement, leaders, winners and achievers by ensuring excellence in all endeavours of MITians through enriched knowledge, creativity, self-development and empowerment of employees and students.

Objectives:

- To implement outcome based education in all academic activities of the institute.
- To have all faculty members with Ph.D. qualification.
- To organize short term courses, conferences and seminars for faculty and students on current technological developments.
- To develop centre of excellence in various disciplines.
- To increase social and environmental awareness.
- To improve quantity and quality of publication in journals of high repute.

Communication to Stakeholders:

The vision and mission statements of the institute are communicated through parent's meet, student meetings, orientation of faculty and staff, department meetings with faculty and non-teaching staff, Departmental Advisory Board (DAB) meetings etc. The vision and mission statements of the institute are displayed at prominent places like Principal office, department office, and all laboratories, institute website engg.mit.asia, faculty diary, institute's brochure. The vision, mission and objectives of institution are communicated to the first-year student during principal's address at induction programme conducted every year for the students of first year.

1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

The institute follows a very systematic approach to develop and deploy action plans for effective curriculum implementation in the manner given below:

Plan for Curriculum Implementation:

- Principal receives inputs through Governing Body (GB), IQAC, Steering Committee, Departmental Advisory Board (DAB), HoDs.
- Based on these inputs Principal, VP and Heads discuss and prepare the academic schedule. These are documented by VP Academics.
- At the beginning of each academic year, the affiliating University give guidelines about the dates of –
 1. Commencement of the semester
 2. End of the semester
 3. End Semester Examinations
 4. Online Examinations
 5. Oral, Practical Examinations
 6. Holidays

Accordingly, Vice Principal (VP)-Academics prepares the academic calendar in consultation with the Principal and HODs. The academic calendar includes detailed schedule of all academic activities of the institute. Based on this, the department prepares more specific calendar for department level activities. Considering the academic calendar, teaching plan of each course is prepared by course coordinator. The unit wise syllabus is discussed by Course coordinator with course teachers of the department. This is regularly monitored by the module coordinator and head and checked by VP-Academics.

The evaluation of students is done through

- Theory – End Semester examinations, Class tests
- Online examinations/ MCQs
- Oral /Practical examinations
- Project/Seminar etc.

The details of these examinations are announced well in advance and the external examiners are appointed by the affiliating University.

The entire planning and scheduling of lectures and practical completed at department level as explained below.

Head of the department (HoD) distributes the load by considering the subject choice form filled by the faculty members. For smooth conduct of curriculum, HoD allocates the load as per faculty competency. The activity is carried out immediately at the end of the previous semester so that faculty members get sufficient time for the preparation of the subject assigned to them for the next semester. Faculty Development Programs are arranged in every department before the beginning of the semester. This activity helps to develop teaching through training and content development skills among the faculty.

Process of Effective Curriculum Implementation:

- Every faculty member prepares a teaching plan of entire semester in-line with the department's academic calendar. All academic processes are streamlined. The calendar includes detailed schedule of activities such as co-curricular and extra-curricular activities such as the institute level sports and cultural activities are also specified in the academic calendar.
- University prescribes the syllabus which specifies the number of lectures, list of recommended books and assessment scheme of internal and external marks. Accordingly, faculty prepares the teaching plan of their allotted subject considering the number of lectures allotted for course.
- Detailed unit-wise implementation plan is filled by individual faculty. Course coordinators, Module coordinator and HoD monitors the progress of curriculum implementation. Moreover, VP-Academics also monitors on weekly/monthly basis through academic monitoring mechanism.
- The number of lectures planned and the number of lectures conducted facilitates identification of gaps, if any, and necessary corrective actions are taken for filling the gap.
- The effective implementation of curriculum is ensured by supplementing Classroom teaching with expert lectures, seminars, industry visit, mini projects, in-house and industry supported projects wherever required.
- Additionally, assignments, and end-course surveys are conducted to assess the students.
- Continuous Assessment and mock exams of laboratory work is carried out to assess the laboratory skills acquired by students.
- The overall curriculum implementation is monitored through academic audits at department as well as institute level committees.

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?**University Support**

Board of Studies (BoS), for respective programme, is an academic core unit of the University which plans, monitors, guides and co-ordinates undergraduate and post-graduate academic programmes and development of affiliated colleges. Many syllabus detailing workshops are conducted jointly by the affiliated institutes and University to create awareness among teachers about the new curriculum. Institute provides support to faculty to attend faculty development programs (FDPs), workshops etc. to improve teaching competencies and motivates and facilitates the conduction of FDP and syllabus implementation workshops in the institute.

- The University encourages the teaching staff to attend curriculum revision meetings, board of studies meeting and Centralized Assessment Programme (CAP).
- The University organizes the curriculum/syllabus detailing and implementation workshops for various courses. This helps faculty to enhance the curriculum delivery method.
- The University provides the online portal for internal marks entry to the affiliated institutes.

Institute Support

The mechanism for implementation teaching learning process ensures that

- Subject distribution is based his/her area of interest and competencies.
- Proper support by senior faculty members (Module Coordinator) with greater experience and expertise in specific module.
- Evaluation and monitoring through academic audits and student feedback.

Moreover, faculties are supported to attend and/or organize FDP to improve their teaching capabilities. FDPs are arranged in most of the departments before the beginning of the semester. This activity helps to develop teaching skills, course contents and provide training to faculty for both effective theory and practical implementation. Based on the interest and training needs of faculty members they are supported to attend short term training programs (STTPs) and Industry Training etc. to bridge the need.

In addition, facilities such as library facilities for NPTEL video lecture, OPAC Software, Digital library, audio/video CDs for various topics etc. along with software for Outcome Based Education(OBE) implementation has been made available.

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

The institute ensures effective curriculum delivery and transaction on curriculum in the following ways.

- Through interaction of senior faculty with the Chairman and members of BoS of relevant subjects, inputs are obtained for effective curriculum delivery.
- Institute, in collaboration with University, conducts syllabus detailing workshops to maintain uniformity not only in teaching but also in assessment. The institute deputed faculty members for various STTPs.

- Various expert lecturers help faculty members to understand the depth and breadth of the subject. Institute always promotes the department to arrange such kind of lectures for faculty members.
- The institute has started the facility of virtual Lab which is the major resource offered by Indian Institute of Technology (IIT) which helps students and teachers to learn difficult concepts through simulation.
- In-house development of laboratories is encouraged.
- For better learning students are supported with the book bank facility, remedial classes for weak students, GATE preparation software and virtual lab.
- Contents beyond curriculum are identified and taught both in the classroom and in the laboratory to expose student learning to recent trends in the industry.

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?

Institute has strong liaising with industries, University, academic and research organizations for effective operationalization of the curriculum.

Interaction with Industries

Institute has a very strong interaction with many industries of various sectors. Following are the major associations of the institute

- Chamber of Marathwada Industries and Agriculture (CMIA) - CMIA is an organization representing small, medium & large scale industries of Marathwada region. All leading industries including Multinational Companies are its members. Total membership is well over 635 representing cross section of industries. MIT is one of the active members of CMIA.
- Confederation of Indian Industry (CII) – The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the growth of industry in India, partnering industry and government alike through advisory and consultative processes.
- Marathwada Auto Cluster (MAC) - It is a state of the art Common Infrastructure Facility at Waluj industrial area of MIDC in Aurangabad, in order to improve the global competitiveness of the industrial units in Marathwada, through manufacturing excellence and insuring sustainable growth through collective wisdom and result oriented efforts.
- Institute promotes skill development programs conducted by Infosys, Red Hat Association, Hort-n-Works and other industries of repute.
- Institute enhances industry liaising through the alumni association.

Interaction with Research Organizations

The institute has developed, over the years, through its and faculty and students, a strong connect with various academic and research organizations. Some of the associations have been presented below:

- Memorandum of Understanding (MoU) with different organizations for collaborative research are as below
 1. MoU between KCTECH, South Korea, MIT and Visvesvaraya National Institute of Technology (VNIT), Nagpur for development of Carbon Fiber reinforced composites.
 2. MoU with Siemens for development of centre of excellence in “Automation and Mechatronics”.
 3. MoU with GRIND Masters Pvt. Ltd., KUKA Robotics and MIT for development of “Advanced Manufacturing Centre”
- Collaborative research projects with:
 1. VNIT, Nagpur
 2. College of Engineering (COEP), Pune
 3. Defence Institute of Advanced Technology (DIAT), Pune
 4. Dr. Babasaheb Ambedkar Technological University, Lonere
- In addition, some of other collaborations for various purposes to enhance the quality of performance are presented below:
 1. MoU between Practicing Valuers Association, India and MIT.
 2. Empaneled as ESCO (Energy Service Company) by BEE under Ministry of Power, Govt. of India.
 3. Signed tri party MoU with University (BAMU), Endress + Hauser, Switzerland and MIT, Aurangabad.
 4. Signed MoU with RED HAT India Pvt. Ltd. Mumbai for RED HAT Academy.
 5. Signed MoU with Altair hyper works to setup a centre of excellence in CAE technologies.

Interaction with University for Effective Curriculum Operationalization

Interaction with affiliating University takes place in the following ways:

1. Meeting of all heads of institutes affiliated to Dr. BAMU with the Vice-chancellor.
2. Meetings of faculty representatives with BoS Chairman.
3. Contribution of faculty for conducting and participating in FDP.
4. Contribution of faculty for designing and implementing open electives
5. Appointment of University representative as a member of GB.

6. Faculty members, from institutes other than the affiliating University, are invited as resource persons to hold seminars and talks for faculty.
7. Faculty is involved in the process of syllabus setting, paper setting, paper assessment and as experts for practical examination.

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.)

Faculty of the institute contributes for the development of curriculum in the following ways:

- Senior faculty members are invited for framing, detailing of syllabi and as resource persons for various FDPs related to curriculum framing and implementation.
- Faculty members organize and participate in various FDPs for discussions and sharing of strategies for effective implementation of the curriculum.
- Over the years, many of our faculty members have contributed to the university in development of curriculum either as member of committee, BoS Member or by providing feedback and specific suggestions. At present, following faculty members are member of Board of Studies:

Table 1.1 BoS faculty details

Sr. No.	Faculty Name	Department	Post held at University
01	Mr. S. V. Mhaske	Architecture	Member
02	Mrs. S. M. Badve	EEE	Member
03	Ms. Vrushali Bhuyar	MCA	Member
04	Dr. P. U. Zine	Mechanical	FE Syllabus Committee Member

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

As the institute is affiliated to Dr. BAMU, Aurangabad, it has no flexibility to develop the curriculum for any of the courses offered. However, to address the challenges created due to rapid changes in technology, the institute is also

providing the facilities of learning beyond curriculum through few of the courses such as CAE, Automation and Mechatronics.

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

The institute ensures quality in curriculum with well-defined Course Outcomes (COs), Program Outcomes (POs) and Program Education Objectives (PEOs). The objectives of curriculum and expected outcomes of each course have been decided based on the POs and PEOs. These outcomes have been defined by considering the need of the society as a whole. They are discussed at department/institute level as well as with external stakeholders from time to time.

The objectives are ensured by measuring the COs and their attainment. The attainments are measured by using direct tools such as class test, during the term as well as university examination. The POs are measured for attainment by using the attainment data of COs as well as indirect methods like survey etc.

Attainment of COs:

In order to ensure attainment of objectives of curriculum, every department has a Programme Assessment Committee (PAC) and Department Advisory Board (DAB). PAC gives guidelines to course coordinators about the various tools for assessing the course objectives and compiles the evaluation provided by them. Course coordinators assess the outcomes by analysing assignments, class tests, course feedback etc.

Attainment of POs:

Engineering graduates are expected to have technical/functional, generic and managerial competencies. The competencies that a graduate of a program should have are called as POs. Assessment is the process that identifies, collects and prepares data to evaluate the attainment of POs and PEOs. Effective assessment uses direct and indirect, quantitative and qualitative measures as appropriate to the objective or outcome being measured.

Direct assessment is assessment of actual student work by someone qualified to assess it; indirect assessment refers to assessment techniques like course end surveys, graduate exit surveys etc.

Table 1.2: Tools used for PO assessment are listed below

Sr. No.	Assessment tool	Method of Assessment	Assessment frequency	Assessed by	Reviewed by
1	Course end survey	Indirect	Once in a semester	Faculty	
2	Exit survey	Indirect	Yearly	CO Committee	

3	External examination of project	Direct	Yearly	Faculty project coordinator	Programme Assessment committee (PAC)
4	Assessment	Direct	Twice in a semester	Faculty	
5	Examination (External)	Direct	Once in a semester	Faculty	

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.

MIT has a vision to prepare engineers to respond to the current and future needs of the industry, higher studies as well as research. Building competent engineers with the spirit of professionalism and responsible citizenship along with dissemination of knowledge and technical skills of highest standards is another objective of the institute.

Following courses are offered to meet the goals and objectives of the Institute

MIT has tied up with leading organizations to establish “Centre of Excellence” (CoE) with state-of-the-art equipment, processes and advanced technical knowledge from industry and academia. These CoEs provide Research and Development (R&D) platform for students and research facilities for industries, experimentation and training.

MIT Siemens Centre of Excellence

MIT Siemens CoE was established in 2013 with an objective of providing training to students, faculty and industry professionals in the field of Automation and Mechatronics. Siemens partnered by setting up an Automation and Mechatronics centre with two dedicated laboratories. This state-of-the-art centre is manned by professionals trained at Siemens and is equipped with Siemens S7-1200PLC and Siemens S7-300PLC with HMI panels, PCS-7 with Total Integrated Automation portal.

Metallurgy and Materials Engineering (MME)

Materials and Metallurgy form the very basic of all development that is happening in the industry. This facility is being utilized for research and industry based projects in the field of treating/shaping/improving existing and new materials, material characterization, failure analysis has found wide acceptance from the industry. The involvement of students in these projects enhances their learning outcomes.

Computer Aided Engineering (CAE)

CAE provides training support in the design and development of tools, machine & processes along with technical support in Computer Aided design (CAD). This centre is well equipped with modern software like NX (unigraphics)/solid edge and equipment like CNC lathes with related software. The training modules & design services are being accepted from the industry.

Red Hat Centre (RHC)

MIT's Red Hat Centre offers the training in Red Hat Enterprise Linux since 2005. Red Hat training and certifications are highly respected across the industry as enterprises, governments and other organizations continue turning to open source to meet mission-critical IT needs.

In 2006, MIT and Red Hat India jointly started the Red Hat Enterprise Linux training in MIT campus. Industry defined course contents were delivered to the students of engineering, technology, and the other graduates of the region Marathwada. These trained students assessed by the Red Hat for the real-time performance on live Red Hat server, rigorously tested and finally certified internationally.

Red Hat Academy

The Department of Computer Science and Engineering has launched the Red Hat Academy in February 2016. Red Hat Academy is an open source education program that provides turnkey curriculum materials for educational programs worldwide. Objectives of the Academy are

- To provide quality curriculum for teaching Open Source Technologies.
- To impart Industry leading, role-based curriculum.
- To provide Industry sponsored curriculum and professional certification.

Benefits of Red Hat Academy partnership:

- Red Hat Academy course textbooks are web-based, mobile-friendly, and accessible any place there is an Internet connection.
- Integrated tests and quizzes validate understanding of topics in each level of instruction.
- The classroom lab system provides a hands-on environment for learning and performing skills as well as a self checking function for immediate feedback.
- The web portal includes course management and tracking of performance and graded activities.
- Students in eligible programs receive vouchers to take the Red Hat certification exam of the associated course.

- Curriculum and technical support for instructors is provided by email.
- On certification, the student is enrolled in the Red Hat Certification Forum, connecting them to other Red Hat Certified Professionals and employers seeking certified professionals.
- We will have access to courses covering Red Hat Enterprise Linux administration, Red Hat JBoss® Middleware administration and development, and Red Hat Enterprise Linux OpenStack® Platform administration.
- Curriculum and certification

Infosys Campus Connect (ICC)

The Infosys Campus Connect (ICC) programme started in 2008. ICC is a unique academia-industry initiative to “architect the education experience”. The goal is to build a sustainable partnership with engineering education institutions in India and abroad for mutual benefit; producing “industry ready” recruits. Our objective in launching the ICC programme is to enhance the quality and quantity of the IT talent-pool; sustain the growth of the IT industry itself. Following programmes are undertaken as part of ICC:

Foundation Programme (Generic): The Foundation Programme aligns technical competency to a student's individual needs. It comprises real-life case studies, and insights into application of technology. These unique teaching aids go a long way in ensuring that the students are “industry ready.”

Faculty Enablement Programme: The Faculty Enablement Programme introduces to the faculty the 9 generic courses, ICC teaching methodology, and prepares them to roll out the Foundation Programme in their colleges.

Soft Skills Programme: This programme aims at grooming individuals into excellent team players, who will have strong communication skills, and will adapt to the corporate work culture easily.

Student Industrial Visit: A student- faculty group from different engineering disciplines visit one of the Infosys DCs, and spend half a day there. The purpose of this visit is to demystify the image that students would have on the working of IT business enterprise.

Sabbaticals: ICC sponsors sabbaticals for the faculty, involving them at Infosys' Development Centres for 2-3 months.

Deep Dive Technology: Train the Trainer Programme

Conclave: The CC Conclave brings IT managers and college management on the same platform to discuss the need and actions for academia-industry collaboration.

Regional Meets: Regional meets are an attempt to bring all the partnering colleges on the same platform with the ICC team.

Big Data Academy

MIT Big Data Academy was launched in June 2015 and is associated with Hortonworks, USA. Our aim of the academy is to introduce students to the Hadoop Data Platform (HDP), an open source software Apache™ Hadoop® data platform, and in doing so, to equip them with HDP technical skills. The courses on HDP Operations, HDP Developer are included in this activity. A batch of 22 students has completed the course in 2015-16.

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

The institution does not offer any program facilitating twinning/dual degree.

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

- **Range of Core/Elective options offered by the University those opted by the college.**
 - **Choice Based Credit System and range of subject options**
 - **Courses offered in modular form**
 - **Credit transfer and accumulation facility**
 - **Lateral and vertical mobility within and across Programs and courses, Enrichment courses**
-
- University offers four electives, two of them are offered for Final year in both semesters. Choice of electives is based on the requirements of industry and higher education. Students have freedom to choose the elective of his/her interest.
 - Range of core subjects: As the institute is affiliated to Dr. BAMU, selection of core subject is from courses offered by Dr. BAMU. A study of the curriculum reveals that the balance between core, elective, HSS (Humanities & social science) and other category subjects are as per AICTE model curriculum.
 - Choice Based Credit System (CBCS): Yes, the University has started CBCS w.e.f. academic year 2016-17 for UG. For Post-graduation courses, it was started from academic year 2015-16.
 - Institute is affiliated to Dr. BAMU, hence follows academic structure as offered by Dr. BAMU in which credit transfer and accumulation facility is not offered.

- Academic mobility: After First Year Engineering, students can opt for vertical mobility (i.e. changing program at the start of second year) as per the guidelines given by DTE to choose different programs.
- Skill based training programs or enrichment courses are usually conducted, as content beyond syllabi, by departments with or without the collaboration of industry. Students are also encouraged to undergo industry internship. These courses and internship programs do not have any credits but help in enhancing employability skills. The institute also provides few courses on campus.

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

Yes, all the programmes are self-financed as the institute is unaided. List of the programs run in the institute is given in section 1.2.1.

- Admission to all UG and PG programs are conducted according to the Director of Technical Education (DTE) rules and regulations the details of which are available at www.dte.org.in
- Curriculum for each program is designed by the BoS of the related branch, Dr. BAMU, Aurangabad according to the university norms
- The tuition fee is charged as prescribed by the Fee Regulation Authority, Maharashtra state and Dr. BAMU rules and is subject to revision. Details are available on www.sssamiti.org
- The institute has appointed qualified and experienced faculty members. Appointments are made as per the UGC and AICTE norms.
- The salary is pertinent to the UGC and AICTE norms. It is as per sixth pay scale.

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

Aurangabad is surrounded by industries and research organizations. Aurangabad is also known as automobile hub. Many multinational companies (MNCs) have established their offices and industries in and around Aurangabad. MIT interact with all these industries to identify the regional and global employment needs, as well as, conducts skill oriented programs for its students to make them industry ready. Apart from the curriculum, students are provided with following skill oriented programmes:

- MIT-REDHAT Centre
- MIT Siemens Centre of Excellence
- Metallurgy and Materials Engineering (MME)
- Computer Aided Engineering (CAE)

- Big Data Academy
- Infosys Campus Connect
- Red Hat Academy

The details of these courses have already been provided in section 1.2.3.

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?

University does not offer any such courses.

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 Programs and Institution’s goals and objectives are integrated?

All the academic programs of MIT follow the curriculum prescribed by its affiliating University i.e. Dr. BAMU, Aurangabad. The institute has also adopted OBE system prescribed by National Board of Accreditation (NBA) which helps in taking preventive and corrective measures to ensure that the academic programmes and goals and objectives of the institute are integrated. Some of the measures taken are enlisted below:

- Sincere efforts are put in by institute to supplement the University Curriculum to ensure that the academic programs and institutions goals, objectives are integrated. BoS give new syllabus after every five years. Syllabus is primarily focused on fundamental aspect of respective branch of engineering. Few subjects in the syllabus take care of developing skills of students required by industry. However, despite sincere efforts by BoS members a gap exists between needs of industry and outcome of curriculum. This can be addressed through various methods such as OBE structure.
- According to OBE structure, Module coordinators (MC) and Course coordinators (CC) are appointed in each department. Curriculum gaps, if any, are identified through the meetings between MC and CC. For the needs identified through industry interactions, supplementary guest lecturers/workshops are arranged to fill up these curriculum gaps.
- The content beyond syllabus is conducted wherever required. In addition, workshops, seminars and training programs are also arranged to deliver contents beyond syllabus.
- Students are encouraged to work in industries as interns during vacation and take up industry based projects. Institute and departments take special efforts to strengthen this activity.

- Moreover, through entrepreneurship development cell, CoEs, collaboration with industry also help to enhance specific skills. Guest lectures are arranged from subject experts on specific part of syllabus or on part not in syllabus but are the need of the industry.
- Departments arrange conferences on emerging fields of engineering where students get lot of exposure to the happening of the state of art research from distinguished academia and persons from industry.

1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students to cope with the needs of the dynamic employment market?

As the Institute is affiliated to Dr. BAMU, Aurangabad, it is mandatory to follow syllabi set by the university. The syllabi are designed by BoS and senior faculty members of various institutes. As we are one of the leading institutes in the university, institute has significant contribution in this process for entire Engineering faculty. The Institute arranges alumni meet to receive valuable suggestions from the alumni regarding additional syllabi contents, which are currently required by the industry. The department interacts to industry and other stakeholders as a part of various departmental level activities. It gives them insight about the requirements of the industry and society as whole. The institute, through the faculty, try to incorporate these inputs in the syllabi of respective subject. In addition, the institute also provides appropriate platform to our students to enhance their learning outcomes through various programmes. Some of them are as below.

- To give industry exposure, internships of one/ two/ three weeks are arranged for SE & TE students. For this, industry collaboration efforts are taken at institute as well as department level.
- To enhance the experiences of the students further, student chapters of professional societies organize co-curricular activities such as paper presentation, project competition and other technical activities under the aegis of perception - a techno cultural activity of the institute. Guest lectures by eminent persons and workshops are also arranged to give inputs beyond curriculum.
- Institute faculty and professionals also contribute to improve the soft skills of the students. These trainings have resulted in an increased number of placements in last few years.

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

The present curriculum has integrated above mentioned issues through courses such as Environmental Engineering, Industrial Management, and Soft Skills etc. Final year students are encouraged to take projects which address crosscutting issues viz. green energy, biogas, water management, road

pavements foundation problems, structural audit etc. During academic year 2015-16 all final year students were encouraged to study the environment and energy aspect of their academic project and incorporate into the project report. This action has enabled the institute to sensitize our students on these vital issues of the society.

The institute has established a 'Internal Complaint Committee' to sensitize the students and employees on gender issues, make them aware of the social, moral, and legal implication of gender discrimination, encourage value education upholding gender equality, and at the same time to deal with instances of sexual harassment on campus. The cell is committed to creating and maintaining an environment in which students, teachers and non-teaching staff can work together in an atmosphere free of gender violence, sexual harassment, and gender discrimination.

The institute takes additional efforts through National Social Service (NSS) for making students sensitive towards societal issues. NSS organizes tree plantation programs, blood donation camps, teaching rural children. The programs like no vehicle day, and cycle day also create awareness regarding environment among the students.

Anti-ragging committee is also effectively working in the Institute. The Institute has formed anti-ragging committee comprising of mixed gender which includes the Principal, faculty members and physical education trainer. A few members of committee are from community like lawyers and senior social activists. Boards containing list of anti-ragging committee members are displayed in Institute campus along with their mobile phone numbers and email address. The committee members are available to students after Institute hours also. Every semester meetings of the committee members is conducted and decisions of the committee are communicated to the faculty and students. Guest lectures are conducted by domain experts to make students aware about how to deal with ragging and assist their colleague in such a case. Due to active vigilance of the committee no incidence is recorded in institute campus.

1.3.4 What are the various value-added courses / enrichment Programs offered to ensure holistic development of students?

- **Moral and ethical values**
- **Employable and life skills**
- **Better career options**
- **Community orientation**

Following value added courses/enrichment programmes are offered to ensure holistic development of students-

Moral and ethical values

- The institute celebrates Vivekananda Jayanti (National Youth Day). On this occasion, students are reminded about the universal values of

human life. This is done by inviting Senior Citizen following on the paths of teaching of Swamiji.

- The institute also celebrates Chatrapati Shivaji Maharaj Jayanti. On this occasion, renowned speakers interact with students and teach them the lessons learnt from the life of Chatrapati Shivaji Maharaj.
- The institute also celebrates National Constitution day to enable the students to learn the values and importance of our constitution.
- The institute also celebrates Dr. Babasaheb Ambedkar Jayanti. On this occasion, students are acquainted with the thoughts and moral values taught by Dr. Babasaheb Ambedkar.
- In addition, department level, various programmes are organized by students. The organization of these programmes help the students to learn the attributes such as team work, ethics and planning.
- Institute has the Entrepreneurship Development Cell. As a part of third year curriculum, students undergo vocational training during summer vacation for about a month and submit a report based on it. This provides exposure to industrial work culture, processes and lives experience of its functioning and help to understand the prerequisites for an entrepreneur.
- Entrepreneurship Development Cell has been established in the institute. This cell is run by faculty members of the institute. The Entrepreneurship Development Cell as a team is continuously putting efforts to create awareness amongst faculty and students of the institute. The nature of functioning of this cell is to organize Entrepreneurship awareness progress for UG students. Some expert talk on the Entrepreneurship related topics on creativity, leadership, motivation, Entrepreneur skills etc. were organized. There is lot of awareness observed in the faculty and students of the institute.
- The National Cadet Corps (NCC) plays a significant part in moulding a person's character. It fosters the spirit of teamwork and man-management and leads to the development of a more pleasing overall personality. Recognizing the importance of the NCC, the Institute offers the students an opportunity to be part of the NCC. The Institute cadets are part of the 50 Maharashtra Battalion NCC Aurangabad.

Employable and life skills

- Through interactions with industry experts, first-hand information is collected about the demands and expectations of the industry. This helps in identifying training needs. From this information, professional training for students to help them in writing resume, facing interviews and improving their soft skills is organized by Training and Placement Cell.

- Training and Placement department interacts with students regularly, through a dedicated slot in the timetable, to apprise students regarding enhancement of employability skills.
- At department level, students are encouraged to participate in various extra and co-curricular activities organized by professional student chapter of institute or other institutes.

Better career options

- Training programs on technical subjects are conducted at institute as well as department level, depending upon the career options in respective branch. e.g. Two Days workshop on Structural Engineering for PG Students, was conducted in Civil Department which adds value to their knowledge in structural Engineering.
- Sessions by Training and Placement Cell, industry experts and alumni are conducted to orient students towards industry, government jobs and higher education. Students are also given guidance for GATE examination.

Community orientation

- A start up project initiated MIT group of education is hosted in our campus. This has been established by the top management of the group. It will involve the students to understand the problems from the grass root level especially issues related to rural development. With doing of those real-time projects, improve their soft skills such as team work, flexibility, problem solving, communicative skills, leadership qualities, and attitude.
- Institute has its NSS branch which runs various programs like Blood donation camp, Tree plantation etc. Students engage community in identifying their problems and find technology enabled solutions. NSS is one of the strong contributors.
- Socially relevant projects are taken up by the students as their Final year projects that helps build awareness towards community.
- Safety first and Helmet awareness camp was conducted.

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

MIT being an affiliated institute has limited flexibility in changing the curriculum. The institute has various channels to collect and document responses on curriculum from different stakeholders, such as students, parents industry and faculty.

Feedback is taken from stakeholders through meetings like –

- Governing Body (GB) meetings.

- Department Advisory board (DAB) and Programme Assessment Committee (PAC) meetings for obtaining feedback from parents, alumni.
- Module coordinator (MC) – Course coordinator meetings.
- Alumni meetings.

After collecting feedback from these meetings, the data is then processed and the analysis report is submitted to the Principal.

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

MIT has adopted quality assurance systems viz. OBE. VP-Academics monitors and evaluates the quality of enrichment of the programs.

Following processes ensure the same-

- The role of IQAC is to provide solution for improvement in the performance of academic and administrative system and processes of the institute.
- Internal Audits are conducted every semester at department level.
- Survey of regular activity updates like, course file and portfolio specific files updates is conducted at department level by department coordinator.
- Enrichment programs are for enhancing knowledge about recent industry trends, additional technical skills and to make students employable. To monitor and evaluate the quality of these programs, feedback is obtained from relevant stakeholders through formal and informal interactions.

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?

The institute is affiliated to Dr. BAMU, Aurangabad and therefore the Structure of different programs and syllabus are framed by the university. However, the faculty members of the institute regularly attend workshops and seminars on revision of curriculum arranged by the university. Also, the institute has organized workshops, seminars for framing program structure and syllabus revision through board of studies of different disciplines. The institute forwards the suggestions of its faculty to the university through the members of Board of studies. Faculty members contribute through syllabus setting of subjects.

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 Programs?

Being a Tier – II institute, the institute does not have the autonomy to reframe the curriculum. Inputs from students, parents, alumni and employers are taken into consideration through feedback during Class teacher-students meet, Parent- Teacher meet, Industry-Institute Interactions, Alumni Meet, DAB meet and interaction with industry as mentioned earlier. Vice Principal academics and Heads of Department reviews the analysis reports and initiates actions through steering committee. Accordingly, guest lectures, seminars, hands-on practice, additional practical are arranged at department level for enhancing student competencies. Students are also encouraged to participate in conferences. Industrial visits and In-plant Training are arranged for students to obtain exposure to industry environment. Moreover, students are also encouraged to participate at national level exhibitions and motivated to showcase their projects to the industry and community. For example our students and faculty have been participating in IMTEX and DEFEXO. They are also participating and achieving significantly high ranks at national level competitions like SAE BAJA and Hackathon-2017.

1.4.3 How many new Programs/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/Programs?) Any other relevant information regarding curricular aspects which the Institute would like to include.

Table 1.3 Introductions of New Programs/ Courses

Sr. No.	Program/ course	Year	Rationale
1	UG - ETC	2014-15	This programme was introduced by considering the needs of growing tele communication industry in the country.
2	PG – EEE (Electrical Drives and control)	2014-15	This programme was introduced by considering the needs of growing industry which needs human resource capable of dealing with control systems of in various engineering systems.
3	PG – Mech (Automation)	2013-14	This programme was introduced by considering rapid growth of automation in all sectors of industries (Small as well as Medium). The need was prominently identified through interactions with local industrial organizations.
4	Ph. D – Mechanical Engineering (Research centre)	2013-14	To enhance the quality of teaching learning at UG as well as PG level and to create culture of research in the department and institute.

CRITERION – II

TEACHING-LEARNING

AND

EVALUATION

CRITERION II: TEACHING LEARNING AND EVALUATION**2.1 Student Enrollment and Profile****2.1.1 How does the college ensure publicity and transparency in the admission process?**

UG admission process, as well as rules and regulations to be followed in the given Academic Year (A.Y.), are published in the brochure of Directorate of Technical Education (DTE), Government of Maharashtra. A short description of the eligibility criteria for admission, college fees, hostel fees and documents to be submitted at the time of admission etc. are published on the Institute website. The students are admitted in the institute to the respective programme based on the allotment letter offered by the DTE. The students submit the required documents which are verified in his/her presence. The basic information of the student is entered by him/her in the college. Subsequently, the admission is registered on the DTE website.

The fees prescribed by Shikshan Shulk Samiti, (a Government committee) are collected from the student. College I-card is handed over to the student at the end of admission process. The entire process is transparent and student friendly. PG admission process is same as that of UG admission process; students with positive GATE score are eligible for PG admission in the institute.

The Ph.D. admission process is implemented as per the rules and guidelines given by Dr. BAMU Aurangabad. The students must apply to Dr. BAMU for Ph.D. admission. The eligible candidates have to appear for an entrance exam (PET) conducted by Dr. BAMU. The successful candidates of PET have to appear for an interview at Dr. BAMU. The list of selected candidates for Ph.D. is sent to the concern Research Centre.

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 programs of the Institution.

The process of admission and the criteria for admission are well documented in the brochure published by DTE for given Academic year. The method adopted by DTE for generating admission merit list, have been modified for some of the recent years. In the admission process from 2011 to 2014, merit list was prepared by DTE based on the score obtained in CET and subject to other rules of eligibility as specified by DTE. In the admission process for 2015-16, students were allotted Institutes based on the composite score obtained by the candidate. This composite score is generated by combination of marks in the qualifying exam and CET conducted by DTE.

Table 2.1: Summary of admission intake

Academic year	CET/JEE (65%)		AIEEE (15%)	Institute level admission (20%)
	CET	JEE		
2016-17	231	--	67	24
2015-16	270	--	74	43
2014-15	282	--	85	50
2013-14	301	--	61	70
2012-13	349	--	75	82

Bachelor of Engineering:

- **65%** Students are admitted through Maharashtra State Common Entrance Examination (MSCET).
- **15%** Students are admitted through All India Engineering Entrance Examination (AIEEE).
- **20%** Students are admitted under Management Quota subject to having valid score in MSCET of current year.
- **20%** Students of approved intake are admitted through Central Admission Process Conducted by DTE, Maharashtra for Lateral Entry in 2nd year.

Master of Engineering:

- The Selection Process of admission is based on the score in the national level Graduate Aptitude Test for Engineering (GATE) conducted by IITs.

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

Minimum and Maximum marks for admission to first year of all undergraduate programs offered by the college from AY 2012-13 to 2015-16 is detailed in the Table 2.2.

Table No. 2.2: Minimum and Maximum marks for admission to first year

Sr. No.	Academic Year	2013-14		2014-15		2015-16		2016-17	
		Marks		Marks		Marks		Marks	
	Branch	Min	Max	Min	Max	Min	Max	Min	Max
1	Civil (FS)	37	87	22	75	20	85	31	102
2	Civil (SS)	27	72	19	56	18	70	30	79
3	CSE	30	112	06	80	20	85	41	116
4	EEE	29	92	18	64	16	84	36	104
5	ETC			10	78	20	91	20	80
6	MECH (FS)	36	126	11	90	22	83	34	116
7	MECH (SS)	26	91	25	27	21	69	21	80
8	ECE	27	85	10	66	32	89	---	---
9	IT	20	92	10	75	---	---	---	---

- The minimum-maximum cut-offs are computed for open category students admitted in the first round of admission process.
- The minimum-maximum cut-offs are computed for AY 2014-15 for open category students on basis of JEE composite score.
- The minimum maximum cut-offs are computed AY 2011-12 to 2013-14 for open category students based on MH-CET marks.

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

Since admission rules and regulations are laid down by DTE Government of Maharashtra and admission process (allotment) is carried out by DTE Maharashtra, institute does not have any rights to review or change the admission process. The institute analyses student profile in terms of PCM and CET/AIEEE marks.

The institute has set up an admission cell, which is responsible to review the admission process and students profile annually. The admission cell of the institute collects the detailed information about the admitted students and analyzes it to categorize the students on the following aspects Academic background, Economic status, Gender representation.

Outcome:

This helps to understand the trend (i.e. expectations of prospective Students from different branches)

Contribution to improvement of the process:

Based on the statistics of admissions, especially, the profile of admitting students, the institute designs, the quality improvement process arranging open

house event in which common man including students, parents, and industry personnel can visit to the institute to have information and career opportunities. Thus, the institute has a policy to connect with society.

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

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

The institute stands by the National commitment to diversity and inclusion of students from all strata of society. The institute strives to create inclusive culture in which difference is recognized and valued. The reservation policy for admissions of various categories of students is prescribed by the Government of Maharashtra. This policy is implemented in the central admission process (CAP) of the Directorate of Technical Education (DTE) Government of Maharashtra which is followed by the institute.

This is reflected in the student profile presented as follows:

Table No. 2.3: Admission policy of the institution and its student profiles

Category	2012-13	2013-14	2014-15	2015-16	2016-17
SC	370	446	381	383	344
ST	14	21	11	7	7
VJ	83	104	98	101	106
NT-1	67	70	64	72	58
NT-2	92	88	89	102	83
NT-3	102	110	108	109	105
OBC	563	593	564	499	521
SBC	49	50	32	26	30
OPEN	2034	2126	2234	1912	1686
Total	3374	3602	3581	3211	2940

Institute offers the admissions under Tuition fee Waiver scheme which is mainly developed for economically weaker section of the society as allotted by the central admissions committee. There is a special reservation for the

candidate of J& K and North-East students as per the norms. Moreover, the institute attempts to reach to all strata of the society, especially rural background and under privileged and/or SC/ST/OBC/Minority etc and make them aware of the provisions and support government has made for them.

2.1.6 Provide the following details for various programs 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

Since our institution is affiliated to Dr. Babasahab Ambedkar Marathwada University, Aurangabad and approved by AICTE & DTE, the students do not directly apply to the institute but apply for admission to centralized admission process (CAP) conducted by DTE Government of Maharashtra, therefore the mentioned demand ratio cannot be computed.

2.2 Catering to Student Diversity

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

The institution has built ramps at the entrance for physically handicapped students.

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

To assess the needs of students in terms of academics the Institute implements the following:

- In the first year (at the time of entry) students with low qualifying score (CET, AIEEE/ JEE) are given additional inputs in subjects like Mathematics, Engineering Graphics and C programming, Engineering mechanics to bring them at par with students from urban areas or from boards having more advanced curriculum.
- The Heads of all programs give an orientation lecture to students on/before commencement of second year to orient them towards the program so that they are prepared to face the demands of the program.
- Students are given value added inputs from second year in terms of additional training such as EDP, soft skill development and in-plant training in industries.

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 Program of their choice?

Following programs are adopted by institute to bridge the knowledge gap.

- Conducting remedial classes for academically weak students.
- Organizing expert lectures where resource persons are from Industry, R & D organization, IITs, and NITs.
- Organizing co-curricular activities like industrial visits, field visits/survey, in-plant training, conferences and workshops for supplementing the knowledge of students.
- Executing industry oriented training programs on weekends by industry experts to enhance employability.
- Encouraging students to undertake value added courses, internship and projects in industries.
- Expert talk lectures of different subjects and their importance in engineering field.
- Importance of values and ethics, attendance, etiquettes, discipline and punctuality.
- The ability to adapt to the physical environment of the campus.
- Moreover, students are also conducting the different programs under ASME chapter, SAE chapter and ROBOCON.

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

Institute takes all the efforts to educate its staff and students on the issue of gender equality in following ways:

- Institute/department work is delegated to various faculty and staff irrespective of their gender and/or social background.
- There is no discrimination based on gender regarding seating arrangement of students in classrooms/laboratories and while delivering the curriculum or conduction of extracurricular activities
- Class representatives or office bearers of student council are appointed without gender bias.
- Ladies grievance committee is in place to redress the issues of female staff and students. Institute organizes training on ethics - moral values and the special social activities to maintain good social environment in the Institute under NSS activity. About twenty five percent girl students are involved in NSS activity.

Institute and Departments have taken various initiatives regarding environment protection and inclusive development which are as follows:

Social message: "My India, Green India, My India, Clean India" given by Dr. Raghunath Mashelkar is disseminated in the campus.

Tree plantation programs, blood donation campus, construction of toilets in village as well as training the villagers on basic principles of hygiene has been under taken by NSS groups of MIT.

- Biodiesel pilot plant one step process to convert all kinds of lipids including waste oil, fats, oil and grease (FOG) even with 100% free fatty acid it does not need water for washing biodiesel, has a small foot print and lower operating cost. This system has unique gasification unit and filtering mechanism with fuel consumption reported to be 1.17 kg per KVA almost 30 to 35 % lower than conventional system. Any agricultural residues, woodchips, straws, biomass waste can be efficiently converted in to useful inflammable gas. This one is hosted in MIT as startup.
- E-waste campaign was conducted to sensitize students and staff towards environment protection and sustenance.
- Swatch Bharat Abhiyan, a cleanliness drive with participation of faculty, staff and students was conducted in the institute
- Non-degradable wastes are collected at source by placing trash bins at suitable locations.
- The institute has implemented the partial rainwater harvesting project, which has saved significant amount of water expenses.

Environmental issues are also part of curriculum in various courses taught such as:

The course Basic Civil & Environmental Engineering at First Year includes assignments on environmental issues.

- Under graduate students are made aware about environmental issues through several courses such as energy audit and management, refrigeration and air conditioning and power plant engineering.
- Students are also practiced to write the importance of energy, environment and economy as a separate chapter in regards to their final year project.

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

Based on the performance in qualifying examinations (JEE, MHCET etc) for admissions to the program

- The enthusiasm shown in their participation in co-curricular events.

- The sincerity in attending and consistency in performing practical sessions which is evaluated on a continuous basis.
- The performance in internal and university examinations.

Following are the institutional efforts to respond to special educational/learning needs of advanced learners:

- The institute encourages advanced learners for undergoing internships in industry. Those are also exposed to various intercollegiate technical competitions to sharpen their skills and motivate them to win awards.
- Advanced learners are given opportunity to prepare for global certifications or value added training programs.
- At foundation level, advanced learners get a chance to show their creativity and innovative thinking by taking part in science exhibition which is a regular part of the Technoblitz of the Institute. Students develop small experimental setup or project showing application of some fundamental concept of engineering science. This activity helps in developing analytical thinking along with experimental skills. The students showcase their talent in an open exhibition Technoblitz inviting feedback from science students of junior colleges. The exhibition builds up confidence in the student, inspires and motivates them to take on more challenging assignments in future.
- Advanced learners are also encouraged to visit industries, discuss an industrial problem and work on its solution as part of their final year project. Such industry sponsored projects make them professionally competent.
- Special repository of research and e-learning material is made available to such students to get higher level knowledge of their topic of interest.
- Advanced learners are motivated to achieve higher performances in their co-curricular and extra-curricular activities by giving awards. Proficiency prizes are awarded to class-toppers of university examination. University rank holders are honored at the annual gathering ceremony.

These students are also motivated to pursue GATE and research.

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

Institute obtains and analyzes information about students at the risk of dropout or having consistent poor academic performance in the following manner.

- Low performers in the qualifying examination immediately on obtaining admission in first year.
- List of defaulter students having shortage of attendance in theory and practical.
- Through result analysis of class tests and University examinations.
- Through continuous evaluation and interactions of course faculty with the students during class, laboratory or tutorial sessions.
- Through interactions of class teacher during periodic meetings with students.
- Through teacher guardian meetings.

Information about students at risk of drop-out and having consistent poor performance is used for giving additional support in following ways:

- Conducting additional lectures for difficult courses like mathematics, engineering graphics and fundamentals of programming at the first year level for academically weak students to bring them at par with the others before commencement of semester I of first year.
- Conducting remedial lectures or practical sessions for weak students for improving their academic performance.
- Course faculty mentor students individually and suggest remedial measures.
- Taking corrective actions which are discussed in regular departmental meeting of faculty.
- Referring students to full-time counselor appointed by the institute for further analyzing the cause of their low-performance and suggesting holistic remedy.
- Communicating their academic performance to parents in parents-meet and seeking their support in resolving the difficulties of the students.
- Administrative Officer conducts awareness program/seminars about scholarships, free-ships which help them to apply for obtaining financial support for their education.
- Providing facility of payment of fees in installments for economically weak students.
- Helping students from economically weaker section in obtaining reimbursement of their college fees or through earn and learn scheme of institution.
- Building infrastructure and facilities for easy movement and accessibility to differently-challenged students.
- Providing extra time while writing exam papers and /or providing a writer to students with physical disabilities.
- Sitting arrangement at ground floor in accident case or any other disability.

2.3 Teaching-Learning Process

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

At the beginning of each academic year, the affiliating university gives guidelines about the dates of –

- Commencement of the semester
- End of the semester
- Schedule of class test, online examinations and university examination
- Schedule of Oral, Practical Examinations
- Vacation schedule

Vice-Principal Academics prepares institute academic calendar in consultation with the Principal. It is then distributed to the departments. Each department prepares departmental academic calendar. Considering the academic calendar, teaching plan of each course is prepared by course teachers. The implementation of the syllabus is discussed in detail by Course coordinator with course teachers. During the semester, implementation of the lectures and practical is ensured by respective course coordinator. Lecture planning and implementation is regularly monitored by Head and Vice-Principal Academics. The evaluation of students is done through,

- Theory – class test and university examination
- Online examinations
- Oral /Practical examinations

The details of these examinations are announced well in advance and the external examiners are appointed by the affiliating university.

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

IQAC gives suggestions to improve the effectiveness of teaching – learning process. The IQAC contributes in improving teaching learning process. Course file of individual faculty containing study material, assignments, Continuous Assessment Report (CAR), result analysis is evaluated by academic audit committee and the report is submitted to VP-Academics who in turn will provide a consolidated report in the IQAC. Students' feedback about teaching learning process is taken and all such inputs are given to the IQAC.

Table 2.1: Members of IQAC

Sr. No.	Name of the Faculty	Designation/ Department	IQAC Designation
1	Prof. Dr. N. G. Patil	Principal	Chairman
2	Mrs. B. M. Deshmukh	Management Representative	Member
3	Mr. Amol Thakur	Vice President, Parason Group of Industries, Aurangabad	Member
4	Mr. Sunil Kirdak	Vice President, Kirdak Autocom Private Limited, Aurangabad	Member
5	Dr. H. M. Dharmadhakari	VP - Administration	Member
6	Dr. D. V. Nehete	VP - Academic	Member
7	Dr. P. U. Zine	Asso. Professor Mechanical	Coordinator
8	Mr. Sanjay Mhaske	Head Arch. Department	Member
9	Mr. S. R. Andhale	Head BSH Department	Member
10	Mr. V. R. Upadhye	Head Civil Engineering Department	Member
11	Mrs. B. S. Ahirwadkar	Head CSE Department	Member
12	Dr. Sayyad Ajij	Head ETC Department	Member
13	Mrs. S. M. Badave	Head EEE Department	Member
14	Dr. S. V. Lahane	Head MED	Member
15	Dr. M. H. Kondekar	Head MCA Department	Member
16	Mr. S. S. Patil	Training and Placement Officer	Member
17	Mr. V. A. Kane	Assoc. Prof. MED	Faculty nominee
18	Mrs. N. K. Bargal	Asstt. Prof. ETC Department	Faculty nominee
19	Dr. Datta Parale	Alumni Representative	Member
20	Mr. Prajanya Kendrekar	Alumni Representative	Member
21	Ms. Prachi Bindoo	TE (CSE), A division	Student nominee
22	Mr. Ajay Taur	TE (Mech), B division	Student nominee

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?

Institution is practicing Outcome Based Education (OBE). All the academic processes are designed and oriented towards student learning. Course objectives and course outcomes are defined for every course and communicated to the students. Based on students' feedback, teachers fine tune their mode of delivery.

Teachers are also encouraged and sponsored to attend training programs to improve teaching and technical skills organized by the institute and by other organizations.

Final year project is another platform available to students for collaborative and interactive learning. Institute supports department faculty to organize project competitions and student conferences so that students can demonstrate the outcome of their collaborative and interactive learning. Well equipped project laboratories are kept open even after working hours of the institute for students to work on their projects.

In addition, support is also extended to following activities to make students of the institute centric learning.

- Mock viva
- Group discussions
- Training for aptitude tests
- Seminars for independent learning
- Quiz
- Industry Visit
- SAE Baja and Supra
- ASME/IEEE
- Annual social – Debates, Seminars
- GATE and Aptitude test software
- All departmental technical events
- Students association conducting many programmes

Teachers also use NPTEL videos which are available in the institute for teaching and share these videos with students to promote independent learning. Co-curricular events are organized by students under the guidance of faculty, where student groups demonstrate their capabilities. These activities

undertaken by students from FE to BE are useful for interactive and collaborative learning. The institute extends financial and infrastructural support for all such activities.

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

The institute nurtures critical thinking during regular theory and practical sessions by conducting activities such as quiz, live demonstration, educational games, student seminars etc. Teachers ensure that assignment problems given to the students stimulate critical thinking and help to develop scientific temper amongst students.

Institute organizes the events like paper presentation, art exhibitions, Software development competitions, Model development competition, Poster competition, etc to develop creativity and critical thinking among the students. Institute also encourages and guides students to participate in the national competitions organized by other Institutes and University. Students who are interested in Research & Development work are continuously motivated and encouraged to present their project/research work in different National/International /Seminar/Conference/Workshop and Publish their work in National/International Journal and Seminar/Conference Proceedings.

- Students are encouraged to get involved in industry based projects as a part of their curriculum in final year.
- Students are motivated to write scientific and technical articles for magazine.

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

In addition to traditional chalk & talk teaching, the use of teaching aids like LCD projectors is also encouraged.

The other facilities available for effective teaching are as follows-

- Virtual Laboratory facility in collaboration with IIT Bombay
- NPTEL video lectures at the central & department libraries which are used by both faculty and the students.

- Course material, power point presentations prepared by expert faculty are made available.
- Computers with internet connection facility to access digital resources.
- Facilities are available for streaming live video lectures and video Conferencing.

National Mission on Education through Information and Communication Technology (NME-ICT):

Institute is a Remote Centre of IIT, Bombay. Remote centre conduct the workshop/STTP for faculty members of different disciplines where the resource persons are from IITs. The institute has organized 15 such STTPs on various subjects of importance.

Mobile education:

Institute organizes online quiz for students using Clicker software on Aakash tablet.

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

The students and faculty are exposed to advanced level of knowledge and skills in the following way-

- Workshops, seminars, guest lectures of eminent persons are arranged in the institute.
- Faculty and the students are encouraged to participate in national and international seminars, workshops and conferences.
- Faculty is encouraged to participate in in-house training, FDPs and orientation programs. Industry experts give inputs which help in identifying areas where knowledge up-gradation is required.
- Faculty and students have access to state of the art research through online journals like Springer Link, IEEE, J-Gate, ASCE, etc
- Faculty and students are deputed for industry training /internships to industries such as Thermax, Kirloskar, Bajaj, L&T etc. Faculty is motivated to take up higher education & research at premier institutes such as IITB, NITS, VNIT, IISc Bangalore etc.
- Industry visits, study tours are arranged every year to sensitize students and faculty to the practical challenges faced in industry and to advanced technologies. It also increases awareness of the expectations of industry and helps them prepare for employability.
- Institute organizes national and international conferences for different programs.

Institute organizes the paper presentation, project competitions, expert lectures.

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

Students admitted to the institute come from diverse socio-economic backgrounds. These students face various challenges when they are exposed to a professional course like engineering. Support and guidance to the students to address their academic, personal and psycho-social issues are given in the following ways:

- Institute has appointed a dedicated professional counselor who provides psycho-social support to the students and helps them acclimatize with the rigors of education.
- Job related career guidance and inputs on personality development and soft skills are given through Training and Placement office.
- Class-teachers and teacher-guardians provide guidance and counseling/mentoring. Regular meetings between class-teacher/guardian and students are conducted to solve students' problems.
- In addition, students approach individual faculty members / HoD / VP / Principal for career guidance and counseling.
- Suggestion boxes are placed in each department where students, faculty members can give their suggestions.

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

Faculty members are encouraged to adopt innovative teaching methods so as to ensure effective learning outcomes. Use of simulation software in classroom teaching, to explain difficult concepts which are hard to visualize, is one innovative approach practiced in many departments. Virtual laboratory nodal centre of IIT Bombay for self paced learning of practical concepts, use of new formative or summative assessment tools viz. Institution organizes in-house training programs to hone teaching and mentoring skills.

Various faculty competency domains are created at department level where senior faculty members guide other faculty members to improve their content delivery methods. They also share their experience of teaching a course. Institution also takes special efforts to take faculty members for outbound training programs for training them on best teaching practices adopted by senior and performing faculty. Institute realizes the importance of imparting quality technical education and strives to make its faculty technically

competent. The impact of these efforts is observed in enhanced academic performance and is also reflected in improved placements.

Impact of innovative practices on student learning:

- Learning process becomes increasingly personalized.
- It enables students to develop and realize their personal potential.
- Learning process helps the learners to not only enjoy learning, but acquire skills that empower them to actively engage in the development of their personal skills and competences and improve their performance and achievement.

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

Teacher refers the library resources like educational CDs, reference books, text books, research journals transactions, proceedings for development of study material. Library procures learning resources as per the syllabus prescribed by the University.

Information about all these learning resources is accessible throughout the campus via Online Public Access Catalog (OPAC). Index for all reading material is available through OPAC. This enables fast access to subject wise, class-wise, department-wise lists of reading material which in turn helps to access reading material easily.

- E-resources are accessible through OPAC and users can access full text of required material from their department and classroom. This facility helps in planning lecture and preparing lecture notes/ presentations. NPTEL lectures are also accessible through OPAC as reference material.
- Apart from subscribed e-resources URLs of freely accessible e-journals, e books are linked and can be used for lecture planning.
- Book bank facility developed through funds received from management and Social Welfare Scheme is extended to the students for the entire semester. Free Book Bank facility for SC/ST students and book bank facility for open students at the nominal cost is also provided to fulfill their academic needs.
- Books are arranged according to subjects and departments. The personal attention is given for fulfilling student's library related needs. Open access facility is available. Library staff motivate the students for open access to aware them about the latest arrivals. Separate reference, periodical, circulation, digital library section and reading room facility are available in the library.

- In addition to the central library, each department has its own departmental library to facilitate easy access to the faculty, students and research scholars.

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

Yes. The academic structure recommended by affiliating university and recently adopted system of continuous evaluation of students by class test and online examinations make the academic schedule very challenging.

MIT has also realized the importance of organizing extra and co-curricular activities for overall student development. In addition to these activities, value added training programs are also essential for enhancing employability of the students. Thus, faculty members find it challenging to complete the curriculum within the planned time frame.

These challenges are overcome by allocating extra teaching hours for certain courses. Faculty members adjust their teaching loads while availing leaves and make sure that academic sessions are not missed.

At the end of month, Head of department monitor academic and implementation status of planned theory and practical sessions. In case of any missed lectures or non-completion of targeted syllabus, Head of Department asks the concerned faculty member to submit his/her action plan for make-up classes.

The academic monitoring program is also forwarded to Vice-Principal Academics for his perusal or necessary action. Second Year Direct admitted (SEDA) students miss some major part of academic sessions and lag behind other students due to late admission process. Hence, it becomes very challenging to complete the curriculum of these students within the planned timeframe.

At department level, separate timetable is prepared for SEDA students. Few faculty members are allocated for teaching only these students, so that they can fully concentrate on both the syllabus completion and resolving academic difficulties of such students.

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

The institute monitors the quality of teaching in the following ways-

- Senior faculty members regularly monitor teaching process adopted by course teachers. Meetings between senior faculty members, course

coordinator and course teachers are conducted before commencement of the semester to streamline the teaching process.

- Regular meetings of the students with class teachers are conducted. Issues are resolved by the head of the department. A consolidated report of such meetings requiring intervention of the Principal is sent by head of the department to the VP Academics.
- Feedback about faculty is taken from the students. In this feedback, questions related to teaching competencies and attitude of the concerned faculty are asked. Based on the feedback, HoD gives necessary directions for improvement in the teaching methods. VP-Academics also monitors the feedback system and counsels the faculty with low feedback. Mentors are assigned to low performing faculty and their performance is reviewed regularly.
- Various OBE tools including course end survey, project evaluation are used to take course feedback from students.
- Feedbacks from stakeholders are taken periodically to take inputs to provide additional training programs to get industry sponsored projects for students.

2.4 Teacher Quality

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

Human resources required for teaching are planned as per the academic requirements from time to time. The staff is recruited as per guidelines of AICTE, New Delhi and Dr. BAMU, Aurangabad. Applications are invited after the approval for the advertisement from the University from eligible candidates through news paper.

The Vice Chancellor appoints the committee consisting of experts and interviews are conducted by this committee for the scrutinized candidates.

For appointments on temporary basis, applications are invited for walk in interviews through news paper advertisement and well qualified candidates are identified after conducting written test and demo lectures. The list of shortlisted candidates is submitted to the office for interviews by the final selection committee.

Faculty is exposed to various technical and motivational training programs to upgrade their skills and keep themselves updated about the changing technological needs.

Strategies adopted by the institute for retention of faculty members are as follows:

1. Provide academic flexibility for adopting various strategies of teaching appropriate for attaining desired learning outcome.
2. Creating an atmosphere conducive for their professional growth.
3. Assigning roles and responsibilities challenging their capabilities and making them strive further.
4. Providing necessary infrastructure and facilities for promoting the culture of research.
5. Deputing faculty for industrial training and completion of Ph.D. at industries and institute respectively.
6. In some cases, retaining senior faculty even after retirement to use their vast experience and expertise in the domain. This enables the in-house guidance to the freshly recruited faculty members.
7. Establishing research promotional policies for attending conferences and publishing research papers in India and abroad.
8. Implementing various welfare schemes for faculty i.e. group gratuity, group insurance, credit cooperative society etc.

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

The institute promotes existing faculty to do research and solve industrial problems. Experts from industry working on state of the art technologies are invited to interact and work on advisory committee. Various inputs in this regards are listed below:

1. The institute deputed and sponsors faculty members for pursuing Ph.D. to premier institutes like IITs, NITs, and other reputed institutes.
2. Faculty members are also interacting with industry for upgrading their knowledge, skills and making them aware of emerging areas in technology.
3. Joint research projects between MIT and other industries or research organization are undertaken by faculty members and this helps in teaching UG and PG students.

4. Institute recruitment process is open throughout the year and whenever Institute identifies qualified senior faculty, it conducts interviews and appoint them.
5. Institute extends the services of retired faculty to get benefit of their expertise in the domain.
6. As per AICTE norms, persons who are working with industry and research organization are also recruited adjunct faculties so that students will be benefited by their expertise in the domain.

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

a) Nomination to staff development programmes

The institute encourages (deputes) faculty/staff to take part in development programs conducted at the institute or in other institutes/organizations. Financial provisions are made for attending FDPs.

Table No. 2.4: Faculty nominated for development programmes

Academic staff development programmes	Number of faculty nominated				
	AY 2012-13	AY 2013-14	AY 2014-15	AY 2015-16	AY 2016-17
Refresher Courses	3	5	-	7	19
HRD Programmes	2	-	2	2	1
Orientation Programmes	7	4	1	7	6
Staff training conducted by other Institution	2	6	5	6	13
Summer/Winter schools, workshops etc.	24	27	28	21	27
Staff training conducted jointly by the university and the institute	-	2	-	1	-

b) Faculty training program organized by the institutions to empower and enable the use of various tools and technology for improve teaching learning

- Teaching learning methods/approaches

- Handling new curriculum
- Content/knowledge management.
- Selection, development and use of enrichment materials
- Assessment
- Audio Visual Aids/multimedia
- Teaching learning material, proactive in organizing lecture series/ workshops, which focus on overall professional growth.

Some of the programmes organized are as follows

Table No. 2.5: Training Programmes to improve teaching learning.

Sr. No	Name of activity	Department	Date	Sponsoring agency/ Self Sponsored
1	Two week ISTE approved STTP on Introduction to Research Methodologies Conducted by IIT Bombay	MCA	25/06/2012 to 04/07/2012	MHRD Sponsored
2	Two week ISTE sponsored STTP on Engineering Thermodynamics conducted by IIT Bombay	Mechanical	11/12/2012 to 21/12/2012	MHRD Sponsored
3	Two week ISTE approved STTP on Database Management Systems Conducted by IIT Bombay	MCA	21/05/2013 to 31/05/2013	MHRD Sponsored
4	Two week ISTE sponsored STTP on Fluid Mechanics conducted by IIT Bombay	Mechanical	20/05/2014 to 30/05/2014	MHRD Sponsored
5	Two week ISTE approved STTP on Computer Programming Conducted by IIT Bombay	MCA	15/06/2014 to 26/06/2014	MHRD Sponsored
6	One week ISTE approved STTP on Introduction to Design of Algorithms Conducted by IIT Kharagpur	MCA	25/05/2015 to 30/05/2015	MHRD Sponsored
7	Two week ISTE approved STTP on Engineering Physics	Architecture	08/12/2015 to 18/12/2015	MHRD Sponsored
8	Two weeks STTP on Introduction to	Civil	02/06/2015 to	MHRD Sponsored

	Environmental Science		12/06/2015	
9	Two weeks ISTE approved STTP on Introduction to Structural Engineering	Civil	30/11/2015 to 09/01/2016	MHRD sponsored
10	One week FDP on Internet of Things	ETC	11/07/2016 to 16/07/2016	Self sponsored
	One Day FDP on Simulation Modeling Techniques In Industrial automation, Hydraulics, Pneumatics and Digital CNC	Mechanical	11/02/2017	MHRD sponsored
11	Two-Week ISTE STTP on CMOS, Mixed Signal and Radio Frequency VLSI Design	ETC	30/01/2017 to 04/02/2017	MHRD sponsored

c) % 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

Table No. 2.6: Invited as a research person in workshop / seminar / conferences

Details of faculty participation in workshop/ seminar/ conferences	% of faculty
Invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies	7.47
Participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies	19.29
Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies	16.49

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

- The institute gives funds in the form of seed money to few deserving cases for funding the research proposals submitted by the faculty members. This serves as a catalyst in motivating the faculty members and develops research culture. After its utilization, faculty can further apply to various funding agencies for major grants.
- The institute encourages faculty members to pursue their Ph.D. research at premium institute like IITs, NITs, Autonomous Institute by sanctioning study leave.
- Faculty interested in pursuing research though part time Ph.D. is supported by adjusting their teaching work load and providing research facilities in the department. The institute sponsors the faculty for attending various short term training programs/ faculty development programs/ summer schools, presenting research papers in national and international conferences, etc.
- The faculty is encouraged to organize short term training programs/ faculty development programs/ summer schools at MIT.
- Industry connects alumni affairs, staff welfare, maintenance, repair and other activity such as faculty development, student development and related activities.

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.

Dr. P. H. Waghodekar, Professor in Mechanical Engineering department, has received the following awards -

- Management Teachers Consortium (MTC) Global Life Time Achievement Award-2012, 2nd MTC Global Annual Convention, held at VIT University, Rajasthan, on 01/09/2012.
- Entrepreneur Award 2013, Engineering Watch, New Delhi, awarded by the benign hands of Dr. Shashi Tharoor, Honorable MHRD State, Govt. of India, on 15th Feb 2013 in New Delhi
- Golden Educationist of India Award, 30th June 2013, by the National & International Compendium, New Delhi for outstanding achievements in the field of education.

- MTC Global Certification of Award for Knowledge sharing during the year 2012- 2013, Sankalp 2013, 4-6 October 2013 at Jodhpur.
- Enlisted Top 50 Thinkers of India 2013 by Management Teachers' Consortium Global (MTCG), Bangalore.
- Edupreneurs-2014 Award by Engineering Watch, New Delhi, Singapore on 15th September 2014
- HEF Award, based on the work done by Dr. P H Waghodekar on Innovating Best-in-Practices, in the form of Certificate of Merit for Innovating best-In-practices to the Marathwada Institute of Technology, Aurangabad, under the Engineering Colleges Category, one of the two National awards given away during the HEF Annual Convention held in Mumbai on 14th March 2015.

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

Yes. The institution has established a feedback system for evaluating the teacher by students. Students give feedback about their teachers each semester. The feedback report is reviewed by the respective Head and VP Academics. The corrective actions to be taken by the teachers are suggested by Head of Department. Faculty having low feedback is counseled by Principal and a mentor is assigned by the head of department.

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?

Being an affiliated institute, University procedures are followed rigorously in the institute. The circulars, notices issued by Dr. BAMU are put up on its website. The circulars and notices regarding evaluation are sent to all departments through administration and exam departments/office departments.

Information for students

- Notices/circulars from Dr. BAMU regarding evaluation process are displayed on the notice boards and are also conveyed to the students by the class teachers.
- Orientation program is conducted at the beginning of academic year for students in First Year engineering where parents and students are made aware of the evaluation processes.

- Term work evaluation of students is based on continuous assessment. Students are made aware of this assessment scheme in the orientation program and in the first lab/tutorial session.

Information for Faculty

- Notices/circulars are circulated to faculty in department meetings, are displayed on notice boards and by emails.
- Continuous assessment evaluation process and implementation is discussed in HoD meeting with module coordinator, course coordinator and course teacher.

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?

- For final year, students project work is evaluated through seminar and presentations conducted internally as well as through university evaluation process.
- The institute has adopted various university reforms such as on line objective type MCQs examinations for some courses.
- The institute is practicing OBE to measure the attainment through indirect method which is not stated in the curriculum of university.

Ph. D. Program

- The Ph.D. program involves course work, conducted by the University Department/Research Centre. The course work is for a minimum period of one semester followed by theory examination. PhD registration is confirmed after the completion of course work only.

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

Effective implementation of the evaluation reforms is ensured in following manner –

University Level

- For smooth conduct of University exams, the institute has established separate examination section and a CS (Chief Superintendent) are appointed for conducting all Dr. BAMU examinations. Online examinations, in semester, end-semester examinations are conducted as per the norms and schedule given by the University. Institute ensures effective implementation of the evaluation reforms of the University by scrupulously following and implementing the

ordinances, rules and regulations given by Dr. BAMU at UG, PG and research level.

Institute level

- Effective implementation of evaluation reforms initiated by the institute are ensured by the heads of the respective departments by making faculty, staff and students aware of the reform and monitoring their implementation rigorously.
- Each department has class test coordinator for smooth conduct of class test. The results of evaluation are declared within eight days. The students can see their respective answer books and discuss their queries with the concerned staff.
- The term work evaluation is done by respective course teachers. The performance evaluation of students is displayed on notice board. Students can discuss any queries about this with the concerned teacher, and/or class teacher, HoD, etc.

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.**Formative assessment approach**

Formative assessment approaches are used by teachers during the learning process, to modify teaching and learning activities for improving student learning.

Following are the approaches used for formative assessment –

University level:

- Online examination for theory
- Class test for theory
- Continuous assessment for lab work

Institute level:

- Project evaluation by industry experts

Institute prepares its students for University exams through practice sessions for theory (mid semester / prelims), mock – online examinations, assignments for practice and practice for practical sessions. The evaluation through these approaches gives insights regarding student performance which helps to identify learning needs and take necessary steps for possible improvement. Institute also promotes the students to participate in mini projects, seminars, workshop, paper presentation etc. Institute arranges industrial visit for the students and students submit the visit report which is also evaluated for term work marks.

Summative assessment approach

Summative assessment approaches are used at the end of the semester-

University level:

- End semester theory examination
- Project examination
- Oral, Practical examination

Institute level:

- Direct and indirect tools viz. course end survey, exit survey etc. Project evaluation by industry experts and its impact –The involvement of industry in evaluation of students projects has resulted in the following positive impact:
- Introduction of industry rigor in the academic process and student learning
- Exposing faculty and students to practices and trends followed in industry
- Enhanced liasoning with industry
- The university end semester examination shall carry 80 marks for theory, 20 marks for class test and 50 marks for practical and oral examination.

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.)

Internal Assessment is only for term work which is assessed throughout the semester. Assessment scheme is explained to the students to bring in transparency.

They are assessed on the basis of following criteria-

- Timely submission
- Presentation (communication skills)
- Understanding (independent learning)
- Performance and attentiveness (behavior)

Faculty also discusses shortcomings in performance with students to enable them to enhance their learning's and overcome the shortcomings. In each department, final year projects are evaluated continuously and students are

given inputs on their weaknesses and scope for improvement. Students maintain log books or project diary with records of their project progress. These books are checked by guides on a regular basis.

Direct and indirect tools are used to internally assess and evaluate learning outcomes based on behavioral aspects, communication skills etc. The outcome of this assessment is discussed with students. Institute communicates progress report of their ward to the parents. It organizes parent and guardians meet to have a communication once in year.

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

Graduates attributes specified by the college:

Engineering Knowledge: Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

Problem Analysis: Identify, formulate, research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.

Conduct investigations of complex problems: using research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions.

Modern Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

The Engineer and Society: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice.

Environment and Sustainability: Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams and in multi disciplinary settings.

Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions.

Life-long Learning: Recognize the need for and have the preparation and ability to engage in independent and life- long learning in the broadest context of technological change.

Project Management and Finance: Demonstrate knowledge and understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team to manage projects and in multidisciplinary environments.

Attainment of Graduate Attributes:

- Each department has well defined course objectives, course outcomes, program educational objectives and program outcomes and those are in aligned with graduate attributes.
- Innovative teaching methods and student centric teaching – learning approach is adopted to achieve course outcomes.
- Course objectives and course outcomes are mapped with program outcomes and program outcomes are mapped with graduate attributes.
- Institute encourages the independent learning which includes paper presentation by students, project, innovative mini project, publishing the articles in news paper and gives proper weightage to these heads.

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

Redressal of grievances is permitted by University only for end semester examinations and not for online, term work/oral/practical, project, and seminar examination. The mechanisms for redressal of grievances with reference to evaluation is as follows-

Institute level -

- Students are made aware of the assessment methods at the beginning of the semester and whenever necessary
- The assessed answer sheets of internal tests are given to the students and performance is discussed by the course faculty

- Students having grievances with the internal evaluation process can directly discuss their doubts individually with respective faculty members
- Students can approach the Head of the Department, in case of any grievances

University level -

Paper setting, conduction of examination, evaluation and declaration of results is done by exam cell, engineering section, Dr. BAMU Aurangabad.

- After the results are declared by the University, students can apply for photo copy of their answer sheets, which are provided by the University.
- If the student has grievance after receiving photo copy of answer sheet, then he/she can apply for revaluation.

2.6 Student performance and Learning Outcomes**2.6.1. Does the college have clearly stated learning outcomes? If ‘yes’ give details on how the students and staff are made aware of these?**

Yes, each programme of the college has clearly stated learning outcomes in terms of program specific outcomes (PSO's) and course outcomes (COs). The PSO's define the abilities of the students of respective programme expected at the time of graduation and COs are the learning outcomes that the students imbibe at the end of each course.

- The learning outcomes are notified by presentations, academic diaries.
- Learning outcomes are displayed in the departments.
- Learning outcomes are notified to parents through parent meet.
- Learning outcomes are uploaded on institute website.
- The faculty explains the program outcomes and course outcomes expected from the course offered to the students before the commencement of course in every semester.

2.6.2 Enumerate on how the institute monitors and communicates the progress and performance of students through the duration of the course/Program? Provide an analysis of the students results/achievements (Program/course wise for last four years) and explain the differences if any and patterns of achievement across the programs/courses offered.

Institution has a well-defined process to monitor the progress and performance of students implemented at department level. All departments follow this process and communicate this to their parents at regular intervals.

Performance Monitoring:

Student academic performance is monitored by two mechanisms. In the first mechanism, continuous internal assessment is carried out which includes class tests, continuous assessment for practical, assignments, oral exams etc. Performance in internal assessment is used as feedback to improve academic progress. Based on the performance in internal assessment, preventive and corrective actions are taken on non-performing students by the faculty teaching the course.

These actions/ strategies are arrived at, in the course coordinator meetings with the faculty teaching the specific course. Second mechanism includes formative and summative assessment carried out by Dr. BAMU. Formative assessment includes tests, online exams and summative assessment includes end-semester exams for theory and practical /oral/term work.

Performance Communication:

Continuous assessment for the term work is shown to the students regularly as an indicator for self-analysis and improvement. Results of online exams are displayed on the notice board whereas results of end-semester exams are declared by university every semester. Parent meet is conducted in each semester to communicate about the overall progress of each student to their parent. University rankers are felicitated during the parent meet. The results are available online on university website and in the form of hard copy at the institute. Parents can view the results online. Detailed result analysis with identified trends and patterns of every programme is presented in the General Body meetings.

Attendance is the most important parameter which impacts the performance of the students. Monthly attendance report is displayed and conveyed to the parents. At the end of every semester, defaulter list is prepared and appropriate action is taken on defaulter students. In the parent teacher meet, attendance issues are communicated to parents.

The results of all programmes and its comparison with university results are shown in below.

Result analysis (Last 4 years of BE) is shown in Figure 2.2.

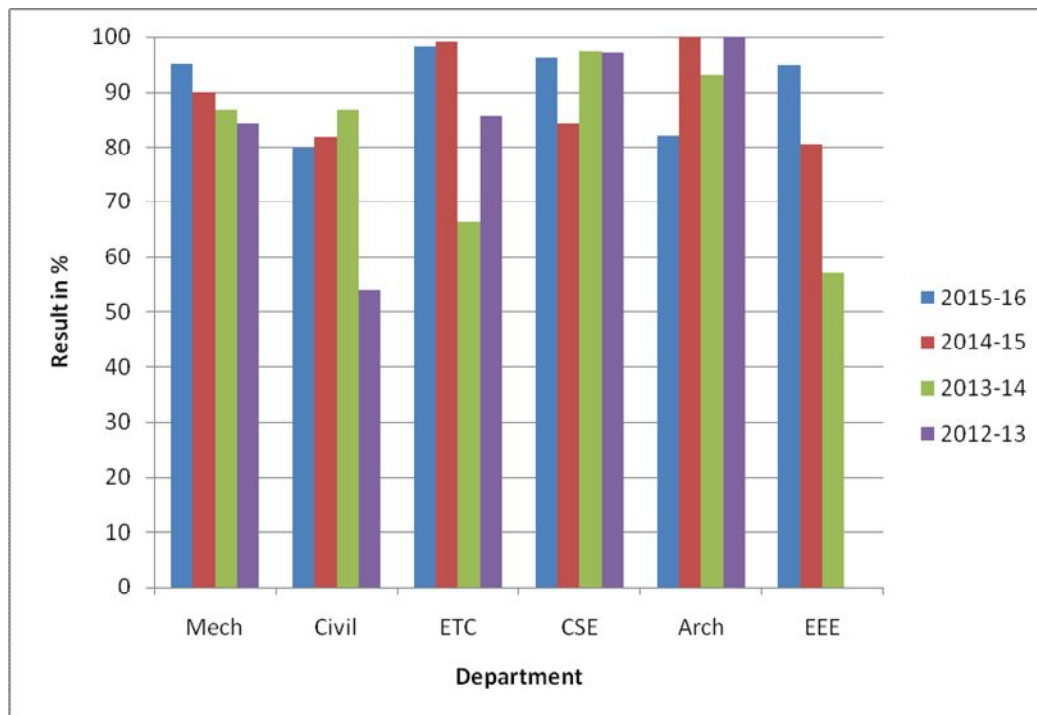


Figure No. 2.2: Result Analysis of last four years

University rankers (all Dept.)

List of student achievements and awards through publications and Participation (AY 2012-13 to 2015-16)

Table No.2.7: University ranker

Sr. No.	Academic Year	Name of the student	Rank	Branch
1	2015-16	Hire Prajka Vyanketrao	III	CSE
		Pankaj Yadav	V	IT
		Tambat Mayuri Vishnu	I	EEE
		Kohkade Anita Ramesh	II	EEE
		Labde Rohit Shivaji	III	EEE
		Puse Pooja Babulal	III	EEE
2	2014-15	Wategaonkar Prachi Sanjay	I	E&C
		Deshmukh Shreya Anant	III	E&C
		Kathar VaibhavKumar Vilas	IV	E&C
		Chatur Nayan Girish	V	E&C
		Munde Mahadev Balasaheb	I	EEE

		Jadhav Shubhangi Sanjay	II	EEE
		Gullapelli Madhuri Ganesh	III	EEE
		Kajale Nilesh Kalyanrao	I	MCA
		Mhaske ashwini Santoshrao	II	MCA
		Khandelnal Minal Rajesh	III	MCA
3	2013-14	Kasat Nikhil Rajesh	IV	Mechanical
		Kulkarni Shashank Satish	III	E&C
		Thorat Rohini R	II	EEE
		Gitte Kiran Balasaheb	III	EEE
		Sharma Ankita Arun	I	MCA
		Jankar Pooja Jagannath	II	MCA
		Joshi Gajanan Baburao	III	MCA
4	2012-13	Jagtap Chandrashekhar P.	V	Civil
		Zarekar Tara Dhondiram	V	E&C
		Shrikhande Krishna Pandurang	I	MCA
		Pandit Riya Bapusaheb	II	MCA
5	2010- 11	Burande Aswini Prabhakar	I	MCA

List of student's achievements and awards through publication and participation

Table No. 2.8: List of student's achievements and awards

Academic year	Civil	Mech	CSE	E&T C	EEE	Arch	MCA
2016-17	1	7	-	2	-	-	-
2015-16	1	3	-	6	9	2	1
2014-15	-	3	-	5	5	2	1
2013-14	-	1	-	4	1	1	-
2012-13	-	-	-	9	-	1	1

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

Teaching: Institute has well defined teaching strategy. Before the commencement of each semester, institute level academic calendar is prepared and circulated by Vice-Principal Academics. By referring to the academic structure, institute and department calendars, each course teacher prepares lecture planning. All teaching resources are procured well in advance before commencement of the curriculum. Faculty teaching new course is deputed for various training programs. Course coordinator identifies the need for content beyond syllabus and develops strategies for their implementation. Faculty teaching the course implements the same.

This process is useful to effectively balance syllabus contents and lecture conduction. Gaps identified during academic monitoring are bridged by conducting make up lectures. Student feedback plays an important role for the assessment of teaching strategies.

Learning: Every course teacher plans various modes of delivery such as chalk/talk, PPTs, case study, tutorials, quiz, projects, seminars, self-learning industry visits, internships etc. for achieving desired learning outcome.

Assessment Strategies:

The achievement of learning outcomes in terms of academic performance is carried out. Various formative and summative assessment methods explained in 2.6.2 are used for this purpose.

Following process describes the assessment strategies which facilitates the achievement of program outcomes:

At the start of the semester, each course coordinator briefs course outcomes and learning outcomes of related course to all the course teachers. Curriculum of each program is categorized into different modules. Each course of curriculum is classified in one of the modules. For every module, Module Coordinator is appointed.

For every course offered, course coordinators are appointed. Course coordinators prepare the course material, finalize the course outcomes and identify the mapping of course outcomes with program outcomes. Course coordinator carries out assessment of achievement of COs and PSOs using various direct tools and indirect tools with appropriate weightage. These tools include internal and external (university) exams. As per the university norms, institute conducts class tests, online exam, practical and orals, theory exams, technical seminars and projects for the assessment of students.

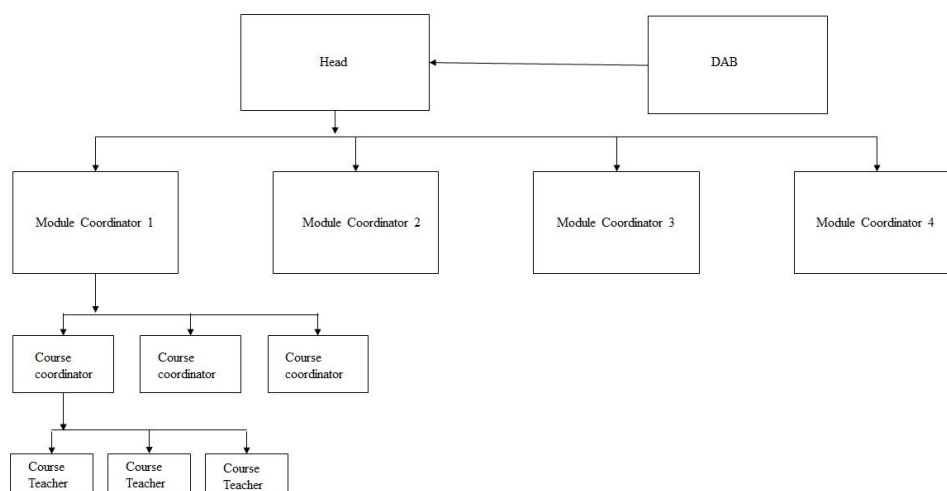


Figure 2.2: Teaching Learning Mechanism

Module coordinator conducts regular meetings with course coordinators to collect reports and analyze the status of PO achievement. Programme assessment committee (PAC) consolidates the data from module coordinators, prepares the final report on PO achievement and submits it to the Department Advisory Board (DAB). Based on the PAC report, DAB approves the final PO achievement. If any of the POs are not being achieved, DAB may recommend measures to attain it.

Various activities to supplement the achievement of Program outcomes are as follows:

Each department identifies gaps in the curriculum using inputs from stakeholders and identifies contents beyond syllabus to bridge those using following mechanisms:

- Guest lectures
- Workshops
- Industrial visits
- Industry internship
- Soft skills training

2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality Jobs, entrepreneurship, innovation and research aptitude) of the courses offered? Summary of T& P training session

To enhance the social and economic relevance of the courses offered following initiatives are taken up by MIT.

- Institute encourages the final year students to select their projects addressing social issues and Institute provides financial assistance for such innovative projects.
- Institute has signed Memorandum of Understanding (MoUs) with many leading industries as well as research institutes/ Universities of repute.
- Institute has adequate online and offline learning resources available in the library for teaching, learning as well as research.
- Institute organizes technical paper presentation and project competitions which help students inculcate a professional approach and imbibe ethical engineering practices.
- Students are encouraged to participate in state/ national technical events like Avishkar, Robocon, SAE Supra and Baja, Technoblitz etc.
- Institute deputed the students for internship programs to industries and institutes of repute.
- Training & Placement cell trains the students for placement and helps them to develop an all-round personality by conducting a variety of sessions on aptitude training, soft skills etc. The summary of sessions conducted in last 4 years as given below in Table No.2.9

Summary of T&P Training sessions

Table No. 2.9: Summary of T&P Training sessions

Academic year	No. of aptitude session	No. of soft skill session	Other session	Total session
2016-17	1	1	2	4
2015-16	2	2	6	10
2014-15	2	2	4	08
2013-14	2	2	2	06
2012-13	1	1	1	04

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

Student performance basically includes two parameters. One is result and other is placement. Results of individual student and detailed analysis are carried out. Training and placement cell of institute registers the interested students. Cell collects data from all the students, keeps records of placement centrally as well as sends the updates to every programme regularly. Quality objectives are set for every department. Internal audits are conducted in every semester.

Nonconformance in student performance is identified by auditors and addressed by the department with corrective action. Thus, internal audits play a vital role in identifying barriers and taking preventive and corrective actions accordingly.

Feedback from the employers, teachers, parents and student is used to identify barriers of learning like understanding, visualization, communication (written and oral), mathematical, psychological, socio-economical, physical etc. Regular meetings with parents, class-teacher and counselor are carried out to overcome these barriers. Training programs on soft skills, aptitude and technical skills are also conducted for the same.

- The program outcomes are the capabilities of graduating student in terms of knowledge, skill and attitude
- Knowledge related PSOs are attained by the students through the curriculum and are assessed through direct assessment tools viz. specific exam questions (ABET problem), internally developed assessment exams, project exams, technical seminars, University exams, practical, oral exams etc. as well as indirect assessment tools like End Course Survey, Exit Survey, Project Feedback etc. carried out annually/per semester.
- Data collected using these tools are analyzed at department and institute level. IQAC deliberate on the result and placement analysis to plan for improving the student performance and learning.
- In addition to remedial classes and personal counseling, MIT has established Virtual Laboratory of IIT Bombay, Microsoft Academy etc for enhancing the knowledge component of students. Planned and systematic efforts at department and institute level have resulted in meaningful collaborations with industries and research organizations.
- Skills related POs like team work, communication (both oral and written) use of modern tools etc attained by the students are assessed through direct tools like laboratory assignments, practical oral examinations, mini projects , projects, seminars, presentations, co-curricular and extracurricular activities. Since attainment of skills cannot be quantified directly, rubrics are developed with appropriate performance criteria

- The curriculum does not cover all the assignments related to the latest technologies. Thus institute has taken an initiative to overcome this gap by arranging courses like Oracle, Microsoft, and Lab view. Soft skills and life-long learning skills are not being attained satisfactorily through present curriculum. Training and Placement Cell of the institute organizes professional training for students to help them in writing resume, facing interviews and improving their soft skills. At department level, students are encouraged to participate in various extra and co-curricular activities organized by CSI student chapter of the institute or other institutes.
- The attitude related POs are assessed through participation of the student in societal work as well as ethical practices followed
- Institute has appointed a dedicated counselor to solve various issues of students and overcome the psycho-social barrier of learning.
- Rigorous implementation of mentoring system is carried out in every department. Faculty mentoring as well as student mentoring is carried out under this scheme.
- Institute also collects and analyzes data from other stake holders like parent, employer and alumni. This analysis and their suggestions are used for the improvement of teaching learning process and to overcome the gaps between industry and academia.
- Direct and indirect assessment tools are rigorously used by course coordinators of all programs throughout the semester. The attainment of program outcomes is computed for every course through direct assessment and indirect tools with appropriate weightage. Direct assessment tools are given more weightage whereas indirect tools have less weightage.
- The consolidated PO attainment is presented in front of PAC (Programme Assessment Committee) and then DAB (Departmental Advisory Board). The suggestions by PAC and DAB are used for overcoming barriers of attainment of POs. During the placement activities, feedback on student performance is taken from the employers.
- Also, in the HR meet, the input is taken from the HRs related to current trends and requirements from the industry. After the analysis of all the feedback, training needs are identified and accordingly training sessions are planned and conducted. Every course teacher prepares micro lesson plan and there is verbal questioning at the end of every lecture.

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

Details of the data collection and analysis required for computation of attainment POs are already presented in Section 2.6.5 in detail.

Process to monitor the degree of PO Attainment –

1. Direct Assessment tools:

During each semester, for each course, sample questions from the papers and assignments are mapped to respective POs through course outcomes. The degree of assessment is evaluated based on academic performance of the students.

For all the tools, the degree of attainment for each course will be evaluated by taking the average passing percentage of the class for the course. This passing percentage is compared with department threshold value to categorize them as High, Medium and Low levels of attainment.

PO attainment is also evaluated by specially designed seminar and project rubrics.

2. Indirect Assessment tools

The enlisted surveys/ feedbacks are collected periodically and their statistical analysis is carried out. This analysis is compared with department threshold value to categorize them as High, Medium and Low levels of attainment. Module coordinator consolidates the attainment of POs from all the courses and prepares the final attainment report. The consolidated PO attainment is presented in front of PAC (Programme Assessment Committee) and then DAB (Departmental Advisory Board).

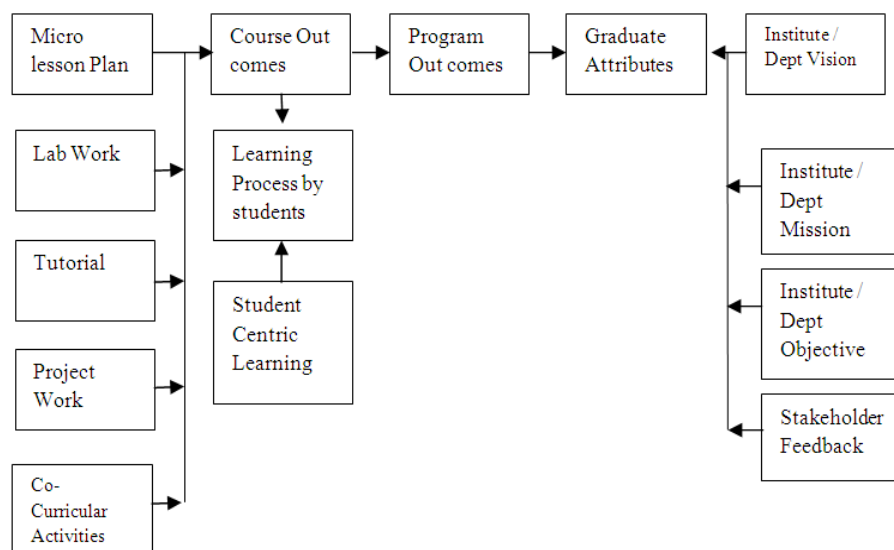


Figure 2.3: Student's Learning Centric Activity

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

Yes, the institution and teachers make use of these outcomes as an indicator for evaluating student performance.

Indicators to Institute: Vision and Mission of the institute are highly correlated with the Programme Educational Objectives (PEOs) of each department, which in turn are mapped to Program outcomes. Therefore, PO and PEO attainment indicate the alignment of academic activities with the vision and mission of the Institute.

Indicators to department: POs are also aligned with the Graduate Attributes that a student is expected to develop on completion of the program. Their attainment or lack of it helps in aligning the activities of the department.

Indicators to teachers: Results of formative and summative assessment methods are the major indicators for evaluating student performance. Results of formative methods are used by the respective course teachers as a feedback on student performance during the semester. Non performing students are identified and proper corrective and preventive actions are planned, so that students can improve their performance in summative exams. e.g., If a student scores less marks in class tests, course teacher prepares them by putting extra efforts by means of corrective action (Extra sessions for theory/practical). Course teacher also plans and executes preventive actions (University paper

solving, Mock Oral and Practical exams) so that non-performers of formative exams can improve their performance.

Results of summative methods are used by the course teacher to improve the performance in the same course for the next batch of students. Non-performers of summative exams are also addressed by taking appropriate action. e.g., If performance of particular course is not satisfactory, course teacher analyses reasons behind it and accordingly plans the contents and sessions for the next batch through the interactions with the course teachers.

As mentioned in 2.6.6, every course coordinator determines contribution of their course in PO attainment in terms of High, Medium and Low category. Low to medium level contribution of course in PO attainments indicates the scope for improvement of student performance. Accordingly, action plan is executed by the course coordinator. This process is carried out in each semester by course coordinator and monitored by Module coordinators.

Final attainment level of any PO is also an indicator for evaluating student performance. Module coordinator consolidates the PO attainment for respective modules which is monitored by PAC. Report of PAC on achievement of POs is presented to DAB which gives suggestions for improvements if required. For example, if attainment of PO'd' (related to research), is low then, DAB suggests methods for improvement, such as encouraging students to carry out extensive literature survey for their BE projects.

Students can also be motivated to publish their work in state/national level conferences. Every course teacher defines course objectives and course outcome and design lesson plan and lecture plan in conformation with the course objectives and adopts innovative teaching methods to achieve the same. Teachers monitor the laboratory skills developed by the students during practical sessions. Students participate in different academic activities i.e. tutorial, mini projects, solution of numerical problems, seminar, oral etc. These activities help to assess proficiency of the students in application of mathematical and engineering concepts, effective communication skills. This process helps in achievement of learning outcomes.

Teacher monitors the laboratory skill developed by students during practical sessions

CRITERION – III

**RESEARCH, CONSULTANCY
AND EXTENSION**

CRITERION III: RESEARCH CONSULTANCY AND EXTENTION**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?**

Department of Mechanical Engineering has a recognized Research Centre by Dr. BAMU, Aurangabad offering Ph.D. Program. The Department is also running three PG programs namely:

- M.E. (Manufacturing Engineering)
- M.E. (Automation)
- M.E. (Heat Power)

The following departments are also running PG courses in various specializations.

1. Civil Engineering department offers PG Program M.E. (Structures)
2. Computer Science and Engineering department offers PG Program M.E. (CSE) and M.E. (Software Engineering)
3. Electronics and Telecommunication Engineering department offers PG Programs M.E. (Embedded Systems) and M.E. (Communication Engineering).
4. Electrical and Electronics Engineering department offers PG Program M.E. (Electrical Drives & Control).

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.

Institute has constituted a Research Committee to address and monitor Research and Development initiatives of faculty and students on the campus. The institute level research committee has been formulated comprising of senior faculty members, HODs and Vice Principals in the chairmanship of the Principal. Table below shows the research committee members and their designations.

Table3.1: Research Committee

Sr. No.	Name	Position	Designation
1	Prof. Dr. N. G. Patil	Chairman	Principal
2	Dr. H. M. Dharmadhakari	Member	Vice Principal (Administration)
3	Dr. D. V. Nehete	Member	Vice Principal (Academics)
4	Dr. P. U. Zine	Coordinator	Associate Prof. (MED)
5	Dr. S. V. Lahane	Member	Head (MED)
6	Dr. Sayyad Ajjij	Member	Head (ETCD)
7	Dr. M. H. Kondekar	Member	Head (MCAD)
8	Prof. Dr. S. S. Ardhapurkar	Member	Professor (ETCD)
9	Dr. M. S. Dixit	Member	Associate Prof.(CED)
10	Dr. Summet Jaiswal	Member	Associate Prof. (CED)
11	Dr. Madhuri Joshi	Member	Assistant Prof. (CSED)

The Committee meets once in a semester. As per requirements, additional meetings are conducted as and when needed. The committee, based on its reviews and discussions held in meetings, have given following recommendations.

1. The staff and students are interested in the research and allied activities should be supported in terms of financial assistance as well as by giving adequate facilities in the form of infrastructure, laboratories, library etc. by the institute.
2. The staff and students interested in upgrading their knowledge by attending the conferences, STTPs, workshops, trainings etc. conducted by various premier institutes at State and National level should be provided with on duty leaves and financial assistance.
3. The institute should develop adequate infrastructural and computing facilities as well as state of the laboratories to promote and imbibe the research culture in the institute and the region at large.
4. The staff of the institute should be trained and developed so that an appropriate competency is developed in the institute which can serve as resources for conducting and organizing the state and national level technical events in the institute.
5. The staff should be encouraged to organize workshops, training

programs and technical events for faculties as well as students.

6. The staff and students on the campus should be motivated and promoted to interact with the industries (through industrial visits, in-plant trainings, taking industry based projects etc.) in order to bridge the gap between academia and industries.
7. The institute should have a policy to promote research and develop intellect properties by having patents by the staff and students. The institute should provide administrative assistance and financial support for filing the patents by staff and students.
8. The institute should have budgetary provisions to support staff and students involved in research projects/activities like attending conferences, workshops, STTPs.

- **Impact of Recommendations of Research Committee:**

Based on various recommendations of the Research Committee, for improving the research activities and developing the research culture at the Institute level, a policy is formulated for financial and other required support for research promotion.

The researchers are financially supported for organizing and attending the research activities like Workshops, Seminars, National and International Conferences, Faculty Development Programs etc. The allocation of funds depends on level of the activity, number of participants and duration of activity. Funds are provided for attending conferences for presenting research work within India and abroad. The registration charges, travelling and other allowances for attending National/International conferences, workshops and STTPs are reimbursed.

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

The institute has taken initiatives and has a policy to promote research environment in the institute. Following steps have been taken.

- **Availability of resources**

For the smooth completion of research work required manpower and other resources are made available as per the need.

- **Adequate infrastructure and human resources**

Various research labs are established in the institute to enhance and assist the researchers in the form of providing state of the art equipment, machineries, and adequate human resources.

- **Reduced teaching load, on duty leaves, special leaves etc. to faculty**

The faculties involved in research are promoted and provided with on duty leaves/special leaves, and travelling and other assistance to attend national and international conferences, exhibitions etc.

- **Support in terms of technology and information needs**

The Institute has improved and updated the library facilities by subscribing e-journals to facilitate research environment and interest amongst the faculties and students.

- **Any other**

Institute encourages development of research facilities and labs in the thrust areas. Such facilities are open beyond normal working hours as per the requirement.

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

- Institute organizes several student centric activities like National Level Technical as well as extra-curricular events for the UG and PG students.
- These events include technical paper presentation competition, software development competition, quizzes, gaming, aptitude tests, model making, and robot competitions to develop scientific temper and research culture in students.
- Institute sponsors the students for attending project and paper presentation competitions.
- Students are also motivated to participate in Institutes/University level competitions like Avishkar, IIT Tech Fest, ROBOCONetc.
- Students are also promoted and monitored/guided to participate and involve in sponsored industry projects like GIZ where the students have provided solutions to the live industrial problems and won awards/prizes for best innovations as well as received appreciations from the industries.
- Students are encouraged to take industrial visits, interact with industry personnel and attempt to solve real life problems so that they get explored to the industrial problems and learn practical approach to address the problems in a scientific way.
- Students are motivated to participate in competitions like SAE BAJA, SUPRA, All Terrain Vehicle competitions, ROBOCONetc.
- The required technical support, workshop facility, laboratories and financial support is also given from the Institute.

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.

- Research activities through the students registered for with the guides available in the institute:

Table 3.2: Research guides and students registered

Sr. No.	Name of the Guide	No. of students registered	Remark
01	Dr. C. L. Gogte	05	Research work in progress
02	Dr. N. G. Patil	04	Research work in progress
03	Dr. Sayyad Ajij	08	Research work in progress

Table 3.3: Research projects completed by institute

Sr. No.	Title of the UG/PG Research Project/RPS/ anyother	Name of the faculty and student/s	Year of completion
01	Design of special purpose machine for removing paper insulation from transformer conductor.	Dr. S.V. Lahane Pratik Pophali (UG student)	2017
02	Investigation of combustion characteristics of a cotton seed Bio diesel fuelled diesel engine	Dr. S.V. Lahane Pankaj Shelke (PG student)	2016
03	Effect of cryogenic processing of age hardenable Al-6061 alloy	Dr. C. L. Gogte A. Bhokariker, R. Shetty (UG Students)	2015
04	Experimental investigation of effect of exhaust gas recirculation and B20 Bio diesel fuel on diesel engine	Dr. S.V. Lahane Nitin Sakhare (PG student)	2015
05	On thermal effect on friction stir weldment of Al 7075-T6	Dr. C. L. Gogte Sandip Patil (Research scholar)	2013
06	Investigations into application of Bio lubrication in machining	Dr. N.G. Patil, Sachin Agrawal (PG student)	2013
07	Comparative study of high speed turning of Inconel 718	Dr. N.G. Patil, Ameer Asem	2013

	in dry condition and by using compressed cold carbon dioxide gas as coolant	(PG student)	
08	Experimental evaluation of the effects of die geometry on surface finish and hardness in aluminium extrusion	Dr. N.G. Patil, G.A. Chaudhari (PG student)	2012

The faculty is involved in active research in the following ways:

- Faculty guides the UG and PG students for seminars, projects and technical papers.
- Faculty is also associated in the industry sponsored projects. Particularly in the Mechanical Engineering Department, most of the final year projects are industry sponsored under the guidance of faculty members.
- Faculty regularly presents research papers in National/ International conferences.
- Faculty regularly publishes research work in National/ International journals.
- Faculty member presents the research papers along with the students in National/ International conferences.
- The faculty is also involved in active collaboration with industries, and premier National and International institutes which help them achieve joint publications and assistance in access to the resources along with knowledge and information sharing.

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.

The details and relevant data with respect to each department are furnished below.

Table 3.4: Workshop/seminar/FDP/Training programs Organized by CSE Department

Sr. No.	Type of Program organized	Date/s		No. of participants	Remark
		From	To		
A.	Workshop				
1	One day workshop on QC Tools	27/03/2016	--	53	Self Sponsored

2	One day workshop on Open-Source Testing Tool Selenium	18/04/2015	--	45	Self Sponsored
3	One day workshop on Big Data & Hadoop	09/08/2014	--	202	Self Sponsored
4	One day workshop on Software testing	15/02/2014	--	70	Self Sponsored
5	One day workshop on Ethical Hacking and Cyber security	21/07/2013	--	197	Self Sponsored
6	One day workshop on Cloud Computing	19/08/2013	--	20	Self Sponsored
7	Hands on session on Python	19/08/2016	22/08/2016	48	Self Sponsored
B. FDPs					
1	One week CSI approved FDP on Advanced Java	02/01/2017	07/01/2017	23	Self Sponsored
2	One week STTP on Big Data and Analytics with R	04/6/2016	09/06/2016	35	Self Sponsored
3	FDP on Python Program	09/08/2015	10/08/2015	08	Self Sponsored
4	Developing application for Android	05/12/2013	06/12/2013	21	Self Sponsored
C. Training Programs					
1	Hands on Session on Python (for students)	07/08/2015	08/08/2015	42	Self Sponsored
1	One day training program on Software Testing	10/10/2015	--	59	Self Sponsored
2	One day training program on Raspberry Pi	10/08/2015	--	100	Self Sponsored
3	Two days training program on Digital Image Processing	02/10/2013	03/10/2013	132	Self Sponsored

Table 3.5: Workshop/seminar/FDP/Training programs Organized by Civil Engineering Department

Sr. No.	Type of Program organized	Date/s		No. of participants	Remark
		From	To		
A.	Workshop				
1	Four days workshop on Limit State Design of Steel Structures	12/07/2016	15/07/2016	96	Sponsored

2	Three days workshop on Introduction to Structural Engineering and OSDAG	02/07/2015	04/07/2015	42	Self sponsored
B.	FDPs:				
1	Two weeks ISTE approved STTP on Introduction to Structural Engineering	30/11/2015	09/01/2016	36	MHRD sponsored
2	Two weeks STTP on Introduction to Environmental Science	02/06/2015	12/06/2015	24	MHRD sponsored

Table 3.6: Workshop/seminar/FDP/Training programs Organized by EEE Department

Sr. No.	Type of Program organized	Date/s		No. of participants	Remark
		From	To		
A.	Workshop				
1	One day workshop: Electromania-1	18/03/2017	---	52	Self sponsored
2	Two days workshop on SCILAB	05/08/2016	07/08/2016	12	Self sponsored
3	One day workshop on Cyber Crime	27/08/2016	---	52	Self sponsored
4	Two days workshop on Aspects of Power Sector	19/09/2016	21/09/2016	117	Self sponsored
5	Oneday workshop on Personality development	09/10/2015	---	106	Self sponsored
6	One day workshop on Testing of Electrical Machines	24/09/2016	---	48	Self sponsored
7	Two days workshop on Arduino	23/09/2015	24/09/2015	44	Self sponsored
B.	Training Programs				
1	One day technical talk on Need of Electronics in Industry	21/02/2017	---	109	Self sponsored
2	One day Technical talk on Transformers	23/01/2017	---	67	Self sponsored
3	One day technical talk on Recent Advances in Renewable Energy	21/01/2017	----	109	Self sponsored
4	One day technical	19/10/2016	----	112	Self

	talk on LED				sponsored
5	One day technical talk on Transformer Protection & Failure Case analysis	06/10/2015	----	141	Self sponsored
6	One day technical talk on Electrical Safety & Protection	06/10/2015	----	141	Self sponsored
7	One day technical talk on Basics of Practical Transformer-Part 2	27/09/2016	----	97	Self sponsored
8	One day technical talk on Energy Audit and Efficient Systems	11/09/2016	----	124	Self sponsored
9	One day technical talk on Basics of Practical Transformer-Part 1	25/08/2016	----	138	Self sponsored
10	One day technical talk on Basics of Switchgear protection & PCB	09/04/2016	----	54	Self sponsored
11	One day technical talk on Techtree	25/01/2016	----	35	Self sponsored
12	One day technical talk on Welding Technologies	01/10/2015	----	24	Self sponsored
13	One day technical talk on Electrical Integrated Network	26/08/2015	----	72	Self sponsored

Table 3.7: Workshop/seminar/FDP/Training programs Organized by ETC Department

Sr. No.	Type of Program organized	Date/s		No. of participants	Remark
		From	To		
A.	Workshop				
1	Two days workshop on C,C++ (For S.E. students)	08/09/2016	09/09/2016	60	Self sponsored
2	One day Hands on workshop on Arduino	17/09/2016	---	22	Self sponsored
3	Two days workshop on Basics of C language	08/09/2016	09/09/2016	70	Self sponsored
4	Two days workshop on Entrepreneurship Development	15/09/2015	16/09/2015	120	Self sponsored

5	One day seminar on Importance of Studies Abroad	21/09/2015	---	60	Self sponsored
6	Three days workshop on MSP 430	26/1/2015	28/1/2015	20	Self sponsored
7	Five days workshop on Front-end VLSI Design	13/10/2014	17/10/2014	20	Self sponsored
8	One day workshop on Personality development and soft skills	16/08/2015	---	100	Self sponsored
9	One day seminar on Basics of VLSI Design	17/04/2015	---	60	Self sponsored
10	Two days workshop on High Frequency Transceiver Amateur Radio	26/10/2014	27/10/2014	70	Self sponsored
11	Five days workshop on Indian Antenna Week	03/05/2013	07/05/2013	50	Partially sponsored
12	Two days workshop on Eureka Entrepreneurship development	02/10/2013	03/10/2013	72	Self sponsored
13	Two days workshop on Product and PCB Designing	28/04/2014	29/04/2014	50	Self sponsored
14	Five days workshop on Advances Antenna Technology	03/06/2013	07/06/2013	110	Self sponsored
15	Three days workshop on Embedded C Program for 8051	27/03/2012	29/03/2012	58	Self sponsored
B. FDPs					
1	One week FDP on Internet of Things	11/07/2016	16/07/2016	37	Self sponsored
2	Two-Week ISTE STTP on CMOS, Mixed Signal and Radio Frequency VLSI Design	30/01/2017	04/02/2017	20	MHRD sponsored
C. Training Programs					
1	Two days Endress+Houser Web base training	15/03/2017	17/03/2017	62	Industry Sponsored
2	One day seminar on Optical Fiber	01/02/2017	---	80	Self sponsored

	Communication				
3	One day seminar on Development of Soft Skills	22/2/2017	---	100	Self sponsored
4	One day seminar on Guidance for AMCAT Exam	03/02/2017	---	200	Self sponsored
5	One day seminar on TCS NG-NEX Contest Registration Guidance Seminar	2/03/2017	---	60	Self sponsored
6	One day seminar on Microsoft course Module	24/01/2017	---	100	Self sponsored
7	One day seminar on Need of Electronics Industry	18/02/2017	---	70	Self sponsored
8	Weekly training at Endress+Houser (WBT)	2014-15	Weekly	72	Industry Sponsored
9	Five days STTP on Emerging trends in Microwave & microstrip devices	07/05/2012	11/05/2012	70	Self sponsored

Table 3.8: Workshop/seminar/FDP/Training programs organized by Mechanical Engineering Department

Sr. No.	Type of Program organized	Date/s		No. of participants	Remark
		From	To		
A.	Workshop				
1	One day workshop on ISRO's FEAST FEA Technology	11/11/2016	---	54	Industry Sponsored
2	Three days workshop AUTOBOTZ	25/09/2016	27/09/2016	120	Self sponsored
3	Two days workshop on Basic Robotics at Saint Lawrence High School, Aurangabad	29/08/2016	30/08/2016	40	Self sponsored
4	Two days workshop on Characterization and Surface Engineering	09/04/2015	10/04/2015	30	Partially Sponsored
5	Two days workshop on Reliable Welds	05/07/2013	06/07/2013	29	Partially Sponsored
6	Two days workshop on Advanced Heat &	07/07/2012	08/07/2012	100	Partially Sponsored

	Cryogenic Techniques				
B.	FDPs				
1	One Day FDP on Simulation Modeling Techniques In Industrial automation, Hydraulics, Pneumatics and Digital CNC	11/02/2017	---	37	Sponsored
2	Two week ISTE sponsored STTP on Fluid Mechanics conducted by IIT Bombay	20/05/2014	30/05/2014	38	MHRD Sponsored
	Two week ISTE sponsored STTP on Engineering Thermodynamics conducted by IIT Bombay	11/12/2012	21/12/2012	26	MHRD Sponsored
C.	Training Programs				
1	One week Training program on Unigraphics UG-NX for industry participants (Bajaj Auto Ltd., Aurangabad)	7/12/2015	15/12/2015	03	Industry Sponsored

Table 3.9: Workshop/seminar/FDP/Training programs organized by MCA Department

Sr. No.	Type of Program organized	Date/s		No. of participants	Remark
		From	To		
A.	Workshop				
1	One day Workshop on Android App Development	12/09/2015	---	68	Sponsored by MHRD
2	Three day Workshop on Hibernate	11/09/2013	13/09/2013	220	Self Sponsored
3	Two days workshop on for Android Application Programming (for Students)	23/02/2013	24/02/2013	66	Sponsored by MHRD
4	Two days workshop on For Education (for faculties)	10/11/ 2012	11/11/2012	47	Sponsored by MHRD

B.	FDPs				
1	One week ISTE approved STTP on Introduction to Design of Algorithms Conducted by IIT Kharagpur	25/05/2015	30/05/2015	32	Sponsored by MHRD
2	Two week ISTE approved STTP on Computer Programming Conducted by IIT Bombay	15/06/2014	26/06/2014	37	Sponsored by MHRD
3	Two week ISTE approved STTP on Database Management Systems Conducted by IIT Bombay	21/05/2013	31/05/2013	75	Sponsored by MHRD
4	Two week ISTE approved STTP on Introduction to Research Methodologies	25/06/2012	04/07/2012	45	Sponsored by MHRD
C.	Conference:				
1	Two days National Conference on Innovations in Computer Applications	23/01/2015	24/01/2015	72	Partially Sponsored

Table 3.10: Workshop/seminar/FDP/Training programs Organized by BSH Department

Sr. No.	Type of Program organized	Date/s		No. of participants	Remark
		From	To		
A.	FDPs				
1	Two week ISTE approved STTP on Engineering Physics	08/12/2015	18/12/2015	26	Sponsored by MHRD

Table 3.11: Workshop/seminar/FDP/Training programs Organized by Architecture Department

Sr. No.	Type of Program organized	Date/s		No. of participants	Remark
		From	To		
A.	Workshop				
1	One day workshop on Ferro cement Technology	04/02/2017	--	60	Partially sponsored

2	Two days workshop on Architectural photography	09/09/2016	10/09/2016	45	Partially sponsored
3	One day Sketching Workshop	30/08/2016	--	38	Self-sponsored
4	One day workshop on Clay Modeling	12/04/2016	--	50	Partially sponsored
5	One day workshop on Communication Skills and Leadership qualities	05/03/2016	--	38	Partially sponsored
6	One day workshop on Software in architecture	24/10/2015	--	60	Partially sponsored
7	One day workshop on Communication Skills and Leadership qualities	24/10/2015	--	60	Partially sponsored
8	One day Scale Proportion and Measurement workshop	28/02/2015	--	35	Partially sponsored
9	One day Sketching Workshop	13/10/2012	--	27	Partially sponsored
10	One day Sketching Workshop	25/09/2012	--	30	Partially sponsored

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

Table 3.12: Faculty and prioritized research area

Sr. No.	Department	Prioritized research area	Expert faculty available
1	Computer Science & Engineering	Text Mining	Ms. B. S. Ahirwadkar
2		Text Mining	Mrs. S. A. Kinariwala
3		Computer Vision	Mr. P. N. Suryawanshi
4		Image Processing	Mr. K. P. Gaikwad
5		Data Mining	Mr. K. Vengatesan
6		Networking	Ms. Sushma Ghode
7		Networking	Ms. Shalini Jain
8		Cloud Computing	Ms. D. D. Dharmadhikari
1	Civil Engineering	Finite Element Methods	Mr. V. R. Upadhye
2		Concrete Technology	Mr. R. L. Shirale
3		Steel Structures, Concrete Technology	Mr. Mohd. Ishtiyaque

4		Urban Transportation and Planning	Dr. Sumit Jaiswal
5		Geotechnical Engineering	Dr. Manish Dixit
1	Electrical & Electronics Engineering	Power Electronics	Mr. S. B. Mahajan
2		VLSI, Signal Processing	Mrs. S.M.Badave
3		Power Electronics	Mr. Kiran Pandav
4		Power Electronics	Ms. R.P. Dahad
5		Electrical Machines	Mr. Sourabh Kohali
6		Power systems	Ms. S.M. Muley
7		Control System	Mr. V.D. Soundarmal
8		Electronics Design	Ms. Rakhi Kharat
9		Electrical Machines	Ms. S.A. Sabnis
10		Illumination Engineering	Ms. G.D. Karanjgaonkar
11		Power Systems	Mr. Imran Ali
1	Electronics & Telecommu- nication Engineering	Robotics and Automation, Wireless Sensor Network, Industrial Automation	Dr.SayyadAjij D.
2		PAPR reduction in Multicarrier Modulation Systems	Mrs.V.M.Kulkarni
3		Bio medical Signal Processing	Dr.S.S.Ardhapurkar
4		PAPR Reduction techniques of OFDM signal	Mr.R.N.Patil
5		Microwave and Antenna	Mrs.M.R.Vargantwar
6		Biomedical Signal Processing	Mrs.S.S.Borde
7		Biomedical Engineering	Mr.T.D.Shep
8		Wireless networking	Mr.M.S.Khan
1	Mechanical Engineering	Metal cutting, WEDM, Composite material Machining	Dr. N.G. Patil
2		Materials Engg., Cryogenic Processing, Metallurgy	Dr. C.L. Gogte
3		CIM, Industrial Engineering	Dr. N.S. Bhalkikar

4		Industrial Engineering	Dr. P.H. Waghodekar
5		Design Engineering	Dr. V.G. Ukadgaonker
6		Heat Power	Prof. K.B. Bokankar
7		Internal Combustion Engine	Dr. H.M. Dharmdhikari
8		Design, Vibration control	Dr. D.V. Nehete
9		Fuels and Combustion	Dr. S.V. Lahane
10		Service Design, Value co-creation	Dr. P.U. Zine
11		CAD-CAM	Mr. S.R. Andhale
12		Micro machining	Dr. V.B. Pansare
13		Manufacturing Engineering	Mr. V.A. Kane
14		Tool Design, Friction Stir Welding	Mr. S.S. Patil
15		Materials Engineering	Mr. K.C. Raipurkar
16		Design Engineering	Mr. S.D. Patil
17		Thermal Engineering	Mr. Dheepa Ravikumar
18		Thermal Engineering	Mr. M.V. Kulkarni
19		CIM	Mr. M.D. Gayakwad
20		Automobile Engineering	Mr. A.V. Gadekar
1	MCA	Image Processing	Dr. Mahendra Kondekar
2		Medical Image Processing & NN	Ms. Shubhashree Savant
3		Text Mining	Ms. Vrushali Bhuyar
4		Cyber Crime and Security, DAA	Mr. Prashant Chintal
5		Software Estimation Techniques	Dr. Vikrant Shaga
6		ERP and Cloud Computing	Mr. Amar Mudiraj
7		Cyber Security	Ms. Rupali Bhakkad
8		Management Information System	Mr. Shaikh Ashed
9		Natural language Processing and Data Mining	Ms. Surabhi Thorat
10		Human Computer Interfacing	Ms. Seema Kute

11		Big Data	Mr. Sayyad Samee
12		Data Mining and Data Warehousing	Mr. Amol Chitte
13		Compiler Design	Ms. Anita Pisote
14		Object oriented Software Estimation	Mr. Lakshmikant Shinde
15		Embedded System	Dr. Madhuri Joshi
1	BSH	Binary & ternary liquid systems investigation	Dr.S.J.Sonkamble
2		Substituted Di-electric material	Ms.S.P.More
3		Lattice and Graph Theory	Mr.A.C.Dabhole
4		Lattice and Graph Theory	Ms.U.R.Borsarkar
5		Photo Voltaic	Ms. M. M. Patil
6		Photo Voltaic	Ms. D. S. Sharma
1	Architecture	Rural Architecture	Prof. S. R. Borawke
2		Urban Heritage	Ms. Kuldeep Kaur Bhatia
3		Energy Conserving Architecture	Ms. Pranita Pranjale
4		Urban-Vernacular Architecture	Ms. Swapna Dhawale
5		Sustainable Architecture	Ms. Dipali Hejiib
6		Urban design	Ms. Leena Aphale

- Faculty members have specialization in cited research areas. Many faculties do their research in association with the local industries.
- Institute has subscription of reputed journals of IEEE, Springer, McGraw Hill access Engineering, J-Gate and ASCE which cater the need of the research. Good reference books, e-journals, and periodicals are available in the Institute library.

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

- Institute periodically arranges STTPs, Workshops, Conferences and Seminars for faculty and industrial participants as well as students for which Researchers, Scientists, Industrial experts are invited to deliver key note addresses and talks.
- Institute also organizes many State and National level Co-curricular activities for UG/PG students.

- Institute has been recognized as Remote centre by IIT Bombay, Mumbai, IIT Kharagpur which gives opportunity to faculties from various institutes of the region to interact with researchers from IITs.
- MIT has a tradition of inviting eminent personalities to interact with faculty, students and industrial invitees to update their information, knowledge and industrial practices involving recent technological developments.
- **Details of some of the eminent personalities/industry experts who visited the campus and interacted with faculties, students and management are given below.**

Table 3.13: Eminent personalities who visited the institute

Sr. No.	Name of Researcher/ Industry Expert	Designation & Affiliation	Date of visit
1	Dr. Ananda Bose	Director, Bose Telecom, Kolkata	04/5 2013
2	Dr. B.A. Chopade	Hon. Vice Chancellor, Dr. B.A.M.U, Aurangabad	1/3/2016
3	Dr. Dewaikar D. M.	Professor, IIT Bombay	27/08/2011
5	Dr. G. D. Khedekar	Director, Paul Hebert Biodiversity Studies, Dr. B.A.M.U., Aurangabad	1/3/2016
6	Dr. M. S. Kulkarni	Professor IIT, Bombay	27/06/2016
7	Dr. Milind Sohoni	CSRE, IIT Bombay	23/09/2016
8	Dr. Narshinha P. Argade	Director, NCL- CSIR, Pune	6/1/2015
9	Dr. Nitin Zope	Executive Engineer, Maharashtra State Electricity Transmission Co. Ltd.	9/4/2016
11	Dr. Pierpolo Carlone	Professor, Dept. Industrial Engineering, Salerone University, Italy.	17/10/2016
12	Dr. R.K.Mishra	Professor, Berhampur University Orisa	4/5/2013
13	Dr. Ramesh Garg	Professor, IIT Kharagpur	4/5/2013
14	Dr. S. K. Apte	Head, Bio Medical group, B. A. R. C. Mumbai	10/1/2015
15	Dr. S. Srinivas Rao	Professor, NIT, Warangal, Telangana	5/3/2016
16	Dr. Sidhartha Ghosh	Associate Prof. IIT, Bombay	12/7/2015
17	Dr. Surendra Pal	Distinguished Scientist, ISRO, Bangalore	4/5/2013
18	Dr. Suresh Mehrotra	Srinivasa Ramanujan Geospatial Chair Prof., Department of CS & IT, Dr. BAMU, Aurangabad	16/09/2016

19	Dr. T. Sudarshan	President & CEO Material modification Inc., Fair flex, Virginia	10/4/2012
20	Dr. V. M. Pandhripande	Hon. Vice Chancellor, Dr. BAMU, Aurangabad	8/5/2012
21	Dr. Vasant Matsagar	Professor, IIT Delhi	10/8/2013
22	Dr. Vishal Sardeshpande	CSRE, IIT Bombay	3/4/2016
23	Mathais Altendorf	Global Managing Director, Member of Executive Board, Endress-Houser, Melberg	18/07/2012
24	Mr. Herald Hertweck	Director Realisation, Endress Houser, GmbH+Co.KG	18/07/12
25	Mr. Klaus Endress	C.E.O., Endress +Houser Global	9/2/2012
26	Mr. Malcolm Warren	Director, International Sales MI Technologies USA	4/5/2013
27	Mr. R. N. Maske	Chief Engineer , Maharashtra State Electricity Transmission Co. Ltd (MSTCL)	3/10/2015
28	Mr. Raj Tilak	Scientist VSSC, ISRO	11/11/2016
29	Mr. Raman Ajgaonkar	Director, Keshav Metals Private Limited, Aurangabad	
30	Mr. S. S. Todkar	Director, S. S. Control Pvt. Ltd, Waluj, Aurangabad	8/26/2015
31	Mr. Sanjay Chaudhari	Director, Electronics Study Center, Pune	3/26/2016
32	Mrs. Anjali Dahnorkar	Deputy Collector, Aurangabad	9/3/2017
33	Shri. Madhavraoji Chitale	Ex. Secretary, WRD, Govt. of Maharashtra	13/03/2014
34	Shri. Ram Bhogle	Managing Director, Nirlep Appliances, Aurangabad	18/02/2011

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?

Institute grants leaves for the faculty members for completion of research/PG dissertation work and Ph.D. work.

Program wise details of faculties who have availed this facility for completing PG/Ph. D. during service:

Table 3.14: Faculty completing PG/Ph.D program

Sr. No.	Department	Faculty pursuing PG	Faculty Completed PG	Faculty Pursuing Ph.D.	Faculty Completed Ph.D.
1	Civil Engg.	--	02	04	--

2	CSE	--	--	08	--
3	EEE	--	01	01	--
4	ETC	--	13	07	--
5	Mechanical	--	03	04	06
6	MCA	--	--	01	01
7	BSH	--	--	05	--

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 organizes events like Open House, Suryamitra, Project exhibition, and Research poster competitions etc. and invites the school students, parents and common people on the institute campus.
- Students from institute visit the schools/colleges to exhibit/demonstrate the information/knowledge to the society.
- Students use professional society platforms (ASME, IEEE, CSI, and SAE) to explore the technology development to society.

A few events/activities which are taken for this purpose include:

Table 3.15: Activity/events by institute in social community

Sr. No.	Name of the event/Activity/Program	Details of activity/Program and Date & Duration	No. of Participants
1	Visit at the Bhagwanbaba Primary School and Yogeshwari Balak ashram (Orphanage) at Beed Bypass, Aurangabad	One day drawing workshop for school students drawing skill development and a competition in which winners as well as participants were gifted drawing stationary and sweets. Duration: 13/09/2014	30
2	Suryamitra	Activity involved demonstration and Training to the participants from society with varying educational background (HSC, ITI, Diploma) for 3 months. It includes skill development and hands on training for Solar installation and service providing with aim to develop photo voltaic	30

		technicians. Duration: March 2016 to May 2016	
3	Open House 2016	Exhibition of the institute capabilities in terms of infrastructural and computational resources, research facilities and knowledge generated, in order to share information, knowledge, technology etc. to the society for improving awareness about the technology, career opportunities and facility centers available in the region. Duration: 19/06/2016 to 21/06/2016	1127
4	Suryamitra	Demonstration and Training of the participants from society with varying educational background (HSC, ITI, Diploma) for 3 months. It includes skill development and hands on training for Solar installation and service providing with aim to develop photo voltaic technicians. Duration: January 2017 to March 2017	30
5	Basic Robotics Workshop	The 2 day workshop was conducted at Saint Lawrence High School, Aurangabad. The school students were given demonstration and training in making autonomous robots using Arduino Microcontroller. The objective was to share knowledge and competency of developing mechanisms and automating them by selecting proper sensors, and other electro-mechanical components. Duration: 29/08/2016 to 30/08/2016	44
6	INSPIRE Camp 2016	Institute hosted the Science Camp "INSPIRE" funded by Department of science and Technology, Government of India in academic year 2016-17. The objective of the camp was to create awareness and motivate the students towards science and technology. The students from Junior colleges with	

		science background have been selected (above 93 % marks in SSC level) for the camps. Numbers of eminent scientists, researchers and renowned academicians have delivered the concepts and recent trends in science, research and technology to the students. Duration: 1 st to 5 th March, 2016	
7	AUTOBOTZ 2016	In three days AUTOBOTZ 2016 workshop, the students of different colleges (polytechnic and engineering) were trained in making autonomous robots using Arduino Microcontroller. The objective was to share knowledge and competency of developing mechanisms and automating them by selecting proper electro-mechanical components and their functioning. Duration: 25/09/2016 to 27/09/2016	122
8	INSPIRE Camp 2015	Institute hosted the Science Camp “INSPIRE” funded by Department of Science and Technology, Government of India in academic year 2015-16. The objective of the camp was to create awareness and motivate the students towards science and technology. The students from Junior colleges with science background have been selected (above 93 % marks in SSC level) for the camps. Numbers of eminent scientists, researchers and renowned academicians have delivered the concepts and recent trends in science, research and technology. Duration: 1 st to 6 th January 2015.	
9	PROBEX-2015	It's a National level project exhibition cum competition for all the students with engineering background. The objective of the event was to provide platform for students to exhibit their creativity, innovation and interact with industry, academics with society.	266

		Duration: 18 th & 19 th July, 2015	
10	TECHTRONICS 2017	A state level event for diploma students involved technical competitions like project competition, presentation, quiz competition, circuit simulation etc. The objective was to exhibit their creativity, innovation and interact with industry, academic with society. Duration: 25 th & 26 th February, 2017	180
11	Promotion of Science in students	An activity initiated by a faculty member Mr. V.S.Damdhar from Mech. Engineering Department has an objective of creating scientific and technological awareness among the students. The activity involves introduction of the science concepts and its demonstration to the school students. The activity helps students to execute innovative ideas practically. Duration: Ongoing activity since August 2015.	200
12	Lecture talk along with hands on session of Electronics Learning through projects	The activity was organized for 9 th and 10 th Students from various schools at Varahmihir Science and Center, Sharnapur Phata, Aurangabad. The objective was to encourage and make aware the school students about electronics engineering learning through projects. Duration: 4 th March, 2016	40
13	Lecture talk on Bio-mimicry	The talk was arranged particularly for the Final year ETC students at JNEC, Aurangabad. The objective was to make students aware about the mimicry of nature and understand the potential applications of the mimicry. Duration: 24 th Sept 2016	42

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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.

- Institute has a policy to allocate a separate budget for R & D activities. Under this the specific requirements in terms of equipment, software, infrastructural requirements and computing facilities are catered.
- The faculty members are encouraged for presenting and publishing paper in conferences as well as they are deputed for visiting premier institutes and universities, exhibitions, taking trainings etc. The details of year wise expenditure on these components are shown in Table below.

Details of amount spent on faculty publications and training is as below:

Table 3.16: Year wise expenditure in R&D activities

Sr. No.	Details of expenditure	Year	Amount in Rs.
1	Research outreach*, Research equipment purchase, Faculty development, Publications and Training	15-16	23,37,700
2	Research outreach*, Research equipment purchase#, Faculty development, Publications and Training	16-17	16,70,556
Total Rs.			40,08,256

* includes the faculty visits to premier institutes in India and abroad as well as institute membership and representation in national level events and exhibitions like IMTEX, DEFEXPO, AUTO EXPO etc.

Includes advance paid to supplier for advanced manufacturing lab.

- For the promotion of research, institute has a policy to depute faculty and students for trainings, conferences, workshops, faculty development programs etc.
- For the enhancement of research, institute has provided very good library facility with excellent resources such as National and International journals (in hard and soft), E-Journals, Magazines and Periodicals.
- The institute has subscribed membership and access to the reputed journals and other resources from publication houses like, ASCE, IEEE, Springer, McGraw Hill access Engineering, J-Gate etc.
- Institute also have remote access to the Central library of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad which

includes access to publishers like science direct, Springer journals and books, Taylor and Francis, EBSCO, Cambridge University Press, Emerald, Oxford, Springer Link, Scopus, Wiley online library etc.

- These resources are extensively used by faculty members and students in their research work.
- Details of expenditure incurred on the library resources are given below.

Purchase of PG Reference Books, Print and access to E- journals:

Table 3.17: Expenditure on PG books

Sr. No.	Academic Year	Expenditure for PG Books (Rs.)	Expenditure on print Journals (Rs.)	Expenditure on E- Journals (Rs.)	Total in Rs.
Existing PG Books expenditure prior to the academic year 11-12 (Rs.)					29,47,115.00
1	2012-13	1,12,060.00	--	8,54,549.80	9,66,609.80
2	2013-14	1,19,472.00	--	7,50,000	8,69,472.00
3	2014-15	1,93,606.00	3,186.00	9,08,698.00	11,05,490.00
4	2015-16	2,48,364.00	1,12,739.00	9,15,698.00	12,76,801.00
Total in Rs.					71,65,487.80

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?

- Institute provides financial assistance to a few research projects in which only deserving cases based on merit of the project are provided this financial assistance.
- For example, a PhD research work involving experimental analysis by one of the civil engineering department faculties has received an initial financial assistance of Rs. 60,000/- for purchase of equipments.
- The financial assistance is also provided to selected UG/PG students' projects through which the students represent the institute at State or National level events/competitions.

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

- Institute also provides financial support to the students for travelling and boarding to participate in the different events at State and National level.
- Students are allowed to use institute infrastructure and resources during and after working hours for doing their projects.

- Institute organizes national level Technical events (like Technoblitz, eExploria, AUTOBOTZ) and provides funds for prizes, certificates and other expenses.
- The students participating in interdisciplinary projects like SAE BAJA and SUPRA, National level vehicle design events, the institute provides financial assistance. It is mainly used by students for registration and other initial expenses to begin with their project. Later, the students also visits and attracts the industry sponsors to collect sponsorship to complete the project and participate in the event.
- In the academic year 2014-15, the institute has provided the financial support of Rs. 1,00,000/- to the SAE BAJA team.
- In the academic year 2015-16, the institute has provided the financial support of Rs. 1,50,000/- to the SAE BAJA team. The team SUPRA was also supported by the institute with an amount of Rs. 66,000/- for initiating the project activities.
- Another regular activity where the students from various departments join together as a team to work on a interdisciplinary project involving designing and developing a robot (mechanisms) to participate in a national level event ROBOCON. Every year, the institute provides infrastructural facilities, laboratories and financial assistance to the ROBOCON team to begin with their development activities. At later stage in project, the students also get success to attract the industry sponsors to complete the project.
- In the current academic year 2016-17, the ROBOCON team has received a financial assistance of Rs. 30,000/- from the institute. The team also has been sponsored by an industry Grind Master Machines Private limited, Aurangabad with an amount of Rs. 1,50,000/-.

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.

Taking into consideration the requirements, facilities and expertise available, the research committee identifies the interdisciplinary areas of research. The HODs and the other research committee members periodically interact to further bring clarity and focus on the ideas of interdisciplinary projects. The students representing institute through participation in the various national level events and competitions like ROBOCON, SAE BAJA, SUPRA also trigger the interdisciplinary areas of research.

The ROBOCON team of the institute has participation from Mechanical,

Electronics and telecommunication, Electrical as well as CSE students. The team takes interdisciplinary projects for development.

In addition, the students from Mechanical and Electrical Engineering department along with faculty (Energy Cell Coordinator) joint together to take interdisciplinary project on Energy Audit and Management. This group has taken several energy audit projects and consultancy works.

The main challenges which emerge while doing such interdisciplinary projects include:

1. The difficulty in identifying the research problem and its nature
2. The development of required infrastructure and research facilities
3. Identifying the scope of each discipline.

Every year, the students from different departments including Mechanical Engineering, Electronics and Telecommunication Engineering, Electrical Engineering and Computer Science and Engineering undertake projects to make robots to compete in the national level ROBO competition 'ROBOCON'. The premier institutes like IITs, NITs and other regional engineering institutes do participate in this national level event. The institute secured good ranking (9th at the India level) in the academic year 2015-16.

There are other competitions in which inter department students jointly design/develop the projects (SAE BAJA, SUPRA vehicles) to represent the institute in National level events. In such events the institute team is funded by the institute as well as the team takes efforts to attract the local industries for the sponsorships.

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

- Measures are taken for making faculty and students aware of the available research facilities.
- The research facilities in terms of infrastructure, laboratories, software and hardware, computing facilities etc. have been identified and their locations and time schedules are notified to the faculty and students.
- Facilities are made available to the staff and students during and beyond the working hours. For example, the students develop BAJA vehicle working late in the institute workshop.
- Faculties and students are allowed to conduct experiments of research work/projects in the Material and Metallurgy Lab.as well as other research labs in the institute.

- Other infrastructural facilities are also made available to the students doing interdisciplinary projects. For example, the ROBO centre is being used by ROBOCON team for extended hours during and beyond the institute working hours.
- Automation Lab with state of the art equipments, hardware and software as well as computing facilities with an investment of Rs. 32,03,900/- is used by faculty and students for doing their research projects.
- Some of UG/PG projects done by students in the automation lab are:
 1. Monitoring system for finishing line using PLC & SCADA. (2015-16: Mugdal Vivek and Ukey Tushar)
 2. Home Automation. (2015-16: Lahane Atul, More Kiran)
 3. PLC based beverage filling system. (2015-16: Tiple Rohan, Thakur Lakhan and Jadhao Virendra)
 4. Automated Electro-Pneumatic Pick and Place System. (2015-16: Pyarlawar Balaji, Aher Vinod and Naik Shivam)
 5. Automated water management of MIT campus using PLC. (2015-16: Kayande Uday, Nagwanshi Sagar and Patil Predeep)
 6. Main shaft assembly line POKAYOKE Automation and SCADA monitoring. (2016-17: Varma Pranay)
 7. Automated multilevel car parking. (2016-17: Kamble Rajanand, Pournima Udawant and Jadhav Swati)
- Apart from this, some professional training courses like Basic Automation, S7-1200, S7-300, SCADA etc. are conducted under MIT-Siemens Centre of Excellence for Automation & Mechatronics using automation lab.
- Also, the institute faculty provides consultancy for Industries in the Aurangabad and nearby region. Some of the industries to whom the consultancy services have been provided include Logical Automation, Enman Automation, Bagala Industries, Marathwada Auto Cluster, Sanjeev Auto etc.
- Some of UG/PG projects done/in progress by students in the research lab 1 and 2 in the EEE department are:
 1. Modified cascaded MLI with level shifting SPWM Technique Using minimum number of switches.
 2. Non isolated quadruple output hybrid coupled converter configurations for high step-up renewable energy applications is ongoing project by UG students.

3. Electromania is a technical program organized by the students of EEE department for the technical students which involve use of the research laboratories for circuit design, circuit modeling, implementation and its testing etc.

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.

The institute has received grants under few schemes from AICTE, as well as from the industries in the Aurangabad and nearby region. It includes:

1. Mechanical Engineering Department of the institute received a grant of Rs. 6.0 Lakhs from AICTE under MODROBs scheme to develop/modernize the Computer Integrated Manufacturing (CIM) laboratory.
2. Institute ROBOCON team has received a grant of Rs. 2.0 Lakhs for developing the Robot for disc throwing application in the academic year 2016-17 from renowned industry of the region 'Grind Master Machines Private Limited, Aurangabad'.
3. The SAE BAJA team of the institute have also received grant of Rs. 70,000/- for their research project.
4. In the academic year 2014-15, the SAE BAJA team of the institute has received a grant of Rs. 2,10,000/- from various industries for developing the BAJA vehicle and completes their research project to compete in the National event. The sponsoring industries include Badve Engineering Ltd., Aurangabad, Sanya Motors Pvt. Ltd., Aurangabad, and other three industries from Aurangabad MIDC region.
5. In the academic year 2014-15, the SUPRA team of the institute has received a grant of Rs. 3,06,000/- from various industries for developing the SUPRA vehicle to complete their project and compete in the National event. Out of this total funding, the team has received a title sponsorship of Rs. 2,86,000/- from Grind Master Machines Private Limited, Aurangabad.
6. In the academic year 2015-16, the SAE BAJA team of the institute has received a total funding of Rs. 1,48,000/- from various industries for developing the BAJA vehicle and competes in the National event.

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.

- Institute has a policy to encourage and promote the faculty to write research proposals and apply for funding from various government agencies for carrying out the research projects. The faculty is also encouraged to interact with industries in order to have collaborations and joint research activities by attracting industries in the nearby region to provide financial assistance.
- Institute provides leaves and other related facilities for the faculty to visit and interact with researchers, industry personnel, research laboratories, technical exhibitions like IMTEX, AUTO EXPO, MAHA EXPO held at National and State level. The faculty is also encouraged to visit and interact with experts in industry meets and exhibitions in the Marathwada Auto Cluster in the Aurangabad industrial region.
- The details of support provided to faculty and students in securing research fund are as follows:

Table 3.18: Support for faculty and students in securing research funds

Nature of Project	Duration From-To	Title of the Project	Name of Funding Agency	Total Grant		Total Grant Received
				Sanc-tioned	Received	
Minor Project	--	--	--	--	--	--
Major Project	--	--	--	--	--	--
Interdisciplinary Project	2016-17	Robot development for disc throwing application	Grind Master Machines Private Limited, Aurangabad	150,000	150,000	150,000
Industry Project	2014-15	Development of Heat treatment for AlSi10Mg alloy for oil sump in auto industry	OMR Bagala auto Systems India Limited, Chitegaon, Paithan	50,000	50,000	50,000
	2016to 2018	Development of MWCNT composite for refinery blade casting	KCTech Institute, South Korea, Parasson Industries, Chikhalthana,	5,00,000	Material worth 20,000 from KC Tech	20,000

			Aurangabad		Institute	
Student Research Project	2016-17	Design of SPM for removing paper insulation from transformer conductor	GIZ, MSME	50,000	50,000	50,000
Any other (Specify)	--	--	--	--	--	--
		Total grant in Rs.	750,000	2,70,000	480,000	

- Moreover, institute has received funding under MODROBs scheme for modernizing the CIM laboratory in Mechanical Engineering department in the AY 2011-12 from AICTE. As, the requirement of the amount for the modernization of laboratory was more than the fund received from AICTE, the remaining amount (difference of amount from the budgeted amount and the fund actually received) has been spent by the institute to complete the modernization of lab.
- In the current academic year 2016-17, the institute has encouraged the faculty members to write proposals for Research projects, Faculty development Programs (FDPs), STTPs, workshops etc. as a result of which total eleven proposals were submitted under AQIS to the AICTE.
- Moreover, every year the institute provides financial assistance to the UG students' ROBOCON team, SAE BAJA team and SUPRA team to begin with their development activities. In the academic year 2015-16, the ROBOCON team has received a financial assistance of Rs. 1,50,000 from the institute. The SAE BAJA team has received Rs. 1,50,000/- from the Institute. The SUPRA team also given financial assistance of Rs. 66,000/-.
- Based on the initial funding, these teams also have been sponsored by various industries in the region.
- In the current academic year 2016-17, the ROBOCON team has received financial assistance of Rs. 30,000 from the institute. The team also have been sponsored by an industry Grind Master Machines Private limited, Aurangabad with an amount of Rs 2 Lakhs.

3.3 Research Facilities

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

- Institute has established research labs in various departments which are availed by the faculty and students for doing research projects.
- These labs have state of the art equipments, software and hardware as well as computing facilities.
- Some of the main laboratories which are preferably used for research studies by UG/PG students, faculty and research scholars include:
 1. Metallurgy & Materials Laboratory (MED)
 2. CIM Lab (MED)
 3. Research Lab I (MED)
 4. Research Lab II (MED)
 5. Automation Lab (EEE Dept.)
 6. Research Lab I (EEE. Dept.)
 7. Research Lab II (EEE. Dept.)
 8. EMB lab (ETC Dept.)
 9. Structural dynamics and earthquake engineering Lab (Civil Department)

1. Metallurgy & Materials Laboratory (MED):

Table 3.19: Metallurgy & Materials Laboratory investment

Sr. No.	Particulars (Major equipments only)	Quantity	Cost	Utilization
1	Microscope	1	4,500	Used by UG/PG students, research scholars and faculty
2	Image Analyzer	1	4,22,438	
3	Cold Mounting Die Set	1	9,846	
Total in Rs.			4,36,784	

2. CIM Lab (MED):

Table 3.20: CIM Lab equipment and investment

Sr. No.	Particulars (Major equipments only)	Quantity	Cost	Utilization
1	Milling Machine	1	8,50,000	Used by UG/PG students, research scholars and faculty
2	CNC Lathe	1	5,00,000	
Total in Rs.			13,50,000	

3. Research Lab I (MED):

Table 3.21: Research Lab I equipment and investment

Sr. No.	Particulars (Major equipments only)	Quantity	Cost	Utilization
1	Single Spindle Polishing Machine	1	6,300	Used by UG/PG students, research scholars and faculty
2	Pin On Disc Wear testing Machine	1	3,00,000	
3	Electrical Conductivity Meter	1	80,269	
4	Analytical high precision measuring digital balance	1	68,000	
Total in Rs.			4,54,569	

4. Research Lab II (MED):

Table 3.22: Research Lab II equipment and investment

Sr. No.	Particulars (Major equipments only)	Quantity	Cost	Utilization
1	CAD Workstation	15	10,74,519	Used by UG/PG students, research scholars and faculty
2	Computer	01	21,250	
Total in Rs.			10,95,769	

5. Automation Lab (EEE Department):

Table 3.23: Automation Lab equipment and investment

Sr. No.	Particulars	Quantity	Cost	Utilization
1	S-7 1200 Testkit (Training Kit)	6	567,031	Used by UG/PG students, research scholars and faculty
2	PCS-7 Training Kit (Training Kit)	1	1,324,585	
3	Computers	11	259875	
4	S7-300 Training kit	1	408,262	
5	Software		644,147	
Total in Rs.			32,03,900	

6. Research Lab I- Hardware Lab (EEE Department):

Table 3.24: Research lab I- Hardware Lab equipment and investment

Sr. No.	Particulars	Quantity	Cost	Utilization
1	Mixed Signal Oscilloscope	1	99041	Used by UG/PG students, research scholars and faculty
2	Dual Power Supply	1	35368	
3	Digital Multimeter	1	2369	
4	Digital Clamp Meter	1	1125	
Total in Rs.			1,37,903	

7. Research Lab II- SIMULATION LAB (EEE Department):

Table 3.25: Research lab II-Simulation lab equipment and investment

Sr. No.	Particulars	Quantity	Cost	Utilization
1	Computer (Windows)	5	172518	Used by UG/PG students, research scholars and faculty
2	Computer (UBUNTU)	5	143908	
3	Zed board with Vivado Voucher	2	90000	
4	Solar Pro (Solar Simulator Hardware 600W), (Simulator Software)	1	181125	
Total in Rs.			5,87,551	

8. Structure dynamics and earthquake engineering Lab (Civil Department)

Table 3.26: SDEE lab equipment and investment

Sr. No.	Particulars (Major equipments only)	Quantity	Cost	Utilization
1	Horizontal Shake Table	1	142850	Used by UG/PG students, research scholars and faculty
2	Vertical Shake Table	1	156800	
3	Accelerometer	4	131200	
4	Signal Conditioning Amplifier	1	98200	
5	Data acquisition system	1	188600	
6	Oscilloscope	1	205800	
7	Vibration Absorber	1	45600	
8	Longitudinal Vibration	1	26800	
9	Viscous Damping Set-up	1	22000	
10	Forced Vibration Set-up	1	38500	
Total in Rs.			10,56,350	

- Apart from the above facilities, institute has a rich library with 15357 number of book titles (actual 53, 204 books) on the shelves. Moreover, institute also provides access to select IEEE, ISCE, and

other reputed journals in digital form.

- The library has more than 750 video lectures under NPTEL prepared by various IITs.

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

- The institute has separate budget provision for R & D initiatives and provides required funds to upgrade and create infrastructural facilities required for research.
- Institute is in process of establishing new 'Advanced Manufacturing Lab' in which a Robotic machining facility is proposed. This lab is being established in coordination with an Industry 'Grind Master Machines Private limited, Aurangabad is budgeted with an amount of Rs. 14 Lakhs.
- Institute has submitted a total of eleven proposals under AICTE Quality Improvement System/Scheme (AQIS) under which some RPS and MODROBs proposals are submitted exclusively for creating infrastructural facilities for the research.
- UG and PG students of the institute are encouraged to undertake industry based problems for UG projects and PG dissertation work respectively under the guidance of expert faculty of various departments in the institute.
- Faculty is being encouraged to write research project proposals for various funding agencies like AICTE, DST, CSIR etc.
- The faculty is also encouraged to undertake industrial consultancy and research assignments involving research work.

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

The institute has taken efforts to develop interactions with industries and premier research institutes in India and outside India. Table 3.27 shows the assistance in financial or any other forms received by the institute.

Table 3.27: Grant from funding agencies for research facility creation

Sr. No.	Particular of Grant/Assistance	Funding Agency	Amount	Year	Remark
1	Aakash Server purchasing	IIT Bombay, Mumbai	100,000	2012-13	Facility development

2	Technical infra-structure development	IIT Bombay, Mumbai	280,000	2012-13	Remote centre facility development
3	Aakash Tablet (246 Nos.)	IIT Bombay, Mumbai	811,800	2012-13	To conduct trainings using Aakash tablets
4	Material for research project	KC Tech Institute, South Korea	MWCNT worth Rs. 20,000	2014-15	Multi walled Carbon Nano Tubes (MWCNT)
5	Material for research project	Singapore Institute of Manufacturing Technology, Singapore	AlSi10Mg alloy worth Rs. 10,000	2014-15	The material is used for a research project with an industry
6	Modernization of CIM Lab	AICTE New Delhi	600,000	2010-11	Fund for purchasing the new equipments in CIM Lab

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

- Institute encourages UG and PG students as well as research scholars to visit different labs for the research purpose by providing leaves and other facilities.

The prominent labs and institutes visited by students, research scholars and faculties include:

1. IIT Bombay
2. IIT, Delhi
3. VNIT, Nagpur
4. Dr. B.A.T.U., Lonere
5. COEP, Pune
6. Shivaji University, Kolhapur
7. GEC, Jalgaon
8. Dr. BAMU, Aurangabad
9. Greaves Cotton Ltd., Aurangabad
10. Set On Site Electricals Pvt. Ltd., Aurangabad
11. Mahalaxmi Rolling Mills, Jalna
12. Technograph Consultancy Services, Aurangabad

Apart from this:

- Institute also periodically arranges industrial visits for students and faculty in the industries and nearby Aurangabad as well as in industrial areas like Bangalore, Pune, Nasik, Delhi, and other parts of the country.
- Deputes faculty for Ph.D. at IIT's, NITs and other renowned institutes.
- Sponsors students for participating in technical competitions, exhibitions.

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

Institute has a central library with 15,357 no. of titles (actual 53,204 books) on the shelves. Apart from the central library, a separate library at a small scale is available at department level for additional reference. There are separate libraries as 'department libraries' one in each department. These libraries are available to researchers.

- Library has adequate number of references from National and International journals.
- Institute has membership of IEEE, CSI, and remote access to Central Library of Dr. BAMU, Aurangabad etc.
- Institute library provides free access to e-journals of IEEE, Springer, McGraw Hill access Engineering, J-Gate and ASCE to the students.

Resources available with the library are as below:

Table 3.28: Expenditure in library in PG books

Sr. No.	Academic Year	No. of Books available for PG students in respective year						Total
		ME Programs (MED)	ME Programs (CED)	ME Programs (ETC)	ME Program (EEE)	ME Program (CSE)	MCA	
1	Till 2012	425	82	318		260	799	1884
2	2012-13	425	82	320		266	1271	2364
3	2013-14	485	101	367		284	1484	2721
4	2014-15	521	188	617		438	1705	3469
5	2015-16	640	302	686		529	1739	3896
6	2016-17	640	302	686		529	1739	3896

Table 3.29: Expenditure in library in print/ e-journals

Sr. No.	Academic Year	No. of print International / National Journals	No. of E- Journals (No. of Packages)	No. of Magazines & Periodicals	Cost
1	2012-13	59	• IEEE – 145 • Springer - 49 • ASCE – 34 • McGraw Hill – 363 • J-Gate - 6500	53	854549
2	2013-14	38	• IEEE – 145 • Springer - 49 • ASCE – 34 • McGraw Hill – 363 • J-Gate - 6500	38	750000

3	2014-15	48	• IEEE – 145 • Springer - 49 • ASCE – 34 • McGraw Hill – 363 • J-Gate –7035	36	908698
4	2015-16	71	• IEEE – 162 • Springer - 49 • ASCE – 35 • McGraw Hill – 363 • J-Gate –7035 • Remote access to Central Library of Dr. B.A.M.U. Aurangabad	39	915698
5	2016-17	39	• IEEE – 169 • Springer - 49 • ASCE – 35 • McGraw Hill – 363 • J-Gate –7035 • Remote access to Central Library of Dr. B.A.M.U. Aurangabad	28	1027219

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.

- Institute has established a state of the art laboratory in the Electrical and Electronics Engineering Department in association with Siemens Automation industry. The ‘Automation’ laboratory has in investment of Rs.32,03,900 in terms of equipments, hardware and software.
- Institute is in process of establishing new ‘Advanced Manufacturing Laboratory’ in which a Robotic machining facility is proposed. This lab is being established in collaboration with ‘Grind Master Machines Private limited, Aurangabad’, a renowned Industry and has a budgetary provision of Rs. 14 Lakhs in the academic year 2016-17.

3.4 Research Publications and Awards

3.4.1 Highlight the major research achievements of the staff and students in terms of Patents obtained and filed (process and product).Original research contributing to product improvement Research studies or surveys benefiting the community or improving the services. Research inputs contributing to new initiatives and social development.

Table 3.30: Research achievement of staff

Sr. no	Details of Research Achievements of staff
1	Prof. Dr. N. G. PATIL: Reviewer of the following Peer Reviewed International Journals: 1. International Journal of Machining and Machinability of Materials, InderScience, U.K. 2. International Journal of Advanced Manufacturing Technology, Springer, USA. 3. Journal of Engineering Manufacture, Springer, USA 4. Materials and Manufacturing Processes, Taylor & Francis. 5. Journal of Composite Materials, Sage Publishers, UK. 6. Journal of Machining and Forming Technology, Nova Science, USA. 7. Journal of Manufacturing Research, NOVA Science, USA. 8. ASME 2007 International Manufacturing Science and Engineering Conference, Atlanta, GA, USA.
2	Prof.Dr. Subhash V. Lahane: Editorial Board member of • International Journal of Sustainable and Green Energy USA • Journal of Mechanical Design and Vibration • Journal of Recent Trends in Fluid Mechanics Reviewer of Peer Reviewed Journals: 1. Fuel (Elsevier) 2. Applied Thermal Engineering (Elsevier) 3. Internal Combustion Engine Division (ICED) 4. American Society of Mechanical Engineering (ASME) 5. Society of Automotive Engineer (SAE) 6. International Journal of Mechanical Design and Vibration 7. Cogent Engineering (UK) in partnership with Taylor & Francis 8. American Journal of Vehicle Design 9. International Journal of Engineering Research and Technology (IJERTREW578)
3	Prof. Dr. P.H.Waghodekar: Was invited as an Expert to address UGC delegates from Bangladesh on 16/10/2015 sponsored by MTG Global, Bangalore, 2015.
4	Ms. U.R.Borsarkar: • Won the First Prize for paper presentation titled

	“Realizibility of special graphs as atom based graph and their uniqueness”, in a competition organized on National Mathematics Day at Dr.B.A.M.U., Aurangabad, 2015-16. • Won the First Prize for paper presentation titled “Some properties of atom based graph on lattices” in a competition organized on National Mathematics Day at Dr.B.A.M.U., Aurangabad, 2014-15.
5	Mr. A. C. Dabhale: • Won Second Prize in paper presentation titled “Zero-divisor graph of some special lattices” in a competition organized on National Mathematics Day at Dr.B.A.M.U., Aurangabad, 2015-16.
Awards/Recognition received by Student:	
Year	Award won / Recognition
2015-16	• A group of 05 students of Mechanical engineering department have participated in CCQC-2015 organized by QCFL, Nagpur chapter and won ‘Gold Award’ on 13th September 2015. • Institute participated in IMTEX 2016 event held at Bangalore and presented student research projects. One of the projects has received a third prize in the Institute category in the event. • Institute team of 20 students from different departments has participated in BAJA 2016 event organized by SAE INDIA. • Institute organized INSPIRE 2016 Science Camp funded by Department of Science and Technology, GOI, Delhi. A team of 25 faculty members have successfully organized the camp for 150 students of 11th and 12th science stream selected from various junior colleges in the region. The camp was held during 1- 5th March 2016 for which the institute has received a fund of Rs. 8 lakhs from DST, GOI.
2014-15	• A group of 03 students have participated in 24th chapter convention of Quality Circle at Nagpur and won ‘Silver Award’.
2013-14	• A group of 03 Students participated in ‘Horizen Kaizen’ competition held at JNEC, Aurangabad on 22-23rd March 2014 and won the First Prize. • A student project titled “Without Helmet Vehicle will not Start” got a Special Prize in a Traffic Parliament event held at Pune on 27th December 2014.
2012-13	• A student Mr. Anil Varmahas participated in “4th State level

	CHESSBOXING Championship 2014-15” and won GOLD MEDAL in 62-54 kg weight category. • A student Mr. Anil Varmahas participated in University Sports Competition 2014-15 and won Silver Medal. • A student Mr. Maroti Devkotte has participated in State level Karate Championship 2015 & won Gold Medal. • A student Mr. Maroti Devkotte has participated & won Bronze Medal in State level championship organized by Nehru Yuva Kendra, Aurangabad.
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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.

Currently institute is not involved in any kind of publication. However, institute is working toward starting a institute level publication of research and scholarly articles.

3.4.3 Give details of publications by the faculty and students:

Publication per faculty

Number of papers published by faculty and students in peer reviewed journals (national/international)

The department wise faculty publication details are given below.

Table 3.31: Faculty publications from Department of CSE

Name of Faculty	International Journal	National Journal	No of publications listed in international database	International Conference	National Conference	Chapter/ Monograph in Books	Book with ISBN/ISSN numbers with detail of publishers	Citation Index	SNIP/ SJR	Impact Factor	h-Index
Ms. Bhakti S. Ahirwadkar	2	-	-	2	-	-	-	-	-	3.52	-
Mrs. Supriya A. Kinariwala	6	-	-	3	-	-	-	2	-	3.52	-
Ms. D. D. Dharmadhikari	5	-	-	3	-	-	-	1	-	3.05	-
Mr. Jayanand Kamble	2	-	-	-	-	-	-	-	-	-	-
Ms. Lalita B. Randive	4	-	-	3	-	-	-	-	-	3.52	-
Ms. M. M. Ganeshwade	2	-	-	2	-	-	-	-	-	-	-
Mr. K. Vengatesan	-	-	-	3	-	-	-	-	-	-	-
Mr. Kiran Gaikwad	-	-	-	1	-	-	-	-	-	-	-

Mr. Ravindra Patil	-	-	-	1	-	-	-	-	-	-	-
Ms. Parmeet C. Gill	4	-	-	-	-	-	-	-	-	-	-
Mr. Pramod N.Suryawanshi	2	-	-	1	1	-	-	-	-	-	-
Ms. Rupali A. Mangrulkar	4	-	-	-	-	-	-	-	-	-	-
Ms. Seema B. Silekar	5	-	-	-	-	-	-	-	-	-	-
Ms. Shilpa A. Sanap	3	-	-	-	-	-	-	-	-	3.31	-
Mr. Sudhir G. Chavan	1	-	-	1	-	-	-	-	-	-	-
Dr. M. A. Joshi	10	-	-	9	-	-	1	-	-	-	-

Table 3.32: Faculty publication from Department of Civil Engineering

Name of Faculty	International Journal	National Journal	No of publications listed in international database	International Conference	National Conference	Chapter/ Monograph in Books	Book with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP/ SJR	Impact Factor	H-index
Mr. V.R.Upadhye	-	-	-	2	2	-	-	-	-	-	-
Dr. M.S.Dixit	13	-	-	7	5	-	-	23	-	-	2
Dr.S.S.Jaiswal	1	-	-	5	1	-	-	-	-	1.1	52
Mr.R.L.Shirale	3	-	-	-	-	-	-	-	-	0.94	-
Mr.S.T.Patil	1	-	-	1	-	-	-	-	-	-	-
Mr.S.G.Quadri	1	-	-	1	-	-	-	-	-	-	-
Ms.C.A.Aherkar	1	-	-	-	-	-	-	-	-	-	-
Mr.S.N.Pawar	-	-	-	3	7	-	-	-	-	-	-
Ms.S.K.Swami	4	-	-	1	1	-	-	-	-	-	-
Mr.R.N.Chatorikar	1	-	-	1	-	-	-	-	-	-	-
Mr.Ather Khan	1	-	-	-	-	-	-	-	-	-	-
Ms.V.B.Sankpal	1	-	-	1	-	-	-	-	-	-	-
Ms.A.A.Ingle	1	-	-	-	-	-	-	-	-	-	-
Ms. A. A. Deshpande	2	-	-	1	-	-	-	-	-	-	-
Ms. Pooja B.Suryavanshi	-	-	-	1	-	-	-	-	-	-	-
Mr. Fahad Syed	1	-	-	-	-	-	-	-	-	-	-

Table 3.33: Faculty publications from ETC Department

Name of Faculty	International Journal	National Journal	No of publications listed in international database	International Conference	National Conference	Chapter/ Monograph in Books	Book with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP/ SJR	Impact Factor	h-index
Dr.Sayyad Ajij	9	2	-	8	-	-	-	-	-	-	-
Prof.(Dr).S.S.Ardhapurkar	5	-	-	4	-	-	-	-	-	6.5	-
Mrs.V.M.Kulkarni	8	-	-	-	14	-	-	-	-	-	-
Mr.R.N.Patil	2	-	-	8	8	-	3	-	-	-	-
Mrs.M.R.Vargantwar	10	-	-	3	3	-	-	-	-	-	-
Mrs.S.V.Verma	13	-	-	-	3	-	-	-	-	-	-
Mrs.K.R.Khandagle	9	-	-	-	-	-	-	-	-	4.43	-
Mrs.S.S.Borde	2	-	-	1	1	-	-	-	-	-	-
Mrs.N.S.Pingle	6	-	-	1	-	-	-	-	-	3.02	-
Mrs.L.K.Padole	2	-	-	-	-	-	-	-	-	-	-
Mrs.P.P.Nalgirkar	4	-	-	-	2	-	-	-	-	-	-
Mr.T.D.Shep	2	1	-	-	-	-	-	-	-	-	-
Mrs.M.S.Joshi	8	-	-	1	1	-	-	-	-	-	-
Mr.A.B.Makone	5	-	-	-	-	-	-	-	-	-	-
Mrs.J.S.Wakode	3	-	-	-	-	-	-	-	-	-	-
Mr.M.S.Khan	7	2	-	2	4	-	-	-	-	7.82	-
Mr.D.L.Gadhe	3	-	-	1	3	-	-	-	-	-	-
Mrs.V.H.Deshmukh	5	-	-	-	3	-	-	-	-	-	-
Ms.N.K.Bargal	5	-	-	-	-	-	-	-	-	7	-
Mr.A.G.Deshmukh	1	-	-	2	-	-	-	-	-	-	-
Mr.V.P.Kardile	3	-	-	-	-	-	-	-	-	4.45	-
Mr.Pawar Vijay	1	1	-	-	-	-	-	-	-	-	-
Mr.Zarkar Gaurav	1	-	-	2	1	-	-	-	-	-	-
Mr.Ram Sharma	2	-	-	1	-	-	-	-	-	-	-
Mr.P.R.Bhusari	1	-	-	2	1	-	-	-	-	-	-
Mr.Mantesh Gudimani	-	-	-	1	-	-	-	-	-	-	-
Mr.K.V.Kalshetti	-	-	-	-	1	-	-	-	-	-	-

Table 3.34: Faculty publications from EEE Department

Name of Faculty	International Journal	National Journal	No of publications listed in international database	International Conference	National Conference	Chapter/ Monograph in Books	Books with ISBN/ISSN numbers with detail of publishers	Citation Index	SNIP/ SJR	Impact Factor	h-index
Ms. S. M. Badave	10	1	-	13	14	-	-	14	-	-	3
Mr.Sagar B. Mahajan	4	-	-	54	1	14	-	84	-	4.24	6
Mr.S.N.Pawar	-	-	-	1	-	-	-	-	-	-	-
Ms.R.P.Dahad	1	-	-	1	-	-	-	-	-	-	-
Ms. S A Sabnis	1	-	-	-	1	-	-	-	-	-	-
Mr.V.D.Saundarmal	1	-	-	2	1	-	-	-	-	-	-
Mr.S.I.Ali	1	-	-	1	-	-	-	-	-	-	-
Ms.S.M.Mule	1	-	-	4	-	-	-	-	-	-	-
Mr.K.M.Pandav	4	-	-	12	1	2	-	-	-	-	3
Ms.R.K.Kharat	2	-	-	-	-	-	-	-	-	-	-

Table 3.35: Faculty publications from Mechanical Engineering Department

Name of Faculty	International Journal	National Journal	No of publications listed in international database	International Conference	National Conference	Chapter/ Monograph in Books	Books with ISBN/ISSN numbers with detail of publishers	Citation Index	SNIP/ SJR	Impact Factor	h-index
Prof.Dr. N. G. Patil	11	-	-	-	-	02	-	145	-	1.57	5
Prof. Dr. C. L. Gogte	13	-	1	09	04	-	-	38	-	-	4
Prof. Dr. N. S. Bhalkikar	02	-	-	-	-	-	-	-	-	-	-
Prof. Dr. P.H. Waghodekar	-	60	-	13	62	-	-	352	-	-	3
Dr. H. M. Dharmadhikari	08	-	-	03	-	-	-	-	-	-	-
Dr. D. V. Nehete	02	-	-	04	-	01	-	7	2.89	2.77	1
Dr. S. V. Lahane	13	-	-	09	11	01	-	109	2.04	3.61	4
Dr. V. B. Pansare	04	-	-	04	01	-	-	6	-	-	2
Dr. P. U. Zine	02	-	-	02	06	-	-	9	-	1.76	1

Mr. S. R. Andhale	06	-	-	-	04	-	-	4	-	-	1
Mr. S. S. Patil	08	-	-	04	13	03	-	27	-	1.3	2
Mr. P. J. Kale	01	-	-	02	-	-	-	-	-	-	-
Mr. T. B. Shaikh	03	-	-	-	01	-	-	-	-	-	-
Mr. M. A. Patil	05	-	-	-	-	-	-	3	-	-	1
Mr. A. T. Pokarnekar	01	-	-	-	-	-	-	-	-	-	-

Table 3.36: Faculty publications fromBSH Department

Name of Faculty	International Journal	National Journal	No of publications listed in international database	International Conference	National Conference	Chapter/ Monograph in Books	BookswithISBN/ISSNnumberswithdetailedsofpublishers	Citation Index	SNIP/ SJR	Impact Factor	h-index
Dr. S. J. Sonkamble	-	-	-	-	-	-	-	-	-	-	-
Ms. S. P. More	01	-	-	-	-	-	-	-	-	-	-
Mr. A. C. Dabhole	01	-	-	02	-	-	-	-	-	-	-
Ms. U. R. Borsarkar	01	-	-	02	-	-	-	-	-	-	-
Ms. M. M. Patil	-	-	-	01	-	-	-	-	-	-	-
Ms. D. S. Sharma	-	-	-	01	-	-	-	-	-	-	-

Table 3.37: Faculty publications from MCA Department

Name of Faculty	International Journal	National Journal	No of publications listed in international database	International Conference	National Conference	Chapter/ Monograph in Books	BookswithISBN/ISSNnumbers withdetailsofpublishers	Citation Index	SNIP/ SJR	Impact Factor	h-index
Dr. M. H. Kondekar	13	0	-	1	10	-	1	-	-	-	-
Ms. S. S. Savant	4	1	-	6	1	-	-	-	-	-	-
Mr. P. L. Chintal	3	0	-	1	1	-	1	-	-	-	-
Ms. V. A. Bhuyar	1	1	-	3	-	-	-	-	-	-	-
Mr. V. V. Shaga	3	-	-	2	-	-	-	-	-	-	-

Mr. A. R. Mudiraj	5	-	-	2	-	-	-	-	-	-	-
Ms. R. J. Bhakkad	2	-	-	1	-	-	-	-	-	-	-
Mr. S. Sayyad	1	-	-	6	-	-	-	-	-	-	-
Mr. A. Shaikh	2	-	-	5	-	-	-	-	-	-	-
Mr. A. R. Chitte	1	-	-	0	1	-	1	-	-	-	-
Ms. S. D. Thorat	6	1	-	1	-	-	-	-	-	-	-
Ms. S. S. Kute	3	0	-	2	-	-	-	-	-	-	-
Ms. A. S. Pisote	1	-	-	-	-	-	-	-	-	-	-
Mr. L. K. Shinde	2	-	-	-	-	-	-	-	-	-	-

Table 3.38: Faculty publications from Department of Architecture

Name of Faculty	International Journal	National Journal	No of publications listed in international database	International Conference	National Conference	Chapter/ Monograph in Books	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP/ SJR	Impact Factor	h-index
Mr. Sham Borawake	-	-	-	1	-	-	-	-	-	-	-
Ms. K. K. Bhatia	-	-	-	2	-	-	-	-	-	-	-
Ms. Pranita Pranjale	1	1	-	1	-	-	-	-	-	-	-
Ms. Swapna Dhavale	-	1	-	2	1	-	-	-	-	-	-
Ms. Deepali Hejiib	1	-	-	-	-	-	-	-	-	-	-
Ms. Leena Aphale	-	1	-	1	2	-	-	-	-	-	-

3.4.4 Provide details (if any) of Research awards received by the faculty.**Table 3.39: Faculty awards and achievement**

Sr. No	Details of faculty Achievements
1	Mr. Sandeep Patil and Dr. R.G.Tated : Won first prize for the Best Presentation, for paper titled “Formability analysis for trapezoidal cup forming using HyperForm”, at Altair’s HyperWorks Technology Conference, Pune, 2011.
2	Ms. U.R.Borsarkar: • Won the First Prize for paper presentation titled “Realizability of special graphs as atom based graph and their uniqueness”, in a conference held at Dr.B.A.M.U., Aurangabad, 2015-16. • Won the First Prize for paper presentation titled “Some

	properties of atom based graph on lattices” in a conference held at Dr.B.A.M.U., Aurangabad, 2014-15.
3	Mr. A. C. Dabhale: • Won Second Prize in Paper presentation titled “Topic-Zero-divisor graph of some special lattices” in a conference held at Dr.B.A.M.U., Aurangabad, 2015-16.

3.5 Consultancy

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

To enhance the industry participation in academics, the institute have taken initiatives by following means:

- Industry experts are invited as members on department advisory board and thus are involved in curriculum development.
- They are also invited as resource persons and evaluators for student’s programs like technical events, Workshops, Quiz competitions etc.
- Industrial visits of students are planned regularly to interact with industry to observe and experience the actual industry practices on shop floors.
- Faculty and students are encouraged to work on live problems of industry and are motivated to work on industry sponsored projects.
- Institute organizes visits of students to industrial exhibitions like AutoExpo, IMTEX etc.

The initiatives which has been taken to enhance industry institution interaction has following objectives:

- To bridge gap between institute and industry.
- To arrange expert lecturers of eminent personalities from industries.
- To explore students and faculty to industrial work culture by arranging visits to industry.
- To develop the skill sets required by the student relevant to the industries to increase potential of student to grab job opportunities in industry.
- To exchange and share the technical knowledge and practical skills between the institute and industry personnel.
- To get acquainted with practical or real word problems.
- To get acquainted with industry requirement, industrial process, managerial skill etc.
- To take review of curriculum and suggest the subject/topics to be included as per industry requirement in order to strengthen the curriculum with the recent technology up-gradation.

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

- The institute has policy of sharing information resources, laboratories and faculty expertise for the benefit of society and industries. Institute has membership of professional industrial bodies like Chamber of Marathwada Industries and Agriculture (CMIA), Marathwada Auto Cluster (MAC) and Deogiri Electronic Cluster (DEC) etc.
- Institute participates and represents through its stall in all activities organized by industries such as exhibition in MAC and Cluster meetings.
- The faculty of institute interacts with industries to network and find opportunities to address industry problems thereby resulting in consultancy activities.
- Institute also encourages the faculty to develop the state of the art laboratories and related facilities to provide the consultancy to the related industries.

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

The research committee of the Institute and Heads of Departments first identify the area of expertise of the faculty. Faculty are encouraged and supported to work in the domains of their expertise and interest.

Institute organizes competency developing programs like product development, design and research methodology which encourage the staff for consultancy.

In some cases the institute also supports the faculty for doing consultancy by setting up specific lab and by purchase of some equipment in respective domain. For example, micro hardness tester, wear test rig, and image analyzer are some of the equipments purchased by the institute for consultancy purpose.

Also, the proposed advance manufacturing lab with robot, FEA Software and the facility of Siemens Automation Lab, as well as remote access to the Central Library of Dr. BAMU, Aurangabad etc. are some of the resources particularly developed for research and consultancy purpose.

In general, the other available resources in terms of research labs established in various departments are also open for all faculty members to use for respective activities.

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 type of consultancy work done and the respective revenue generated by various departments is shown in Tables below.

Table 3.40: Consultancy work done by Civil Engineering Dept.

Sr. No.	Year	Type of Consultancy	Consulted Client	Amount Received (Rs.)
1	2016 -17	Testing of soil/ Cube/ Paver block/ CLC block etc./Strength verification of concrete etc.	Sakshi Construction, Aurangabad and other parties	24,600
2	2015-16	Testing of soil/ Cube/ Paver block/ CLC block etc./ Mix design M30/M25 and Strength verification of concrete	Nath Paper and Pulp Mills Paithan and other parties	23,850
3	2014-15	Testing of soil/ Cube/ Paver block/ Cement etc.	Vastu Infra Projects and other parties	12,000
4	2013-14	Development of nanocomposites	Korean Institute of carbon convergence technology, South Korea.	14,900
5	2012-13	Testing of soil and Cube	OASIS Landmarks, Aurangabad, Indian Oil Corporation etc	57,760

Table 3.41: Consultancy work done by Mech. Engineering Dept.

Sr. No.	Year	Type of Consultancy	Consulted Client	Amount Received (Rs.)
1	2015-16	Characterization of Al-6067 MWCNT Composite material	Fraunhofer Institute, Germany	Material worth Rs. 10,000
2		Dimensional Stability of D2 Steel used in Measuring Instruments	Customized Technologies Private Limited, Bangalore	25,000

3		Cryogenic Treatment characterization of AL 6061 MWCNT Composite	Fraunhofer Research Institute, Germany	50,000
4		Development of nanocomposites	Korean Institute of Carbon Convergence Technology, South Korea	Material CF and CNT worth RS. 65,000
5	2013-14	Non destructive testing	Satyam Mats Private Limited, Aurangabad	5000
6		Problems related to cast components	OMR Bagla Group, Aurangabad	Ex-gratia

Table 3.42: Consultancy work done by EEE Department

Sr. No.	Year	Type of Consultancy	Consulted Client	Amount Received (Rs.)
1	2013 -14	Energy Audit	Dr. BAMU, Aurangabad	3,16,000
2	2013 -14	Energy Audit	M/S Nath Seeds Aurangabad	26000
3	2012-13	Energy Audit	Vitthal Sugar Manufacturing, Mahaisgaon	47700
4	2012-13	Energy Audit	Vitthal SSKL, Venunagar	47700
5	2012-13	Energy Audit	Shri Shankar SSKL, Sadashivnagar	47700
6	2012-13	Energy Audit	GAPS, Aurangabad	48999
7	2012-13	Energy Audit	Ind Barath, Nanded	48999

Table 3.43: Consultancy work done by MCA Department

Sr. No.	Year	Type of Consultancy	Consulted Client	Amount Received (Rs.)
1	2015-16	Website development	Touch Ruby	Ex gratia

			Association – India	
2		Clean India – An Android App Development	Municipal Corporation, Aurangabad	Ex gratia
3	2014-15	Catering Services Software Development	Namrata Caterers, Aurangabad	Ex gratia

Table 3.44: Consultancy work done by Architecture Department

Sr. No.	Year	Type of Consultancy	Consulted Client	Amount Worth (Rs.)
1	2016 -17	Interior Design and execution in New computer lab in Arch. department	MIT, Aurangabad	30,000
2	2015-16	Interior Design of Central Library	MIT CIDCO, Aurangabad	70,000
3	2013-14	Interior Design and execution in Seminar hall (Room 105)	MIT, Aurangabad	50,000
4		Interior Design and execution (Studio design and development) in Architecture department	MIT, Aurangabad	35000
5		Interior Design of Computer lab I and execution in Architecture department	MIT, Aurangabad	50,000
6		Interior design and execution of Medical store	MIT, Aurangabad	30,000
7	2012-13	Modernization design and refurnishing of MIT hospital with a total investment of 5 Crores	MIT, Hospital	2,00,000
8		Design and execution of MIT Polytechnic extension building	MIT, Polytechnic	2,50,000
9		Design of MIT Nursing College Building (G+4)	MIT, Nursing College	50,000
10		Design of MIT New Girls Hostel Building (G+6)	MIT, Aurangabad	1,50,000
11		Design of MIT New Boys Hostel Building (G+5)	MIT, Aurangabad	2,00,000

12	Desig execution of Canteen	MIT, Aurangabad	50,000
13	Interior Design of Principal's Chamber	Maharashtra Insti. of Tech. Aurangabad	50000

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

Institute has following policy for sharing the income generated through consultancy. The consultancy work has been categorized in two types for the sake of convenience as:

1. Type I: Consultancy using institute infrastructure (Lab/equipments)
2. Type II: Consultancy NOT using institute infrastructure

The sharing of income generated is done as follows.

Table 3.45: Type I consultancy and income sharing

Sr. No.	Category of manpower/ infrastructure	Share	Remark
1	Infrastructure development fund	20 %	Including institute overheads
2	R&D growth fund	5%	Promotion of R&D
3	In-charge faculty	60% of the remaining amount	(deducting items 1 and 2 from the income)
4	Lab technician	20% of the remaining amount	
5	Lab attendant	5% of the remaining amount	
6	Admin./supporting staff (Not involved directly in the work)	15% of the remaining amount	

Table 3.46: Type II consultancy and income sharing

Sr. No.	Category of manpower/ infrastructure	Share	Remark
1	R&D growth fund	10%	Promotion of R&D
2	Chief Coordinator	50% of the remaining amount	(deducting items 1

3	Assisting Faculty 1	20% of the remaining amount	from the income)
4	Assisting Faculty 2	15% of the remaining amount	
5	Admin./ supporting staff (Not involved directly in the work)	15% of the remaining amount	

3.6 Institutional Social Responsibility (ISR) and Extension Activities

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?

Institute promotes the faculty and students to work for social activities and aims at holistic development of students to become responsible citizens by following means:

- Faculty and students are encouraged to participate and undertake, in collaboration with other organizations, programs of social importance. Information regarding these programs is circulated through notices and Heads of Departments.
- Institute appreciates the services provided by students and faculty by considering their working for such activities as 'on duty'. Similarly, time spend by students are marked as present on their subjects.
- The institute, through faculty and students, contributes to the neighborhood and/or community by undertaking programs such as Tree plantation, Blood donation camps, Swachhta Abhiyan, Tourism day, Digital awareness and one to two weeks special programs by NSS supported by Dr. BAMU, Aurangabad.
- Institute provides transport facilities, such as Van, Mini bus, Bus to enable the group to interact to larger socio-audience.
- Institute has an active NCC & NSS cell through which different social activities are planned for each academic year.
- The institute established RedHat society to increase the awareness of latest technology in the world of computing.

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

- The institute has a dedicated NSS Cell wherein a coordinator is appointed. The role of the coordinator is to provide support and

motivate students to contribute for social cause beyond the college working hours (regular academics). The coordinator maintains the records of all such activities.

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

- At Institute, we organize alumni meetings, parents – faculty meetings and industry personnel meetings to obtain necessary information on the overall performance and quality of institution.
- In addition, the Training & Placement office is also well connected to industry and provides feedback for improvement.
- The Department Advisory Board (DAB) members, Internal Quality Assurance Cell (IQAC) members and General Body (GB) members also helps provide feedback from society for the quality improvement.

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.

At institute, based on inputs from various stakeholder meetings as discussed in section 3.6.3, identify priority areas for its social activities. The scope of all such social activities is defined and budgetary provisions are made by the institute. These activities are most commonly planned and executed through the NSS cell of the institute. The budgetary details for such activities are given in Table below.

Table 3.47: NSS budget

Sr. No.	Year	NSS Budget (Regular camp)	NSS Budget (Special Camp)	Total Budget
1	2016-17	22,000	22,500	44,500
2	2015-16	22,000	22,500	44,500
3	2014-15	22,000	22,500	44,500
4	2013-14	22,000	22,500	44,500
Total in Rs.				1,78,000

Some of the major social outreach programs conducted by the institute include:

1. Tree Plantation Program: NSS Unit of institute has organized Tree Plantation Program on 01st July 2016. Ten NSS Volunteers and seventy students participated in this event. Neem and other useful tree plants are planted in MIT Campus.
2. Blood Donation Camp: On birthday of Hon. Dr. Y. A. Kawade (President, G.S. Mandal Aurangabad), a blood donation camp

was organized on 8th August, 2016 in association with Government Medical College, Ghati, Aurangabad. 25 NSS volunteers participated in this event. The NSS volunteers motivated the students for donating blood. Students enthusiastically participated in the event. A total of 80 blood units have been collected in this camp. All the donors were given the blood donation card and certificate.

3. National Tourism Day: The NSS Unit of institute has organized 'Swachata Abhiyan' in association with Aurangabad Municipal Corporation and Civic Response Team(CRT) on the National Tourism Day i.e. 27th September, 2016. The Swachata Abhiyan was initiated by cleaning the institute Campus. The NSS volunteers along CRT members and Aurangabad Corporation team then cleaned the nearby area of Khandoba Mandir in Satara Parisar Aurangabad. The villagers of Satara parisar also cooperated and participated during the Abhiyan.
4. Swachata Abhiyan: On Navratri Mohotsav, the NSS unit of institute has organized a Swachata Abhiyan at Karnpura parisar Aurangabad. The activity involved cleaning the temple parisar and the road which lead to temple. The NSS volunteers also presented street act play on Swachata Abhiyan in temple Parisar to aware the people about cleanliness and responsibility of every individual to maintain cleanliness.
5. Digital Awareness Program: To create the awareness about digital transactions, NSS volunteers took initiative and given the demonstration on use of mobile phone for digital payment. NSS volunteers went door to door in Satara Parisar and made aware/trained people to make use of digital payment facility. The volunteers also made aware about the risks involved in the process and the care which people should take during making digital transactions.
6. Special Camp: A Special camp (residential) for 7 days was organized by institute NSS volunteers during 16 – 22nd February, 2017 at Sahara Anathalaya, Govindwadi, in Georai Taluka of Beed district. Activities like Shramdan, Social awareness on Cleanliness, Save water etc were organized in this special camp. Also, different resource persons who are involved in doing social service like Mr. Kantarao Deshmukh, Mr. Deepak Nagargoje, Prof. Vijay Diwan have interacted with NSS volunteers and

shared their vision and objectives for social services.

7. Road Safety Awareness Program: Institute has organized many road safety drives in last four years. In November 2015, “Helmets Save Lives” event was organized by the institute. The event involved participation by more than 100 students and staffs who explained the importance of helmets in driving two-wheelers. Similarly, more than 50 students and staffs executed “Seat-Belt Save Lives” awareness program. Emphasizing the importance of wearing helmet while driving two wheelers and using seat belts while driving four wheelers, institute has made it compulsory for its staff and students to wear helmet / seat-belt while driving an automobile in the Campus.

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

Every year, institute periodically organizes various camps and people oriented programs through NSS cell. The activities/programs which are organized by NSS volunteers in nearby villages, city area and college campus include:

1. ‘Seat-Belt Save Lives’ Awareness Program
2. ‘Helmets Save’ Lives Event
3. Swachata Abhiyan Program
4. Blood Donation Camp
5. National Tourist Day
6. Digital Awareness Program

Moreover, institute has a NCC unit. The NCC cadets and faculty coordinator ensures discipline and security measures during various student activities on the campus.

The NCC cadets and unit also play a vital role during national celebrations and flag hoisting programs on campus on 26th January and 15th August each year.

The NCC cadets attend the annual training camps for ten days organized by the NCC battalion in the region.

3.6.6 Details of the 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.

- It is well known fact that ‘Global Warming’ is currently a serious issue for the mankind. In this context, institute organized “Surya Kumbh” event whose aim was to build awareness towards the Solar Energy and how to harness it for human use. The event was held on

21st– 22nd January 2016 and around 5000 school students, along with socialists & citizens participated and supported this cause.

- In order to develop our surrounding environment and act with sense of responsibility, the students and faculty from Department of Architecture visited Bhangasi Mata Garh parisar and undertook seed sowing and plantation activity.
- Institute also participated in the competition named ‘Mera Gaon Mera Base’ organized by Ultratech Cement Pvt. Ltd. which focuses on the concept proposed by Mahatma Gandhi that India lives in its villages. The maiden step of the ‘Innovate for India’ initiative is the ‘Mera Gaon Mera Base’ competition challenge which is about going back to our roots i.e. our villages. It is a proposal for development of villages of India. The competition challenge is an attempt to bridge the widening urban-rural divide and bring the creativity born of technical education to spaces and places it might be needed and applied in. The interested participants primarily strategized the sequence for work. This was done under the guidance of two erudite teachers. The strategy included selection of the village, survey, planning and proposal.
- Institute, in association with Chamber of Marathwada Industries and Agriculture(CMIA)& Aurangabad Municipal Corporation (AMC), also organized a roundtable on the theme: Challenges, Opportunities, Risks & Mitigation in making Aurangabad a Smart City. The roundtable meeting and discussion provided an opportunity to identify the subtle dependencies that may exist between various elements of smart city and hence enable local government and industries to discover the potential risks and unlocking unknown possibilities.
- Institute offers ‘Learn and Earn’ scheme for to the students from under privileged and vulnerable sections of society.

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.

Every social activity that the institute has organized stands on following objectives:

- Inducing social learning experience in the students
- Boosting moral values and beliefs of the students
- Inculcating critical thinking skills in students and faculty

These activities are so designed that students and faculty get exposure to wide range of socio-economic problems lower strata of the local community, the common problems faced by weaker sections of society in their day to day life and how they can be assisted.

3.6.8 Details of 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.

In all the programs that NSS cell of institute has organized in villages, a very positive response and support is exhibited by the villagers. In general, The young and enthusiastic students and villagers do jointly take on various activities during the NSS camp.

Before undertaking any NSS activities, institute coordinator meets the local people (villagers) to understand their problems and aspirations. Accordingly, the activities/programs in NSS camp are decided.

In general, the major programs that are commonly undertaken include:

- Blood donation camps
- Seeding and plantation
- Water shed management
- Road safety
- Household waste management
- Swachata Abhiyan

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

Institute has developed positive relationship with various Government and NonGovernment Organizations.

Institute has a working relationship with AMC to help them, via technical and academic know-how, in the quest of making Aurangabad a smart city.

Institute has also developed good relationship with the local industries that help the students and faculty to get sponsored projects at UG/PG level as well as opportunities for the students for industrial visits in order to explore the students on campus with the working culture of the industries.

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

The institute through its students and faculty consistently organizes programs and activities through NSS, NCC and entrepreneurship cell. Thus, the institute has been contributing towards various social cause such as Blood Donation, Swachata Abhiyan, support to Sahara Anathshram through Shramdan, and being appreciated for this contribution.

A few examples include:

1. Appreciation from Government Medical College and Hospital for hosting and organizing blood donation camp in 2016-17.
2. Appreciation and memento from Sakar a Anathashram for helping through Shramdan by the NSS cell.
3. Appreciation and memento from Dattaji Bhale Blood bank for organizing the blood donation camp.
4. Appreciation and recognition as 'Advanced Partner Institute' in Infosys Campus Connect Program by Infosys in year 2012-13.

3.7 Collaboration

3.7.1 Details of the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - Collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

Institute, through its Research & Development and Training and Placement office, interacts with various National and International institutes with an aim to develop new frontiers in the field of engineering and technology.

Similarly, institute also takes efforts to interact with local community and industries to understand local problems and develop workable solutions for the industry problems. Table below shows details of institute linkages and collaborations with local and international industries and local communities.

Table 3.48: Industry – Institute linkages

Industry/Firm	Linkage Descriptions
Infosys (Campus connect)	Infosys shall facilitate & share input with university/ college for co-designing industry based electives in the field of IT. The Syllabus and contents of such elective program shall be decided by University/ College at its sole

	discretion.
Red Hat India Private Limited	• Faculty training & Curriculum • Curriculum Support Students Projects • Infrastructure & Programme Delivery
Excelize Software Private Limited	Industry - Institute Interaction, Knowledge sharing, Research And Development, Educating Students On Real Life Work Scenarios, in plant Training
Outsource Ideas	To set up CAD Documentation office of Outsource Ideas in MIT Premises
TechRel Technology Limited	Industry - Institute Interaction, Knowledge sharing, Expert Lectures, Educating Students on Real Life work scenarios-Project, In- Plant Training.
Seacom Technology Private Limited	Start Training course at MIT, Aurangabad, Provide better avenues for fresh Graduates, Providing better resources of industry
IBM, India	To express the broad understanding of the parties regarding their working with each other to extent possible for their mutual benefit
Credila	To set up a non banking financial company (NBFC) to offer students educational loans for post secondary Education
Edexcel	To offer Higher National Diploma under ISTE- Edexcel
Paral System Software Private Limited	Industry - Institute Interaction, Knowledge sharing, Research And Development, Educating Students On Real Life Work Scenarios, in plant Training
RTC (Regional Training Centre) Mahatransco, Aurangabad	MOU with RTC Mahatransco for student and faculty training
Trasdelta Transformers Private Limited Aurangabad	Student Training
Logical Automation Private Limited Aurangabad	Student and Faculty Training
MIT -Siemens Center of Excellence for Mechatronics & Automation	MOU with Siemens For Training & services for academia and the industries

MIT collaboration with Siemens Technik Akademie Berlin(STA)	Student and Faculty Training
M/S Measurewel Services	Contribute in development , maintenance and calibration of measuring Instruments available in metrology and mechanical measurement lab at MIT
Bharatiya Yuva Shakti Trust (BYST)	To turn job Seeker into job creators
IIA, Aurangabad	Work in collaboration with IIA, Aurangabad in various social activities
University of Sunderland	To create greater awareness among the student of MIT about the opportunities of higher education at university of Sunderland
ETH Research Lab	Industry - Institute Interaction, Knowledge sharing, Research And Development, Educating Students On Real Life Work Scenarios, in plant Training

3.7.2 Details of 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.

Institute strives continuously towards having result oriented relationships with progressive industries. As a result, institute signed MoUs with following organization.

- **KC-Tech South Korea**

Through this MOU, a composite of epoxy resin and carbon fiber was manufactured by die cast method. This work is related to performance and reliability of car glass window pulley. Mechanical and micro structural characterization was performed to evaluate the performance of composite. The carbon fibers were provided by the Korean Research Institute named KCTech, South Korea. A third institute is also involved in these research activities and the MoU. Thus, the institute has a triparty MoU between KCTech, South Korea and VNIT, Nagpur.

- **Fraunhofer Institute, Germany**

A composite A16061-MWCNT manufactured by Fraunhofer Institute Germany was undertaken for performing cryogenic treatment. In this project a comparative study is done by mechanical, tribological and microstructural characterization techniques using Scanning Electron Microscopy and XRD from North Maharashtra University, Jalgaon. The Multi Walled Carbon Nano Tubes (MWCNT) were provided by the

Fraunhofer Institute Germany. The outcome of this work has been authored jointly by MIT and Fraunhofer Institute and has been presented in November 2016 at IIT, Kanpur in a conference.

- COE, Pune

‘Lab to Shop Floor’ concept was applied by institute by providing improved wear resistance to D2 steel punch for Saigan Industries, Waluj, Aurangabad. In this industry based research project, an add-on cryogenic treatment was performed on D2 steel punch. The results obtained were significant and ten times improvement in the life of punch was obtained. This was an inspiring accomplishment and number of industries have shown interest in this work. A PhD project was also initiated and the work is in progress to understand some more aspects of benefits due to this process. The cryogenic processing was carried out with the Metallurgy & Materials Department of College of Engineering, Pune. The faculty at this department has also shared knowledge and resources and collaborated in the research project.

- Singapore Institute of Manufacturing

A project on Friction Stir Welding has been completed in alliance with Singapore Institute of Manufacturing Technology (SIMTECH) and VNIT Nagpur. In this project characterization of Friction Stir Weldment of Al-7075 alloy was done. Effect of rotation speed on the performance of alloy was also studied. This work has initiated a PhD work by the institute faculty which is in progress.

3.7.3 Details of 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.

Institute has strong linkages with the industries and has taken efforts through the faculty to address many problems of the industries. The faculty has visited many premier R&D institutes for interactions and industries in India and abroad. A select contribution from such institutes to our institute is mentioned below.

- Institute received material Multi walled Carbon Nano Tubes (MWCNT) composite from KCTech Research Institute, South Korea for doing a research project.
- Institute also received a composite AlSi10Mg alloy from Singapore Institute of Manufacturing Technology, Singapore for doing a research project.

A few select industries and respective projects are also listed here.

- Software development project for Yashashri Private Limited

The MCA students have contributed in software development of Yashashri Private Limited Aurangabad in academic year 2013-14. Eventually all the students who were involved in the project has been recruited by the industry.

- Project with Chamunda Industries, Waluj

A project titled 'Quality Improvement of PTFE Nozzle' was carried out by UG students and research scholars. This project was sponsored by Chamunda Industries, Waluj, Aurangabad. Enhancement of wear resistance of the PTFE nozzles was accomplished by introducing a step of cryogenic treatment in its manufacturing cycle.

- Project with Shri Ganesh Industries Waluj

The project involves investigations on cost of quality for improving and/or design of holistic system with an objective to provide sustainable solution for manufacturing system which consists of no. of sequential processes.

3.7.4 Details of 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.

Key eminent personalities and participants in the various seminars, conferences, workshops, and training courses conducted at the institute are given in Table 3.49.

Table 3.49: Eminent persons who contributed in various programs

Sr. No.	Visitor's Name	Designation	Topic
1	Dr. T. S. Sudarshan	President and CEO, Material Modification Inc., Virginia	Surface Engineering
2	Dr. Pierpolo Rarlone	Professor, Department of Industrial Engineering, University of Salerno, Italy	Manufacturing Processes on Polymer Composites
3	Dr.D.R. Peshve	Professor, VNIT	Materials
4	Dr. B.G. Thakur	DIAT	Advance Joining Process
5	Dr. Jateen Bhat	Associate Professor, VNIT	Surface Engineering
6	Dr. Srinivasa Rao	Professor, NIT, Warangal	Global Warming & Biomass Gasifier

7	Dr. Kaveri Rajaraman	Centre for Neural and Cognitive Sciences, University of Hyderabad	Insect Communication
8	Dr.V.M. Bhandari	Senior Principal Scientist, CSIR-NCL, Pune	Environmental Pollution Control
9	Dr.D.V. Gokhale	NCIM Resource Center, NCL, Pune	Biomass Conversion
10	Dr. G.D. Khedkar	Director, Paul Hebert Centre Biodiversity Studies, Dr.BAMU, Aurangabad	DNA Brocading, Importance and Applications
11	Mr. Pranav Manvatkar	Hortonworks, Bangluru	Job opportunities in Open-Source
12	Mr. Tushar Kute	Mitu skillologies, Pune	Big Data and Analytics with R
13	Ms. Mukta Ahirwadkar	Sr. Software Engineer, Infosys, Pune	Software Testing
14	Shri. Amitesh Kumar	Commissioner of Police, Aurangabad	Cyber Crime Analysis
15	Mr. Bharat Kumar	Big Data Analyst Infosys, Bangalore	Big Data & Hadoop
16	Mr. Abhishek Gaike	Director of ILearn Institute, Aurangabad	Aptitude & Communication Skill
17	Mr. Ganesh Kadam	Senior Product Developer, BMC Software Pune	Cloud Computing
18	Mr. Mukund Wangikar	Associate Director Quality Assurance, Icertis	Software Testing
19	Ar.Usha Rangarajan	Principal Architect, Landmark Design Group, Pune	Green and Energy Efficient Architecture
20	Ar. Geert Robberchts	Convener Belgium chapter, INTACH	Heritage Conservation in Aurangabad
21	Ar. Dean D'Cruz	Principal Architect, GOA	Energy Efficient Design
22	Ar. Anita Dake	Principal Architect, Vector Designs, Pune	Tensile Structure
23	Ar. Rajesh Phadke	Chief Architect and Planner, GIFT City, Gandhinagar, Gujarat	Smart Cities
24	Ar. Sonali Dhopte	Director, Excelize Architectural Services Pvt.Limited, Aurangabad	Software in Architecture

25	Ar. Ajay Kulkarni	Principal Architect Interface Designers, Aurangabad	An Introspection - Past and Present
26	Ar. Tina Dharamsey	Production Designer, Abstract Designers, Mumbai	Set Designing

3.7.5 Details 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.

Every department has advisory board which has members for industry, parents and eminent people from the field of engineering. From time to time, the feedbacks and suggestions are gathered from the stakeholders on the following aspects.

- Curriculum Development

Institute and its departments, on periodic basis, interact with industry personnel and DAB members to have suggestions about new desirable requirements in terms of know-how that the students must have to increase employment opportunities. Identifying such know-how will be useful to update the curriculum.

- Student Internship & Placement

Institute and its departments, maintain regular contact/interaction with industry to facilitate training and internship opportunities to the students of the institute.

- Research & Consultancy

Institute maintains a good working contact/interaction with local industry body (CMIA) and Municipal Corporation (AMC) etc to explore and develop new research opportunities and to solve their immediate problems and concerns. This helps to identify and explore newer research projects/ideas for study/investigation.

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

The institute has developed strong linkages with industry by taking membership of industry professional bodies like CMIA, MAC, Delogiri Electronic Cluster etc. This move has helped for development of industry linkages and collaborations. This has resulted in providing PG and UG students a connect with industries and they are able to interact with industry personnel, visit the industries and identify the live problems for

their UG project/ PG dissertation work.

Furthermore, students are utilized effectively towards consultancy and extension activities which also help in development of their capabilities.

Also, through Entrepreneurship Development Cell in the institute, the faculty along with professionals and experts on entrepreneurship development skill organize various activities on campus to develop the entrepreneurship skills amongst the students and motivate them to work as job creators than as job seekers.

CRITERION – IV

INFRASTRUCTURE AND LEARNING RESOURCES

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES**4.1 Physical Facilities****4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?**

The policy of the institute is to provide the infrastructure as per the norms laid down by AICTE, Council of Architecture, and other authorities. Additionally, the infrastructure is regularly upgraded as per the growth-expansion plan. In addition to the physical infrastructure which caters for co-curricular and extra-curricular activities, the policy is to provide educational infrastructure for students in terms of library resources, software and equipment in the laboratories prescribed in the curriculum. The institute has a policy to provide Wi-Fi facility to the students. Apart from adequate provision of class rooms with audio visual teaching aids and laboratory infrastructure for each department, the institute has a strategy to tie up with renowned research organizations and industries as well. MIT is also recognized as a nodal centre for accessing virtual lab facilities provided by IIT, Bombay.

4.1.2 Detail the facilities available for

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

The infrastructure facilities provided by the institute are as detailed below:

- The Institute campus has sufficient space for all academic, administrative, co-curricular and extra-curricular activities.
- Each department of the institute is well equipped with independent classrooms, laboratories, tutorial rooms, workshop and seminar hall etc.

Table 4.1: Institute Area including instructional/ Administrative/ Circulation

Sr.No.	Particulars	Total Area in Sq.m.
1	Instructional area	15525
2	Administrative area	2100
3	Amenities	2903
4	Circulation and others	5636
Total area		26164

The instructional area is further detailed as follows

Table 4.2: Instructional Area including UG/PG/Laboratory/Seminar Hall

Sr. No	Particulars	Available in institution	Total Area in Sq.m.
1	UG Class room	36	2463.6
2	PG Class room	08	541
3	UG Tutorial room	05	165
3	PG Tutorial room	07	231
4	Drawing Hall	01	139.3
5	Laboratories UG	57	4650.5
6	Laboratories PG	11	726
7	Research Laboratory	03	198
8	Computer Centre	02	340
9	Library and Reading room	01	1080
10	Workshop	01	200
11	Seminar hall	05	712.8
12	Additional Workshop under category X	05	850
Total area			12297.20

Specialized Facilities:

The institute has a Virtual Laboratory Nodal Centre of IIT Bombay, Centre of excellence laboratory etc.

Table 4.3: Specialized equipment or software for research

Sr.No.	Particulars
1	Vivado
2	Solar Pro
3	ISRO's FEM FEAST
4	MATLAB
5	ETAB
6	Microcontroller cross compiler

7	Unigraphics
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Research Facilities:

- Metallurgy & Materials Laboratory(MED)
- CIM Lab (MED)
- Research Lab I (MED)
- Research Lab II (MED)
- Automation Lab (EEE Dept.)
- Research Lab I (EEE. Dept.)
- Research Lab II (EEE. Dept.)
- EMB lab (ETC Dept.)
- Structural dynamics and earthquake engineering Lab (Civil Department)

Other Facilities:

- Communication Language Lab
- Internet Laboratory

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

Facilities of extra- curricular activities are given below:

Outdoor games

Institute has provided facilities for Outdoor games like Kho-kho, volley ball, cricket etc. at two different venues within the campus.

The details of facilities are given below

Table 4.4: Facilities for outdoor games

Sr. No.	Details
1	Volley ball court
2	Kabaddi ground
3	Cricket
4	Football

Indoor Games / Facility

Indoor games facilities like Table Tennis, chess are provided by the institute the details of which are given below

Table 4.5: Facilities for Indoor games

Sr. No.	Details	Number
1	Table tennis	2 table
2	Chess	9
3	Carom	4 boards 20 mm with accessories
4	Gym equipment are available	

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any).

- The institute was established in 1984. Since then the requirement of physical infrastructure was duly identified, planned and constructed to meet the needs. Each of the program, run by the institute, is provided with the required academic and administrative infrastructure as per AICTE norms in the form of class rooms, laboratories, tutorial rooms, seminar rooms and faculty rooms.
- All the class rooms have well equipped furniture and some classroom with LCD Projectors and screens. Additionally, there are central facilities like central library, computer centre, examination control office, canteen and student recreational facilities.
- The campus also provides appropriate parking facility for two wheeler and four wheeler vehicles.
- The institute functions in two shifts to optimally utilize the available infrastructure.

Facilities Available, Developed/augmented**1. Instructional Area Details**

Additional infrastructure was constructed which housed the department of Electrical and Electronics, Architecture and Central Library. Additional parking space is provided in this building infrastructure facilities and available in the institute are tabulated below:

Table 4.6: Infrastructure facilities required by AICTE and available in the institute

Type	2012-13		2013-14		2014-15		2015-16		2016-17	
	Required	Available	Required	Available	Required	Available	Required	Available	Required	Available
Class Rooms and tutorial rooms –UG	2541	2705.4	2541	2705.4	2607	2771.4	2673	2810.6	2673	2810.6
Tutorial rooms PG	594	594	660	660	726	726	759	759	759	759
Laboratories (All)	4686	5877.8	4686	5877.8	4686	5877.8	4752	5901.5	4752	5901.5
Workshops	200	900	200	900	200	900	200	900	200	900
Drawing Halls	132	139.3	132	139.3	132	139.3	132	139.3	132	139.3
Seminar Halls	600	712.8	600	712.8	600	712.8	600	712.8	600	712.8

2. Electrical Infrastructure:

- 315 KVA electrical Transformer has been installed. The cost of which is Rs.5,00,000 and its electrical panel is installed costing is Rs. 5,00,000.
- Generator is upgraded from 65 KVA to 125 KVA. Cost of generators is Rs.16,00,000Capacitor Bank is upgraded up to 25 KVA.
- An electrical panel is installed in Main control room, EEE Dept, Library and Arch building, Main building, boy's hostel (old).
- Water pumps are operated during night hours for minimizing electrical charges. Institute has received incentive from MSEB almost every year for maintaining the power factor.
- Solar power generation of 100kwpwith 752 panels installed at Main building, cost of which is Rs. 1,18,00,000.Additional Solar power generation of 150kwpwith 480 panels installed on newly developed infrastructure, cost of which is Rs. 1,50,00,000/-.

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

The institute has a policy of providing class rooms and examination block on ground floor for the disabled students.

The institute has provided the infrastructure in the form of:

- Ramp at the entrance of main gate
- Special toilet blocks

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

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

Hostel facility is provided for boys and girls separately. These hostels are situated close to the institute. The capacity of Boys Hostel is 240. The hostel is provided with 24 hours security system. Potable water is provided through water purifier fitted to the coolers. The solar heaters are provided for supply of hot water. Gymnasium and TV room are available for students recreation. In case of medical emergency, the medical facilities are available on call. A Warden is appointed to look after the general discipline of the hostel. Similar facilities are provided to the Girls Hostel. The capacity of the hostel is 160 students.

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?

- New India Assurance Company Ltd accidental policy for students. In case of accidents parents sum insured is Rs.1,00,000 /- for accidental death.
- First aid box is available in every department.
- Day time clinic facility is available in the college campus and a doctor is available for this purpose. This facility is available for staff and students, during working hours of the institute. In case of emergency the patient is taken to nearby hospital using institute vehicle. The MIT group also has super speciality hospital in the same town and services can be made available if required.

4.1.7 Give details of the common facilities available on the campus

Facilities are available on campus for various special units such as auditorium, placement cell, canteen, recreational spaces, etc. The available spaces are provided with desired areas. Following are some of the other facilities available on the campus

- Purified drinking water facility is made available in all departments on all floors.
- Student Activities: - Space is made available for different activities such as Robocon, Supra, Baja, Cultural, Outdoor Sports(Playground) etc.

4.2 Library as a Learning Resource

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

Yes, the library has Advisory Committee.

Table 4.7: Library Advisory Committee

Sr. No.	Faculty Name	Committee Designation	Department
1	Dr. D. V. Nehete	Chairman	Vice-Principal (acad.)
2	Mr. S. T. Patil	Vice Chairman	Civil Dept.
3	Mr. S.N. Pawar	Member	Civil Dept.
4	Mr. Atul Tiwari	Member	Mech. Dept.
5	Mr. A. G. Deshmukh	Member	ETC Dept.
6	Ms. Sheetal Mule	Member	EEE Dept.
7	Ms. Ganeshwade M. M.	Member	CSE Dept.
8	Mr. Sayyad Samee	Member	MCA Dept.
9	Mr. Borawke S. R.	Member	Arch. Dept.
10	Ms. Patil M. M.	Member	BSH Dept
11	Mr. Thorat A. R	Member	Library
12	Mr. Yogesh Sapkal	Student Member	T.E. (C) – Mech.
13	Ms. Shital Aasbe	Student Member	T.E. (B) - ETC

Significant Initiatives taken to make library student/ user friendly:

- Committee members provide e-books in computer systems of library to avail the benefit to students and staff.
- The students have been provided with excellent environment for studies. Daily newspapers, magazines are made available in the reading room.
- Giving due considerations to the students' request library reading room timings have been extended during examination period 24X7. The students are allowed to carry their own books in the library for study.
- CCTV cameras are installed in the Central Library for security purpose.
- Online library portal is made available through intranet within the campus for the access to library electronic resources such as NPTEL videos and e-books.
- Library provides OPAC (Online Public Access Catalogue) facility within the Campus.
- Spacious study room with 260 seating capacity.

4.2.2 Provide details of the following:

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

The details of library including area, seating capacity, library hours and other relevant information is given below in the Table 4.9.

Table 4.9: Details of Library

Sr. No.	particulars	Availability
1	Total area of library	1080sq.m
2	Seating capacity of library	260
3	Reprographic facility	Yes
4	Working hours of library	10.00 am to 6.00 pm
5	Library networking facility	Yes
6	Usage data of the library (in terms of book issued to the faculty and students)	Log book is maintained
7	Annual library budget	INR 30,00,000 (average per year)
8	Reading Room Facility	24 * 7

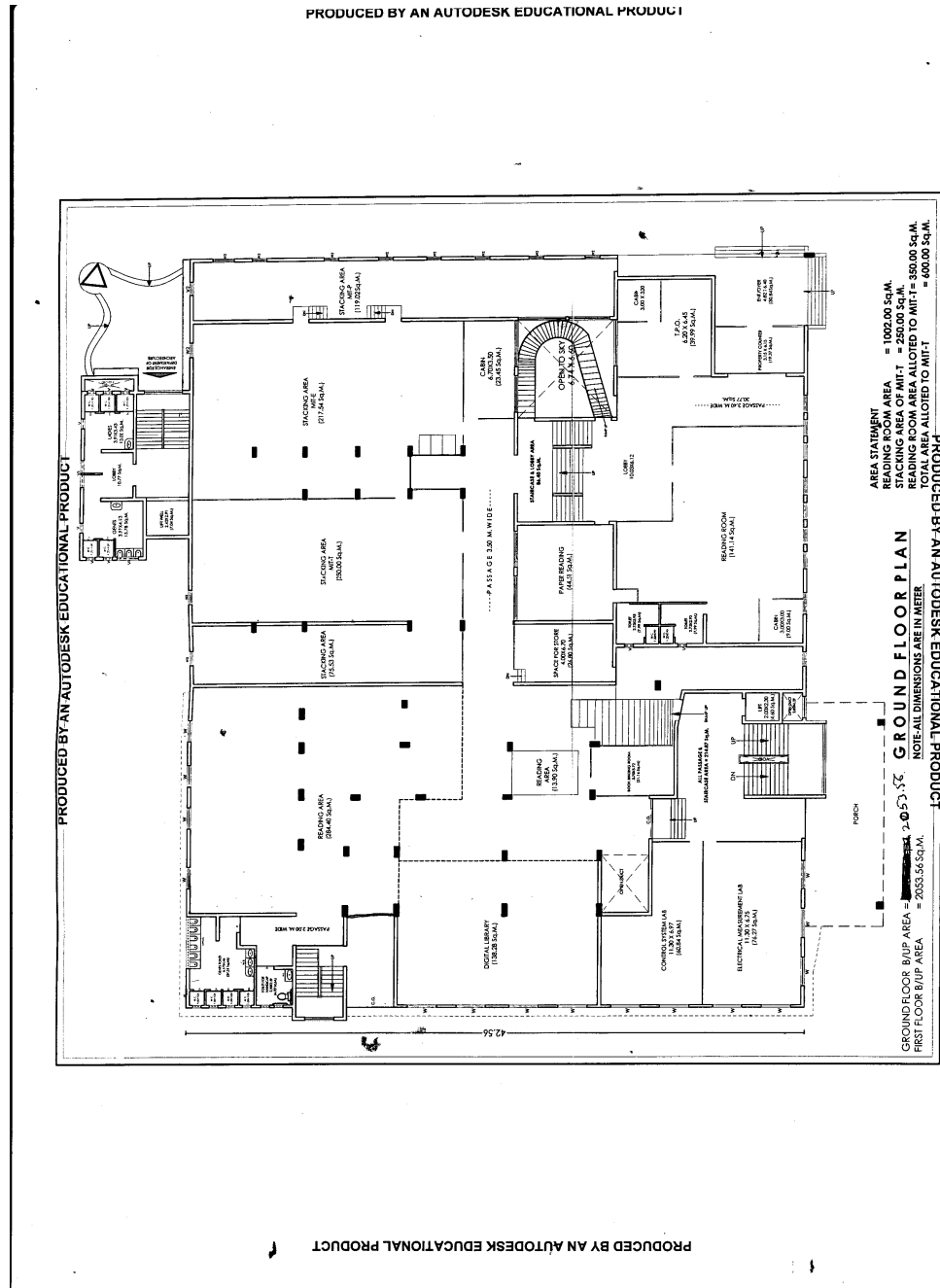


Figure 4.2: Ground Floor Plan of Library

The institution has subscribed to following e-Journal packages which covers comprehensively all disciplines.

- IEEE, ASCE, Springer- Mechanical Engineering Collection, McGraw Hill's Access Engineering, J-Gate- Engineering and Technology.
- The Institution has remote access with the Central library of Dr.BAMU, Aurangabad. Which includes Science Direct, Springer journals & Books, Taylor & Francis, EBSCO, Cambridge University Press, Emerald, IEEE Computer Society, Oxford Journals, Springer Link, Scopus, J-Gate, Wiley Online library, American Chemical Society, American Institute of Physics, American Physical Society.

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 Advisory Committee (LAC) concerned department decides which books are to be purchased. After finalizing, LAC gives recommendation for purchase of books through librarian to purchase section.

The details of amount spent on procuring new books, journals and e-resources during the last four years is as follows: (Total cost in lakh rupees)

Table 4.9: Expenditure on procuring new Text/reference books

Library Holding	Year 2012-13		Year 2013-14		Year 2014-15		Year 2015-16		Year 2016-17	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Text Books	1507	689025	2338	1010985	2460	633156	399	293691	403	588823
Reference Books	160		259		430		55		135	
Journal/ Periodical	21		70	50000	55	3186	75	112739	45	1670
News paper, General Books	15 News Paper	15785	14 News Paper	18000	15 News Paper	18380	15 News Paper	24032	15 News Paper	26658

Table 4.10: Expenditure in library in print/e-journals

Sr. No.	Academic Year	No. of print International / National Journals	No. of E- Journals (No. of Packages)	No. of Magazines & Periodicals	Cost
1	2012-13	59	• IEEE – 145 • Springer - 49 • ASCE – 34 • McGraw Hill – 363	53	854549

			• J-Gate - 6500		
2	2013-14	38	• IEEE – 145 • Springer - 49 • ASCE – 34 • McGraw Hill – 363 • J-Gate - 6500	38	750000
3	2014-15	48	• IEEE – 145 • Springer - 49 • ASCE – 34 • McGraw Hill – 363 • J-Gate –7035	36	908698
4	2015-16	71	• IEEE – 162 • Springer - 49 • ASCE – 35 • McGraw Hill – 363 • J-Gate –7035 • Remote access to Central Library of Dr. B.A.M.U. Aurangabad	39	915698
5	2016-17	39	• IEEE – 169 • Springer - 49 • ASCE – 35 • McGraw Hill – 363 • J-Gate –7035 • Remote access to Central Library of Dr. B.A.M.U. Aurangabad	28	1027219

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

1. **Online Public Access Catalogue(OPAC):** OPAC is an online database of materials held by the Central Library. Users search a library catalogue principally to locate books and other material physically located at a Central library. The patron in the library can search the bibliographic database and find specific information. The search facility also apprises the user about the availability of each item for circulation, including current status of individual copies of a title and reserve status.

2. **Electronic Resource Management package for e-journals:**

The Library has access to e-journals and databases as per AICTE norms.

- IEEE-All-Society Periodicals Packages (ASPP) 169 Journals
- ASCE- Journals Package 35 Journals Plus
- Springer- Mechanical Engineering Collection titles-49

- McGraw Hill- McGraw Hill's Access Engineering : 363 (2017)
 - J-Gate (Engineering and Technology)
3. **Federated searching tools to search articles in multiple databases:**
Not Available
 4. **Library Website:**
172.16.0.10:3333 (Intranet IP address)
 5. **In-house/remote access to e-publications**
Through internet, Wi-Fi and Library Portal
 6. **Library Automation:**
Yes. All the work related to issue and return has been partially computerized. Many of books are bar-coded.
 7. **Total number of computers for public access:**
74 computers
 8. **Total numbers of printers for public access:**
All PCs are attached to copier machine for printing/photocopy.
 9. **Internet band width speed:**
1 GBPS (BSNL leased line)
 10. **Institutional Repository:**
Institutional repositories are a development in managing digital objects for effective utilization. Institutional repository is an online archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution. An institutional repository might also include power points presentation, course notes, NPTEL learning objects, MCQ, Syllabus, Previous Question papers, College proceedings or research paper of faculties. Deposit of material in an institutional repository is sometimes mandated by that institution. It is available through intranet link.
 11. **Content management system for e-learning:**
NPTEL videos
 12. **Participation in Resource sharing networks/consortia:** NA

4.2.5 Provide details on the following terms:

- a. Average number of walk-ins per day
- b. Average number of books issued/returned per day
- c. Ratio of library books to students enrolled
- d. Average number of books added during last three years per year
- e. Average number of login to OPAC per day
- f. Average number of login to e-resources (per month)
- g. Average number of e-resources downloaded/printed
- h. Number of information literacy trainings organized
- i. Details of “weeding out” of books and other materials

The detail about the relevant data for library is shown in Table 4.11.

Table 4.11 Details of Library

Sr. No.	Particular	Remark/response
1	Average number of walk-ins	200-250/day
2	Average number of books issued/returned	150-175 books/day
3	Ratio of library books to students enrolled	15:1
4	Average number of books added during last three years	1930 books were added/Year
5	Average number of login to OPAC	100-125/day
6	Average number of login to e-resources (per month)	E-resources are made available through Institute 's IP address.
7	Average number of e-resources downloaded/printed	Users number is very large so it is not recorded.
8	Number of information literacy trainings organized	The library takes an active part in information literacy program organized by the institute for the benefit of new students in the beginning of an

		academic year. They are taken around the library to familiarize them with various resources and services available for them. Training sessions are also organized whenever a new product or service is introduced.
9	Details of “weeding out” of books and other materials:	It is in process

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

Manuscripts

Reference and Text Books

Reprography section

Inter Library Loan Service (ILL)

Information deployment and notification

Download

Printing

Reading list/ Bibliography compilation

In-house/remote access to e-resources

User Orientation and awareness

The relevant details of the specialized services provided in the institute library is given in Table 4.11

Table 4.11 Details of the specialized services provided

Sr. No.	Particular	Remark/response
1	Manuscripts	General books available in library.
2	Reference and Text Books	53,204 reference and text books are available.
3	Reprography section	One copier machine and one scanner are available.
4	Inter Library Loan Service (ILL)	We have co-operation with Maharashtra Institute of Technology MIT Polytechnic, and MIT-IT Cidco.
5	Information deployment	Done through notice sent to all

	and notification	departments also displayed in Library Notice board
6	Download	Yes.
7	Printing	Yes, copier machine which is attached to computers.
8	Reading list/ Bibliography compilation	Trade Catalogue is available OPAC
9	In-house/remote access to e-resources	Internet, Intranet and Wi-Fi, IP based access to E-journal throughout campus.
10	User Orientation and awareness	We organize orientation program for students and teachers at the beginning of every academic year.

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

Library staff assists the students and teachers in case of difficulty in accessing the resources. Library provides new arrival of documents through notice. Further a copy of revised syllabus is sent to all the respective heads of departments. In addition to this, different databases/websites for accessing and downloading the research papers, e-books to students and staff, information, orientation program/awareness program arranged for users.

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

- Reading room facility available in ground floor. Moreover, ramp is made available.
- Library staff helps the physically challenged persons for getting the books.

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. Library gets the feedback from the users. LAC analyses the feedbacks and recommends corrective measures, if any.

Special Features of library:

1. Book Bank scheme for all students
2. Open Access for students

3. Potable Drinking water (RO)
4. Earn and Learn scheme for needy students

4.3 IT Infrastructure

4.3.1. Give details on the computing facility available (hardware and software) at the institution.

Table 4.12 No. of computers with configurations

Sr. No.	Particular	Remark/response
1	Number of computers with	697
2	Computer student ratio	No. of students admitted in current year: 2940 (Ratio = 1:4)
3	Stand alone facility	YES
4	LAN facility	YES
5	Wi-Fi facility	YES
6	Licensed software	YES
7	Number of nodes/computers with internet facility	All labs are in network and have internet facility (697 computer systems)
8	Any other	

Configurations details of the PC's is as follows:

Table 4.13 Configurations details of PC

Sr. No.	Numbers of PCs	Configurations
1	247	Lenovo c2d 300 GB HDD 2GB RAM
2	54	Lenovo Dual Core 250 GB HDD 2GB RAM
3	90	Lenovo Dual Core 250 GB HDD 1GB RAM
4	212	Lenovo i3 500 GB HDD 4 GB RAM
5	70	Lenovo i3 500 GB HDD 2 GB RAM
6	24	Lenovo i3 500 GB HDD 10 GB RAM

License Software:**Table 4.14 License Software**

Sr. No.	Software Name	Number of Licenses
1	Unigraphics	15
2	SOLID WORKS	20
3	MATLAB	5
4	VLSI DESIGN	1
5	LAB View	25

Software available through Microsoft Academic License:**Table 4.15 Software available through Microsoft Academic**

Sr. No.	Software	Details
1	.NET Framework 4.5-4.6.2	System Centre 2016 Technical Preview 5 Operations Manager
2	Access 2013, 2016	System Centre 2016 Technical Preview 5 Orchestrator, Service Manager, 5 Virtual Machine Manager
3	Advanced Threat Analytics (ATA) version 1.4-1.7	System Centre 2016 Virtual Machine Manager
4	Agents for Visual Studio 2013, 2015	System Centre Configuration Manager (version - 1606)
5	Agents for Visual Studio 2017 Preview	System Centre Configuration Manager and Endpoint Protection Technical Preview 5
6	ASP.NET MVC 2	System Centre Configuration Manager, Version 1511
7	ASP.NET MVC 4 for Visual Studio 2010 SP1 and Visual Web Developer 2010 SP1	Team Explorer Everywhere for Team Foundation Server 2012
8	AutoRoute 2013	Team Explorer Everywhere for Team Foundation Server 2013
9	Azure Stack Technical Preview 1	Team Explorer for Visual Studio 2012, Studio 2013
10	BizTalk Server 2013 Developer Edition	Team Foundation Server 2017
11	BizTalk Server 2013 Enterprise Edition, R2	Team Foundation Server Express 2015 Team Foundation Server Express 2017

	Developer Edition, R2 Enterprise Edition, R2 Standard Edition	
12	BizTalk Server 2016 Standard Edition	Team Foundation Server Extensions Project Server 2015 Update 2
13	BizTalk Server 2016 Enterprise Edition	Team Foundation Server Office Integration 2015
14	Desktop Optimization Pack 2012, 2013, 2013 R2, 2014, 2014 R2, 2015	Team Foundation Server Office Integration 2017 RC
15	Exchange Server 2010 Service Pack 3, 2013, 2013 with Service Pack 1, 2016	Team Foundation Server Project Server Extensions 2015 Update 3
16	FAST Search Server 2010 with Service Pack 2	Visio Professional 2013, 2016
17	Feedback Client for Visual Studio 2013, 2017 RC	Visual C++ 2015 Redistributable
18	Feedback Client for Visual Studio Team Foundation Server 2012, 2015	Visual Studio 2012 - 2015
19	Host Integration Server 2010, 2013, 2016 Developer, 2016 Enterprise	Visual Studio Enterprise 2017 RC Visual Studio Express 2012 Visual Studio Express 2013 for Web
20	InfoPath 2013	Visual Studio Express 2013 for Windows , 2015
21	IntelliTrace Collector for Visual Studio 2012 (v. 2012.1), (v. 2012.2), (v. 2012.4),	Visual Studio Premium 2012, 2013
22	IntelliTrace Collector for Visual Studio 2013	Visual Studio Team Foundation Server 2012 , 2013, 2015 , Express 2012, Express 2013, Express 2014
23	IntelliTrace Standalone Collector for Visual Studio 2017 RC	Visual Studio Professional 2012 , 2013 , 2015 , 2017 RC
24	Kinect for Windows Developer Toolkit v1.6, v1.7, v1.8	Visual Studio Ultimate 2012, 2013 Visual Studio Test Professional 2012 , 2013, 2015, 2017RC
25	Kinect for Windows SDK 11.0 Language Pack	Windows 10 (Multiple Editions)
26	Kinect for Windows SDK 2.0, v1.5, v1.5.0, v1.5.1, v1.6, v1.7, v1.8	Windows 10 N (Multiple Editions)
27	Lync Server 2013	Windows 8
28	MapPoint 2013	Windows 8.1

29	Microsoft Azure - 2.4, 2.5, 2.6	Windows Azure - 2.3
30	Microsoft Azure Tools for Visual Studio 2012 - 2.4, 2.5, 2.6	Windows Azure Tools for Visual Studio 2012 - 2.3
31	Microsoft Deployment Agent 2015, 2015 Update 1, 2015 Update 2, 2015 Update 3	Windows Embedded 8 Industry Pro
32	Microsoft Hyper-V Server 2012, Debug/Checked	Windows Embedded Compact 2013
33	Microsoft Hyper-V Server 2012, 2012 R2, 2012 R2 Debug/Checked, 2016, 2016 Technical Preview 3, 2016 Technical Preview 5	Windows Phone SDK 7.1, 8.0
34	Microsoft R Client, Microsoft R Server, R Server 9.0.1	Windows Server 2012
35	Modeling SDK for Visual Studio 2015 Update 2, Update 3	Windows Server 2012 R2
36	Multibyte MFC Library for Visual Studio 2013	Windows Server 2016 Technical Preview 5 Symbols
37	Performance Tools for Visual Studio 2017 RC	Windows Small Business Server 2011 Standard
38	Project 2013, 2013 with Service Pack 1, 2016	Skype for Business Server 2015
39	Release Management Client for Visual Studio 2015, Update 1, Release Management Server for Team Foundation Server 2015, Update 1, Update 3	Speech Server v11.1
40	Remote Tools for Visual Studio 2012, 2013, 2015	SQL Server 2008 Express, 2008 R2
41	Remote Tools for Visual Studio 2017 RC	SQL Server
42	Search Server 2010 with Service Pack 2	SQL Server 2012 Business Intelligence, Developer Edition, Developer Edition, Web Edition
43	SharePoint Designer 2013, SharePoint Server 2016	SQL Server 2014 Business Intelligence
44	SQL Server 2014 Developer Edition, Enterprise Core Edition, Express Edition, Standard Edition, Web Ed.	System Centre 2012 R2 Orchestrator,

45	SQL Server 2014 Management Studio	System Centre 2012 R2 Service Manager,
46	SQL Server 2016 Developer, Enterprise, Enterprise Core, Express Edition, Standard, Web	System Centre 2012 R2 Virtual Machine Manager,
47	SQL Server vNext CTP1	System Centre 2012 Virtual Machine Manager with Service Pack 1,
48	System Centre 2012 Client Management Suite	System Centre 2016 Data Protection Manager,
49	System Centre 2012 Configuration Manager	System Centre 2016 Operations Manager,
50	System Centre 2012 R2 App Controller	System Centre 2016 Orchestrator,
51	System Centre 2012 R2 Configuration Manager	System Centre 2016 Service Manager,
52	System Centre 2012 R2 Data Protection Manager	System Centre 2016 Technical Preview 5 Data
53	System Centre 2012 R2 Operations Manager	Windows Server 2016 Essentials

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

- Internet facility is available to the staff and students on campus.
- Most of the computers are connected and internet facility is available.
- The institute has 1 GBPS lease line.
- The Principal cabin, Administrative Office, HoD cabin, faculty cabins, computer labs in every department have internet facility.
- Digital library is established to provide access to research publications and technical magazine.
- The ratio of computer and the students is approximately 1:4

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

- Computer lab has been setup in all the departments for conducting labs and trainings related to the software of respective departments.
- Hardware and software up-gradations required for new technologies are done and provisions are made in the budget for necessary up-gradations.

- New computer labs, up-gradations, networking and other facilities budgeted are procured so the departmental labs conform to the latest technologies.
- Institute has upgraded the 155Mbps Leased Line Internet connectivity to 1 Gbps Leased Line (1:1) over Optical Fiber Cable.
- LCD projectors in department classrooms are made available.
- The institute in the near future is optimistic about infrastructural up gradation.
- The college intends to upgrade the PCs to latest configuration available in the market.
- Video conferencing facility is available
- Institute is planning for Wi-Fi facility in entire campus. As first stage of plan Wi-Fi facility is made available at boy's and girl's hostels.

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)

Table 4.16 Annual budget for procurement/up gradation/deployment and maintenance of the computers

Sr. No.	Particulars	2014-15	2015-16	2016-17
1	Computer Procurement	Rs. 52,80,717/-	Rs. 1,66,32,000/-	Rs. 28,49,000/-

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?

At the Institute, 15 workshops have been conducted under NMEICT program sponsored by MHRD. IIT Bombay conducts ISTE workshops during the vacation period in summer and winter. Teachers attend the workshops at a designated Remote Centre (RC), close to their own college. Lectures are delivered by faculty from IIT Bombay, while tutorials and lab sessions are conducted locally in the same RC.

- Name of Remote Centre: Marathwada Institute of Technology, Aurangabad
- Remote Centre ID: 1098
- Remote Centre Since: June 2012

- We have NPTEL system which is also under NMEICT program. NPTEL system makes available a number of video lectures for different engineering stream subjects.
- The institute has a virtual lab under NMEICT program. IIT, Bombay is the nodal Centre and the Institute Remote Centre Id is 16. The Virtual Lab was inaugurated on 9th April 2016.
- Every department has been equipped with one Pearson Digital Classroom.
- Many classrooms equipped with LCD projectors so that faculties can teach through demonstrations, videos, pictures etc.
- Some departments have following facilities for conducting trainings: Wi-Fi routers, Raspberry-Pi Kits etc.
- The Institute has subscribed following e-resources. All faculty members and students can access the following website for e-resources and upgrade their knowledge for academic enhancement.

Table 4.17 E-recourses and no. of journals

Sr. No.	Title of e-Resource	No. of Journals
1	IEEE e-Journals	159
2	Mc-Graw Hills e-Books	363
3	ASCE e-Journals	34
4	Springer (Mechanical Engineering e-Journals)	49
5	J-Gate Engineering Database	7035
6	Remote Access to e-Resources, Dr. Babasaheb Ambedkar Marathwada University Central Library	UGC Info net Online Journals • American Chemical Society • American Institute of Physics • American Physical Society • Annual Reviews • Cambridge University Press • Economic & Political Weekly • Emerald • Institute of Physics • JSTOR • Oxford University Press • Project Muse • Royal Society of Chemistry • ScienceDirect (10 Subject Collection)

		• Springer Link • Taylor & Francis • Web of Science • J-Gate • Indian Citation Index Online Database • ISID • JCCC • Wiley Blackwell • Royal Society of Chemistry • SCOPUS • IEEE Computer Society Digital Library (CSDL) • Proceedings of the National Academy of Sciences of the USA(PNAS) • LexisnexisBentham Science Journals
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- Workshops are conducted for promoting use of ICT tools in design and development. The details are given in Table 4.18

Table 4.18 Workshops are conducted

Sr. No.	Dates	Workshop Topic	Coordinator	Dept.	No. of Participants	ICT Resources used
1	26-03-2015 to 30/03/2015	Electrical CAD	Mr. S.A. Sabnis Mr. Saundarmal	EEE	64	Computers and Electrical CAD
2	23/10/2015	Arduino Workshop	Student	EEE	44	Cross Compiler

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 space etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

- The institute has GATE software which students can use for GATE exam preparation.
- Students can perform practical in virtual lab for better understandability.

- Faculty members share e-Resources available in the form of presentations, pdf files, videos with the students so as to enhance the knowledge about the subjects.
- The digital library and the e-resources are accessible to the students for promoting self-learning and knowledge up-gradation.

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?

At the Institute, 15 workshops have been conducted under NMEICT program sponsored by MHRD. IIT Bombay conducts ISTE workshops during the vacation period in summer and winter. Teachers attend the workshops at a designated Remote Centre (RC), close to their own college. Lectures are delivered by faculty from IIT Bombay, while tutorials and lab sessions are conducted locally in the same RC.

Name of Remote Centre: Marathwada Institute of Technology, Aurangabad

Remote Centre ID: 1098

Remote Centre Since: June 2012

Table 4.19 Workshop under NMEICT

Sr. No.	Dates	Workshop Topic	Coordinator	Dept.	Funds Received if any	No. of Participants
1	10/07/2014 to 20/07/2014	Cyber Security	Dr. Chitra G.Desai	MCA	1,17,095	22
2	20/05/2014 to 21/06/2014	Computer Programming	Shubhshree Savant	MCA	1,04,315	34
3	21/05/2013 to 31/05/2013	Database Management System	Dr. Chitra G.Desai	MCA	2,20,826	75
4	25/06/2012 to 04/07/2012	Introduction to Research Methodologies	Dr. Chitra G.Desai	MCA	1,28,575	45
5	20/05/2014 to 30/05/2014	Engineering Fluid Mechanics	Mr. ShonPatil	Mech	1,63,690	26
6	30/06/14 to 05/07/2014	Computer Networks	Dr. RadhakrishnaNaik	CSE	80,748	23

7	08/12/2015 to 18/12/2015	Engineering Physics	Ms. MadhuriPatil	FE	1,27,752	31
8	11/12/2012 to 21/12/2012	Engineering Thermodynamics	Dr. Subhash Lahane	Mech	1,28,646	51
9	10/11/2012 to 11/11/2012	Aakash For Education for Teachers	Dr. Chitra G.Desai	MCA	246 Tab Received	47
10	03/03/2013 to 04/03/2013	Aakash Android Application Programming Workshop for Students	Dr. Chitra G.Desai	MCA	17,000	66
11	25/12/2015 to 31/12/2015	Design and Algorithm	Mr. Amar R. Mudiraj	MCA	1,09,844	61
12	02/06/2015 to 12/06/2015	Introduction to Environmental Science	Dr. Jagdish H. Godihal	Civil	1,38,382	42
13	30 /01/2017 to 04/02/2017	“CMOS mixed signal and radio frequency VLSI design”	Ms. Monika S. Joshi	ETC	90,950	28
14	02/05/2016 to 10/07/2016	Use Of ICT In Education For Online And Blended Learning - For Teachers	Dr. Jagdish H. Godihal	NA	NA	42
15	Since 2012	Spoken Tutorial Workshops for Students	Ms. Shubhshree Savant	MCA	No Cost	Class- Wise

- We have NPTEL system which is also under NMEICT program. In NPTEL system we have collection of Video Lectures for different engineering streams and subjects.
- The institute has a virtual lab under NMEICT program. IIT, Bombay is the nodal Centre. The Virtual Lab was inaugurated on 9th April 2016. It has provided labs for many subjects of engineering. Faculties can conduct practical of available subjects in this lab.

4.4 Maintenance of Campus Facilities

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

- a. Building
- b. Furniture
- c. Equipment
- d. Computers
- e. Vehicles
- f. Any other

Infrastructure maintenance expenditure for last four year is given below.

Table 4.20: Infrastructure maintenance expenditure

Sr. No.	Particulars	2013-14	2014-15	2015-16
a.	Building	Rs. 11,83,925/-	Rs. 10,00,000/-	Rs. 50,00,000/-
b.	Furniture	Rs. 3,78,000/-	Rs. 7,00,000/-	Rs. 20,00,000/-
c.	Equipment	-	-	-
d.	Computers	Rs. 3,79,000/-	Rs. 4,25,000/-	Rs. 5,00,000/-
e.	Vehicles	Rs. 12,83,000/-	Rs. 25,00,000/-	-
f.	Any other	-	Rs. 2,00,000/-	Rs. 1,50,000/-

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

Concerned section /Department head sends a request form to the concerned section. Based on the request, material requisition is sent to central store. After receiving the material, repair/maintenance work is carried out.

1. Maintenance of furniture items and metal fixtures is carried out by Workshop.
2. Maintenance of EPABX, Air Conditioning System, Water Coolers, glass fittings etc. is looked after by Store Keeper of Central stores. External agency is appointed for maintenance either in the form of AMC or on case to case basis.

3. Maintenance of plumbing related work is managed by Estate Manager. Estate Manager also looks after general cleanliness through separate House Keeping team.
4. Electrical Maintenance is looked after by Electrical Maintenance coordinator and his team.
5. Repair and Maintenance of equipment and instruments is initiated by Laboratory In charge as and when required. As a precautionary measure laboratory in charge, along with laboratory assistant, ensures proper working of all equipment at the beginning of each semester.
6. Annual Maintenance Contract is signed for Generator, UPS etc.
7. General civil maintenance and upkeep of civil infrastructure is carried out by the Head Infrastructure Management Cell.

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

- Mechanical department is in a process of calibration of major equipment.
- Civil Engineering Department is in a process of calibration of major equipment and Universal Testing Machine.
- The equipment in all laboratories is verified for their working conditions at the start of every semester, following the procedure laid down in Quality Manual.
- The equipment which are used for research and consultancy work are calibrated every year.

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

Circuit breakers are provided to protect sensitive equipment Institute has three bore wells on and across campus to meet the water requirement. There is a main storage tank for drinking water having 1 lakh litre capacity and the institute has about 2 lakhs litres capacity for usage purpose. This ensures constant supply of water to meet the requirement of the institute. Ground water recharge, additionally, recharges the borewell.

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

The management and the institute take efforts to upgrade and maintain the infrastructure of the campus and the laboratory. Department of Mechanical Engineering has secured additional funding from MODROB (Computer Integrated Manufacturing Lab), AICTE of Rs. 6.0 lakhs for up gradation of laboratory in the year 2011.

CRITERION – V

STUDENT SUPPORT AND PROGRESSION

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1 Does the institution publish its updated prospectus / handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes, the institution publishes the information brochure annually. This brochure is given along with the application form to every candidate who wishes to take the admission to the institute. The brochure includes Vision and Mission of the institute, details of programmes offered, facilities provided, rules and regulations, various co-curricular and extra-curricular activities conducted by the institute. The brochure also has information about ethics and code of conduct, hostel facility, infrastructural set up, canteen facility, learning resources provided to students, training and placement activities, centralized computing centre, campus-wide networking, UG and PG courses, eligibility criteria for admission, student scholarships, student council, information about the departments, MoU with various organizations and cultural activities conducted and innovative practices followed in the departments.

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

Financial assistance in the form of scholarship is awarded every year to students under different heads as approved by the management and disbursed by the institute. Institute gives fee concession to wards of non-teaching staff for pursuing education in any of the institute of the Trust. Institute offers fee waiver scheme for needy students and gives concession in tuition fees for deserving students.

Details of students receiving financial assistance from the institute in the last four years are given in Table 5.1.

Table 5.1: Details of students receiving financial assistance from Institute

Sr. No	Academic Year	No. of students	Amount Disbursed (Rs)
1.	2012-13	01	9,841
2.	2013-14	02	33,452
3.	2014-15	06	86,011
4.	2015-16	04	53,426

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

Students receive financial assistance from State Government, Central Government and other national agencies based on eligibility criteria that are

laid down by the various regulatory bodies. Central government offers minority scholarships for students and institute students avail the same. Students belonging to SC/ST/OBC categories avail scholarship/free ship from State Government. Scholarships/free ships are given by State Government of Maharashtra based on parental annual income. Details of students receiving financial assistance from various government agencies (such as for social welfare, economically backward, minority, etc) are given in Table 5.2 and Table 5.3.

Table 5.2: UG students (Social welfare + EBC + Minority + STC/PTC + Central sector)

Academic Year	Total no. of students	Scholarship from state government		Scholarship from central government		Total % of students
		No. of students	% of students	No. of students	% of students	
2012-13	2868	1853	64.60	391	13.63	78.23
2013-14	3048	2013	66.00	460	15.10	81.10
2014-15	3022	2025	67.00	414	13.70	80.70
2015-16	2932	1887	64.36	403	13.74	78.10
2016-17	2725	1770	64.95	368	13.50	78.45

Table 5.3: Details of students receiving financial assistance from various government agencies for PG students (AICTE + GATE+ Minority)

Year	Total no. of students	Scholarship from state government		Scholarship from central government		Total % of students
		No. of students	% of students	No. of students	% of students	
2012-13	506	-	-	05	0.98	0.98
2013-14	554	-	-	04	0.72	0.72
2014-15	574	-	-	05	0.87	0.87
2015-16	341	-	-	07	2.10	2.10
2016-17	204	-	-	03	1.47	1.47

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
- Overseas students
- Students to participate in various competitions/National and International

- **Earn and Learn scheme**
- **Medical assistance to students: health centre, health insurance etc.**
- **Organizing coaching classes for competitive exams**
- **Skill development (spoken English, computer literacy, etc.)**
- **Support for “slow learners”**
- **Exposures of students to other institution of higher learning/ corporate/business house, etc.**
- **Publication of student magazines**

The institution for this purpose provides the following support facilities to its students:

Students from SC/ST, OBC and economically weaker sections -

Students from SC/ST, VJ, SBC, and OBC, NT-B, C, D and economically weaker sections receive scholarship/free ship from the Social Welfare Department as per Government regulations. Economically Weaker Section students get EBC concession in fees from Govt. of Maharashtra through Directorate of Technical Education (DTE). Book bank scheme is also provided to these students by the institute.

Students with physical disabilities -

The facilities provided by the institute to differently-abled students are as follows:

- Ramps are provided at the entrance of institute for the convenience of these students. They are given extra time and writers during examinations as per university norms. Administrative support is provided to the students to avail concessional travel to attend conferences, seminars, and industrial visits etc. from state and central government agencies.
- Preference is given to the students with physically disabilities in usage and book issues in Library. They can exchange the books on any day & time. For other students, the exchange of books is as per the time table.

Overseas students -

There are no overseas students admitted in the Institute.

Students to participate in various competitions/National and International -

Information is circulated among students about various paper presentations, seminars, project competitions, model makings etc. as well as notified on

notice boards. Students are guided by faculty members for participation in these competitions. Usage of laboratories & computer facilities, e-journals, library, workshop etc. are extended to students. 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 IITs, NITs, Universities and other colleges. All necessary support and services are provided by the institute like financial assistance, Wi-Fi facility and library facility. A separate budget provision is made to take care of these activities.

Earn and Learn Scheme: Institute also supports earn and learn scheme. Students those who are from financial weak background are given some work in laboratory/ library after the academic hours so that students can earn and get the benefit under this scheme. Every semester about 10 students take advantage under this scheme.

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

Accidental policy for students by new India Assurance Company limited.

Clinic-

Institute has medical clinic facility available for students and staff. This facility can be used during day time. Furthermore, Group of MIT Institute also run a multi-speciality hospital. This facility can be availed by student and faculty.

Availability of first-aid unit-

All the departments and sections are equipped with First Aid boxes. Periodical inspection is carried out to replace expired medicines with fresh stock.

Organizing coaching classes for competitive exams-

Final year students are made aware about the various competitive exams through departmental training and placement coordinators. Aspirant student of such classes is advised to contact the faculty as per the subject expertise in off hour to get the guidance.

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

Communication skills are taught as a part of the curriculum and practical sessions are conducted in a dedicated language laboratory. In addition, guest lectures by eminent and distinguished personalities are arranged by the Training and Placement department and every department takes efforts to enhance soft skills such as spoken English, resume writing, personality development etc.

Support for “slow learners”-

Special mentoring is provided for weak students not only to help them in academics but to provide guidance for career development, help them tackle

personal and social problems and to guide them for their overall development. Weak students are identified based on result of University examinations. Additional lectures and practical are conducted to bring them at par with other students.

Exposures of students to other institution of higher learning / corporate / business house, etc. -

Institute motivates student for participation in technical event organized by other institutes like IIT Tech-fests, ISTE Conventions and visits to IIT, National Youth Parliament Council (NYPC), etc. Industrial Training, Industrial Visits, Visits to Exhibitions like IMTEX, DIPEX, DEFEXFO, Auto Expo etc. are also arranged periodically.

Publication of student magazines –

Newsletters are periodically published centrally that highlight the achievements of the students and faculty members and showcase special activities conducted during the semester like Guest Lectures, Training Sessions etc.

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

Entrepreneurship Development Cell has been established in the institute. As a part of third year curriculum, students undergo vocational training during summer vacation for about a month and submit a report based on it. This provides exposure to industrial work culture; processes and live experience of its functioning and help to understand the prerequisites for an entrepreneur. The nature of functioning of the EDC is to organize Entrepreneurship awareness program for UG students. Some expert talk on the Entrepreneurship related topics on creativity, leadership, motivation, Entrepreneur skills etc.

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.

Institute has identified extra-curricular and co-curricular activities and encourages students to participate in the activities. In addition, the institute organizes annual events like Technical competitions, Cultural fest, Technoblitz, e-Nexplora, a regular feature of each department. A student council is constituted which organizes and promotes these activities. Students are also encouraged to participate in various sports, quiz competitions, debate and discussions, cultural competitions etc. This gives an opportunity to the students to showcase their talents and capabilities.

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

Apart from good academic record, sports play a very important role in building personality. Institute encourages students to participate in a variety of sports activities at intercollegiate, university, state and national levels. Institute provides required kits/material and daily allowance to students participating in sports activities. Participating students are treated as on Deputation on College work. They are given flexibility in schedule of the class test, allowance like TA-DA, registration fees, additional expenses are also provided. Institute gives Track Suits for University Players (selected as Member of Dr. BAMU Team).

NCC (National Cadets Corps) Activity:

The National Cadet Corps plays a significant part in moulding a person's character. It fosters the spirit of teamwork and man-management and leads to the development of a more pleasing overall personality. Recognizing the importance of the NCC, the Institute offers the students an opportunity to be part of the NCC. The Institute cadets are part of the 50 Maharashtra Battalion NCC Aurangabad.

NCC General Activities

- Parades are regularly held to train the cadets in foot drill and command, weapon training, field craft, civil defence, map reading etc.
- Guard of Honour is given on 26th January and 15th August to commemorate the Republic Day and Independence Day of India.

NCC Camp Activities

- An Annual Training Camp is held to further enhance and inculcate a feeling of independence in the cadets.
- Extensive knowledge about devices used in the Army weapons etc. is imparted in camp.
- Rigorous physical Military training is provided in the camp with a view to increasing the physical endurance of the cadets.
- Table 5.4 present the year-wise camps held at Military Cantonment Area- Chhavni, Aurangabad.

Table 5.4: Year-wise NCC camps held

Sr. No.	Academic Year	Date (participants)	No. of Participants
1	2012-2013	03 Sept to 12 Sept 2012	20 Cadets
2	2013-2014	28 Jan to 06 Feb 2013	6 Cadets
3	2014-2015	24 Jan to 02 Feb 2014	10 Cadets
4	2015-2016	9 Sept to 19 Sept 2015	10 Cadets
5	2016-2017	10 Aug to 19 Aug 2016	25 Cadets

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

Orientation & guidance lectures about various competitive exams are organized every year. Students who are interested and willing to appear in various competitive examinations get helped from the expert, available study material and counselling for preparation. Students are allowed to have access to library and to refer books related to entrance tests. In the recent past many students have appeared and qualified in various competitive exams and the details are given in Table 5.5.

Table 5.5: No of students who have qualified in various competitive exams

Particulars	2012-13	2013-14	2014-15	2015-16	2016-17
GATE	07	01	04	09	16
GRE /TOFEL	02	03	02	04	Nil
Civil services	Nil	Nil	01	Nil	Nil

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

- **Mentoring Cell**

According to AICTE norms, the institute constitute a Mentoring Cell consisting of students volunteering to be Mentors for freshers and there are as many levels or tiers of Mentors as the number of batches in the institution, at the rate of one Mentor for six fresher's and one Mentor of a higher level for six Mentors of the lower level.

- **Teacher Guardian Scheme**

Academic and Personnel counselling services are provided by the teacher guardian to each student. Apart from regular schedule, faculty members conduct the meetings of students as a guardian. The role of teacher guardian is to be a coach/advisor, source of encouragement, support and resource person.

- **Help to Slow learners**

Remedial classes are arranged for slow learners by concerned faculty members immediately after the semester end. Also, faculty members are available after the class hours to clear the doubt of students.

- **Academic and Career counselling**

The students, at the time of the admission, are guided by the faculty. They are informed about the scope and nature of the various subjects that form the syllabus. They are counselled adequately to shape their career

- **Social awareness**

The students are made aware about the social problems and responsibilities through various lecture talks, competitions and innovative project. Water conservation, Energy saving, waste management, pollution monitoring, health awareness, road safety and many more topics related to smart city are considered.

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 programmers).

The Institute has a structured mechanism for career guidance for its students. Under the guidance of the Principal, the Institutes Training and Placement Officer in coordination with Departmental Training and Placement coordinators carry out different activities related to both training and placement. These include,

- Collection of data and CV's of each student
- Arranging for training activities to enhance aptitude and soft skills
- Arranging group discussions and mock interviews
- Arranging expert / guest lecturers of industry personnel
- Arranging industrial training
- Arranging campus placement drive

The following services are provided in the career guidance and placement.

Information of job Opportunities:

The students are informed regarding the vacancies offered by government and other agencies. The notice of the advertisements is put up on the notice board at training and placement cell as well as at every Department. The students are informed regarding all necessary information and important dates for such vacancies.

Preparation for Campus Drive:

The training and placement cell organizes lectures on career opportunities. Interactions are conducted between the training and placement personnel/ invited experts and the students to brief them about exam module and pattern, the syllabus, and the methodology of attempting the paper. Mock tests are held to facilitate them in this pursuit. Their performance is analysed after every test and then a brain storming session is organized to assess their strengths and weaknesses.

Soft Skills Training Areas:

Soft skill training areas include positive attitude development, goal setting, leadership, decision making, team building, communication skills, mock interviews, and vocational training.

Follow up:

The placement cell keeps track of the post examination developments. As and when the result is declared, the cell informs the students regarding the result. The results are analyzed and then the next process of helping the successful candidates is taken up.

GDPI:

The Institute organizes sessions of Group Discussions and Mock Personal interviews for the candidates who have succeeded in the written test. The Mock drill exercise takes place till the candidate is totally confident regarding his performance for the final interview.

Campus Placement:

The placement cell of the institute invites many reputed companies for campus recruitment. The students of the institute are sent to off campus interviews also. The details of the selection through placement and sample list of companies/industries are given in Table 5.6 and Table 5.7 respectively.

Table 5.6: Student selected in campus placement drives during last four year

Academic Year	2012-13	2013-14	2014-15	2015-16
No. of students placed	22	47	36	54
% of placed students	10%	16%	12%	22%

Table 5.7: list of companies/industries visited for campus recruitment

Sr. No.	Name of Company/Industry & Location
1.	Persistent Systems Ltd, Pune
2.	Kelvolt Pvt. Ltd., Mumbai
3.	Varroc, Aurangabad
4.	Kirloskar Brothers Limited, Pune
5.	Bosch Chasis Limited, Pune
6.	Prothius Engineering Services, Nashik
7.	CMC Limited, Bangalore
8.	Piaggio, Pune
9.	Videocon Group, Aurangabad

10.	Sanjeev Auto Parts Manufacturers Pvt. Ltd., Aurangabad
11.	Softman, Aurangabad
12.	Grind Master Machines Private Limited, Aurangabad
13.	Tech Mahindra, Pune
14.	Infosys, Pune
15.	Enzigma, Pune
16.	Winjit, Technologies , Nashik
17.	Syntel Private Limited, Mumbai, Pune
18.	NRB Bearings, Jalna
19.	Osborn Lippert, Aurangabad
20.	NewTek Electrical, Aurangabad
21.	Parason Machinery (I) Pvt. Ltd, Aurangabad
22.	Mphasis, Bangalore
23.	Webtech Technologies, Pune
24.	Amazon, Pune
25.	Triveni Turbines Limited, Bangalore
26.	Bitwise Solutions
27.	Bosch Limited, Nashik
28.	Cosmo Films Pvt. Ltd, Aurangabad
29.	Marathwada Auto Cluster (MAC) Aurangabad
30.	Tata Consultancy Services, Pune
31.	Tudip Technologies Pvt. Ltd. , Pune
32.	Wipro Ltd
33.	INDO-MIM Private Limited, Bangalore
34.	Hybrid B I, Bhopal
35.	KONEcrane Pune
36.	AMAZON Technology center, Pune
37.	Time Technoplast Mumbai
38.	Yshyshree Press Components, Aurangabad
39.	AMDOCS, Pune
40.	CERATIZIT India Pvt. Ltd. Howrah
41.	BizveriInfotechPvt. Ltd. Aurangabad
42.	Stride Software Solutions, Aurangabad
43.	Sandvik Asia ltd, Pune
44.	Endurance Technologies Pvt. Ltd Aurangabad

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.

The institute has a mechanism to address student grievances. The institute has internal complaint committee (ICC) as well as feedback system. Based on the type of grievances either ICC or team of senior faculty members such as HoD and Vice Principal address the grievances.

Suggestion Box:

Institute keeps suggestion boxes at various places within institute so that stake holders put their comments, suggestions, and requests without directly meeting to the authorities. The grievances and feedback received through these boxes are dealt with top priority either at the department level or institute level.

5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment? Internal Complaints Committee (Vishakha Committee) Activities:

The Sexual Anti-Harassment Committee formerly known as Vishakha Committee is renamed as Internal Complaints Committee according to the Indian Penal Code Act 2013 “Prevention Prohibition and Redressal Act” regarding the sexual Harassment of Women at workplace. The organization of Internal Complaints Committee is presented in Table 5.8. Programs conducted for such measures are mentioned in Table 5.9.

Table 5.8: Internal Complaints Committee members

Sr. No.	Name of Employee	Department	Designation
1.	Prof. Mrs. Sharma D.S	BSHD	Chairman
2.	Prof. Deepali Hejib	Architecture	Member
3.	Prof. S. R. Survase	CED	Member
4.	Prof. Nilima Ambad	BSHD	Member
5.	Prof. Dheepa Ravikumar	MED	Member
6.	Prof. R. A. Mangrulkar	CSE	Member
7.	Prof. L. K. Padole	ETC	Member
8.	Prof. R. K. Kharat	EED	Member
9.	Prof. Madhuri Joshi	MCA	Member
10.	Prof. R. D. Mahajan	BSHD	Member
11.	Mrs. Kalpana Sarode	MED	Member (Non – Teaching)
12.	Mr. S. P. Bhore	Accounts office	Member (Non – Teaching)
13.	Adv. Manjusha Deshpande	-----	Member (Advocate)

Table 5.9: Programs conducted under Vishakha Committee at institute

Sr. No.	Program particular	Date	Guest Speaker
1.	Women's Day (Woman in field work)	8/03/2012	BhavnaRatnalikar
2.	Workshop on Self Defense	04/02/2013	Mahesh Indapure
3.	Tarunyabhan	23 - 25/09/2013	Dr.Rani Bang
4.	MilunSaryaJani	3/10/2013	VidyaBal
5.	Sakaar Group Program	14/10/2013	Sakaar Group
6.	Sakaar Group Program	15/02/2014	Sakaar Group
7.	Women's Health Awareness Program	21/08/2014	Dr.Jayashree More Dr.PunitMalpani Dr.Ajay Boralkar
8.	Awareness programme on sexual harassment of woman at work place (Prevention ,Prohibition and Rederressal) Act,2013	27/02/2017	Advocate Ratnamala Mane

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?

The institute has established anti-ragging committees for the institute and its hostels. Its organization is mentioned in Table 5.10 and Table 5.11 respectively.

Responsibility of anti-ragging committee for the institute:

- To plan monitor for anti-ragging activities especially in the beginning of the academic year.
- To design a mechanism a place for effective and efficient function of the Institute in the matter.
- To comply with the AICTE regulations and any law in the matter.
- To control and review the functioning of anti-ragging squad.
- To hold the meeting once in a month, maintain proceedings, etc.
- To undertake any other task assign by the Management / AICTE / University / Government.

Responsibility of anti-ragging committee for Hostel:

- To monitor status of cleanliness.
- To control overall environment in the hostel campus.

- To comply number of anti-ragging cases.
- To council seniors inmate of hostel.
- To council fresher's inmate of hostel.
- To control and review the functioning of anti-ragging squad.

Table 5.10: Anti-ragging committee for institute

Sr. No	Name of committee member	Designation
1.	Dr. N.G.Patil	Chairman
2.	Dr.P.S.Adwani (Principal, Govt. Engineering College, Aurangabad)	Member - Representative Civil
3.	Mr.B.D.Kakde (Police-Inspector, SataraParisar, Aurangabad)	Member- Representative Police
4.	Mr.Ashish Chaudhary (Maharashtra Times, Aurangabad)	Member - Representative Media
5.	Mr. Ajit Vaishnav (Board of Director, Rotary Club of Aurangabad)	Member- Representative NGO
6.	Mrs. Deepika Sharma	Member- Representative Faculty
7.	Mrs. Bhakti Ahirwadkar	
8.	Mr. Shon Patil,	
9.	Mr. T. D. Shep	
10.	Mr. Govind Ghadmode	Member - Representative Parents
11.	Mr.Anil Shejwal	
12.	Mr.Rajendra Chavan	Member - Students
13.	Mr.Shashank Dhondge	
14.	Ms.PratikshaTribhuvan	
15.	Ms.Pranali Patil	
16.	Mr.V.S.Gunjal	Member- Non Teaching Staff

Table 5.11: Anti-ragging committee for Hostel

Sr. No	Name of committee member	Designation
1.	Col. M. S. Virdee (Retd.)	Administrative Officer and Hostel Manager
2.	Mr. V.G.Jadhav	Rector, Boys Hostel,
3.	Ms. Anita Pisote	Rector, Girls Hostel
4.	Mr. Shon Patil	Convener, Anti-Ragging Committee
5.	Ms. Deepika Sharma	

CCTV cameras are installed in the campus and hostels to monitor such activities. A suggestion box is available for students to forward their suggestions / complaints. The content details of the committee members are displayed on the website and at prominent places in the institute.

Note: During last four year there were not a single ragging case reported towards committee.

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

The institution is working towards ensuring social justice through the various student welfare schemes. The induction programme clearly presents the welfare schemes available to the students. These schemes are discussed below.

Scholarships & Free-ships:

Details about the scholarships, various free-ships are displayed on the notice board of the institution. The class teacher guides the students with respect to these welfare schemes and help them in completing the necessary procedure. Similarly, scholarships received from various central, state government and other agencies are made available to the students. Institute has student welfare fund through which needy students and in case of medical emergency, economically weaker students are supported.

Bank Services:

In collaboration with the SBI (State Bank of India), the institution assists all the students in opening an account. It enable students to make transactions through the bank. The bank also provides educational loans.

Counselling & Placement Service:

The placement cell extends its service to the students in career guidance, organizes lectures concerning career planning and invites companies for campus recruitment.

Health Services:

Institute has medical clinic facility available for students and staff. This facility can be used during day time. Furthermore, Group of MIT Institute also run a multi-speciality hospital. This facility can be availed by student and faculty.

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

Yes. The institute has a registered Alumni association with registration number: MH/398/04. It was established on 21th June 2004. Following are the activities carried out by Alumni.

- Sponsoring various prizes for extracurricular events like SUPRA, co-curricular events like student conferences etc.
- Conducting mock interviews and resume writing sessions for enhancing placements
- Arranging guest lectures by alumni members and other prominent people for students on current technical and non-technical topics
- Helping students to get sponsored projects and internships
- Donating books to library

Few activities have included in Table 5.12. Few students have been placed through the alumni in their organizations as mentioned in Table 5.14.

Table 5.12: Activities carried out in association with Alumni of Institute

Academic Year	Topics	Expert speaker
2012-13	Approaching Entrepreneurship (ETC)	Mr. Ankur Sharma
	Sketching workshop (Arch)	Ar. Babasaheb Mhaske
2013-14	Concept of arch. Design (Arch)	Ar. Dhananjay Pund
2014-15	Robocon (ETC)	Mr. Aniket
	Application of Revit in Architectural practice and presentation technique (Arch)	Mr. Shaikh Altaf
2015-16	Career opportunities in Taiwan (ETC)	Ms Priyanka Jadhav
	Career in IT (ETC)	Ms. Samhita Hisvankar
	Android (ETC)	Mr. Swapnil Damkondwar
	Seminar on Software in Architecture. (Arch)	Ar. Sonali Dhopte
	Seminar on set designing. (Arch)	Ar. Tina Dharamsey
2016-17	Hands On Workshop on Arudino (ETC)	Ms. Ashwini kulkarni
	Career building (ETC)	Mr. Suman Kumar Shekhar

Table 5.13: Jobs secured by students in association with Institute Alumni

Sr. No.	Name of Architect	No. of students appointed
1.	Ar. C. B. Kulkarni	8
2.	Ar. Piyush Kapadiya	3
3.	Ar. Dananjay Pund	6
4.	Ar. Yogendra Ballal	5

5.	Ar. Sameer Ausekar	9
6.	Ar. Chintan Shah	2
7.	Ar. Tina Dharamsey	4

5.2 Student Progression

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

The statistics of students progressing for higher education and secured employment through various opportunities is mentioned in Table 5.15.

Table 5.15: Percentage of students progressing to higher studies / employment

Students Progression	% of students			
UG TO PG	2015-16	2014-15	2013-14	2012-13
Mechanical	2	9	9	2
Civil	18	8	6	6
ETC	25	35	40	40
CSE	4	5	5	15
Arch	--	13	30	5
EEE	3	3	5	--
PG TO Ph.D. (Mech.)	2	1	--	--
PG To M.Phil.	--	--	--	--
Employed campus	2015-16	2014-15	2013-14	2012-13
Mechanical	15.48	7.05	8.07	9.2
Civil	--	3	7	--
ETC	--	--	--	--
CSE	6	7	8	2
Arch	--	--	--	--
EEE	3	3	--	--
MCA	--	29	25	--
Employed other than campus	2015-16	2014-15	2013-14	2012-13
Mechanical	49	61	73	75
Civil	76	80	80	80
ETC	--	--	--	--
CSE	7	16	36	38
Arch	68	40	38	33
EEE	4	10	20	--

MCA	81	25	29	8
Entrepreneurship/ self employment (arch)	1	3	5	2

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.

Academic year-wise pass percentage of students after completing the course duration is mentioned in Table 5.16.

Table 5.16: Pass percentage of UG students

Academic Year	2015-16	2014-15	2013-14	2012-13
Mechanical (No. of students)	184	126	151	159
No. of students passed	175	113	131	134
Completion rate (%)	95.10	89.68	86.70	84.20
Civil (No .of students)	125	66	68	61
No. of students passed	100	54	59	33
Completion rate (%)	80.00	81.81	86.76	54.09
ETC (No .of students)	115	128	180	139
No. of students passed	113	127	113	119
Completion rate (%)	98.26	99.21	64.44	85.61
CSE (No .of students)	126	128	113	74
No. of students passed	121	108	110	72
Completion rate (%)	96.03	84.37	97.34	97.27
Architecture (No .of students)	28	40	29	17
No. of students passed	23	40	27	17
Completion rate (%)	82.14	100	93.00	100
EEE (No .of students)	70	62	63	--
No. of students passed	66	50	36	--
Completion rate (%)	94.86	80.64	57.15	--
MCA (No .of students)	136	193	110	52
No. of students passed	135	174	106	50
Completion rate (%)	99.26	90.15	96.26	96.15

Table No. 5.17: Pass percentage of PG students

Year	2015-16	2014-15	2013-14	2012-13
M.E. Manufacturing Engineering (No .of students)	13	13	13	24
No. of students passed	--	03	--	--
Completion rate (%)	--	24.12	--	--
M.E. Automation (No .of students)	04	05	08	--
No. of students passed	--	--	--	--
Completion rate (%)	--	--	--	--
M.E. Heat Power Engineering (No .of students)	07	08	12	17
No. of students passed	--	02	--	--
Completion rate (%)	--	25	--	--
M.E. Structure (No .of students)	16	11	15	09
No. of students passed	-	02	06	02
Completion rate (%)	-	18.18	40.00	22.22
M.E. Embedded Systems (No .of students)	09	15	19	24
No. of students passed	06	06	06	06
Completion rate (%)	66.66	40.00	31.57	25.00
M.E. Communication Engineering (No .of students)	03	03	17	18
No. of students passed	--	02	07	07
Completion rate (%)	--	66.66	41.17	38.88
M.E. Software Engineering (No .of students)	--	02	18	18
No. of students passed	--	01	12	06
Completion rate (%)		50	67	33
M.E. Computer Science and Engineering (No .of students)	06	24	24	24
No. of students passed	-	1	6	15
Completion rate (%)	-	4.1	25	62.5

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

T&P cell as well as the Departments arranges awareness activities for T.E. students twice in a year and coaching-training programs for interested students on preparation for GATE, GRE, etc. The students who are placed share their preparations for interviews with students of junior classes. The graduates who have been selected through MPSC/GATE/GRE also are invited to interact with students. Departments conduct alumni/ parent meets to invite suggestions and share the efforts from institute to optimize opportunities for Jobs and higher education.

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

Special support is provided by all departments to students who are academically weak. Additional practice sessions and mock tests are conducted for these students. The subject teacher identifies the students who are at risk of failure through internal and end semester exam of University. These students are given extra assignments and remedial lectures. Parents are informed about the performance of their ward and they are invited with the student to discuss the reasons and best possible solutions.

5.3 Student Participation and Activities

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

Students participate in various Sports & Games and win prices.

Indoor Games: Chess, Badminton, Table Tennis, Carom

Outdoor Games: Basketball, Lawn Tennis, Cricket, Mal Khamb, Football, Volleyball, Swimming and Kho-Kho.

Table 5.18 presents students' participation and achievement in various sports activities, in last four academic years. Tentative schedule for academic year 2016-17 as per University guidelines is given in Table 5.19.

Table 5.18: Students' participation and achievement in various sports

AY 2012-13

Sr. No.	Name of Game	No. of students' participation			
	Level →	ICT/State	IUT	National	International
1	Table Soccer	5	0	3	3
2	Badminton	12	3	10	0
3	Boxing	2	0	1	0

4	Power Lifting	2	1	0	0
5	Archery	2	0	0	0
6	Judo	2	2	1	0
7	Athletics	2	0	0	0
8	Taekwondo	4	2	0	0
9	Cricket	15	0	15	0
10	Table Tennis	1	1	8	0
11	Volleyball	9	1	9	0
12	Football	15	0	15	0
13	Rifle Shooting	1	1	0	0
14	Gymnastics	1	1	0	0
15	Swimming	2	2	0	0
16	Basketball	15	1	9	0
	TOTAL	90	15	71	3

(ICT – Inter-collegiate, IUT- Inter-University) AY- 2013-14

Sr. No.	Name of Game	No. of students' participation			
	Level →	ICT/State	IUT	National	International
1	Table Soccer	5	0	3	3
2	Badminton	12	3	10	0
3	Boxing	2	0	1	0
4	Power Lifting	2	1	0	0
5	Archery	2	0	0	0
6	Judo	2	2	1	0
7	Athletics	2	0	0	0
8	Taekwondo	4	2	0	0
9	Cricket	15	0	15	0
10	Table Tennis	1	1	8	0
11	Volleyball	9	1	9	0
12	Football	15	0	15	0
13	Rifle Shooting	1	1	0	0
14	Gymnastics	1	1	0	0
15	Swimming	2	2	0	0
16	Basketball	15	1	9	0
	TOTAL	90	15	71	3

ICT – Inter-collegiate, IUT- Inter-University AY- 2014-15

Sr. No.	Name of Game	Men	Women	Achievement	IUT
1	Swimming	2	0	Team Runner	Two Boys Selected in University Team
2	Lawn Tennis	5	0	Team Winner	Three Boys selected in University Team
3	Kabaddi	12	0	Participated	-
4	Volleyball	12	12	Participated	Two Girls selected in University Team
5	Table Tennis	1	0	-	One Selected in University Team
6	Fencing	3	0	Participated	Two Selected in University Team
7	Chess	5	0	Participated	-
8	Cricket	16	0	Participated	-
9	Basketball	12	12	Participated	Two Girls selected in University Team
10	Football	16	0	Participated	-
11	Judo	0	2	2 Gold	Two Girls selected in University Team
12	Taekwondo	2	0	1 Gold	One Selected in University Team
	TOTAL	86	26		

(IUT- Inter-University) AY- 2015-16

Sr. No.	Name of Game	Men	Women	Achievement	IUT	International / National
1	Swimming	3	1	Four gold	Four selected in University Team	0
2	Lawn Tennis	3	0	Winner	Three selected in University Team	1
3	Chess	5		Third place	One selected in University Team	5
3	Kabaddi	12	0	Participated	----	0
4	Volleyball	12	12	Participated	----	12
5	Fencing	1	0	Participated	One selected in University Team	0

6	Cricket	16	0	Participated	----	16
7	Basketball	12	12	Participated	0	12
8	Football	16	0	Participated	----	0
9	Judo	0	2	two Gold	Two selected in University Team	0
10	Taekwondo	3	1	1 gold 2 Bronze	One selected in university team	0
12	Badminton	5	5	Participated	----	----
	Table Tennis	3	0	Participated	----	----
13	Boxing	2	0	Participated	----	----
	Total	93	33		----	46

(ICT – Inter-collegiate, IUT- Inter-University)

Sr.	Game	Men	Women	Achievement	IUT	Inter-national / National	Federation	
		ICT					State	National
1	Athletics	4	0	Participated	----	0	----	----
2	Kho-Kho	12	0	Reach Quarter Final	----	0	----	----
3	Badminton	5	3	Reach second Round	----	0	----	----
3	Boxing	2	0	One got Silver	----	0	----	----
4	Swimming	1	1	One Gold	One selected in University Team	0	----	----
5	Chess	5	0	Runner	One Selected in University Team	0	----	----
6	Lawn Tennis	3	0	Participated	----	0	----	----
7	Kabaddi	12	0	Lost in First round	----	----	----	----
8	Volleyball	12		Reach in quarter Final				
9	Judo	0	2	1 Silver	One	----	----	----

					Selected in University Team			
10	Cricket	-----			-----	16	-----	-----
11	Kick Boxing	Miss. Vaishali Jadhav			-----	-----	Gold	Gold
12	Lawn Tennis	Master. Shekhar Jaiswal			-----	-----		Gold

(ICT – Inter-collegiate, IUT- Inter-University)

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

Tentative allotment of organization for Inter collegiate Tournaments for the year of 2016-2017

Table 5.19: Schedule for Inter-collegiate tournaments for AY- 2016-2017

Sr. No.	Events	Venue Of Inter Collegiate Tournaments	Date of Tournament
1	Cross Country Races Men & Women)	ACS College, Kannad	12-Aug-16
2	Judo (Men & Women)	Deogiri College, Aurangabad	19-Aug-16
3	Basketball (Men & Women)	Gandhi College, Kada	19, 20 & 21 August 2016
4	Tennis (Men)	Milliya College, Beed	22-Aug-16
5	Swimming (Men & Women)	KSK College, Beed	22-Aug-16
6	Pistal& Riffle Shooting (Men & Women)	MSS College, Ambad	-----
7	Kabaddi (M) A Zone	MGM College, Aurangabad	30 & 31 August 2016
8	Kabaddi (M) B Zone	A.D. College, Kada	30 & 31 August 2016
9	Kabaddi (M and Women) Central Zone	MGM College, Aurangabad	2 & 3 September 2016
10	Badminton (Men & Women)	Department of Sports, University Campus, Aurangabad	09 & 10 September 2016
11	Cricket (Women)	Deogir College, Aurangabad	9 & 10 September 2016
12	Chess (Men & Women)	Yogeshwar	23 & 24 September

		College, Ambajogai	2016
13	Volleyball (M) A Zone	Indraraj College, Sillod	26 & 27 September 2016
14	Volleyball (M) B Zone	Shankarrao Gutte College, Dharmapuri	26 & 27 September 2016
15	Volleyball (M) Central Zone	Shankarrao Gutte College, Dharmapuri	29 & 30 September 2016
16	Kho-Kho (Men & Women)	MIT College, Cidco, Aurangabad	Sep-16
17	Boxing (Men)	Sant Savta Mali G. College, Phulambri	1-Oct-16
18	Athletics (Men & Women) Aurangabad District	Department of Sports, University Campus, Aurangabad	19 & 20 October 2016
19	Athletics (Men & Women) Jalna District	BPEd College, Jalna	19 & 20 October 2016
20	Athletics (Men & Women) Beed District	BPEd College, Beed	19 & 20 October 2016
21	Athletics (Men & Women) Osmanabad District	Terna College, Osmanabad	19 & 20 October 2016
22	Athletics (Men & Women) Central Zone	Department of Sports, University Campus, Aurangabad	22 & 23 October 2016
23	Volleyball (Women)	YCM College, Ambajogai	25 & 26 October 2016
24	Gymnastics, Rhythmic Gymnastics (M/W) and Malkhamb (M)	MSM College of Physical Education, Aurangabad	22-Nov-16
25	Wt. Lf. Pow. Lifting. & Best Physiques (M)	Moreswar College, Bhokardan	14 & 15 December 2016
26	Wrestling (Men & Women)	Pandit Nehru College, Aurangabad.	27 & 28 December 2016
27	Hockey (Men & Women)	Maulana Azad College, Aurangabad.	Dec-16
28	Football (Men)	Maulana Azad College, Aurangabad.	Dec-16
29	Handball (Men & Women)	Muktanand College, Gangapur	January first week
30	Softball (Men)	JES College, Jalna	January first week
31	Table Tennis (Men & Women)	Vasundhara College, Ghatnandur	January first week

32	Ball Badminton (Men)	Barwale College, Jalna	January first week
33	Cricket (M) Central Zone	SRT College, Ambajogai	January first week
34	Cricket (M) Aurangabad District	Maulana Azad College, Aurangabad	January first week
35	Cricket (M) Jalna District	BPEd College, Jalna	January first week
36	Cricket (M) Beed District	SRT College, Ambajogai	January first week
37	Cricket (M) Osmanabad District	Mohekar College, Kallam	January first week
38	Archery (Men & Women)	JES College, Jalna	January first week
39	Fencing (Men & Women)	IBP Mahila College & MP, Law College, Aurangabad	January first week
40	Yoga (Men & Women)	Sawarkar College, Beed	January first week
41	Taekwondo (Men & Women)	D.D. College, Waluj	Feb-16

5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State /Zonal / National /International, etc. for the previous four years.

Details are provided in Table 5.20

Table 5.20: Students' participation in various co-curricular, extracurricular and cultural activities

Academic Year	Name of Student	Competition /participation Details	Organized by	Award
2015-16	Ms. SnehalKathare	Republic Day Parade Camp	NSS Department, Dr. BAMU, Aurangabad, Maharastra	Selection
		Republic Day Parade Camp	NSS Department, Swami Ramanand Teerth Marathwada University, Nanded, Maharastra	Selection
		Republic Day Parade Camp	NSS Department, Rastrsant Tukadoji Maharaj Nagpur	Selection

		University, Nagpur, Maharastra	
	Republic Day Parade	Delhi	Selection
	Youth Exchange Programme	South Korea	

AY: 2013-14

Sr. No.	Date/s	Name of Activity	No. of NSS Volunteers Participated	No. of Students Participated	Faculties Present
1	8/8/2013	Blood Donation Camp	20	154	----
2	28/9/2013	For the initiative Program by atlanta group "Pollution free world and Universal Peace" Peace Ride	25	----	25
3	15/10/2013	Tree Plantation in MIT premises	50	----	----
4	7/2/2014	Lecture Talk by Mr. Suresh Savant on Indian Constitution	100	----	----
5	8/2/2014	Lecture Talk by Mr. Umesh Khade on "Personality Development"	100	----	----
6	19/2/2014	Blood Donation Camp	20	147	----
7	10 - 16th Feb 2014	Special Camp at Jaipur, Tal KarmadDistJalana	100	----	10

AY: 2014-15

Sr. No.	Date/s	Name of Activity	No. of NSS Volunteers Participated	No. of Students Participated	Faculties Present
1	8/8/2014	Blood Donation Camp	60	300	10
2	8/9/2014	Tree Plantation at Satara village	80		10
3	9/8/2014	Talk on "Awareness about security precautions at public places	20	200	05
4	14/8/2014	Pledge to attain flag hosting functions and celebrating such events in right spirit	30	All students of Institute	06
5	20/8/2014	Guest lecture by Dr. Dilip Peshwe on "Social Awareness"	30	200	05
6	30/8/2014	Tree Plantation at Satara village, MIT premises	70		10
7	31/8/2014	"Bhagwanbaba Ashram" Orphan House	10		04
8	4/9/2014	Voluntary Flag distribution under "International White Cane Day	50	200	07
9	5/9/2014	Demonstration showing fallacy about ill beliefs in society	20	200	03
10	10/9/2014	"Yuvak Yuvati Vaidnyanikva Samajik Janiva" Under Andhashradha Nirmulan" one day camp	14	----	04

11	19/9/2014	One day workshop of NSS Program Officer at Paithan	50	----	05
12	24/9/2014	NSS Foundation Day Celebration and street play at Milind Nagar about "Sanitation awareness and health"	50	----	06
13	26/9/2014	Yuvak Biradari	23	----	07
14	2/10/2014	Swachha Bharat Abhiyan	100	All students	15
15	10/10/2014	Awareness Program about addiction, counseling and rehabilitation	40	200	04
16	10/11/2014	"GyanSetu" An initiative to overcome the barrier of North East states, J&K, Jharkhand, Orissa	60	100	07
17	10/13/2014	Street play for voting awareness under "Systematic Voter Education and Electors Participation SVEEP-II	20	All students of Institute	All faculties of Institute
18	10/14/2014	Pledge about casting votes under "Systematic Voter Education and Electors Participation SVEEP-II"	100	All students of Institute	All faculties of Institute
19	28 Jan-3Feb (7 days)	Special Camp	45	----	----

AY: 2015-16

Sr. No.	Date/s	Name of Activity	No. of NSS Volunteers Participated	No. of Students Participated	Faculties Present
1	27/7/ 2015	Swachata Abhiyan	20	42	06
2	2/8/ 2015	Womens Cycle Rally	8	20	04
3	8/8/ 2015	Blood Donation Camp	25	310	07
4	11/8/ 2015	Maitri Abhiyan	30	215	05
5	20/8/ 2015	Sadbhavana Diwas	30	430	ALL
6	21 -23/8/ 2015	Tarunyabhan	10	415	10
7	27/9/ 2015	Nirmalya Dan	10		12
8	19-25/11/2015	Road Safety Week	20	----	14
9	05 -11/02/ 2016	Special Camp at Mehboobkheda, Tal Gangapur Dist Aurangabad	45	----	10

AY: 2016-17

Sr. No.	Date/s	Name of Activity	No. of NSS Volunteers Participated	No. of Students Participated	Faculties Present
1	1/7/ 2016	Tree Plantation Programme (MIT Campus)	15	60	11
2	8/8/2016	Blood Donation Camp (MIT Campus)	30	120	05
3	27/9/2016	Swachata Abhiyan (MIT Campus & Khandoba Mandir, Satara Parisar, Aurangabad)	20	----	----
4	3/10/2016	Swachata Abhiyan (Karnpura, Aurangabad)	25	----	----
5	26/11/2016	Indian Constitution Day	5	----	All Faculties

Table 5.21: Summary of students who have achieved in various extracurricular activities

Academic Year	2016-17	2015-16	2014-15	2013-14	2012-13
No. of students who have achieved	10	22	14	5	1

Table 5.22: Students achievement at University Level

Sr. no.	Academic year	Name of the student	Rank	Branch
1	2015-16	Hire Prajta Vyanketrao	III	CSE
		Pankaj Yadav	V	IT
		Tambat Mayuri Vishnu	I	EEE
		Kohkade Anita Ramesh	II	EEE
		Labde Rohit Shivaji	III	EEE
		Puse Pooja Babulal	III	EEE
2	2014-15	Wategaonkar Prachi Sanjay	I	E&C
		Deshmukh Shreya Anant	III	E&C
		Kathar Vaibhav Kumar Vilas	IV	E&C
		Chatur Nayan Girish	V	E&C
		Munde Mahadev Balasaheb	I	EEE
		Jadhav Shubhangi Sanjay	II	EEE
		Gullapelli Madhuri Ganesh	III	EEE
		Kajale Nilesh Kalyanrao	I	MCA
		Mhaske Ashwini Santoshrao	II	MCA
		Khandelnal Minal Rajesh	III	MCA
		Kasat Nikhil Rajesh	IV	Mechanical
3	2013-14	Kulkarni Shashank Satish	III	E&C
		Thorat Rohini R.	II	EEE
		Gitte Kiran Balasaheb	III	EEE
		Sharma Ankita Arun	I	MCA
		Jankar Pooja Jagannath	II	MCA
		Joshi Gajanan Baburao	III	MCA
		Jagtap Chandrashekhar P.	V	Civil
4	2012-13	Zarekar Tara Dhondiram	V	E&C
		Shrikhande Krishna Pandurang	I	MCA
		Pandit Riya Bapusaheb	II	MCA
		Burande Aswini Prabhakar	I	MCA
	2010-11	Burande Aswini Prabhakar	I	MCA

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?

Institute collects feedback from the Employers in the prescribed form during Campus Interviews, Formal Meetings and from Alumni during Alumni Meets conducted departmentally, Formal & Informal Meetings, Expert & Guidance Lectures etc. Feedbacks contain information regarding institutional provisions about Quality of Students, Student's Performance in Interview, Curriculum Improvement etc.

The feedback helps in designing the training modules prepared by T & P cell for the current students. Employers and Alumni give valuable suggestions on curriculum development as well as infrastructure facilities.

Exit Survey:

Exit survey is taken from the students graduating every year. A set of question are given in the survey form regarding the quality of teaching, placement assistance and their feedback is collected and analysed. Corrective measures are adopted as per the feedback to improve teaching competencies of the faculty thereby enhancing student learning.

Employer survey:

Departments obtain feedback from the employer through a structured questionnaire. This is used to obtain information about the performance of employed students which further helps in planning content to be delivered beyond the curriculum.

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, Institute involves and encourages students to publish materials like wall magazines, college magazine etc. It includes-

- Newsletters are periodically released by some department that highlight the achievements of the students and faculty members and showcase special activities conducted during the term like expert lectures, training sessions, etc.
- Wall magazines are also displayed in some departments.
- Institute level Newsletter is published which includes achievements of faculty, students, major events conducted by various departments etc.

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

The institute constitutes Student Council as per the norms of affiliating university and the directives of state government. The main objective of council is to work for benefits of students in various extra-curricular activities such as sports, cultural activities, and other co-curricular activities. Central committees for sports and cultural programmes are formed to organise these activities. Similarly, department level student associations contribute for organising co-curricular activities.

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

Student representation and participation has been an integral part of academics as also of the various activities of the college. Student representation is also in the following:

- IQAC
- Anti-ragging committee
- Student Council
- All organizing committees for seminars, conferences and workshops conducted for students by the institute
- All Department Association activities of students and annual festivals organized by - students.
- Student Chapters of Professional Society
- NCC and NSS
- Entrepreneurship Development Cell

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. Heads of the Departments, faculty and staff are continuously in touch with the alumni through e-mail, social media and various activities conducted by alumni association. Alumni are invited to deliver expert lectures and evaluate student projects. Faculty members are in personal touch with former faculty and collaborate for conducting faculty development programs, workshops etc.

CRITERION – VI

GOVERNANCE, LEADERSHIP AND MANAGEMENT

**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.?

Gramaudyogik Shikshan Mandal (GSM), Aurangabad, Maharashtra, India is the parent Trust established in 1975 under Bombay public Trust Act and registered under Society Registration Act. The Trust established technical institute, "Marathwada Institute of Technology" in 1984 with an objective of imparting top of the line hardcore engineering education to the aspiring to the students of Marathwada region.

Vision:

To inculcate, through engineering education, human values by character building and develop multidimensional personality.

Mission:

MIT is committed to be premier "Educational Institute" with a mission to create, through continuous improvement leaders, winners and achievers by ensuring excellence in all endeavours of MITians through enriched knowledge, creativity, self-development, empowerment of employees and students.

The mission of the institute is to provide appropriate learning experience to the students to bring out their potential and capabilities. The objective is to produce leaders in all walks of life to serve the society and lead towards future with right kind of vision. The mission showcases the distinctive characteristic of the institute is to the produce leaders, winners and achievers. This is to be met through continues improvement and by empowerment of faculty and students. This is very specifically stated in the mission and provides great clarity and motivation to lead towards the vision of building character and multidimensional personality.

MIT is serving the society since 1984 and produced many engineers who are serving the society not only in the field of technology but also leading in many other walks of life such as education, entrepreneur, defence, politics as well as arts. This is the outcome of overall developmental activities such as co-curricular activities such as participation and organization of technical workshops, conference, seminars and providing industrial exposure to the students during their studentship through visits to all kind of industries, and promoting students to work on industry based projects. Moreover, our students also participate in prestigious national level competitions like ROBOCON and SAE Baja. They have also secured very high ranks in these competitions at

national level. This helps the students in becoming multifaceted and multi-dimensional as stated in the mission of the institute. The institute focuses on quality improvement in teaching learning process. The focus, however, is learning outcomes. Hence, the institute is also practicing outcome based education (OBE). In addition, a strong connection with industries provide good opportunities to our students for better learning experience through industry based projects. This ensures the standards as per the global requirements. To ensure the global standards, the institute also promotes the activities of professional body such as American Society of Mechanical Engineers (ASME) through dedicated student chapter.

The institute believes in value education and always tries to inculcate right values in the students. The NSS cell of the institute is very active and a good number of students participate in activities of social cause and contribute at their best from within. The institute also strives to inculcate sportsman spirit into the young brains by promoting in-house as well as inter collegiate sports activities. Hence, it is evident that the institute is attempting for overall development of students to transform them realize their goals and they become leaders of tomorrow in all walks of life.

In coming year, the institute, by recognizing the change in the overall learning and other habits of the society as well as students, will be focusing of greater connect with the industries. Moreover, the institute will try to incorporate 'Project based learning' in the given frame of academic flexibility provided by the University. The paradigm shift in the teaching learning will be taken care so as to produce high quality engineering graduates.

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

The top management is Governing Body (GB) of the institute. The GB is led by the General Secretary of the parent trust. GB is constituted as per the guidelines of the AICTE. It includes members from academia, industries, affiliating University, and state government and AICTE regional office. Principal of the institute is the member secretary of the GB.

Role of the Top Management

- GB meets at least once in an academic year to make policies and decisions of the next academic year.
- The role of the GB is to review the progress of the institute and guide the Principal to take the institute in right direction as per the vision.
- GB makes necessary financial provisions for the development of the institute such as infrastructural development, faculty recruitment, setting new research facilities.
- It creates conducive environment for appropriate teaching learning and overall development of students as well as faculty members.

Role of the Principal:

- To provide academic leadership to the institute.
- Principal shares and disseminates the vision and mission of the top management to the internal stake holders like faculty and students.
- Principal conducts weekly meeting for academic review and provide guidelines for improvement.
- Principal also forms committees for annual distribution of administrative and academic activities of the institute. Principal conducts frequent meeting of these committees to review the progress and guide for improvement.
- The principal motivates faculty to contribute for the student development through the teaching learning and other activities at the institute.
- Principal also ensures the availability of facilities such as infrastructure and qualified faculty and nonteaching staff.
- Principal form rules as per the guidelines of GB to provide guideline to all faculty and students in conduct of various activities.
- Principal monitors the progress of all activities through feedback from faculty and students.

Role of the Vice Principals:

1. Vice Principal (Academics):

- To ensure smooth conduct of all academic activities of the institute such as lectures, laboratory sessions, and examinations.
- Vice Principal (Academics) prepares the academic calendar of the institute in consultation with the Principal and steering committee to achieve the academic goals for the year.
- Vice Principal (Academics) designs academic forms and get it approved through the steering committee and implement for smooth execution and monitoring of the academic progress.
- Vice Principal (Academics) provides academic reports to the Principal for review of academic progress and suggests action plan for improvement in the academic performance of the students.

2. Vice Principal (Administration):

- To ensure smooth conducts of all administrative activities of the institute such as admissions, accounts, student section, and infrastructure development and maintenance.
- Vice Principal (Administration) prepares the plan of activities such as affiliation of the university and other related activities of the institute in consultation with the Principal.
- Vice Principal (Administration) designs for smooth conduct an administrative system and get it approved through the steering committee and implement for smooth execution and monitoring of the administrative activities.

- Vice Principal (Administration) provide reports of the administrative challenges for students and faculty to the Principal for review of administrative conduct and suggest action plan for improvement in the administrative performance of the system.

Role of Heads of Departments:

- To provide academic leadership to the department.
- HoDs prepare the academic calendar of the department in line with calendar of the institute in consultation with the Principal and steering committee to achieve the academic goals of the department for the year.
- HoD is responsible of smooth conduct of all administrative and academic activities of the department.
- HoDs creates conducive environment in the department for better learning. HoDs plans and monitor the activities of the department through module and course coordinators as well as class teachers.
- HoDs provide weekly and monthly academic progress report to the Vice Principal academic for review of departmental academic activities.

Role of the Faculty:

- Faculty prepares plan of the course and execute it for quality in teaching and learning with learning as focus.
- Faculty defines course outcomes and measures its attainments during and at the end of the term.

Faculty measures and monitors the progress of the students in the course and guides them to improve their learning outcomes.

6.1.3 What is the involvement of the leadership in ensuring :

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

The management and principal provide the goals for the academic year, based on these goals action plan is defined for various activities the academic calendar includes broad action plan of the institute. At departmental level head of department prepare detail action plan to achieve these goal through module coordinator, course coordinator, class teacher and all teaching and non-teaching staff of department.

The execution for achievement of the stated mission is ensured through the following activities

Meeting of steering committee to make appropriate decision.

1. Meeting with students and teachers.
2. Meeting between course coordinator and module coordinator.
3. Parent teacher meeting.

4. Student council meeting.
5. Alumni meetings.
6. Meeting of coordinator e.g training and placement, sports etc.
7. Students feedback and principal meetings with head of departments, faculty and students

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

Based on vision and mission of the institute academic goal are set for the academic year, these goal are set considering needs of industry and society as a whole. To achieve these goals following steps are taken

1. Action plan is prepared for the academic year.
2. The necessary activities are specified in the calendar.
3. The requirements to undertake these activities are submitted to management in the form of budget. After approval of budget detail execution plan is prepared for smooth conduct of these activities. The activities include purchase of new equipment, maintenance work, and faculty development, and student development, extra-curricular and co-curricular activity.

- **Interaction with Stakeholders**

Being an old established institute MIT has developed, strong relationship with its stakeholders like industry, society, student and alumni and parents.

1. Regular interaction with parents is very routine in the institute. This allows parents to know about progress of their wards and institute also get feedback of their ward.
 2. The departmental advisory board includes some of the industrial experts, this enables department to stay connected with industry.
 3. MIT is also member of local industry association and have very strong network with industries of the region, it create platform for our students to work on industry based projects.
 4. Regular alumni meets are organised by MIT, not only in institute but also in other cities where alumni are located. Few of the meetings also have been conducted at abroad. This action has created the good connect with alumni.
 5. The students of MIT also contribute towards society like conduction of any programme for school going students to create their interest in science and technology.
 6. The NSS activity is regular feature wherein faculty members and students do contribute towards social cause by conducting various activities such as tree plantation, blood donation, Swachata Abhiyan and Digital awareness programme.
- **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders**

The alumni feedback, input from industry and society through various activities such as alumni meet, inplant training, visit to industries, interaction with industry person, admission outreach programmes helps the institute to develop deep insight about need of stakeholders. In addition the affiliated university, Directorate of Technical Education, research institute, experts in academia and industries provide valuable inputs for strategic planning so as to serve local and global needs.

- **Reinforcing the culture of excellence**

MIT believes on Quest for Excellence. Institute wants to excel in the following aspects

1. Academic research by students and faculty.
2. Excellence in graduate outcome of student.

To achieve this excellence the institute encourages and promotes faculty members to undertake research project and /or industry based project. Institute also promote faculty to participate and /or organise STTP, FDP for faculty. MIT encourages and promote students to take part in national level competition such as ROBOCON, SAE Baja, IMTEX, DIPEX etc. To maintain the academic excellence, academic audit is conducted and best performers are rewarded.

As a result of this the students of MIT have reached great achievement in industry, research, higher studies etc in India and abroad.

The students of MIT have also own significant higher rank in prestigious completion as SAE BAJA and SUPRA, ROBOCON, DIPEX. The faculty members have achieved excellence in their domain by quality publication in reputed international journal as well as conferences.

- **Champion organizational change**

1. Special position like VP (Academic) and VP (Administration) have been created to provide focused support to academic and administration activities respectively.
2. Decentralized administration has been practised for empowering through various portfolios.
3. The concept of energy, environment, economy have been included in the project report.

The academic journal and project reports are printed on both sides of pages.

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

The procedure adopted by the institution to monitor and evaluate policies and plans of the institution is as follows:

- In the institute GB meeting is held at least once in a year, review of academic and administrative performance is taken. Area in which target is not achieved suggestions are given for improvement, change in policies are adopted, if required.
- The suggestions given in GB meeting are communicated by the principal to the heads of all departments.
- In the departmental meeting the heads will communicate these suggestions to the faculties and staff of the department.
- A review is conducted by management once a year through presentation by heads to IQAC. Progresses of departments are discussed and strategies are formulated for appropriate action.
- Internal and external audit of department is carried out. Results of audit are discussed and suggestions for improvement and compliance are communicated to all heads for appropriate action.

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

The top management believes in giving academic and administrative flexibility in autonomy to Principal in turn Principal gives freedom to heads of department.

The Principal give full freedom in planning, decision making and implementing the curricular, co-curricular and extra-curricular activities for satisfying objectives of institution.

Some faculties were sent to visit KC-TechSouth Korea and SIMTECH/NTU Singapore to explore opportunities for collaborative research.

Principal, vice principal, heads of department and few faculty members were attended a program 'Gurukul for the Gurus' by SatishMandora.

6.1.6 How does the college groom leadership at various levels?

Faculty Level:

The Principal is the chief controller of academic and administrative activities done in the institute. Head of departments work in the respective departments under the guidance of Principal. In each department various faculty members are given responsibilities like

- Class teacher, activity coordinators, TGS
- Class Test coordinator
- Time Table coordinator
- Training and placement coordinator
- NSS and NCC

Some of the faculties of each department also handle various central portfolios.

Student Level:

At departmental level student association is formed along with different portfolios such as the faculty advisor, secretary, joint-Secretary and treasurer etc. nominated and selected by Head of department and under the guidance of Principal. All classes are having class representatives who are helpful in organizing and conducting various activities and events in the institute. The students are also encouraged to participate in seminars, conferences, technical activities, extra-curricular, co-curricular, sports, inter collegiate tournaments, NSS, NCC and other programmes.

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

Governing Body members, Director General provides directions and guidelines focusing vision and mission of the institution.

Deans:

1. Dean Admission is responsible for student's admission to the institutes. He looks after admission strategy, advertisement.
2. Dean R & D is responsible for research and development activities in the institute.

Principal:

Principal is the key person that provides effective administration by handling academic and all institute level administration.

Head of the department:

Head is responsible for the academic and administrative functions of the department. They can take necessary action for overall controlling and monitoring of the department. The department head prepares the departmental budget for development and maintenance of laboratories, conducting workshops, conferences etc. in consultation with faculty, lab in-charge & TPO and submit it to Principal.

Faculty:

The departmental advisory committees are formed in every department. Class teachers suggest variety of technical programs of student interest to the head of department. Also, faculty can take initiative to organize seminars, workshops and guest lectures.

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

Yes, Institute promotes culture of participative management. This is achieved by encouraging faculty, staff and students to contribute through participation.

Strategic Level:

GB, Principal, IQAC, Vice Principal

Functional/Operational Level

All head of departments, faculties, student association, along with various committees such as academic monitoring committee, academic and administrative audit committee, library committee, research committee, anti-ragging committee, Hostel monitoring committee, cultural committee, EDP committee, internal complaint committee, Alumni affairs, time table committee, TGS, competitive examination, NSS/NCC, transportation 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 formally stated quality policy as follow “To strive for global standards of excellence in all our endeavours such as teaching, consultancy, continuing education, R & D etc. through the process of self-evaluation and continuous improvement.”

Evaluation and review of the systems is achieved through quality check systems like internal audits, feedback from stakeholders. The collected reviews are discussed and policy is developed in line with vision and mission of institute.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

The perspective plan is prepared by the top management. Aspects like infrastructural development, industry partnership; accreditation, research grants, faculty and student development etc. are considered for inclusion in the plan by the Governing Body.

Following are salient features of the plan

- Development of state of the art laboratory in advanced manufacturing, this is in collaboration KUKA Robotics, Siemens and Grind Master Pvt. Ltd. Aurangabad.
- Centre of Excellence in Non-Destructive Testing.
- Development of cell for competitive examinations such as GATE.
- Faculty recruitment and development programme.
- Development of incubation Centre.
- NBA accreditation.
- Improvement in industry based and research based projects.

6.2.3 Describe the internal organizational structure and decision making processes

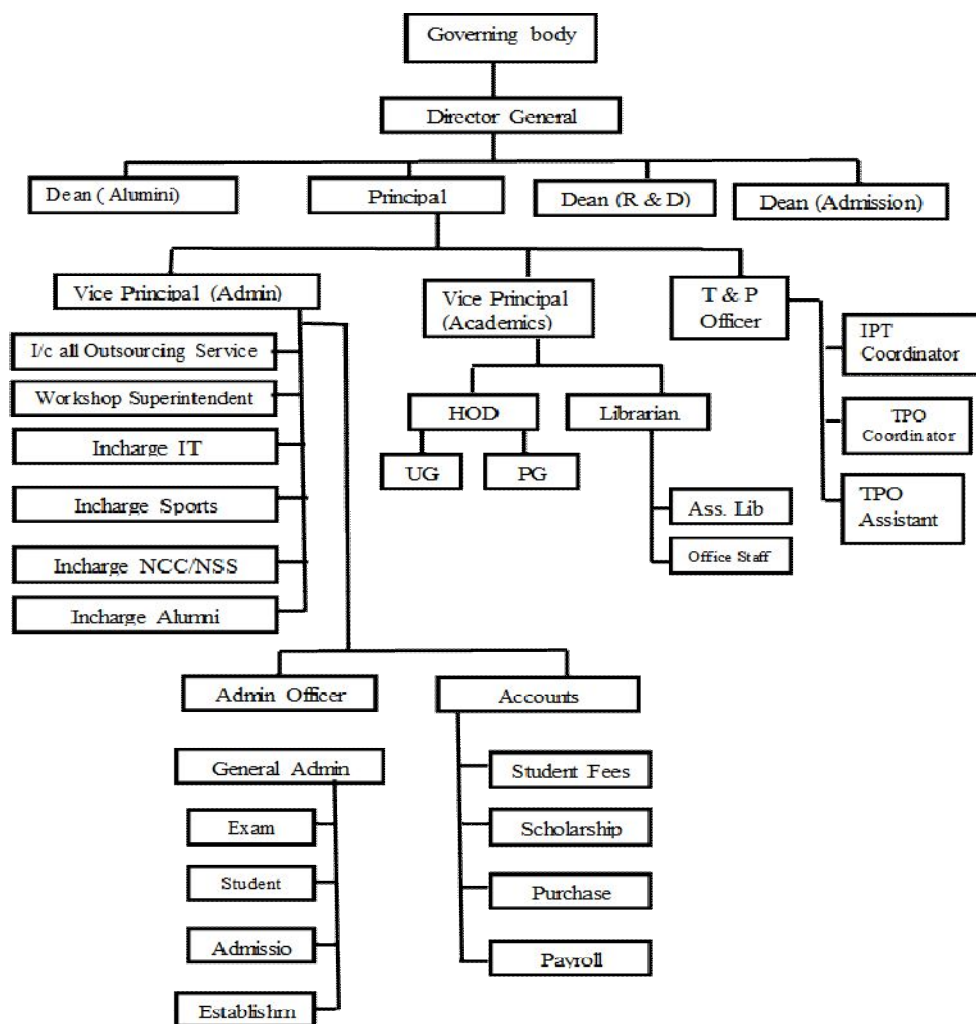


Figure 6.1: Organisational Structure of an Institute

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

- **Teaching & Learning**

To cater the need of industry, institute is adopting outcome based education system which is student centric instead of traditional education system. The institute recruits qualified and experienced faculty as per norms of regularity bodies. Moreover, resource persons with industrial

background are also contributing in the teaching learning process in the role of adjunct faculty members.

For enhancing quality of teaching learning process other initiatives taken in the institute as follows.

1. Provision of classrooms with ICT facility
2. Providing e-learning resources in Central Library, and seminar halls in each department.
3. Remedial lectures for weak students to maintain the pace with the learning of other students.
4. Structured course files and lab manuals for all courses.
5. Student feed-back on teachers and necessary follow-up.
6. Conducting FDP for faculty to ensure quality in teaching.
7. Providing e-learning initiatives such as Virtual Labs, NPTEL video lectures, spoken tutorials, MOOC courses, educational CDs /DVDs
8. Language lab and soft skill Lab
9. Renowned e-journals such as IEEE, Springer and hard copy journals are available in library.

- **Research and Development**

1. Allocation of budget for R & D activity.
2. Faculty encouragement for getting financial assistance for research project from different funding agency.
3. Financial assistance for student's innovative projects.
4. Setting of university recognized research centers for Ph.D. research.
5. To encourage students and faculty for collaborative research, partnership with industries.
6. Structured efforts for greater connect with industry.

- **Community Engagement**

The institute is looking forward to contribute, through faculty and students, for greater visibility and connect with the community. The focus areas for contribution are environment, Energy, developmental aspects, with the aid of development engineering centre. Following are some of the areas of concern

1. Green India and solar energy
2. Swachata Abhiyan
3. NSS activities
4. Development Engineering
5. Awareness for Safety

- **Human Resource Management**

Following are some concerns about Human Resource management

1. Loan facility is available for teaching and non-teaching staff

2. G S Manadal's provides employees Co-operative Credit society, accidental Insurance Rs. 5 Lakh to all teaching and non-teaching staff.
3. Deputation of staff for FDP / workshops / training / conferences / symposia / STTP
4. Transparent staff recruitment policy as per UGC/AICTE norms.
5. Systematic performance appraisal process
6. Training arranged for teaching and non-teaching staff by identifying training needs for enhancing professional competencies, teaching and soft skills

- **Industry Interaction**

MIT has strong association and active participation in various professional bodies' activities. MIT is member of Chamber of Marathwada Industries and Agriculture (CMIA), Marathwada Auto Cluster (MAC) and proposed Devgiri Electronic Auto Cluster (DEC). By virtue of this association MIT is privileged to explore greater connect through its faculty and students. MIT is looking forward to undertake various activities in collaboration with industries. This will provide appropriate learning platform to our budding engineers. Following are some of these activities.

1. UG and PG academic projects to address present problems of local industries
2. Research projects based on future requirements of industry.
3. Collaborative research with industry for development of indigenous technology.
4. Improved association and greater connect between students and industry experts for mutual benefits.

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?

Following activities are regularly undertaken to review the progress of academics and all other co-curricular and extracurricular activities.

- Academic review meetings (weekly)
- Academic review meeting (monthly academic progress report)
- Academic and administrative audit (per semester)
- Student feedback (mid and end term)

The minutes of these meeting are submitted to the top management on regular basis. In addition, the principal office also communicates any other information related to such activities to the top management as and when required.

Principal office also presents the academic, co-curricular, extra-curricular, research and development, faculty and student development, and other relevant activities during the governing body meetings. Moreover, the principal office also submits the plan of next academic year and the required budgetary provision to execute the plan to GB for approval.

The principal office also submits academic and administration annual report to the top management i.e. the executive council of parent trust.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

To improve the effectiveness and efficiency of the institutional process, The management encourages the faculty by providing support in the following aspects. The management also supports the faculty members to enhance their capabilities through

- Provision for faculty development programme
- Provision for short term training Programme
- Support for research and development undertakings
- Management also encourages and supports faculty to upgrade academic qualification such as Ph.D.
- Provision of ERP software for all administrative activities
- Provision of ERP software for academic activities such as teaching learning process
- Provision of training for academic and administrative activities

The performance is measured through a systematic performance appraisal process every academic year. This helps to monitor the performance, and it is followed by necessary actions to improve the overall performance of the system.

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

Few sample resolutions made by Board of Governing Body meeting in last year dated 11 March 2016 at 05.00 pm in Conference hall, MIT Aurangabad.

Item No.A-1: Academic details of 2015-16 Part I

Resolution 1: Principal briefed to the governing body about the admission status, events, activity held and result analysis in addition to this about the students achievements at national level activities.

Item No.A-2 : NIRF and AICTE compliances and also adjunct faculty induction procedure

Resolution 2 : Principal briefed the details of AICTE compliances and also about the NIRF application status to the Governing Body. As per the AICTE new policy, the procedure to be adopted for the appointment of adjunct faculty has been discussed and approved.

Status : Adjunct faculties have been appointed at various departments

Item No.A-3 : Annual Budget for 2016-17

Resolution 3: The consolidated budget for the year 2016-17 of the institute Engineering PG, MCA, and architecture courses was presented by the principal Prof.Dr. J. H. Godihal. The budget for R & D was presented by Dean R & D Dr. C. L. Gogte. The members had discussion on the budget and finally it was approved unanimously.

Status : Budget allotments are done as per approval

Item No.A-5 : Pre-NBA Qualifier

Resolution 5: Principal briefed the status of Pre-NBA qualifier readiness at institute level, however considering the fulfilling of requirements with additional inputs, institute can go for Pre-NBA qualifier for four UG courses: Civil, Mechanical, EEE, CSE and one PG course MCA.

Status: To fulfil the Pre-qualifying conditions, the process of recruitment of desired faculty members, especially with Ph.D. Qualification has been initiated. Moreover, the advertisement under UGC process has also been published and the recruitment process, under UGC, is in progress.

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, however our institute has not applied for autonomy.

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

The complaints are promptly addressed and resolved effectively through the internal complaint committee. The committee is constituted as per the provisions of Vishakha Guidelines against Sexual Harassment at Workplace Guidelines and norms laid down by the Honorable Supreme Court,(JT 1997(7)SC 384) And Prevention, Prohibition and redressal ACT 2013, No.14 of 2013.The committee is shown in Table 6.1.

Table 6.1: Internal Complain Committee

Sr.No.	Name	Department	Designation
1.	Mrs. Sharma D.S	BSHD	Chairman
2	Prof. Deepali Hejib	ARCH.	Member
3	Ms. S.R.Survase	CED	Member
4	Ms.Nilima Ambad	BSHD	Member
5	Ms. Dheepa R K	MED	Member
6	Ms.R.A. Mangrule	CSE	Member
7	Ms.L.K.Padole	ETC	Member
8	Ms.R.K. Kharat	EED	Member
9	Dr. Madhuri Joshi	CSE	Member
10	Ms.R.D. Mahajan	BSHD	Member
11	Ms. Kalpana Sarode	MED	Member (Non –Teaching)
12	Mr.S.P.Bhore	Accounts office	Member (Non –Teaching)
13	Adv. Manjusha Deshpande		Member (Advocate)

The committee works as per the guide lines laid by UGC and AICTE from time to time.

In addition to this all students are free to provide their feedback and /or complaints to respective class teacher/section in-charge/head of department, vice-principal and principal. The complaints are resolved at various levels considering the nature of complaint or feedback.

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. There are no cases filed by and against the institute.

6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If “yes”, what was the outcome and response of the institution to such an effort?

Yes, the institute collects the feedback of the students at the department level. These feedbacks are analyzed at the department. Based on the analysis, a report on feedback is submitted to the Principal office. Moreover, action is

taken at the department level to address the problem at the earliest. The action taken report is submitted to the Principal office to make further decisions on these issues. In addition, complaints boxes are also kept at each department for students to convey their feedback about anything they wish to convey and action is taken on such feedback at the earliest.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?

- The institute encourage and support the faculty members to upgrade educational qualification such as Ph.D.
- The institute supports by providing no objection certificate (NOC) to eligible faculty members as per the rules of the organization. The institute also provide study leave to faculty members for their studies and Ph.D. research.
- If the faculty is not eligible as per the rules of the institute, the institute still provides support to few deserving faculty members by considering their passion towards research.
- The institute supports training and development of faculty members by provision of pedagogical courses on and off campus, exposure to industrial practices; support to attend QIP programmes, conferences and workshops.
- The institute support faculty for improvement in teaching-learning capabilities by provision of rich library well equipped laboratories and other modern teaching- learning aids along with NPTEL video lectures.
- The institute also encourage and support the research and development by faculty and provide them academic freedom to learn what they want to learn by provision of setting of state of art laboratories in desired domain.

The institute support the faculty to enhance their knowledge of industrial developments by provision of strong connect with industry.

6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employee for the roles and responsibilities they perform?

The institute is looking forward for faculty empowerment through

- Support to attend training programmes such as orientation programmes, workshops, seminars, STTP etc.
- Faculty's members are also motivated by providing special leave to pursue higher education and on duty leave to attend such training programmes.

Table 6.2: Training Programme for Faculty Empowerment

Activity	2012-13	2013-14	2014-15	2015-16	2016-17
Training Programmes (STTP/ FDP/Workshop)	83	217	96	89	97
Sponsorship / NOC for Ph.D.	06	03	03	06	7

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

The Performance Appraisal (PA) is maintained on yearly basis for faculty, individual faculty will submit his self-assessment on a prescribed format; HoD forwards it with his observations, if any, to the Principal. The Principal will write Faculty PA, submit it to the trust for review. The trust will finalize PA grades.

6.3.4 What is the outcome of the review of the performance appraisal records by the management and major decisions taken? How are they communicated to the appropriate stakeholder? For review of performance appraisal

- The trust plays an active role for evaluation of performance appraisal of the faculty.
- Based on the self-assessment report submitted by the faculty and observations of HoD & Principal, the suitable changes are suggested to the concerned faculty.

The outcomes of the PA will reflect in annual increment.

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 scheme on the last 4 years?

The institute provide

- Maternity leave to ladies staff.
- Group gratuity scheme
- EPF
- Support to non-teaching staff by providing either partial concession in the tuition fees of their wards or providing instalments.
- Institute provides loan facility from co-operative society

6.3.6 What are the measures taken by the institution for attracting and retaining eminent faculty?

The institute, on regular basis, makes attempts to attract high quality faculty to contribute. Moreover, it also provides conducive environment to existing

faculty to retain them with the institute. Following are some of such activities undertaken by the institute:

- The talent search is always active on the institute website. Candidates with desired qualification and other attributes can apply throughout the year.
- The management and Principal are always in search of high quality faculty and provide lucrative conditions such as salary and work environment for them. This helps them to realize their goals and provide great learning environment as well.

Special salary packages are also offered to deserving high quality faculty members based on their qualification and experience. Besides, young but highly qualified and research oriented faculty members are also attracted with better packages.

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?

It has been decided by the management of the institute that the administrative and financial powers to the controlling officers such as principal, head of the departments and the section in-charges.

Following is the procedure to make decisions about effective and efficient use of available financial resources:

- All departments and sections work on their requirements for the next financial and academic year.
- The requirements include capital expenses such as laboratory equipment, IT infrastructure, faculty resources, and other human resources, Research and development, industry connect, alumni affairs, staff welfare, maintenance, repair, and other activities such as faculty development, student development, and related activities.
- Based on these and the other institute level expenses such as building rent and other recurring expenses, Principal office prepare a budget of the institute and propose this budget to the Governing Body of the institute.
- The Governing Body studies the proposal and approves the budget for the stated requirements of the institute.
- After the approval of the GB, Principal conveys to the entire department about the allocated budget of respective department.
- The allocated budget is utilized as per the led down procedure of the institute.

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 internal as well as external audits are undertaken every year. The last audit was conducted during March 2016. Every year the audit is conducted at the end of the financial year. The objection raised was about inappropriate heads of account for some of the items. This has been resolved by including these items to appropriate heads of accounts.

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 institute is a self-finance institute and the main source of fund is tuition fees. Some part of the funding also made available as and when required from the trust for capacity building and expansion plans. The audited income and expenditure statement is given as below:

Table 6.3: Audited statement of income and expenditure

Sr. No.	Particulars in (Rs.)	2015-16	2014-15	2013-14	2012-13
1.	Total Income	27,62,87,775	22,50,47,016	27,22,15,835	23,29,50,902
2.	Total Expenditure	31,83,57,564	20,82,78,611	18,69,11,135	14,87,11,264
3.	Balanced amount	-4,20,69,789	1,67,68,405	8,53,04,700	8,42,39,638

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

Table 6.4: Grants Received

Sr. No.	Type of fund through which grants received	Amount received
1	NMEICT MHRD	2130723
2	Testing and Consultancy	171110
3	MODROB from AICTE for modernization of laboratory	600000
4	Student welfare board BAMU for NSS activities	35000
5	Funding from DRDO for NCCSAIT	50000

6	International Travel Grant from DST	45000
	Total	30,31,833

6.5 Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

- a. **Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

Yes, institute has established IQAC recently. The role of IQAC is to improve the processes in various activities of the institute and departments. The main focus is given on improvement in academic performance and research contribution through improvements in the design of the system.

- b. **How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?**

Point discussed /decisions taken:

Table 6.5: IQAC Decisions

Sr. No.	Agenda point	Details of discussion and conclusion	Action plan
1.	To inculcate the EEE concepts in the minds of students through academic projects	All members have discussed and supported this concept and finally it was decided to motivate students to incorporate the concept of energy environment and economy in their academic project.	More than 70 % of academic projects have incorporated the concept of EEE in their academic project reports.
2	To design for OBE	It was discussed at length on how to successfully implement OBE in our teaching learning process. Finally it was unanimously concluded that Software based OBE system will be useful in implementation of OBE.	Software to support OBE is to be designed and developed with the help of MIT software team and it is almost ready.

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

The IQAC has been reconstituted recently and external members from industry have also been included in the IQAC, however, there is no significant contribution as on date since, the meeting is yet to be convened.

Table 6.6: IQAC Committee

Sr. No.	Name	Designation
1	Principal	Chairman
2	Management representative	Member
3	Vice Principal (Academics)	Member
4	Vice Principal (Administration)	Member
5	HOD Mechanical	Member
6	HOD Civil	Member
7	HOD ETC	Member
8	HOD CSE	Member
9	HOD Arch	Member
10	HOD EEE	Member
11	HOD MCA	Member
12	HOD BSH	Member
13	Senior faculty	Coordinator
14	T & P officer	Member
15	Faculty nominee	Member
16	Faculty nominee	Member
17	Alumni representative	Member
18	Alumni representative	Member
19	Student nominee	Member
20	Student nominee	Member
21	Industry representative	Member
22	Industry representative	Member

d. How do students and alumni contribute to the effective functioning of the IQAC?

Earlier, students and alumni were not part of the IQAC. However, recently they have also been added. We are planning to get their inputs in terms of feedback about the system and their expectations. In addition, we are also looking forward to gain some insights about the design of the system for quality and continuous improvement through their active contributions as members of IQAC.

e. How does the IQAC communicate and engage staff from different constituents of the institution?

The IQAC is formed in such a way that the representative of all departments and section are member of the IQAC. In the past, during academic year 2015-16 IQAC was formed with few faculty members. The objectives of IQAC have been defined and conveyed to all members. In the first meeting, few decisions have been made to incorporate certain systemic improvements in academic and administrative activities of the institutes. To incorporate these changes in the design of the system, all members were involved. This was a very good initiate and the outcome of this initiative was development of new OBE software in the institute and incorporation of environment, energy and economy aspects in the projects of students so as to create awareness and enhance their learning of sustainable development.

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalization.

The IQAC is formed at institute level. Under this different academic as well as administrative committees are constituted at institute and department level. These committees work under super vision of steering committee. The academic quality is ensured by focusing on teaching-learning process. The institute follows a pre-defined framework in implementing policy, where any decision finalized by steering committee is implemented through Head of department, institute and department level committees and faculty members.

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.

So for training session have conducted for other aspects such as domain specific knowledge, Research methodology, however data related to training on Quality assurance procedures is almost nil. The institute is strategically thinking to work on these aspects in near future.

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 undertakes internal academic audit each semester at department level and is communicated to the vice principal academics through head of department. Following aspects are covered in the audit

- The progress of the syllabus coverage is reviewed and additional lectures required if any, are provided to complete the syllabus of the respective subjects.
- Quality of teaching is ensured.
- Counselling of the faculty is carried out by the senior faculty and HoD (if required) for improvement in the teaching skills.
- The training needs of the faculty are identified and training is provided in the respective areas.

6.5.5 How is the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

Institute works under the guideline and framework set by AICTE and Dr. BAMU, Aurangabad and Govt. of Maharashtra. Moreover the accrediting bodies such as NBA also provide guidelines for quality enhancement in the academic and other procedures of the institute. The institute also learn from the requirements of the society and industry to be specific.

Hence activities undertaken and methods of conduct of those activities are relevant to these external agencies.

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, Vice Principals, Heads, academic coordinators of the department take continuous reviews of teaching learning process institute. Before commencement of the term academic calendar is prepared, faculty prepares lecture planning for the semester and all the coordinator insure that activities are conducted as per the schedule.

Heads and academic coordinator monitor class wise, faculty wise and subject wise conduction of lectures and practical's.

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

Any other relevant information regarding Governance

Leadership and Management which the college would like to include.

The vision, mission and quality policy statements of the institute are displayed at prominent places like Principal office, department office, laboratories, college website, college brochure, faculty diary, etc. The institution communicates all its quality assurance policies, mechanisms and outcomes to all the internal and external stakeholders through notifications, report etc.

CRITERION – VII

INNOVATIONS AND BEST PRACTICES

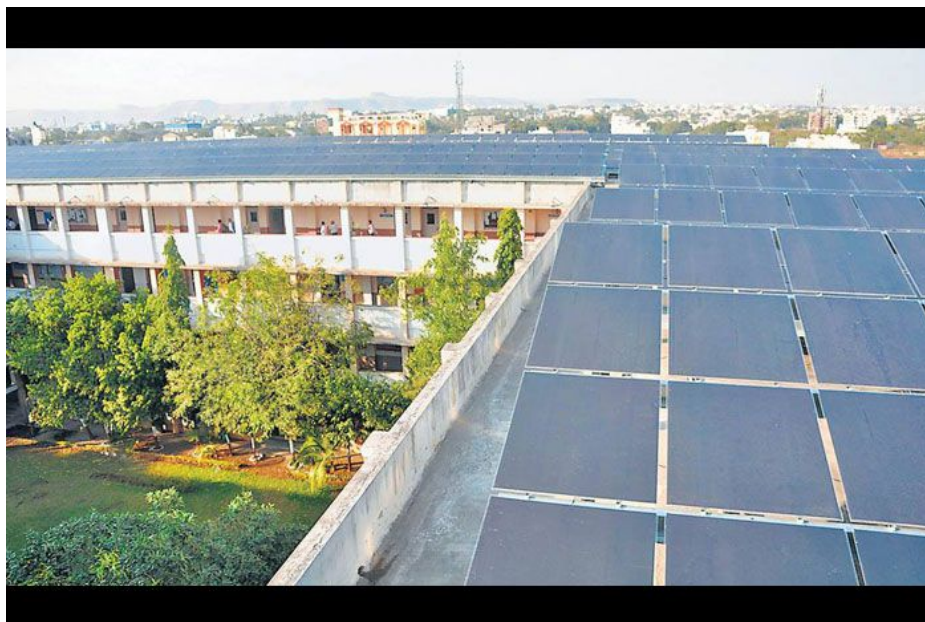
CRITERION VII: INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness:

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

The electrical audits are conducted every year and the systems and procedures are evaluated. Also, the instrumentation, electrical appliances are replaced by new technology equipments to enhance efficiency of the use of electricity. The Electrical and Electronics department of the institute has ESCO (Energy Service Company) status empanelled with BEE (Ministry of Power, Government of India). ESCO, MIT is a member of MEDA, GEDA, and CREDA.

At all roof tops of MIT **350kWp** solar photovoltaic power had been installed, that help to reduce the burden of depending on conventional electricity by almost 45% in the campus. It is one of the major projects of its kind in the region. Maharashtra state education minister Mr. Rajendra Darda was present for the inauguration of same in 2014. Solar energy is a clean and green energy source and also requires the least maintenance compared to methods used for generation of conventional energy. In total, more than 800 modules have been installed. Also, MIT has been awarded with prestigious *Vasundhara* award for the same.



MIT roof top solar panel installation

7.1.2 What are the initiatives taken by the Institute to make the campus eco-friendly?**Energy Conservation:****A) Environmental Awareness Campaigns:**

Every year institute celebrates **World Water Day/ World Forestry Day/ Ozone day**, etc. by organizing student competitions like essay Competition, Photography etc, and expert lectures. MIT organized 9th JalSahityaSammelan, a State Level Event on 13th and 14th March, 2014. The major focus of all these activities is to create awareness about Environment and Water related issues amongst students. Also, students and faculty members organizes Path Natya, Rallies for awareness campaign. The annual diary distributed to all employees of MIT and also associated partners in the society with a theme dedicated to **“Go Green”** in the year 2015.

B) Rain Water Harvesting:

- Open ponds are constructed at different locations on campus to collect excess rain water and it is allowed to seep through ground for underground water recharge.
- Students of MIT have made a group to create awareness about rain water harvesting amongst citizens in and around Aurangabad. Under this activity, for economical project, the material is purchased in mass and also plumbing agency is trained and involved. The student visit houses in and around Aurangabad, Creates awareness, explains costing involved and benefits of project and after positive response from owner of the house Rain Water Harvesting of the house gets completed. Under this activity Rain Water Harvesting of more than 250 houses, bungalows, etc. is completed.

C) Check dam construction:

MIT is involved in design and construction of Cement NalaBandharas (CNBs) at various locations in and around Aurangabad. Civil Engineering Department of MIT is involved in conducting necessary Surveys for identifying good natural sites for construction of CNBs. Also, Civil Engineering Department is involved in Stability Design, Hydraulic Design and Construction of CNBs. MIT also works on cost optimization of these structures. Two typical regular CNBs in UCR and RC, One Counter-fort wall type RC CNB and Four RC Pipe Type CNBs are constructed by MIT in and around Aurangabad namely in villages as Satara, Maliwada, Jalgoan, etc.



Check dam construction at Satara Village

D) Efforts for Carbon neutrality

A concept is implemented in the institute under the title “**EEE**” from the academic year 2015-16. It stands for **E**nergy, **E**nvironment, and **E**conomy. The objective of this initiative is evoking thought process amongst the students of final year of all braches about impact of their final year projects on Energy, Environment and Economy. Before implementing this concept, all HoDs were asked to present one case study based on any past final year project and brainstorming session was conducted so that the concept can be implemented effectively. The final year project groups of students of all branches were made aware about this concept through department wise presentations. At the end of academic projects, students wrote either a complete chapter or a section on **EEE**.

MIT has established Green Fuel and Green Energy laboratory and is working in the field of development of technologies and engineer solutions including proof of concept studies, laboratory scale validation, pilot scale validation, Commercial scale plant design and execution, develop alternative energy sources, identify new feedstock for conversion in bio fuel, study alternative processes for improving economic feasibility etc.

A group of students and faculty in Mechanical engineering department is working on research projects to develop bio-degradable cutting fluids as alternative and sustainable solution to synthetic cutting fluids, in widely used machining applications. One of such projects was awarded as best “innovative project” at University level in “*Avishkar 2016*”, a project completion organized by Dr. B. A. M. University, Aurangabad.

Institute involves the students and faculties in the events and activities related to environment conscious issues. Special training workshop for students and faculties are conducted on regular basis through various means like open discussion on the topic of Smart city mission and eco-friendly aspects in implementation.

As per guidelines of Dr. B. A. M. University, Aurangabad, it is made compulsory for undergraduate students to pass the compulsory course called- Environmental Science. The institute follows the guideline to conduct the course including theory and practical sessions, Students do visit the local fields like slum area, ponds, lake, mountains, etc to present the case study which create awareness among student community to realize the need of eco-friendly environment and environment consciousness.



Awareness program for smart city mission



Faculty participated in workshop on –“Environmental Studies”

Carbon Sequestration:

The waste produced on campus is separated at collection points itself into compostable waste and non compostable waste. The food waste at mess in hostels as well as canteen is weighed daily and displayed at proper places to make students aware about food waste.

Unless essential all the correspondence on campus is through email and any printouts are to be taken, it is observed that both sides of papers are utilized. Also, the used papers are sent for recycle. The drawing sheets after submissions and examinations are donated to *Anathashrams* so that kids can reuse it for drawings and other activities. At three locations on campus, **Earthworm Compost Plants** are installed and the compost is used in all gardens on campus.

E) Plantations:

Every year on 8th August Tree Plantation is organized. Verities of useful plants are planted in and around campus and also a care is taken up to sufficient growth of Plants. Also, on major events organized by various departments of the institute, tree plants are offered in place of flower a bouquet, which gives right message to the Guests as well as Audience.

**F) Hazardous waste management:****a) Precautionary Measures:**

There is a very less quantum of hazardous waste production at Campus.

b) Safety and Security Initiatives:

The institute has made wearing helmet obligatory to all the students and employees while riding two wheelers and using seat belts while driving four wheelers. They are not allowed to park the vehicle inside campus on that basis. Students get involved in the awareness campaign.



Students involved in the awareness campaign- Helmet saves life

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

Modern ICT-assisted teaching – learning methods:

Every department in the Institute is facilitated with necessary infrastructure including smart boards and LCD projectors, internet connectivity, e-resources in order to use ICT facilities optimally for enhanced and better teaching-learning. Faculties have been trained to use of such technology. Few departments are identified as nodal centers for virtual learning in association with IITs e-resource support. Necessary infrastructure (with 10 to 20 computers) is provided in the laboratory at different departments. These virtual desktops are remotely connected to servers / data centers. Students access the laboratory work/ experimentation procedure as per their curriculum requirement. Students from various departments in the off working hours or on holidays use these resources. Presently, the access is provided for on-campus students. But, we are planning for off-campus access. This practice resulted in better teaching - learning.

Mentoring:

MIT has formed teacher-guardian scheme from last three years. In this innovative practice, undergraduate students from first year to final year are under the care of faculty mentor. One faculty member is assigned as a mentor to a group of 15 to 20 students. For such 4 to 5 mentors one senior faculty functions as 'Mentee'. Faculty mentor closely monitor the students' performance in terms of curricular, co-curricular and extra-curricular activities

on frequent basis. Monthly meetings are held to ensure the solution, motivation and support for student. Students are motivated to inculcate ethical values and practices, participation in extensive activities. Students are also encouraged to contact the mentor in case of need. It is observed that, such interaction induced positive impact on the teacher - student relationship. Teachers and faculty observed the effectiveness.

Asian Centre for Development Engineering (DEC.ASIA):

This year recently from January 2017, MIT has introduced a new concept called DEC i.e. an initial start-up project. The broad goal is to provide exposure to every stakeholder and mostly to society people. It will involve the real prospect of broadening the mind, understanding the problems from the grassroot level.

DEC.ASIA is a start-up project purely initiated by MIT group of institutions and hosted in our campus. This has been established by the top management of the group. With doing of those real time projects, improve their soft skills such as team work, flexibility, problem solving, communicative skills, leadership qualities, and attitude. Upon completion of identified quantum of work, students will be certified as “Certified Development Engineering Associate”.

Objectives and learning Outcomes of DEC:

Keeping in mind about the huge talent distribution in an academic institute, the objectives and learning outcomes are identified. The basic objective is to create a platform for the students to do real social projects and analyse developmental problems and foster technological innovations. Expected outcomes are improvement in soft skills and attitude of students, platform to showcase student’s capabilities, application of professional knowledge.

Proposed projects under this innovative initiative-

Out of the various fields of DEC.ASIA, rural development is considered at a primary level. Inline with this, the proposed projects are identified as below:

- ❖ Designs of water supply system, irrigation plans.
- ❖ Design, analysis and testing of submersible water pumps.
- ❖ To evaluate water supply schemes, planning, structure and review during implementation.
- ❖ Evaluation or planning of solid waste management, energy audit and drainage system.
- ❖ Action plan for rural sanitation, toilets, drainage management.
- ❖ Cost estimation for water supply systems, road development and road evaluation.

- ❖ Water shed inventions.
- ❖ Rooftop solar plants and Rooftop Rainwater Harvesting.
- ❖ Temperature regulations.
- ❖ Enhancing productivity of small scale industry and village industry
- ❖ Energy bill reduction through use of available renewable energy.

Till date work status of DEC.ASIA-

- Introduced DEC concept to all the students of MIT
- Helped CMIA to prepare DSR for turmeric cluster of Tal. Kannad, Dist. Aurangabad.
- 1100 Students have registered so far to participate in this projects.
- Guiding a group of electrical students on energy auditing.
- Started Solid Waste management project in Kasliwal region, Aurangabad and MIT campus.
- Started a project on Solar panel cleaning machine.



Students' participation at DEC concept programme at MIT campus

This innovative practice and interaction with students created positive impact in the students' mind-set. Teacher and student community is finding this as an

opportunity to stay connected with socio-economical challenges. Also, it provides opportunity to apply their knowledge and contribute.

Online student and staff management system:

MIT Software Park has developed following online modules for students and staff, is referred as Campus Management System (CMS). This online service includes:

- ❖ Admission Management System (AMS)
- ❖ Library Management System (LMS)
- ❖ Staff Management System (SMS)
- ❖ Android App: My MIT App
- ❖ MIT Outcome Based Education (OBE) portal

Admission Management System (AMS):

This portal facilitates staff members –

- a. To use as admission register and update the students' information
- b. To promote the student to higher class in admission
- c. To monitor the admission fees and scholarships details

Library Management System (LMS):

This portal facilitates students and staff members –

- a. To monitor library transactions
- b. To search the available books, journals and e-resources

Staff Management System (SMS):

This portal facilitates staff members –

- a. To monitor their daily biometric attendance
- b. To raise the request regarding the services required
- c. To upload the faculty information
- d. To view the monthly pay slips
- e. To access library facilities

Android App: My MIT App

MIT Software Park has launched first android app for MIT students in August 2016. We have shared login credentials with students through SMS. MIT students have appreciated the first release and have shared their views. Students also shared their feedback on email id mititpark@mit.asia. Following features are available in My MIT App.

1. Home page displays photo, name , course and branch of student
2. Tuition fees details
3. Scholarship details
4. Library details
 - Weekly books taken
 - Semester books taken
 - Dues/Fine
 - Search book by title and author name
5. Personal details
6. Notice board
7. Assignment
8. Time table
9. Student online Attendance

MIT Outcome Based Education (OBE) portal:

Recently, MIT have prepared and deployed OBE/NBA portal as per standard practice / guidelines for NBA accreditation. We have incorporated the different roles of faculty members after brainstorming sessions, meetings, faculty interactions and suggestions by steering committee members. Following is the flow of OBE/NBA system:

Name of the Role	Feature available to Role
Principal	1. Can add Vision and Mission of Institute. 2. Final approving authority for transactions submitted by Program Coordinator / HOD. 3. Can also track status of different departments till course attainment.
Vice Principal	1. Vice Principal can verify and approve / reject transactions submitted by Program Coordinator / HOD. 2. Transactions either approved or rejected are forwarded to Principal for final decision.

Program Coordinator (PC)	1. A PC can add Vision and Mission of department. 2. Add PEO, PO's and PSO's, Vision elements, mission elements. 3. PC can add course details and also assign course and module coordinator. 4. PC verifies transactions submitted by course coordinator like Attainment level, Course PO mapping, Course PSO mapping, etc.
Module coordinator (MC)	1. Module coordinator verifies transactions submitted by course coordinator. 2. MC can either approve or reject the transactions. 3. Transactions verified by MC are forwarded to PC for final decision. 4. MC verifies transactions submitted by course coordinator like Attainment level, Course PO mapping, Course PSO mapping, etc.
Course Coordinator	1. Course coordinator can assign Course teacher 2. Can do CO-PO-Tool mapping 3. CC can calculate attainment level 4. Can view attainment summary 5. Can calculate CO Attainment
Course Teacher(CT)	1. CT can calculate attainment level 2. Can view attainment summary 3. Can calculate CO Attainment

Presently, faculties started using the OBE system and could use to determine CO and PO attainment. Few snapshots are added here.

Course: Agril. Econ & Farm Machinery GO [Know More](#)

Course Outcome	PO 1	PO 2	PO 3	PO 4	PO 5
AED442.1	Tool : Assignment I Mapped Level : 3 Attained Level : 3.00 Click to view Details			Tool : Assignment I Mapped Level : 1 Attained Level : 3.00 Click to view Details	
AED442.2	Tool : Class Test I Mapped Level : 2 No Attainment Added			Tool : Assignment III Mapped Level : 3 No Attainment Added	
AED442.3	Tool : Class Test II Mapped Level : 1 No Attainment Added	Tool : Class Test II Mapped Level : 2 Attained Level : 3.00 Click to view Details	Tool : Assignment I Mapped Level : 1 No Attainment Added	Tool : Class Test I Mapped Level : 3 No Attainment Added	
AED442.4	Tool : Class Test I Mapped Level : 3 No Attainment Added	Tool : Class Test III Mapped Level : 3 No Attainment Added		Tool : Class Test III Mapped Level : 2 No Attainment Added	Tool : Class Test I Mapped Level : 3 No Attainment Added
	Mapped Level : 3.00 Attained Level : 3.00	Mapped Level : 2.00 Attained Level : 3.00	Mapped Level : NA Attained Level : NA	Mapped Level : 1.00 Attained Level : 3.00	Mapped Level : NA Attained Level : NA

Sample Course Outcome (CO) attainment assessment tools

Select ESE : 3 Calculate Course Attainment

Internal Assessment Level			Course Attainment	
Mapped PO's	Obtained Levels	Mapped Indicators		
PO 1	3.00	3.00	Average of internal Assessment of CO's	3.00
PO 2	2.00	3.00	End semester Exam (ESE) Attainment Level	3
PO 4	1.00	3.00	Final attainment of course = [Internal Assessment * 0.2] + [ESE * 0.8]	
Average	2.00	3.00	Agril. Econ & Farm Machinery = [3.00 * 0.2] + [3 * 0.8]	
			Agril. Econ & Farm Machinery =	3.00

Cancel

Sample Course Outcome (CO) attainment calculation

7.3 Best Practices

7.3.1: Computer Centre for interactive Learning

1. Title of the Practice –

Computer Centre for Interactive Learning and Academic Enhancement

2. Objectives of the Practice:

Objectives of the practice are listed below:

- To enhance interest of students in learning
- To improve teaching quality of faculty members
- To promote self-learning habit among the students
- To bridge the curricular gaps through other alternatives

3. The Context:

Use of such advanced technique and innovative method is required to enhance teaching-learning process. During lectures, faculty demonstrates the concept and the students perform hands-on simultaneously. This helps in better understanding of the concepts.

4. The Practice:

While preparing class time tables, usually all programming subjects are scheduled in computer centre. Workshops for students as well as faculty members are conducted in computer centre.

5. Evidence of Success:

- Overall class attendance, engagements of classes and syllabus coverage has substantially improved.
- Participation of students in workshops has increased.

6. Problems Encountered and Resources Required:

Initially there was resistance from few students, due to mindset developed with traditional teaching-learning process, where teaching was the only focus. Initially students could not appreciate the benefits with self-learning mode. They felt that department has prepared the time table unnecessary for self-learning. To address those problems, students are given opportunity to sit in the centre and do their regular study. Faculties monitored the students and extended help to use the computers for teaching and learning. Gradually, students realize the advantage of enhanced learning.

7.3.2:Preparing and implementing Academic and Administrative Audit (AAAA) framework**1. TitleofthePractice:**

Preparing and implementing Academic and Administrative Audit (AAAA) framework.

2.Goals/Objectives:

- To streamline departmental and institutional functions in strategic manner and objectively
- To assess individual faculty's performance in terms of teaching, research and administrative contribution as per the cadre responsibility
- To improve the academic and administrative capabilities of organization through various level feedback
- To monitor the overall institutional development with student centric approach aimed towards improvement and quality excellence.

3.The Context-

Through brainstorming in IQAC meetings, it was felt that AAA will help us to understand the present status of various institutional processes and identify the gaps. This will guide and direct us to take necessary steps / start new initiatives. It was found that, we lacked standardized formats for periodic assessment of academic and administrative units. The changing education system demands:

- Self and third-party assessment and provisions for maintaining quality education.
- Preparation of fool proof documentation and formats for ready reference as policy matter.
- Mechanism for identifying the potential of faculties involved in teaching and administrative post to decide his/her performance indicator.
- Inculcating accountability in faculty members for assuring quality of their teaching, research and services.

4. The Practice:

Step One: Preparation of formats for Academic and Administrative Annual Audit (AAAA) report, and performance appraisal criteria's for faculty member's assessment.

a. Preparation of format for AAAA report:

Indicative terminology, references and focus areas are given to the sub-committee to prepare a standardized format. The sub-committees of IQAC made the formats for both, academic and administrative audit to ascertain the presence and adequacy of quality assurance procedures, their applicability and effectiveness in guaranteeing quality of inputs and processes and effectiveness in guaranteeing quality of inputs and processes.

A detailed format in terms of e-book of 20 pages was prepared which includes following three parts–

PART-I: INPUTS	○ Period of Assessment ○ Vision Statement ○ Mission Statement ○ Goals set for the Report year ○ Goals set for the following year ○ Quality policy statement ○ Student-strength ○ Human Capital (in terms of academic and administrative delivery) ○ Income status ○ Expenses
PART-II: OUTCOMES	○ Student-Results in percentage and strategies planning ○ Student-achievements and suggestions ○ Faculty performance and suggestions ○ R & D achievements and suggestions ○ Library facilities and utilization report ○ Infrastructure facilities and utilization report

PART-III: CONCLUDING SECTION	○ SWOT Analysis: ✚ Significant internal and external threats and challenges to the Institute ✚ Significant internal and external strengths and opportunities to the Institute ✚ Recommendations for new developments and resources including building space, if required. ✚ Suggestions for the betterment of the Institute ○ Self-Assessment of overall performance of the Institute during the Report Year
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b. Preparation of format for performance appraisal criteria's for faculty member's assessment:

The format for assessment of teachers is prepared with provision of feedback. This is a regular practice from last 5 years. A grand total 500 grade points is divided between following five criteria. Weightages are assigned to key indicators in each criterion to have an objective audit.

Criteria	Key Indicators
Teaching - Learning	a) Only Theory or only Practical teaching load engaged (5 level grades) b) Only Theory or only Practical related University Exam results (5 level grades) c) Combined Theory and Practical teaching load engaged (with 5 grading systems) d) Combined Theory and Practical related University Exam results (with 5 grading systems) e) Lesson planning, digital notes access to students f) Student Feedback
Academic Achievements	a) STTP Program attended b) Development of Lab/ manual/e-notes/books c) Chairman of Institute Committee d) Program / conference Coordinated e) Testing/Consultancy contribution

	f) Obtaining funds for lab and research projects g) Article published in inter/national journal h) Article presented in inter/national conference i) Inter/national patenting j) Supervisor for M.E.dissertation work k) Supervisor for PhD work l) Reviewer/Member of Editorial Board of a journal
Industry Interaction	a) Industrial Visit b) Guest lecture c) Industry training
Other Contribution	a) Awards b) Guidance to weak students c) Guidance for competitive examination d) Counseling to students e) Faculty mentoring
Administration	a) Meeting conducted b) Documentation c) Monitoring the academic activities d) Submitting the proposals e) Budget preparation and planning activities

Step Two: Data Collection-

Staff members were informed about the need for the audit and performance appraisals. The format / proforma is explained meticulously with its objective. They were expected to submit the duly filled in stipulated format in hard form to respective heads of the departments, Management and governing body as per requirements with evidences within stipulated time period.

Step Three: Evaluation-

Evaluation of academic and administrative audit report is done through Vice-Principal (Academics), Vice-Principal (Administration) and Principal as self-evaluation purpose. It includes information related to different departments, sections handling admissions, examinations, stores, maintenance, accounts,

salary, appointments, promotions, administration, and scholarships. It is presented in front of management and executive council members for critical evaluation.

The evaluation of performance and audit report has provision of feedback by self, Head of Department, Principal and management as applicable for qualification, punctuality, regularity, accountability etc.

All departmental information supporting the audit and performance appraisal, is verified through Internal audit team consisting of three senior faculty members, on the basis of inputs given. The team made appropriate recommendations for continuous improvement of the processes and procedures used for quality assurance and enhancement.

5. Evidence of Success:

The practice of current AAA audit has resulted in critical, objective and introspective assessment of departmental and institute status. It helped to identify the areas for improvement. Performance appraisal mechanism has created a motivating environment for faculty to connect in quality academic delivery. Data compilation for the audit brought in systematic documentation at all departments and sections. The objective and practical recommendations were accepted by both academic and administrative staff and there is keenness to comply with the same. This consistent practice which started with uncertainty concluded with the positive sensitivity among faculty.

6. Problems Encountered and Resources Required:

Initially there was resistance from all academic and administrative faculty as they felt that the mechanism was pointless and time-consuming. The format or report proforma was lengthy and took longer time for data collection and compilation. To address those problems, all faculty members were taken into confidence and detailed about its objectivity and extended outcome in terms of self-introspection, looking inside, opportunity to come out of self-centered practices and enhancement of individual's capabilities. Also, sufficient elaborative inputs and case studies were provided through meetings and discussions conducted by head of departments.

7. Contact details:

Name of the Principal: Dr. Nilesh G. Patil

Name of Institution: G.S.Mandal's, Marathwada Institute of Technology

City: Aurangabad, Pin Code: 431010

Accredited Status: Applied for NAAC (Cycle-1) Accreditation

Work Phone: 0240-2375111 Fax: 0240-2376154

Website: <http://engg.mit.asia> E-mail: principal.mite@mit.asia

Mobile: 9028887885

EVALUATIVE
REPORT OF THE
DEPARTMENTS

EVALUATIVE REPORT OF THE DEPARTMENTS**Department of Civil Engineering****1. Name of the department:** Civil Engineering**2. Year of Establishment:** 1984**3. Names of Programmes offered:**

Name of the program	Year of Establishment
UG:-Bachelor of Civil Engineering	1984
UG:-Bachelor of Civil Engineering (II Shift)	2011-12
PG:-Master of Engineering (Structural Engineering)	2011-12

4. Names of Interdisciplinary courses and the departments/units involved: Nil**5. Annual/ semester/choice based credit system (Programme wise):**

Name of the program	Evaluation System
UG in Civil Engineering	Semester System
PG in Structural Engineering	Semester System

6. Participation of the department in the courses offered by other departments:

Sr. No.	Subject/courses offered	Organizing Department	Supporting Department
1.	Basic Civil Engineering	EEE, ETC, Mechanical and CSE Engineering	Civil Engineering
2.	Engineering Mechanics	EEE, ETC, Mechanical and CSE Engineering	Civil Engineering
3.	Strength of Material	Mechanical Engineering	Civil Engineering
4.	Theory and Design of Structure	Architecture	

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:**

Academic Year	Post	Sanctioned	Filled
2016-17	Professor	03	00
	Associate Professor	05	03

	Assistant Professor	22	21
	Adjunct Faculty	6	6
	Total	36	30

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./ M. Phil. etc.)

Sr. No.	Name of the Faculty	Qualification	Designation	Specialization	Experience (yrs.)				
					Industry	Teaching	Total	Research	No. of PhD students Guided in last 4 years
1	Mr. Upadhye V. R.	ME	Head & Assoc. Professor	Structures	4.9	16	20.9	---	NA
2	Dr. Dixit M. S.	Ph.D	Assoc. Professor	Civil Engg	1	17.8	18.8	---	NA
3	Dr. Jaiswal S. S.	Ph.D	Assoc. Professor	Public Transport	7	2.0	9.1	---	NA
4	Mr. Patil S.T.	ME	Assistant professor	Structures	26	4.5	30.5	---	NA
5	Ms. Survase S. R.	ME	Assistant professor	Water Resource Engg	0	9.0	9	---	NA
6	Mr. Mohammed Ishtiyaque	ME	Assistant professor	Structures	3.6	15	18.6	---	NA
7	Mr. Shirale R. L.	ME	Assistant professor	Structures	3	7	10	---	NA
8	Mr. Quadri S.G.	ME	Assistant professor	Soil	7	10	17	---	NA
9	Ms. Aherkar C. A.	ME	Assistant professor	Soil	2	6.9	8.9	---	NA
10	Mr. Chatorikar R.N.	ME	Assistant professor	Structures	2.5	6.3	8.8	---	NA
11	Mr. Ratnaparkhi A. A.	ME	Assistant professor	Water Resource Engg	2	4.8	6.8	---	NA
12	Ms. Swami S. K.	ME	Assistant professor	Structures	6.1	4.3	10.4	---	NA
13	Mr. Pawar S. N.	ME	Assistant Professor	Structures	0	9.7	9.7	---	NA
14	Mr. Khan A.	ME	Assistant	Structur	0	3.8	3.8	---	NA

	A.		Professor	es					
15	Ms. Wevhal A. S.	ME	Assistant Professor	Water Resource Engg	0	5.10	5.10	---	NA
16	Ms. Sankpal V. B.	M. Tech	Assistant Professor	Const. Management	0	2.0	2	---	NA
17	Mr. Syed F. J.	ME	Assistant Professor	Structur es	0	1.1	1.1	---	NA
18	Mr. Syed M. M.	ME	Assistant Professor	Structur es	0	5.0	5	---	NA
19	Ms. Ingle A. A.	ME	Assistant Professor	Const. Management	0	1.0	1	---	NA
20	Mr. Mane S. D.	ME	Assistant Professor	Structur es	0	0.3	0.3	---	NA
21	Ms. Deshpande A. A.	ME	Assistant Professor	Structur es	0	0.3	0.3	---	NA
22	Ms. Suryawanshi P. B.	ME	Assistant Professor	Structur es	0	0.3	0.3	---	NA
23	Mr. Pathak S. N.	ME	Assistant Professor	Structur es	0	6.0	6.0	---	NA
24	Mr. Wasim R.	ME	Assistant Professor	Structur es	0	7.0	7.0	---	NA
List of Adjunct Faculty									
25	Prof. Kulkarni B. D.	ME	Adjunct Faculty	Civil	0	48	48	---	NA
26	Mr. Shelar S.D.	ME	Adjunct Faculty	Structur es	23	6	29	---	NA
27	Dr. Mathew M. B.	Ph.D	Adjunct Faculty	Structur es	23	02	25	---	NA
28	Dr. Godihal J.H	Ph.D	Adjunct Faculty	Environmental Engg	01	29	30	---	NA
29	Dr. Mulay J.G.	Ph.D	Adjunct Faculty	Geology	0	45	45	---	NA
30	Mr. Deshmukh S. B.	ME	Adjunct Faculty	Structur es	22	0	22	---	NA

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):

Academic Year	Student :Teacher Ratio	
	Civil Engineering (UG)	PG
2016-17	13.87: 1	12: 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Academic support staff	Sanctioned by Management	Filled
Technical staff	2	1
Administrative staff	1	Nil

15. Qualifications of teaching faculty with DSC/D.Litt./Ph.D./M.Phil./PG./MASLP

Sr. No.	Qualification	Number
1	Ph.D.	02 + 03
2	Ph.D.(Pursuing)	06
3	PG(M.E./M.Tech)M.Sc.	16 + 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: Nil

19. Publications: Publication per faculty

Sr. No	Name of Faculty	No. of paper published in peer reviewed journals (National/ international)	No. of publications listed in international data base	No. of paper published in Conference		Monographs/ chapter in books/ books edited	Books with ISBN/ISSN no with details of publishers	Citation index	SNIP/SJR	Impact factor	h-index
				Nat	Int						
1	Mr. V.R.Upadhye			2	3						
2	Dr. M.S.Dixit	13		7	5						
3	Dr.S.S.Jaiswal	1		1	5					0.556	5
4	Mr.R.L.Shirale	3								0.94	
5	Mr.S.T.Patil	1			1						

6	Mr.S.G.Quadri	0		1						
7	Mr.A.A.Ratnaparkhi		1							
8	Ms.C.A.Aherkar	1								
9	Mr.S.N.Pawar	0	7	3						
10	Ms.S.K.Swami	4	1	1						
11	Mr.R.N.Chatorikar	1		1						
12	Ms.A.S.Wevhal		1							
13	Mr.Ather Khan	1								
14	Ms.V.B.Sankpal	1	1						3.5	
15	Mr.Fahad Syed	1								
16	Ms.A.A.Ingle	2								
17	Ms A A. Deshpande	2	1							
18	Ms.P. B.Suryavanshi		1							

20. Areas of consultancy and income generated:

Sr.No.	Year	Name of project	Funding agency	Amount Received
1	2016-17	Soil testing	Shree Ambika Printers and publications Aurangabad	12000
2		Soil testing	Sakshi Constructions Aurangabad	4000
3		Cube Testing	Shree buildcon Vaijapur Dist.Aurangabad	300
4		Cube Testing	Dupty Engineer, Municipal corporation Aurangabad	300
5		Soil Testing	Dr. Pravin Joshi Ambajogai	4000
6		Soil Testing	Executive Engineer World Bank project division	4000
7	2015-16	Soil Testing	Executive Engineer, PWD, Washim	1800
8		Cube Testing	Nath Pulp & Paper Mills	1800
9		Paver Block Testing	Nath Pulp & Paper Mills	900
10		Cube Testing	Gautam Jain	450
11		CLC Block Testing	Gautam Jain	450
12		Cube Testing	Kiran P. Joshi	450
13		Mix Design M30	Paithan Mega Food Park Pvt Ltd	6000

14		Strength verification of	Paithan Mega Food Park Pvt Ltd	6000
15		Mix Design M25	Paithan Mega Food Park Pvt Ltd	6000
			Total	23850
16	2014-15	Cube Testing	Module Architect	1350
17		Cube Testing	Module Architect	900
18		Paver Block	Gajanan Auto	300
19		Cube Testing	Module Architect	450
20		Cube Testing	Module Architect	450
21		Cement Testing	Ambilwade Developers	1350
22		Cube Testing	Module Architect	900
23		Cube Testing	Module Architect	450
24		Cube Testing	Khinvasara Projects	1350
25		Cube Testing	Vastu Levenders	450
26		Cube Testing	Module Architect	450
27		Cube Testing	Vastu Infra Projects	4050
28		Cube Testing	Module Architect	900
			Total	13350
29	2013-14	Cube Testing	Module Architect	1800
30		Cube Testing	Devdaya Contractor	450
31		Cube Testing	JCC Pvt.Ltd.	450
32		Cube Testing	KASHEC Engineers Pvt.Ltd.	900
33		Non-Destructive Testing	Satyam Mats Pvt.Ltd.	5000
34		Cube Testing	Vaastu Infra Projects	4050
35		Soil Testing	Deven Realities	1800
36		Cube Testing	Shri.Renuka Constructions	450
			Total	14900
37	2012-13	Soil Testing	OASIS Landmarks,Aurangabad.	600
38		Soil Testing	Indian Oil Corporation	48600

39		Cube testing	Rudranee Infrastructure	2500
40		Cube testing	BVG India Ltd.	6060
			Total	57760

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:

Name of Faculty	Name of Committee	Category
Dr. M.S.Dixit	IGS Life Member	National
	ISTE Life Member	National
	Reviewer - Geotechnical testing journal ASTM,	International
	Reviewer - Geo-mechanics and Engineering, techno press Korea	International
Mr.V.R.Upadhye	ISTE Life Member	National
	ISSE Life Member	National
Mr.S.G.Quadri	ISTE Life Member	National
Mr.S.T. Patil	ISTE Life Member	National
Mr.Md.Ishtique	ISTE Life Member	National
Mr.R.L.Shirale	ISTE Life Member	National
	AMIE Life Member	National
Ms.S.R. Survase	ISTE Life Member	National
Ms.C.A.Aherkar	ISTE Life Member	National
Ms.S.K.Swami	ISTE Life Member	National
	MIE Life Member	National
Mr.S.N.Pawar	ISTE Life Member	National
Ms.V.B.Sankpal	ISTE Life Member	National
Wasim Razvi	ISTE Life Member	National

22. Student projects

- Percentage of students who have done in-house projects including inter-departmental/Program

Sr. No.	Academic Year	Percentage of students working on their projects in-house	
		UG	PG (SE)
1	2016-17	100	100
2	2015-16	100	100

3	2014-15	100	100
4	2013-14	100	100
5	2012-13	100	100

- **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies**

Sr.No.	Academic Year	Percentage of students placed for projects in organizations outside	
		UG	PG (SE
1	2015-16	Nil	Nil
2	2014-15	Nil	Nil
3	2013-14	Nil	Nil
4	2012-13	Nil	Nil

23. Awards/ Recognitions received by faculty and students:

a) Awards / Recognitions received by faculty

Year	Name	Awards/Recognitions
2015-16	Ms. Vanashri B.Sankpal	Best research paper

b) Awards / Recognition received by student

Year	Name	Award won//Recognitions
2016-17	Mr. Prassana S. Wadgaonkar	Dipex 2017 Pimpri Chinchwad
	Mr.Ganesh S. Gadekar	
	Mr. Amol L. Kamble	
	Mr. Vedant Kharade	
	Ms. Shraddha Vangujare	
2016-17	Mr. Girish Rajurwar	'Construct it' Project Exhibition at Nanded
	Mr. Sunil Vishvasrao	
	Mr. Girish Rajurwar	'Bio-Toilet' Project Exhibition at Nanded
	Mr. Sunil Vishvasrao	
	Mr. Shubham Are	

24. List of eminent academicians and scientists/ visitors to the department

Sr. No.	Name of the Academician/ Scientist	Organisation	Designation	Date
1	Dr. Dewaikar D. M	IIT, Bombay	Professor	27/8/11
2	Dr. Dasaka S. Murthy	IIT, Bombay	Asso.Professor	27/8/11

3	Prof. D. L. Shah	Consulting Engineer, Pune	Consulting Engineer	9/9/10
4	Shri. Sukomal Chakraborty	RITES India Limited	Consulting Engineer	3/2003
5	Dr. Siddharth Ghosh	IIT, Bombay	Asso.Professor	12/7/ 15
6	Dr. Vasant Matsagar	IIT, Delhi	Asso.Professor	10/8/13
7	Dr. V. A. Kharamale	COE, Avasari, Pune	Asso.Professor	12/7/15
8	Dr. S. S. Jamkar	GEC, Aurangabad	Asso.Professor	13/7/15
9	Dr. Vishal Sardeshpande	CSRE, IIT, Bombay	Asso.Professor	3/4/16
10	Dr. Milind Sohoni	CSRE, IIT, Bombay	Asso.Professor	23/9/16
11	Shri. Madhavraoji Chitale	Ex. Secretary, WRD, GoM	Ex. Secretary	13/3/14
12	Shri. Chandrakantji Kheire	MP, GoI	MP	14/7/16
13	Mrs. Kamal Rao	Consulting Engineer, Aurangabad, Chairperson, ISSE, Aurangabad Center	Consulting Engineer	08/2016
14	Dr. Mahesh Varma	Director, Nandadeep Designs & Valuers Private Limited, Consulting Engineer, Aurangabad	Director	21/1/16
15	Shri. Suresh Khanapurkar	Eminent Geologist & Water Activist, Shirur, MS	Eminent Geologist	9/14
16	Mr. Ejaz Nathani	Zameel Steel Building India Private Limited	Consulting Engineer	12/7/15
17	Mr. Venu Gopal K.	Zameel Steel Building India Private Limited	Consulting Engineer	12/7/15
18	Mr. Dildar Ahmad	GM, Design, Zameel Steel Building India Private Limited	GM	12/7/15
19	Dr.U.J.Kahalekar	Govt. college of Engineering, Aurangabad	Professor	17/8/07
20	Dr.P.A.Sadgir	Govt. college of Engineering, Aurangabad	Asso.Professor	16/9/06

25. Seminars/ Conferences/Workshops organized and the source offunding : Nil

26. Student profile programme/course wise:

Name of the Course/ Programme	Academic year	Application received and selected	Enrolled		Pass %
			Male	Female	
UG	2016-17	Admission process is as per the rules and regulation of DTE	86	20	Currently in F.E.
	2015-16		88	12	Currently in S.E.
	2014-15		98	18	Currently in T.E.
	2013-14		108	12	Currently in B.E.
	2012-13		111	12	64.91
PG	2016-17		8	7	Currently in F.E.
	2015-16		13	3	Currently in S.E.
	2014-15		7	4	18.18
	2013-14		13	2	40.00
	2012-13		7	2	22.22

27. Diversity of Students

Name of the Course	Academic Year	% of students from the same state	% of students from other states	% of students from abroad
UG	2012-13	95.6	4.4	-
	2013-14	89.11	10.89	-
	2014-15	100	0	-
	2015-16	90.82	9.18	-
PG	2012-13	100	-	-
	2013-14	100	-	-
	2014-15	100	-	-
	2015-16	100	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.? :

Academic Year	2015-16	2014-15	2013-14	2012-13
Gate	2	-	-	-
Others(GRE/TOEFL)	-	-	-	-

29. Student progression

Student Progression	Against % Enrolled
UG to PG	30
PG to Ph.d.	-
Ph.d. To Post Doctoral	-
Employed	-
• Campus selection	65
• Other than campus recruitment	5
Entrepreneurship/self employment	

30. Details of Infrastructural facilities

Laboratory Space (9)	1121.04 sq.m
Class – rooms (5)	450 sq. M
Departmental Library (1)	20 sq.m
H.O.D. Office (1)	18.24 sq.m
LCD Projector	2
Overhead Projector	1
Video CDs	5
Printed Charts	0
PCs	23
Networking & Leased Line	1GBPS
Internet facility	Available

Library

a) Departmental Library (Coordinator: **Mr.S. T. Patil**)

Category of Books	Available
Total numbers	350
Ref. Books	52
Text Books	298
Hand Books	NIL
Journal National	Online Journals are available for access at computer centre
Technical Papers	Online Journals are available for access at computer centre
IS Codes	Yes

b) Internet facilities for staff & student and Class rooms with ICT facility

Internet Service Provider	BSNL
Internet Speed	1 GBPS Leased Line

WIFI Connectivity	Yes
Classrooms with ICT facility	2

Laboratories:

Sr. No.	Name of Laboratory for UG	Major Equipment
1	Material Testing	Universal testing machine
		Compression Testing Machine
		Torsion testing machine
		Impact testing Machine
2	Geotechnical Engineering	Plate load test apparatus
		Tri-axial test
		Direct shear Test
3	Surveying Stores	One second accuracy Theodolite
		EDM with all standard accessories
4	Environmental Engineering	B. O. D.
		Muffle Furnace
		Jar Test apparatus
		Digital D.O. Meter
5	Transportation	CBR Test Apparatus
		Ductility Test Apparatus
		Flash Point Test Apparatus
		Los Angeles Abrasion Test
6	Fluid Mechanics	Channel Flume
		Bernoulli's Apparatus
		Reynolds Apparatus
		Pipe in Series(Minor Losses)
		Pipes in parallels(Major Losses)
7	Computer Lab	INTEL(R) Core 2 DUO CPU E7500 @ 2.93 GHz, 2G RAM 300 GB HDD- Total Nos.- 15
		INTEL(R) Core 2 DUO CPU G645 @ 2.90 GHz, 2G RAM 300GB Hard disk Total Nos.-7
		ETABS NL V-9.7.3 Design software
		Staad Pro+ Staad Foundation V8 I IS Design code software
8	Engineering Mechanics	Differential Axle and Wheel
		Screw Jack
		Single purchase crab
		Fly Wheel

Sr. No.	Name of the Laboratory for PG	Lab / Major Equipments
1	Structural Dynamics & Earthquake Eng.	Shake Table Type 2-Model IST-2
		Shake Table Type - Vertical Model IST-3
		IEICOS USB based data acquisition system model DAS DAQ system
		Oscilloscope 4 channel digital storage oscilloscope

31. Number of students receiving financial assistance from College, University, government or other agencies

Agency	2015-16	2014-15	2013-14	2012-13
Government	270	231	335	233

Number of students receiving financial assistance

Sr. No.	Scholarship	2012-13		2013-14		2014-15		2015-16		2016-17	
		M	F	M	F	M	F	M	F	M	F
1	OBC-GOI	48	7	49	10	54	14	51	15	0	0
2	SC-GOI	25	3	38	6	39	8	40	16	0	0
3	VJNT-GO	22	3	35	7	50	8	61	9	0	0
4	SBC-GOI	3	0	2	1	0	1	2	0	0	0
5	ST-GOI	2	2	5	2	2	2	0	0	0	0
6	OBC- Free ship	13	3	10	4	8	3	10	3	0	0
7	SC- Free ship	5	3	4	5	6	3	8	3	0	0
8	VJNT- Free ship	11	1	8	2	6	1	4	3	0	0
9	SBC- Free ship	2	1	2	0	2	0	1	0	0	0
10	ST- Free ship	0	1	1	0	0	0	0	0	0	0
11	EBC	65	13	87	23	0	0	0	0	0	0
12	Central Minority Fresh	0	0	6	4	4	1	0	0	7	4
13	Central Minority renewal	0	0	4	0	3	3	0	0	1 2	4
14	State Minority	0	0	18	2	12	1	36	8	2 1	1

*M-Male, F-Female

32. Details on student enrichment programmes (special lectures /workshops / seminars) with external experts

Count of enrichment programmes organized for students	2016-17	2015-16	2014-15	2013-14
Workshops/ Guest lecturers	2	2	2	1

Industrial visits	3	2	1	1
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33. Teaching methods adopted to improve student learning

Department has initiated FDP (Faculty Development Program) for every Subject. The senior faculty members guide the other faculty members of the subject in understanding the fundamentals. Common strategies are finalized by senior faculty member.

Notes of various units and standard readings in the laboratory are prepared at the beginning of the semester. This activity helps the faculty members of the subject to maintain the same uniformity across various classes.

To inculcate the knowledge delivery skills a faculty induction program was conducted at institute level. Faculty members from department are also encouraged to take up the program in summer, winter vacations. To improve students' learning following parameters are consider

1. Assignments are given to the students based on each unit.
2. Power point presentations and NPTEL Videos, resource materials are used by the faculty for delivery of subject matter.
3. Industrial visits are organized.
4. Guest lecturers of eminent personalities from academic institutions as well as industries are organized to enhance the student knowledge.
5. Summer, winter Internship program are organized to bridge the gap between theory and practical.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- NSS Activity
- Blood Donation Camp
- Tree plantation
- Smart city (Road show)
- Roundtable on Aurangabad smart city
- Helmet drive
- Surya - Kumbh

35. SWOC analysis of the department and future plan

Strengths:

- Well qualified and dedicated staff
- Well equipped laboratories

Weakness:

- Active involvement of alumni in department activities
- Few qualified PhD faculty.

- Necessity of establishing rapport with industry for on campus placement and need to improve research and development in terms of funded projects
- Poor communications skills for students due to rural background

 Opportunities:

- To become centre of excellence in major area of civil engineering
- To explore involvement of alumni in academic and placement activities.

 Challenges:

- Preparing employable engineers to face the challenges (present and future).
- Academic flexibility
- Retention of faculty
- Due to more number of colleges, getting poor quality of students

Road Map/Future plan

- To collaborate with other institutes like IITs, NITs for faculty and students development.
- To enhance Industrial interaction for catering the current needs through final year project.

EVALUATIVE REPORT OF THE DEPARTMENTS**Department of Computer Science and Engineering**

1. **Name of the department:** Computer Science and Engineering
2. **Year of Establishment:** 1984
3. **Names of Programmes offered:**

Name of the program	Year of Establishment
B.E(Computer Science and Engineering)	1984
M.E(Computer Science and Engineering)	2009
M.E(Software Engineering)	2011

4. **Names of Interdisciplinary courses and the departments/units involved:** Nil
5. **Annual/ semester/choice based credit system (Programme wise):**

Name of the program	Evaluation System
UG in Electronics & Telecommunication	Semester System
PG in Communication Engineering	Semester System
PG in Embedded Systems	Semester System

6. **Participation of the department in the courses offered by other departments:**

Sr.No.	Subject/courses offered	Organizing Department	Supporting Department
1.	Data Structure and Numerical Computation	Electronics & Telecomm. Engg	Computer Science and Engineering
2.	Computer Fundamental-I	Basic Science & Humanities	Computer Science and Engineering
3.	Computer Fundamental-II	Basic Science & Humanities	Computer Science and Engineering

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.**

Sr. No.	Course offered	Industries	Year
1	Infosys Campus Connect	Infosys	2008
2	Red Hat Academy	Red Hat, India	2016
3	Big Data Academy	Horton Works	2015

8. **Details of courses/programmes discontinued (if any) with reasons:**

Nil

9. Number of teaching posts:

Academic Year	Post	Sanctioned	Filled
2016-17	Professor	04	01
	Associate Professor	09	02
	Assistant Professor	25	26
	Lecturer	--	02
	Adjunct Faculty	--	07
	Total	38	38

10. Faculty profile with name, qualification, designation, specialization,(D.Sc./D.Litt./Ph.D./ M. Phil. etc.)

Sr.No.	Name of the Faculty	Qualification	Designation	Specialization	Experience (yrs.)				
					Industry	Teaching	Total	Research	No. of Ph.D. students Guided in last 4 years
1	Mr. B. M. Mishra	ME SE	Professor	SE	14	4	18	---	NA
2	Ms. B. S. Ahirwadkar	ME CSE Ph.D pursuing	Asso.Pr of.	CSE Data Mining	2	13	15	---	NA
3	Mr. B. N. Kshirsagar	ME CSE	Asso.Pr of.	CSE	---	24	24	---	NA
4	Mrs. S. A. Kinariwala	ME CSE Ph.D pursuing	AP	CSE Data Mining	---	14	14	---	NA
5	Ms. D. D. Dharmadhikari	ME CSE Ph.D pursuing	AP	CSE Cloud Computing	---	14	14	---	NA
6	Ms. L. B. Randive	ME CSE	AP	CSE	---	11	11	---	NA
7	Ms. R. A. Mangrule	ME CSE	AP	CSE	---	12	12	---	NA
8	Ms. M. M. Ganeshwade	ME CSE	AP	CSE	---	12.5	12.5	---	NA
9	Ms. S. A.	ME CSE	AP	CSE	---	10	10	---	NA

	Sanap								
10	Mr. A. S. Nagrik	BE CSE	AP	--	---	18	18	---	NA
11	Mr. J. A. Kamble	ME CSE	AP	CSE	2	7	9	---	NA
12	Ms. S. B. Siledar	ME CSE	AP	CSE	---	11	11	---	NA
13	Ms. P. C. Gill	ME CSE	AP	CSE	---	10	10	---	NA
14	Mr. P. N. Suryawan Shi	ME CSE Ph.D pursuing	AP	CSE Big Data and Analysis	2	7	9	---	NA
15	Mr. R. B. Patil	ME CSE Ph.D pursuing	AP	CSE Machin e Learnin g	---	11	11	---	NA
16	Mr. K. P. Gaikwad	M TECH CSE Ph.D pursuing	AP	CSE Image Processi ng	---	11	11	---	NA
17	Mr. K. Vengatesan	M TECH Ph.D pursuing	AP	CSE Data Mining	---	9	9	---	NA
18	Mr. S. G. Chavan	ME SE	AP	SE	1.4	2.6	4	---	NA
19	Ms. S. S. Lahoti	ME CSE	AP	CSE	---	5.2	5.2	---	NA
20	Ms. K. A. Kulkarni	ME CSE	AP	CSE	1	1	2	---	NA
21	Mr. S. R. Milke	ME CSE	AP	CSE	0.3	1.8	1.1 1	---	NA
22	Mr. S. F. ParvezAbidi	BE IT	Lecture r	---	6	6	12	---	NA
23	Ms.S. B. Lohare	M.Tech	AP	CSE	---	3	3	---	NA
24	Ms. P.S.Bhalde	BE CSE	Lecture r	CSE	1.5	2	3.5	---	NA
25	Mr.S.DGhode	ME CSE Ph.D pursuing	AP	Adhoc Network s	---	10	10	---	NA
26	Ms.S. M. Jain	ME CSE Ph.D pursuing	AP	Compute r Network	---	14	14	---	NA

				Algorithms & SC					
27	Mr.S. S. Marathe	ME CSE	AP	CSE	---	0.3	0.3	---	NA
28	Mr.S. S. Hire	ME CSE	AP	CSE	---	10	10	---	NA
29	Ms.P.A. Kapadiya	ME CSE	AP	CSE	---	4	4	---	NA
30	Dr.M. A. Joshi	Ph.D	AP	Embedded Systems	---	13	13	---	NA
31	Mr.AmolChitte	MSc IT	AP	IT	---	7	7	---	NA
List of Adjunct Faculty									
32	Mrs.M.P.Deshpande	ME CSE	Adjunct Faculty	CSE	20	0	20	--	N A
33	Ms.Y.S.Chichane	B.Tech CSE	Adjunct Faculty	---	2.6	0	2.6	--	N A
34	Ms.ManvinderKaur	MCA	Adjunct Faculty	---	6	0	6	--	N A
35	Mr.J.V.Desale	BE Inst	Adjunct Faculty	---	10	0	10	--	N A
36	Dr.S.C.Mehrotra	Ph.D	Adjunct Faculty	PR, Signal Processing, Speech Processing, GIS& IP	0	40	40	--	37
37	Mr.Muktak Joshi	BE CSE	Adjunct Faculty	---	11	0	11	--	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):

Academic Year	Student :Teacher Ratio	
	Computer Science and Engineering (UG)	PG)
2016-17	14.52: 1	4: 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Academic support staff	Sanctioned by Management	Filled
------------------------	--------------------------	--------

Technical staff	1	1
Administrative staff	1	Nil

15. Qualifications of teaching faculty with DSC/D.Litt./Ph.D./M.Phil./PG./MASLP

Sr. No.	Qualification	Number
1	Ph.D	02
2	ME / M. Tech/MCA	29
3	BE / B. Tech	06

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications:Publication per faculty

Name of Faculty	International Journal	National Journal	No of publications listed in international database	International Conference	National Conference	Chapter/ Monograph in Books	BookwithISBN/ISSNnumberswithdetailsofpublishers	Citation Index	SNIP/ SJR	Impact Factor	h-Index
Ms.B.S. Ahirwadkar	3	-	-	2	-	-	-	-	-	4.42	-
Mrs. S.A. Kinariwala	6	-	-	3	-	-	-	5	-	1.92	-
Ms. R.A. Mangrule	6	-	-	-	2	-	-	-	-	-	-
Ms. M. M. Ganeshwade	4	-	-	1	-	-	-	-	-	-	-
Mr.J.A.Kamble	2	-	-	-	-	-	-	-	-	-	-
Ms. D. D. Dharmadhikari	12	-	-	4	-	-	-	8	-	3.05	2

Ms. L.B. Randive	5	-	-	4	-	-	-	-	-	3.5 2	-
Ms. S.A. Sanap	3	-	-	1	1	-	-	-	-	3.3 1	2
Mr.P.N.Suryawan shi	2	-	-	1	1	-	-	-	-	-	-
Ms. P.C. Gill	4	-	-	1	4	-	-	-	-	-	-
Ms.S.B.Siledar	5	-	-	-	-	-	-	-	-	-	-
Mr.S.G.Chavan	1	-	-	1	-	-	-	-	-	-	-
Mr.R.B.Patil	1	-	-	1	-	-	-	-	-	-	-
Ms. R. A. Awati	1	-	-	-	-	-	-	-	-	-	-
Dr. M. A. Joshi	1	-	-	3	-	-	-	-	-	-	-
Mr. K.P. Gaikwad	4	-	-	1	3	-	-	-	-	-	-
Mrs. K. A. Kulkarni	1	-	-	-	-	-	-	-	-	-	-
Mrs. S. S. Lahoti	1	-	-	-	-	-	-	-	-	-	-
Mr. K. Vengatesan	11	-	-	6	1	-	-	-	-	-	-
Mr. S. R. Milke	2	-	-	-	-	-	-	-	-	-	-
Ms. S. B. Lohare	1	-	-	-	-	-	-	-	-	-	-
Mr. S. S. Marathe	2	-	-	1	-	-	-	-	-	-	-
Ms. P. A. Kapadiya	1	-	-	-	-	-	-	-	-	-	-
Ms. S. M. Jain	-	-	-	1	-	-	-	-	-	-	-
Ms.S.D.Ghode	4	-	-	1	2	-	-	3	-	-	1
Mr. A. Chitte	-	1	-	3	-	-	-	-	-	-	-

20. Areas of consultancy and income generated: Nil

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:

a) National committees: Nil

b) International Committees: Nil

c) Editorial Boards: Nil

22. Student projects

- Percentage of students who have done in-house projects including inter-departmental/Program

Sr. No.	Academic Year	Percentage of students working on their projects in-house		
		UG	PG (CSE)	PG (SE)

1	2016-17	100	---	---
2	2015-16	100	100	100
3	2014-15	73	100	100
4	2013-14	100	100	100
5	2012-13	100	100	100

- Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies
NIL

23. Awards/ Recognitions received by faculty and students:

a) Awards / Recognitions received by faculty

Year	Name	Awards/Recognitions
2016-17	Prof. D. D. Dharmadhikari	Longest Student Branch Counselor Award from Computer Society of India.
2015-16	Dr. R. B. Naik	Partnership Level Achiever (Bronze) from Infosys, Pune
	Prof. Vijay B. Patil	Partnership Level Achiever (Bronze) from Infosys, Pune
2014-15	Prof. D. D. Dharmadhikari	Longest Student Branch Counselor Award from Computer Society of India
	Prof. P. N. Suryavanshi	Partnership Level Achiever (Silver) from Infosys, Pune for Industry Elective Subject (Mainframe)
2013-14	Prof. D. D. Dharmadhikari	CSI Significant Award from Computer Society of India
2012-13	Prof. D. D. Dharmadhikari	Active Participation Woman Award from Computer Society of India

b) Awards / Recognition received by student

Sr. No.	Year	Student Name	Award won//Recognitions
1	2016-17	VishakhaSonawane	Winner of Techno MIT Web Designing
2		VishakhaSonawane	Winner of Webbing at Agnitoi 2017, JNEC, Auragabad
3		VishakhaSonawane	Winner of Web Sly Cybernetics 2016, MIT, Aurangabad

4	2015-16	Ajay Ramawat Akshay Gurme Ankit Yadav	“Best Intern Team” award, Police Commissioner Office, Aurangabad
5		Minica Shetkar	Winner of Techno Quiz, Techelectra 2016
6	2014-15	Shekhar Jaiswal	Winner of Tennis Tournament, AGON
7		Pallavi Puri	Winner of skipping competition at Kalavihamgam 2015
8		Ajay Ramawat	Runner Up of Crack Code
9		Pallavi Ramteke	Winner of Antakshari competition at Kalavihamgam 2015
10	2013-14	Mohini Chopade	Winner of Euthopia, March 2014
11		Arjun Nile & Team	Winner of Cricket, AGON
12		Syed Akhtar	Runner Up of Engineering Design Solutions

Red Hat Certifications through Red Hat Academy:

Sr. No.	Name of Student- Year: 2015-16	Sr. No.	Name of Student- Year: 2016-17
Red Hat Certified System Administrator			
1	Aditya Rawas	1	Akshay Mahamuni
2	Riya Sharma	2	S M Talha
3	Nirja Karwande	3	Somesh Soni
4	Anshuman Patil	4	Pankaj Shelke
5	Aditya Patil	5	Mahesh Hemke
6	Sanket Mundada	6	Suryakirti Sakhare
7	Ankush Mistry	7	Praful Kaul
8	Pranav Pandit	8	Vicky Dawane
9	Sunil Mohite	9	Saurabh Choudhary
10	Shubham Joshi	10	Amey Deshpande
11	Sameer Kandarkar	11	Gopal Borse
12	Shubham Jadhav	12	Komal Raut
13	Rutuja Mahajan	13	Abhijeet Jadhav
14	Shamal Chabukswar	Red Hat Certified Engineer	
15	Shriya Mulay	1	Aditya Rawas
16	Somesh Jagtap	2	Riya Sharma
17	Suruchi Dharma	3	Nirja Karwande
18	Vaishnavi	4	Anshuman Patil

19	ShrutiChikalthankar	5	AdityaPatil
20	RutujaKamble	6	SanketMundada
21	SarveshaDudhgaonkar	7	AnkushMistry
22	ParagSarvade	8	PranavPandit
23	ChinmayShastri	9	Sunil Mohite
24	Ajay Satbhadre	10	Shubham Joshi
25	RupaliPoul	11	Sameer Kandarkar
26	AishwaryaPatil	12	ShubhamJadhav
27	AkshayShinde	13	RutujaMahajan
28	ShubhamSaraf	14	TruptiTompe
29	PoojaKakade	15	AishwaryaPatil
30	SamataGajbhiye	16	AkshayShinde
31	LokeshSonawane	17	ShubhamSaraf
		18	PoojaKakade
		19	SamataGajbhiye
		20	LokeshSonawane
		21	KiranUchal

**24. List of eminent academicians and scientists/ visitors to the department
2016-17:**

Sr. No.	Dates	Event Type	Chief Guest of Event
1	5/8/2016	Expert talk on Red Hat Certifications and Career Opportunities in Open-Source	Mr.Vatsal Thakur, Examiner, Red Hat India, Mumbai
2	13/ 8/2016	Expert Talk on job opportunities in Open-Source	Mr.PranavManvatkar, Hortonworks, Bangluru
3	4/6/2016 to 9/06/2016 19/08/2016 to 22/08/2016	Short Term Training Program on “Big Data and Analytics with R” - Hands on session on Python	Mr.TusharKute, Mituskillogies, Pune
4	07/10/2016	Cybernetics 2016 (Sate Level Student Convention)	Mr.RavindraWaybase Managing Director ,ValuD, Aurangabad
5	07/10/2016	Cybernetics 2016 (Sate Level Student Convention)	PramodRathod Deputy Mayor, Aurangabad

6	07/10/2016	Expert Lecturer Cybernetics 2016	Mr.SureshShakkarwar, Vice President, Technology, Findability Sciences, Aurangabad
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2015-2016

Sr. No.	Dates	Event Type	Chief Guest of Event
1	29/09/2015	Expert talk on Infosys Campus Connect Program	Mr.AnujJajoo, Lead Education, Infosys Campus Connect Pune DC
2	10/10/2015	Expert Talk on Software Testing	MuktaAhirwadkar, Sr.Software Engineer, Infosys, Pune
3	12/3/2016	Expert Talk on Multimedia	Mr.MandeepSingh,Founder& Owner Black Sheep Animation Studio, Aurangabad
4	27/03/2016	One Day Workshop ON QC Tool	Mrs.Mukta Kulkarni (Infosys, Pune)
5	14/09/15	Cybernatices 2015	Amitesh Kumar, Commissioner of Police, Aurangabad

2014-2015

Sr. No.	Date	Event Type	Chief Guest of Event
1	9/8/ 2014	One Day Workshop on Big Data &Hadoop	Mr. Bharat Kumar, Big Data Analyst Infosys,Banglore
2	2/2/15 to 1/4/15	40 hours Workshop on Aptitude & communication Skill	Mr.AbhishekGaike, (Director of ILearn Institute, Aurangabad

2013-2014

Sr. No.	Dates	Event Type	Chief Guest of Event
1	8 th to 10 th July 2013	Three Days Faculty Development on Faculty & Content Development	Mr.AtulKherde ThoughtCraft Pvt Ltd Pune
2	19/8/2013	Workshop on Cloud Computing	Mr. Ganesh Kadam,Senior Product Developer (BMC Software Pune)
3	21/7/2013		

		Workshop on Ethical Hacking and Cyber security	Mr.PawanYadav from CIB,ACTS
4	2/10/13 & 3/10/13	Expert Lecturer- Digital Image Processing	Dr. Ramesh Manza, senior assistant professor
5	15/2/14	Workshop on Software testing	Mr.MukundWangikar Associate Director Quality Assurance, Icertis
6	28/2/14	Conference on Recent Trends in IT	Mr.SatishSangameswaran Sr. Research Program Manager at Microsoft Research (MSR). Mr. Bharat Kumar,(Systems Engineer in Infosys,Banglore) Mr.ArunKadikudi (co-founder and CEO of Soft Corner, a software product company , Pune)
7	08/08/2014 to 10/08/2014	Inter college Symposium- video clipping competition	Mr. Brad Steinwede

25. Seminars/ Conferences/Workshops organized and the source offunding

Sr. No.	Date	Event Type	Event Title	Funded By
1	10/10/14 to 11/10/14	State Level Student Convention (Technical Symposium)	CYBERNETICS 2014	Computer Society of India
2.	7/10/16 to 8/10/16	State Level Student Convention(Technical Symposium)	CYBERNETICS 2016	Computer Society of India

26. Student profile programme/course wise:

Name of the Course/ Programme	Academic year	Application received	Selected	Enrolled		Passing percentage
				Male	Female	
UG – Computer Science and Engineering	2012-2013	Not Applicable since applications are received by DTE	119	76	43	93.30%
	2013-2014		107	55	52	Currently BE
	2014-2015		101	70	31	Currently TE
	2015-2016		111	68	43	Currently SE
	2016-2017		86	47	39	Currently FE
PG- Computer Science and Engineering	2013-2014		24			25%
	2014-2015		24			4 %
	2015-2016		06			Currently SE
	2016-2017		02		02	Currently FE
PG- Software Engineering	2013-2014		18			50%
	2014-2015		02			50%

27. Diversity of Students

Name of the Course	Academic Year	% of students from the same state	% of students from other states	% of students from abroad
UG	2012-13	99	1	-
	2013-14	100	0	-
	2014-15	99	1	-
	2015-16	98	2	-
	2016-17	98	2	-
PG	2012-13	100	0	-
	2013-14	100	0	-
	2014-15	100	0	-
	2015-16	100	0	-
	2016-17	100	0	-
Ph.D.	NA			

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.? :

Academic Year	2015-16	2014-15	2013-14	2012-13
Gate	1	4	1	1
Civil service	1	Nil	Nil	Nil
Defence service	Nil	Nil	Nil	Nil
Others(GRE/TOEFL)	Nil	1	Nil	Nil

29. Student progression

Student progression

Against % Enrolled

Academic Year	2015-16	2014-15	2013-14	2012-13
UG to PG	11.90%	13.28%	5.64%	14.86%
PG to Ph.D.	Nil	Nil	Nil	Nil
Ph.D. to post-Doctoral	Nil	Nil	Nil	Nil
Employed -Campus selection and Other than campus recruitment	27.77%	26.56%	29.37%	40.54%
Entrepreneurship/Self-employment	0.79%	Nil	Nil	Nil

30. Details of Infrastructural facilities

Laboratory Space (14):	653.36 sq.m
Class – rooms (6)	434.40 sq. M
Seminar Hall (1)	135 sq.m
Departmental Library (1)	16.40 sq.m
H.O.D. Office (1)	49 sq.m
Faculty area total (1)	242.96 sq.m
LCD Projector	6
Overhead Projector	1
Video CDs	5
Printed Charts	28
PCs	301
Networking & Leased Line	1GBPS
Internet facility	Available

Librarya) Departmental Library (Coordinator: **Mrs.Kshama Kulkarni**)

Category of Books	Available
Total numbers	750
Ref. Books	500
Text Books	150
Hand Books	50
Journal National	Nil
Technical Papers	Nil
IS Codes	Nil

b) Internet facilities for staff & student

Internet Service Provider	BSNL
Internet Speed	1 GBPS Leased Line
WIFI Connectivity	No
Firewall Details	No

c) Class rooms with ICT facility

Name of Equipment	Quantity
LCD Projector	6
OHP Projector	1
Video CDs	NPTEL
Printed Charts	-

Laboratories:

Sr. No.	Name of the Laboratory	No. of Systems	Configuration Details
1	Computer Hardware & Microprocessor Laboratory (418)	20	Pentium(R) dual core CPU E5300@2.60GHz 2.59 GHz 992 MB RAM
		1	Intel®Core™2 Duo CPU E7500@2.93GHz 2.93 GHz 1.96 GB RAM
		9	Microprocessor kit with Power Supply
2	Computer Programming Lab (419)	20	2 GB DDR2 SD RAM, 320 GB HDD, Color Monitor TFT 18", Inbuilt speaker, 110 keyboard, Optical mouse
3	Computer Software Laboratory (420)	21 Lenovo	15- Intel Dual Core Processor(2.33GHZ) 2MB Cache Memory, Intel Motherboard, GHI Chipset, 2 GB DDR2, 250GB HDD, Keyboard, Ethernet Card, optical

			Mouse, Color Monitor TFT 18” 6-Intel®, Core 2Duo,2.93GHZ,2GB, RAM, 250GB HDDKeyboard, Ethernet Card, optical Mouse, Color Monitor TFT 18.5”
4	Computer Network Lab-421	22	Intel Dual CoreProcessor(2.33GHZ) 2MB Cache Memory,Intel Mother- board, GHIChipset,2Gb, DDR2,250 GB HDD,Keyboard, Ethernet Card,Mouse, Monitor TFT18”
5	Project Lab - 422	20	Intel Dual CoreProcessor(2.53GHz), 2GB DDR2,250GNB HDD, TFT 18.5” Monitor,Keyboard, Mouse
6	Computer Design Lab (424)	16	Intel Dual Core P4 Processor (2.53 GHz), 2 GB DDR2 RAM, 250 GHz HDD, TFT, 18.5” Monitor,Keyboard, Mouse
		05	Intel Dual Core P4 Processor (2.53 GHz), 2 GB DDR2 RAM, 320 GHz HDD, TFT18.5” Monitor,Keyboard, Mouse
7	Computer Graphics Lab (401)	18	Intel Dual CoreProcessor(2.53GHz), 2GB DDR2,250 GB HDD, TFT 18.5” Monitor,Keyboard, Mouse
		2	Intel Core2Duo , 2.93GHz, 2GB DDR3RAM, 320 GB HDD,18.5” Monitor,Keyboard, Mouse
8	Database and Information Technology (402)	20	CPU:Intel core 2 Duo processor 2.93 GHz, Intel Mother Board, RAM 2GB HDD 320GB, Monitor: TFT 18” Intel GB Ethernet
9	Online Computer Centre – I	35	Lenovo Corei3,10 GBRAM,320GB HDD,TFT17”, Monitor,Keyboard, Mouse
10	Online Computer Centre - II	35	Lenovo Corei3,2 GBRAM,320GB HDD,TFT17”, Monitor,Keyboard, Mouse
PG Labs			
1	Research Lab - I	12	Lenovo Corei3,10 GBRAM,500GB HDD,TFT17”, Monitor, Keyboard
		01	24 Port D-Link Switch
2	Research Lab - II	12	Lenovo Corei3,10 GBRAM,500GB HDD,TFT17”, Monitor, Keyboard, Mouse

3	Advanced Computing Lab (Library Building)	11	Core2DuoE7500@2.93GHz,8GB RAM,320GB HDD,TFT17'', Monitor,Keyboard, Mouse
		2	Corei3,16GBRAM,500GB HDD,TFT 17'', Monitor,Keyboard, Mouse
4	Linux Lab	12	Intel Dual CoreProcessor(2.6GHz), 2GB DDR2,250 HDD, TFT 18.5'' Monitor,Keyboard, Mouse
		8	Corei3,2 GB RAM,500GB HDD,TFT 17'' Monitor, Keyboard, Mouse
		01	LAN Switch 24 Port Dlink
		01	LAN Switch 8 Port Dlink
		06	UPS – iBall

31. Number of students receiving financial assistance from College, University, government or other agencies

Agency	2015-16	2014-15	2013-14	2012-13
Government	349	377	390	333

Number of students receiving financial assistance

Year	Scholarship and freeship	EBC	STC	PT C	Handi-cap	Minority	Central sector
2012-13	193	133	--	--	--	7	--
2013-14	228	156	--	--	--	6	--
2014-15	204	165	--	--	--	8	--
2015-16	185	159	--	--	--	5	--
2016-17	--	--	--	--	--	--	--

32. Details on student enrichment programmes (special lectures /workshops / seminars) with external experts

Count of enrichment programmes organized for students	2016-17	2015-16	2014-15	2013-14
Workshops	3	5	7	4
Guest lecturers	2	8	2	2
Industrial visits	1	1	2	2

33. Teaching methods adopted to improve student learning

(Processes may include adherence to academic calendar and improving instruction methods using pedagogical initiatives such as real world examples, collaborative learning, quality of laboratory experience with regard to conducting experiments, recording observations, analysis of data

etc. encouraging bright students, assisting weak students etc. The implementation details and impact analysis need to be documented)

1. **Lesson Plan:** - Lesson plan is prepared by each faculty for his/her respective theory subject. It contains lecture-wise objective and outcome which helps the faculty to analyze the need of all the topics.
 2. **Desktop Sharing:** - This method is adopted by the faculty to conduct practical efficiently. It improves the learning process since students can directly view the faculty's desktop that is shared on their own system.
 3. **Demonstration:** - This technique is implemented by the faculty to make student better understand a concept. It helps the student to connect theories to actual practice or to understand application of theories.
 4. **Presentation:** - Presentation is used by the faculty to explain some concepts. It helps the faculty to utilize the lecture time efficiently.
 5. **Animation:** - This is used by the faculty to show the concepts graphically. Instead of visualizing the concept, the student can actually see the things happening.
 6. **Continuous Assessment Sheets:** - These sheets are maintained by each faculty for his/her respective practical subject. It motivates the student to perform the practical in deadline as it is graded accordingly.
- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities**

Year	No. of Students			
	2016-17	2015-16	2014-15	2013-14
Tree Plantation	04	----	03	----
Blood Donation	05	05	03	----
Swachata Abhiyan	154	04	03	----
Indian Constitution Day	20	----	----	----
Maitri Abhiyan	----	04	----	----
Sabhavna Divas	----	150	----	----
Tarunyabhan	----	20	----	----
SRD/NRD Camp Training	----	01	----	----

SRTMU,Nanded				
Nirmalya Dan	----	01	----	----
SRD/NRD Camp Training, RTM Nagpur University,Nagpur	----	01	----	----
NRD Training, New Delhi	----	01	----	----
Special Camp	01	06	45	----

35. SWOC analysis of the department and future plan



Strengths

- Faculty enhancement as per industry need and current technology
- Linkage and collaboration with industry to boost confidence and creativity in students and augment career prospects.



Weakness

- Contribution to funded projects, consultancy projects,
- Lack of Ph.D faculty
- Faculty, Students participation for International Conferences and national level Symposium.



Opportunities

- Consultancy and other industry involvement
- To get funded projects and research innovation from various organizations



Challenges

- Enhancing the skills of students according to industrial requirements
- Encouraging the students to take up higher educations
- Be globally competitive in engineering education, services and research.

Road Map/Future plan

- Conducting more faculty development programs for upgrading skills of faculties
- Planning different courses for the student's betterment and their career like offering certified courses and other value based programs.
- Conducting more research enhancement programs
- Applying for research centre recognition

EVALUATIVE REPORT OF THE DEPARTMENTS

Department of Electrical and Electronics Engineering

1. **Name of the department:** Electrical and Electronics Engineering
2. **Year of Establishment:** 2010-2011
3. **Names of Programmes offered:**

Name of the program	Year of Establishment
B.E (Electrical and Electronics Engineering)	2010-2011
M.E (Electrical Drives and Control)	2014-2015

4. **Names of Interdisciplinary courses and the departments/units involved:**

Sr.No	Name of Inter-disciplinary course	Beneficiary Department	Supporting Department
1.	Engg Maths – I&II	Electrical and Electronics Engineering	Basic Science & Humanities
2.	Engg Maths – III	Electrical and Electronics Engineering	Basic Science & Humanities
3.	Engg Maths – IV	Electrical and Electronics Engineering	Basic Science & Humanities
4.	Communication Skills – I	Electrical and Electronics Engineering	Basic Science & Humanities
5.	Communication Skills – II	Electrical and Electronics Engineering	Basic Science & Humanities
6.	Industrial Management	Electrical and Electronics Engineering	Mechanical Engineering

5. **Annual/ semester/choice based credit system (Programme wise):**

Name of the program	Evaluation System
B.E. (Electrical & Electronics Engineering)	Semester System
M.E (Electrical Drives and Control)	Semester System

6. Participation of the department in the courses offered by other departments:

Sr.No.	Subject/courses offered	Organizing Department	Supporting Department
1.	Electrical Machines and Applied Electronics	Mechanical Engineering	Electrical and Electronics Engg
2.	Basics of Electrical Engineering	Basic Science & Humanities	Electrical and Electronics Engg
3.	ME(Automation)	Mechanical Engineering	Electrical and Electronics Engg

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Sr.No.	Course offered	Industries	Year
1.	Suryamitra- Skill Development Program: Maharashtra Centre for Entrepreneurship Development (MCED) and Marathwada Institute of Technology (MIT) is jointly organizing a certified training Program named “Suryamitra - Skills Development Program” in our campus. The first batch of classes for the same started from 19/03/2016. The Program is sponsored by the National Institute of Solar Energy (NISE), Gurgaon (Haryana). The program is aimed at developing photovoltaic technician for solar installation and service providing. The duration of this skill development program is 600 hrs (approx 3 months) with the batch of 30 trainees. This is a residential program and no fee will be charged from the trainees also boarding and lodging facility are to be provided to the trainees. The training program covers basics of technology, installation, hands on practice, preventive maintenance, trouble shooting along with industrial/ field visits and motivational sessions. The main curriculum of teaching is designed as per National Council Vocational Training (NCVT). The Eligibility for joining this course is 12th Pass with science subjects, ITI (Electrical/Electronics), Polytechnic Diploma (Electrical/Mechanical/Electronics). The second batch for Suryamitra commenced on 6th January, 2017. This batch too attracted a total of 30 trainees of varying age group and educational backgrounds.		
2.	Siemens Centre of Excellence for Automation and Mechatronics: MIT Group of Institutions in collaboration with Siemens Technik Academy, Berlin set up a Centre of Excellence for Automation & Mechatronics (COEAM) at Marathwada Institute of Technology, Aurangabad. The goal is to bridge the gap between academia and the industries, developing industry ready engineers for automation industries.		

	At MIT, we understand the importance of elevating student's skills in adapting to newer challenges and value the returns of investing in technical skill enhancement. MIT has consistently sought to set higher standards in education and training programs. The centre combines its state-of-the art equipment and its team of Trainers (Specialized in training for Automation & Mechatronics) to provide hands-on experience besides comprehensive training. MIT has been providing training for students in the field of Automation & Mechatronics through MIT-SIEMENS Centre of Excellence for Automation & Mechatronics. COEAM is equipped with state-of-art infrastructure where we use latest training methods bringing professionals up to speed with the latest technology in the global marketplace. The training module encompasses a wide range of courses designed for PLCs, HMI, SCADA, Mechatronics, DCS & related Hardware & Software and more. Through specific courses designed for students and working professionals, each course schedule consists of well balanced theory and provides hands-on training to optimize the knowledge about the products. The Automation & Mechatronics courses aims to providing the student a better understanding of Digital Process Control and Automation techniques using Programmable Logic Controllers/Distributed Control Systems for different applications. Our fleet of professional trainers ensures that each participant makes a contribution towards productivity and performance improvement in his institute/organization. Courses Offered by MIT-SIEMENS COEAM are- • Basic PLC • Basic SCADA • Basic DCS • Basic Mechatronics • SMSCP Level 1
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8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts:

Academic Year	Post	Sanctioned	Filled
2016-17	Professor	2	0
	Associate Professor	5	1
	Assistant Professor	12	11
	Adjunct Faculty	--	8
	Total	19	20

10. Faculty profile with name, qualification, designation, specialization,(D.Sc./D.Litt./Ph.D./ M. Phil. etc.)

Sr. No.	Name of the Faculty	Qualifi-cation	Designa-tion	Specializ-ation	Experience (yrs.)				
					Industry	Teaching	Total	Research	No.of PhD students Guided in last 4 years
1	Ms. S. M.Badave	M.E	Head and Asso-ciate Professor	EPS	---	24.5	24.5	8	NA
2	Ms. R. M.Maheshwari	M.Tech	Asst. Professor	PED	---	9.5	9.5	--	NA
3	Mr. S. N.Pawar	M.E	Asst. Professor	EPS	32	6.6	38.6	--	NA
4	Ms. S. A.Sabnis	M.E	Asst. Professor	MD	---	5	5	--	NA
5	Mr. V. D.Saundarmal	M.E	Asst. Professor	CS	---	4.5	4.5	--	NA
6	Mr.S. I. Ali	M.E	Asst. Professor	EPS	0.6	4.75	5.25	--	NA
7	Ms. S.M. Mule	M.E	Asst. Professor	CS	---	4	4	--	NA
8	Ms. R.K.Kharat	M.Tech	Asst. Professor	EDT	0.5	3	3.5	--	NA
9	Mr.Anoop A. S.	M.Tech	Asst. Professor	PED	0.75	1.5	2.25	0.25	NA
10	Mr. S.S.Kohli	M.S	Asst. Professor	PED	2	1.5	3.5	0.75	NA
11	Mr. V. N.Pillai	M.Tech	Asst. Professor	CI	0.5	1	1.5	--	NA
12	Ms.G.D. Karanjgaokar	ME	Asst. Professor	MD	2.5	3	5.5	--	NA
List of Adjunct Faculty									
13	Mr.R.B.Pathak	B.E.	Adjunct Faculty	EE	40	-	40	-	NA
14	Mr.S.S.Todkar	B.E.	Adjunct Faculty	EE	30	-	30	-	NA
15.	Mr. C.S. Gumpawar	B.E.	Adjunct Faculty	EE	40	-	40	-	NA
16	Mr. M.R. Thakur	B.E.	Adjunct Faculty	EE	10	-	10	-	NA

17	Mr. B.A. Sawale	ME	Adjunct Faculty	EPS	34	-	34	-	NA
18	Dr.N.S.Zope	Ph.D	Adjunct Faculty	EE	14	4	18	-	NA
19	Mr.V.N.Nanapurkar	BE	Adjunct Faculty	EE	33	0	33		NA
20	Mr.S.R.Bhale	BE	Adjunct Faculty	EE	08	0	08		NA

EPS: Electrical Power Systems,

PED: Power Electronics & Drives,

MD: Machines & Drives,

CS: Control Systems,

CI: Control and Instrumentation,

EDT: Electronics Design and Technology

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):

Under Graduate -

Academic Year	Student :Teacher Ratio
2016-17	10.5:1

Post Graduate -

Academic Year	Student Teacher Ratio
2016-17	1:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Academic support staff	Sanctioned by Management	Filled
Technical staff	6	1
Administrative staff	0	0

15. Qualifications of teaching faculty with DSC/D.Litt./Ph.D./M.Phil./PG./MASLP

Sr. No.	Qualification	Number
1	Ph.D	0
2	ME/M.Tech/MS	14
3	BE/B.Tech	6

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications:

Publication per faculty

Name of the Faculty	Number of papers published in peer reviewed journals (national /international)	No. of publications listed in international database	No. of papers published in national/international conferences	Monographs/Chapter in Books / Book edited	Books with ISBN/ISSN No. with Details of publishers	Citation Index (average)	SNIP/SJR	Impact factor(Max)	H-index
Ms S.M. Badave	10	10	13	03	-	14	-	-	3
Ms. R. M. Maheshwari	1	1	-	-	-	-	-	-	-
Mr. S.N Pawar	-	1	-	-	-	-	-	-	-
Ms. S.A Sabnis	1		1	-	-	-	-	-	-
Mr. V. D. Saundermal	1	2	1	-	-	-	-	-	-
Ms. S.M. Mule	1	4	-	-	-	-	-	-	-
Mr. S. B. Mahajan	4	58	54	14	-	84	-	4.2	6
Mr. K. M. Pandav	4	12	2	2	-	22	-	-	3
Ms. R. K. Kharat	2	-	-	-	-	-	-	-	-
Mr. S. I. Ali	1	1	-	-	-	-	-	-	1

20. Areas of consultancy and income generated:

Year	Name of agency	Areas of consultancy	Income generated
2012-13	ESCO (Energy Service Company)	Energy Audit	240398
2013-14	ESCO (Energy Service Company)	Energy Audit	326000
2014-15	Logical Solutions (For Training)	Training	10000
2015-16	Enman Automation (Project Help)	Project	5000
2016-17	Sanjeev Auto (Service)	Service	---

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:

Professional Memberships -	
Name of Faculty	Name of Committee
Mrs. S. M. Badave	1) Student Member – IEEE , 2) Bombay section, Professional Member of IEEE (Industrial Electronics Society) 3) Life Member - IETE (M093698) 4) Life Member - ISTE (LM12385) 5) Member – Institute of Engineers (India) 6) Lifetime Member - International Society for research and development (ISRSD), London Press. 7) Member -International Association of Engineers (IAENG), Hong Kong. (Membership ID: 114897)
Ms. R. P. Dahad	Institute of Engineers (India) -AM159056-4
Mr. K.M Pandav	1) Member of the International Association of Engineers (IAENG), Hong Kong. (Membership 172927) 2) Lifetime Member of International Society for research and development (ISRSD), London Press (Membership ID:M4150901653)
Ms. G.D Karanjgaokar	Institute of Engineers (India), Associate Member AM153412-5
Ms.S.A.Sabnis	Institute of Engineers (India), Associate Member (AM15324B3)

Editorial Committee	
Mrs. S. M. Badave	Member, Board of Studies, Dr. B. A. M. University, Aurangabad
Mrs. S. M. Badave	Member of Departmental Advisory Board, MIT Polytechnic, Aurangabad.

22. Student projects

- Percentage of students who have done in-house projects including inter-departmental/Program

Sr.No.	Academic Year	Percentage of students working on their projects in-house	
		UG	PG
1	2016-17	88.5	--
2	2015-16	91	100
3	2014-15	100	-
4	2013-14	89	-
5	2012-13	-	-

- Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies

Sr. No.	Academic Year	Percentage of students placed for projects in organizations outside	
		UG	PG
1	2016-17	11.5	-
2	2015-16	9	-
3	2014-15	0	-
4	2013-14	11	-
5	2012-13	-	-

23. Awards/ Recognitions received by faculty and students:

a) Awards / Recognitions received by faculty

Year	Name	Awards/Recognitions
2016	Mr.Sagar Mahajan	Received a Best presenter award in 4 th IET International Conference on Clean Energy and Technology, (IET_CEAT16), Kuala Lumpur. Malaysia. MahajanSagar, BhaskarRanjana, P. Sanjeevikumar, F. Blaabjerg, OLourufemiOjo, ShridharSeshagiri, Rishi Kulkarni "Inverting Nx and 2Nx Non Isolated Multilevel Boost Converter for Renewable Energy

		Application” MahajanSagar,BhaskarRanjana, P. Sanjeevikumar, F. Blaabjerg, Rishi Kulkarni, ShridharSeshagiri, Amin Hajizadeh “Novel LY Converter Topologies for High Gain Transfer Ratio- A New Breed of XY Family” P. Sanjeevikumar, MahajanSagarBhaskarRanjana, F. Blaabjerg, Lars E. Norum, ShridharSeshagiri, Amin Hajizadeh “Nine phase Hextuple Inverter for Optimized Five Level Output Based On Double Carrier PWM Technique”
2016	Mr.Sagar Mahajan	Received a Four Best Paper award (Article will appear in Book Series Chapter, Springer: Lecture Notes in Electrical Engineering, March 2017). 1st Springer International Conference on Emerging Trends and Advances in Electrical Engineering and Renewable Energy (ETAERE-2016), Sikkim, India. P. Sanjeevikumar, MahajanSagarBhaskarRanjana, P. Dhond, FredeBlaabjerg, Michael Pecht “Non-Isolated Sextuple Output Hybrid Triad Converter Configurations for High Step-Up Renewable Energy Applications
2016	Mr.Sagar Mahajan	Received a Four Best Paper award (Article will appear in Book Series Chapter, Springer: Lecture Notes in Electrical Engineering, March 2017). 1st Springer International Conference on Emerging Trends and Advances in Electrical Engineering and Renewable Energy (ETAERE-2016), Sikkim, India “Dual Six-Phase Multilevel AC Drive with Single Carrier Optimized Five-Level PWM for Star-Winding Configuration
2014	Mr.Sagar Mahajan	Received a Best paper award IEEE International Conference on Circuit, Power and Computing Technologies (IEEE-ICCPCT) 2014, Nagarcoil (India). MahajanSagarBhaskarRanjana, NandyalaSreeramula Reddy, RepalleKusalaPavan Kumar “A Novel High Gain Floating Output DC-DC Multilevel Boost Converter for Fuelcell Applications”
2016	K.M Pandav, S.M Mahajan, P. Sanjeevikumar, S.M Badave, RuchiPachgade	Received a Four Best Paper award (Article will appear in Book Series Chapter, Springer: Lecture Notes in Electrical Engineering, March 2017). 1st Springer International Conference on Emerging Trends and Advances in Electrical Engineering and Renewable Energy (ETAERE-2016), Sikkim, India. 2.4kW Three Phase Inverter for Aircraft Application- Hardware Implementation”

2010	Mrs. S.M Badave	Best Teacher Award, from Lion's Club of Aurangabad
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b) Awards / Recognition received by student

Year	Name	Award won//Recognitions
	Pratik Gawde	Appreciation as Best Adaptable Team, by Kalash Seeds Pvt.Ltd.,Jalna.
2016	Pratik Gawde UdayKayande	Achieved 9 th Rank in ROBOCON 2016
	Rishi Kulkarni	Presented paper in International Conference on Circuit,Power and Computing Technologies – 2016
	Rishi Kulkarni	Presented paper in International Conference on Circuit,Power and Computing Technologies – 2016
	Rishi Kulkarni	Presented paper in Technothlon 2016, National Level Technical Event, College of Engg and Technology, (Paper Presentation)
	VaibhavSherke	Presented paper in Technothlon 2016, National Level Technical Event, College of Engg and Technology, (Paper Presentation)
	AamerShaikh	Presented paper in Technothlon 2016, National Level Technical Event, College of Engg and Technology, (Paper Presentation)
	PranavDhond	Presented paper in Technothlon 2016, National Level Technical Event, College of Engg and Technology, (Paper Presentation)
	VaibhavSherke	Published a paper in International Journal of Innovative Technology and Research.(IJTR)
	PranavDhond	Published a paper in International Journal of Innovative Technology and Research. IJTR
2015	MayuriTambat, Rishi Kulkarni, Anita Kohakade HemangiBaxi	Won second prize in Technical Quiz organized by Consulting Electrical Engineering Association of Maharashtra,CEEMA.
	NehaJawle, VaibhavSherke, AkshayDehedkar, TejasPardeshi, Aamer Sheik	Won second prize in Robotz organized by Marathwada Institute of Technology,Aurangabad.
	HumbeMininath	Won first prize in PROBEX 2015, Project Competition, organized by Department of Electrical and Comm. Engg, MIT, Aurangabad.
	HumbeMininath	Won first prize in PROYECTO,Project Competition, organized by J.N.E.C.Aurangabad.
2014	MayuriTambat	Won first prize in 'Energy Con' in CORONA 2014, organized by EEE Department, MIT,Aurangabad.

24. List of eminent academicians and scientists/ visitors to the department

Sr. No	Name of the Academicians and Scientists / Visitors	Designation	Organization
1	Mr.Atul Save	MLA Aurangabad East	Government of Maharashtra
2	Mr. R.P. Deshpande	Technical Consultant	Viz Technologies pvt Ltd, Hyderabad
3	Dr.Nitin Zope	Executive Engineer	MSETCL
4	Mr.S.S.Todkar	Managing Director	S. S. control Pvt. Ltd, Waluj, Aurangabad
5	K. K. Jadia	Energy Audit Consultant	Freelancer
6	Mr.Prasant Nankar	Director	TransdeltaPvt. Ltd, Aurangabad
7	Mr. R.L. Lahare	Retd. Superintending Engineer	Maharashtra State Electricity Transmission Co. Ltd (MSETCL)
8	Mr. Subhash R Bhavle	Dy. Executive Engineer	Maharashtra State Electricity Transmission Co. Ltd (MSETCL)
9	Mr.Vinod Nandapurkar	Vice President	Garware Polyester Ltd
10	Mr.Preetham Singh	Assistant Director	NPTI, Nagpur
11	Mr.V.H.Tayade	Retd. Executive Engineer	Maharashtra State Electricity Generation Co. Ltd (MSETCL)Mahagenco
12	Mr.Avinash Kalyankar	Assistant Police Inspector	Cyber Cell, Aurangabad
13	Mr.Savle Bhaskar	Executive Engineer	Maharashtra State Electricity Transmission Co. Ltd (MSETCL)
14	Mr. Sanjay Chaudhari	Director	Electronics Study Centre, Nashik
15	Mr.Abhijeet Dharmadhikari	Director	Krishna Education Zone
16	Mr. C.B Deshpande	Retd. Principal	SGGS Nanded
17	Mr. R.N Mhaske	Chief Engineer	Maharashtra State Electricity Transmission

			Co. Ltd (MSETCL)
18	Mr. U.G Zalte	Former Director	Maharashtra State Electricity Transmission Co. Ltd (MSETCL)
19	Prof.Satish Tambat	Owner	School of Business Education, Aurangabad
20	Mr. S.S Jewalikar	Superintending Engineer	Maharashtra State Electricity Transmission Co. Ltd (MSETCL)
21	Mr.S.P. Vasekar	Superintending Engineer (Testing)	Maharashtra State Electricity Transmission Co. Ltd (MSETCL)
22	Mr. S.L Bhumkar	Deputy General Manager	TPM Dept, Bajaj Auto Ltd
23	Mr. K.V Kale	Chairman, IETE	Dr. BAMU
24	Mr. Mahesh Vittekar	Managing Director	Memory Marketing India Pvt Ltd
25	Mr.Sudhir Samre	Chief Executive Officer	Luans Electronics
26	Mr. P.R Pande	Senior Manager	Plant Main, Bajaj Auto ltd
27	Mr. N.B. Bansode	Executive Engineer	Maharashtra State Electricity Transmission Co. Ltd (MSETCL)
28	Mr.G.T. Munde	Chief Engineer	Maharashtra State Electricity Distribution Co. Ltd (MSEDCL)
29	Dr. U.B Kalwane	Director	ShreeyashPratishthan
30	Er. Somanna Ganpati	Energy Conservation Consultant	Freelancer
31	Mr.Shirish Kulkarni	Founder & Director	SS Control Systems, Aurangabad
32	Mr.Mahagaonkar	Director	Mahagaonkar Industries

25. Seminars/ Conferences/Workshops organized and the source offunding

- a) National: -Nil
b) International:-Nil

26. Student profile programme/course wise

Name of the Course/Programme	Academic year	Application received	Selected	Enrolled Male/Female	Passing percentage
UG	2016-17	16	16	12/4	Students currently in First Year
	2015-16	33	33	26/7	Students currently in Second Year
	2014-15	49	49	45/4	Students currently in Third Year
	2013-14	59	59	52/7	Students currently in Final Year
	2012-13	59	59	50/9	34.94
PG	2016-17	3	3	2/1	Students appearing in current AY
	2015-16	2	2	1/1	0
	2014-15	9	9	5/4	0

27. Diversity of Students

Name of the Course	Academic Year	% of students from the same state	% of students from other states	% of students from abroad
UG	2012-13	100	0	0
	2013-14	100	0	0
	2014-15	100	0	0
	2015-16	100	0	0
	2016-17	100	0	0
PG	2012-13	NA	0	0
	2013-14	NA	0	0
	2014-15	100	0	0
	2015-16	100	0	0
	2016-17	100	0	0
Ph.D.	NA			

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Academic Year	2016-17	2015-16	2014-15	2013-14	2012-13
Gate	4	1	1	--	--
Others(GRE/TOEFL)	--	--	--	2	--

29. Student progression

Student progression	Against % Enrolled			
Academic Year	2015-16	2014-15	2013-14	2012-13
UG to PG	2.5	2.5	4.8	-
PG to Ph.D.	-	-	-	-
Ph.D. to post-Doctoral	-	-	-	-
Employed	-	-	-	-
Campus selection	2.5	2.5	0	-
Other than campus recruitment	3.6	10.8	20.3	-
Entrepreneurship/Self-employment	0	0	1.9	-

30. Details of Infrastructural facilities

Laboratory Space (11):	576.07 sq.m
Class – rooms (3)	210 sq. M
Lecture Theatre (1)	105sq.m
Departmental Library (1)	38.46 sq.m
H.O.D. Office (1)	41.77 sq.m
Other [Tutorial Room (2)]	42 sq.m
LCD Projector	4
Overhead Projector	0
Video CDs	0
Printed Charts	15
PCs	78
Networking & Leased Line	1Gbps
Internet facility	Available

Library

Departmental Library (Coordinator: **Ms.ShitalM Mule**)

Category of Books	Available
Total numbers	211
Ref. Books	50
Text Books	158
Hand Books	3
Journal National	-
Technical Papers	-

IS Codes	10
Total Magazines	29
Technical Magazines	23
Non-Technical Magazines	6

Laboratories

Sr. No.	Name of Laboratory	Major Equipment
1	Automation Lab	S7 1200, PCS 7, S7 300 with HMI Siemens PLC kit.
2	Switch Gear Protection	Transmission line Distance protection system, Transformer Protection, 3 ph. Alternator protection system, IDMT relay, Static Over current Relay, Static Over Voltage Relay, Negative Sequence Relay, Boul Relay,
3	Transmission And Distribution	Transmission line parameter panel, Schering Bridge, Different types of Insulators. Line material, Lightning Arrestors, Substation Models
4	Power Electronics & Electrical Drives Lab	CRO, Function Generator, Dual power supply Kit ,AC DRIVES SYSTEM.
5	Testing And Maintenance	Earth Tester kit., Oil testing kit
6	Microprocessors Lab	8051 based microcontroller systems, Cross compilerInterfacing cards, 8085 based micro computer kits, Peripheral cards
7	Electronic Devices And Circuit	CRO, Function Generator, Dual power supply, Trainer Kits.
8	Electrical Measurement Lab	CRO, Function Generator, Dual power supply, Trainer Kits.
9	Electrical Machines	Turbogenerator demo kit, DC / AC Series/Shunt/Compound Motors, 1ph, 3ph Transformers, Induction Motors, Electrical Load Banks
10	Network Analysis Lab	Experimental kits
11	Control System Lab	Control System Panel for pneumatic componentsControl system Trainers, PCs, PCLs
12	Computer Lab	Personal computers

13	Research Lab- I	FPGA (Zed board) Solar system simulation kit Personal Computers
14	Research Lab-II	Mixed Signal processor, HV Power Supply

31. Number of students receiving financial assistance from College, University, government or other agencies

Agency	2015-16	2014-15	2013-14	2012-13
Government	182	194	214	164

Number of students receiving financial assistance

Sr.No.	Scholarship and freeship	EBC	STC	PTC	Handicap	Minority	Central sector
2012-13	111	53	Nil	Nil	Nil	Nil	Nil
2013-14	138	72				4	
2014-15	130	62				2	
2015-16	120	60				2	
2016-17	In Process	63				In Process	

32. Details on student enrichment programmes (special lectures /workshops / seminars) with external experts

Count of enrichment programmes organized for students	2016-17	2015-16	2014-15	2013-14	2012-13
Guest lecturers/workshops	4/2	6/2	4/1	2/0	1/0
Industrial visits	6	5	2	1	3
Internship	0	21	73	--	3

33. Teaching methods adopted to improve student learning

To improve teaching learning methodology, few innovative methods are adopted by various faculty, the motive of using innovative methodology is to make teaching and learning more interesting and to give the students more practical knowledge. The various methodology decided by considering the type of subject and the necessity of technology in today industrial environment. Following table give the subject wise list of adopted teaching learning methodology.

Class -SE(EEE), Faculty: Mr.SaurabhKohli	Subject: DCMT, Topic covered - Transformer, Stepper Motor
Method adopted for improve the teaching Hardware/presentation/model/any other	Students were demonstrated with an actual smaller rating transformer and a stepper motor in the class to give them a better overview on the constructional details of such machines
Impact analysis	Students got a better understanding of the construction details of the machines. They were enthusiastic for more such sessions in future.
Class -SE(EEE), Faculty: Mr.SaurabhKohli	Subject: DCMT, Topic covered - Construction & principle of indicating instruments.
Method adopted for improve the teaching Hardware / presentation /model /any other	Power Point Presentation, Videos
Impact analysis	Students get how the indicating instrument actually works, How different torques produced & control. They got knowledge of the transducer, working of Linear Variable Differential Transducer., working of meters and Compensation of different errors
Class -SE(EEE), Faculty: Mrs. R.P.Dahad	Subject: EDC, Topic covered - Amplifier, feedback
Method adopted for improve the teaching Hardware / presentation /model /any other	Few Lectures are delivered in PPT form
Impact analysis and action taken	Good. We decided to implement for complete syllabus
Class- TE(EEE), Faculty: Mr.S.A. Sabnis	Subject: EMF, Topic covered - Model for co-ordinate system
Method adopted for improve the teaching Hardware / presentation /model /any other	Cartesian, cylindrical and spherical co-ordinate system
Impact analysis and action taken	Student able to imagine 3D axis system for vector calculation. We decided to develop maximum examples on EMF in PPT with 3D images.
Class- TE(EEE), Faculty: Ms.P.Narkhede	Subject: MPI, Topic covered - Real life applications of microprocessor.
Method adopted for improve the	Programs are explained along with the

teaching Hardware / presentation /model /any other	help of 8085 kits and simulators. Asked Students to explain “Real life applications of microprocessor”.
Impact analysis & action taken	Good
Class- TE(EEE), Faculty: Mr.J. Laiju	Subject: CS, Topic covered - Matlab programming.
Method adopted for improve the teaching Hardware / presentation /model /any other	Root Locus And Bode Plot
Impact analysis and action taken	Good. We decided to implement for complete syllabus.
Class- TE(EEE), Faculty: Mr.Imran Ali.	Subject: PSA, Topic covered –Hardware.
Method adopted for improve the teaching Hardware / presentation /model /any other	Power system & electronic based circuits
Impact analysis and action taken	Good. We decided to implement continue then same approach.
Class- BE(EEE), Faculty: Mr.S.B.Mahajan	Subject: ED, Topic covered- Control of Electrical Drives Using Fuzzy and Neural.
Method adopted for improve the teaching Hardware / presentation /model /any other	Review and Discussion of Technical Paper conducted on Recent trends in Electrical Drives in Lecture.
Impact analysis and action taken	Students acquired the knowledge of development, application and latest advances in the field of motor control. Students share their ideas related to the latest development in the field of Electric Drives. Surprise Test is arranged to enhanced the learning capability of students.
Class- BE(EEE), Faculty: Mr.S.M.Mule	Subject: PSOC, Topic covered- Manufacturing processes of PV Cells and Plug in Hybrid Electric Vehicles (PHEV).
Method adopted for improve the teaching Hardware / presentation /model /any other	Video and Power Point Presentation
Impact analysis and action taken	Students got the information about manufacturing processes of PV Cells. Students got the idea of interconnection of micro grid.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr.No.	Program	Year
1	Runanubandh – 15	2014-15
2	Runanubandh – 16	2015-16
3	Runanubandh – 17	2016-17
4	Blood donation camp	2015-16
5	Organ donation din	2015-16
6	Tree plantation	2015-16
7	SwachhataAbhiyan	2015-16
8	VachanPrerana Din- 16	2015-16
9	VachanPrerana Din-17	2016-17

35. SWOC analysis of the department and future plan

Strength:

- Good infrastructure: The department houses well equipped 12 laboratories and airy class rooms of good ambience with audio-visual facility.
- Expert faculty for practical demonstration.
- The department also have two research labs and has a centre of excellence for Automation and Mechatronics established in collaboration with Siemens.
- Ability of the faculty to come up with novel methodologies for transfer of knowledge to the students.

Weakness

- Lack of PhD holders at Department.

Opportunities

- Scope for projects with industrial collaboration.
- Research Centre
- Scope for industrial consultancy

Challenges

- The challenges faced by the department is the day by day declining of learning attitude in incoming students

Road Map/Future plan

- To increase industry based projects at UG & PG level
- To establish & develop research centre
- To extend consultancy services to public and private sectors

EVALUATIVE REPORT OF THE DEPARTMENTS

Department of Electronics Telecommunication Engineering

1. **Name of the department:** Electronics and Telecommunication Engg.
2. **Year of Establishment:** 1984
3. **Names of Programmes offered:**

Name of the program	Year of Establishment
UG in Electronics and Telecommunication Engineering	Started with 30 seats in 1984 as Electronics Engineering. Since 2015-16 it is Electronics & Telecommunication Engineering.
PG in Communication Engineering	Started with 18 seats in 2008-09
PG in Embedded Systems	Started with 18 seats in 2011-12 Intake increased to 24 in 2012-13

4. **Names of Interdisciplinary courses and the departments/units involved:**

Sr. No.	Name of Inter-disciplinary course	Beneficiary Department	Supporting Department
1.	Engg Maths – I, II, III & IV	Electronics and Telecommunication Engg	Basic Science & Humanities
2.	Communication Skills – I and II	Electronics and Telecommunication Engg	Basic Science & Humanities
3.	Elements of Electrical Engineering	Electronics and Telecommunication Engg	Electrical and Electronics Engineering

5. **Annual/ semester/choice based credit system (Programme wise):**

Name of the program	Evaluation System
UG in Electronics & Telecommunication	Semester System
PG in Communication Engineering	Semester System
PG in Embedded Systems	Semester System

6. **Participation of the department in the courses offered by other departments:**

Sr. No.	Subject/courses offered	Organizing Department	Supporting Department
1.	Elements of Electronics Engineering	Basic Science & Humanities	Electronics and Telecomm. Engg
2.	Mechatronics	Mechanical	Electronics and

		Engineering s	Telecomm. Engg
3.	Electrical Machines and Applied Electronics	Mechanical Engineering	Electronics and Telecomm. Engg
4.	Digital Electronics	Computer Science and Engineering	Electronics and Telecomm. Engg

7. Courses in collaboration with other universities, industries, foreign institutions, etc. : NIL

8. Details of courses/programmes discontinued (if any) with reasons:

Sr. No.	Name of the program	Reasons
1	UG in Electronics & Communication Engineering (II nd shift)	Less admission in last three years.

9. Number of teaching posts:

Academic Year	Post	Sanctioned	Filled
2016-17	Professor	04	01
	Associate Professor	08	04
	Assistant Professor	24	26
	Adjunct	--	03
	Total	36	34

10. Faculty profile with name, qualification, designation, specialization,(D.Sc./D.Litt./Ph.D./ M. Phil. etc.)

Sr. No.	Name of the Faculty	Qualifi-cation	Designa-tion	Specializ-ation	Experience (yrs.)				No. of PhD students
					Teaching	Industry	Research	Total	
1	Prof. (Dr.) Ardhapurkar S. S.	Ph.D	Professor	DSP	27	00	00	27	NA
2	Prof. (Dr.) Sayyad A. D.	Ph.D.	Head and Asso. Professor	RA	12.3	0	05	17.3	08
3	Prof.Mrs. Kulkarni V.M.	ME, PhD ^s	Asso. Professor	CE	27	00	00	27	NA
4	Prof.Mr.Patil R. N.	ME, PhD ^s	Asso. Professor	AE, CE	17.7	3	00	20.7	NA
5	Prof.Mrs.Vargantwar M.	ME, PhD ^s	Asso. Professor	SIP, AC	18.4	2.2	00	20.6	NA

6	(Col). Virdee M.	M.Tech	Assistant Professor	CE	9.1	00	00	9.1	NA
7	Mrs.Verma S. V.	ME	Assistant Professor	MPC, RA	19.6	1	00	20. 06	NA
8	Mrs.Khand gale K. R.	ME	Assistant Professor	AE, CE	11.7	00	00	11. 7	NA
9	Mr.Shep T. D.	ME, PhD ^s	Assistant Professor	CS, DE	12.1 0	02	00	14. 10	NA
10	Ms. Rathod M R	ME	Assistant Professor	CS, DE	12	00	00	12	NA
11	Mrs.Nalgirk ar P. P.	ME	Assistant Professor	SIP	10.9	00	00	10. 9	NA
12	Mrs.Padole L. K.	ME	Assistant Professor	AE, CE	10.2	0.6	00	10. 8	NA
13	Mrs.Borde S.S.	M.Tech	Assistant Professor	SIP	9.5	00	00	9.5	NA
14	Mr.Waghma re H. K.	M.Tech	Assistant Professor	ES, SIP	7.5	00	00	7.5	NA
15	Mrs. Joshi M.J.	ME	Assistant Professor	MPC, RA	11.7	00	00	11. 7	NA
16	Mr.Makone A. B.	ME	Assistant Professor	Android, DS	9.3	1	00	10. 3	NA
17	Mrs.Pingle N. S.	ME	Assistant Professor	CE, SIP, MPC	9.4	00	00	9.4	NA
18	Mrs.Deshm ukh V. H.	ME	Assistant Professor	CE, PE	9.11	01	00	10. 11	NA
19	Mr. Khan M. .S.	M.Tech , PhD ^s	Assistant Professor	CN	5.7	00	00	5.7	NA
20	Mr.Gadhe D. L.	M.Tech	Assistant Professor	AE, EM	7.7	1.6	00	9.1	NA
21	Mrs.Wakod e J. S.	ME	Assistant Professor	CE	12	00	00	12	NA
22	Mr.Deshmu kh A.G.	ME	Assistant Professor	AE, CE	06	00	00	06	NA
23	Miss.Bargal N. K.	MTEC H	Assistant Professor	EDT, ES	3.6	01	00	4.6	NA
24	Mr.Kardile V. P.	ME	Assistant Professor	MRE	2.10	02	00	4.1 0	NA
25	Mr.Bhusari P. R.	ME	Assistant Professor	VLSID, SIP	02	00	00	02	NA
26	Mr.Sable V. B.	ME	Assistant Professor	EDT	04	00	00	04	NA
27	Mr.Pawar V.K.	MTEC H	Assistant Professor	MPC, ES	8.3	00	00	8.3	NA
28	Mr.Zarkar G.S.	ME	Assistant Professor	SIP	02	00	00	02	NA
29	Miss.Sarode N. V.	MTEC H	Assistant Professor	VISID	0.8	00	00	0.8	NA

30	Mr.Kalshetti K. V.	MTEC H	Assistant Professor	VLSID, ES	4.11	01	00	5.11	NA
31	Mr.Gudimani M.	MTEC H	Assistant Professor	CE	1.2	01	00	2.2	NA
32	Mr.Rajgure A. K.	ME	Adjunct Faculty	CE, CNN	00	14	01	15	NA
33	Mr.Wakode Ashok	ME	Adjunct Faculty	VLSID, ES	00	13	00	13	NA
34	Mr.Naik P. B.	ME	Adjunct Faculty	AE, CS	00	15	01	16	NA

\$: Pursuing PhD Program

Abbreviations are listed on the following page.

DSP: Digital Signal Processing **RA:** Robotics and Automation
CE: Communication Engineering **AE:** Analog Electronics
SIP: Signal and Image Processing **AC:** Antenna Communication
MPC: Microprocessors and Controllers **CS:** Control Systems
DE: Digital Electronics **ES:** Embedded Systems
DS: Data Structure **PE:** Power Electronics
CN: Computer Networking **EM:** Electromagnetics
EDT: Electronics Design and Technology **MRE:** Microwave & Radar Engg
VLSID: Very Large Integration Systems Design

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):

Academic Year	Student :Teacher Ratio		
	Electronics and Tele-communication(UG)	Communication Engg (PG)	Embedded (PG)
2016-17	12.03: 1	0.33: 1	0.66: 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Academic support staff	Sanctioned by Management	Filled
Technical staff	1	1
Administrative staff	0	0

15. Qualifications of teaching faculty with DSC/D.Litt./Ph.D./M.Phil./PG./MASLP

Sr. No.	Qualification	Number
1	PhD	02
2	ME / M. Tech	32

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications: Publication per faculty

Sr. No.	Name of Faculty	International Journal	National Journal	International Conference	National Conference	Chapter in Books	Books Edited	Impact Factor
1	Dr. A. D. Sayyad	9	2	8	-	-	-	-
2	Dr. S. S. Ardhapurkar	5	-	4	-	-	-	6.5
3	Mrs. V. M. Kulkarni	8	-	0	14	-	-	-
4	Mr. R. N. Patil	2	-	8	8	-	3	-
5	Mrs. M. R. Vargantwar	10	-	3	3	-	-	-
6	Col. M. S. Virdee	-	-	-	-	-	-	-
7	Mrs. S. V. Verma	13	-	-	3	-	-	-
8	Mrs. K. R. Khandagle	9	-	-	-	-	-	4.43
9	Mrs. S. S. Borde	2	-	1	1	-	-	-
10	Mrs. N. S. Pingle	6	-	1	-	-	-	3.02
11	Mrs. L. K. Padole	2	-	-	-	-	-	-
12	Mrs. P. P. Nalgirkar	4	-	-	2	-	-	-
13	Mr. T. D. Shep	2	1	-	-	-	-	-
14	Mrs. M. S. Joshi	8	-	1	1	-	-	-
15	Mr. H. K. Waghmare	-	-	-	-	-	-	-
16	Mr. A. B. Makone	5	-	-	-	-	-	-
17	Mrs. J. S. Wakode	3	-	-	-	-	-	-
18	Mr. M. S. Khan	7	2	2	4	-	-	7.82
19	Mr. D. L. Gadhe	3	-	1	3	-	-	-
20	Mrs. V. H. Deshmukh	5	-	-	3	-	-	-
21	Ms. N. K. Bargal	5	-	-	-	-	-	7
22	Mr. A. G. Deshmukh	1	-	2	-	-	-	-
23	Mr. V. P. Kardile	3	-	-	-	-	-	4.45
24	Mr. V. K. Pawar	1	1	-	-	-	-	-
25	Mr. G. S. Zarkar	1	-	2	1	-	-	-
26	Mr. V. B. Sable	-	-	-	-	-	-	-

27	Mr.R. B. Sharma	2	-	1	-	-	-	-
28	Mr.P.R.Bhusari	1	-	2	1	-	-	-
29	Mr.M. D. Gudimani	-	-	1	-	-	-	-
30	Mr.K. V.Kalshetti	-	-	-	1	-	-	-
31	Ms.N.V.Sarode	-	-	1	-	-	-	-
32	Mr.S.V.Patil	-	-	-	-	-	-	-

20. Areas of consultancy and income generated: Nil

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:

a) National committees:

Sr. No.	Name of the Faculty	Name of Committee	Year
1	Dr.Sayyad Ajij Dildar	ISTE Life membership-No. LM107484	2015
2	Dr. Ardhapurkar Shubhada Sakharam	ISTE Life membership-No. LM 7256	1998
3	Mrs. Kulkarni Vijaya Madhavrao	ISTE Life membership-No. LM12372	2006
		IETE (Member)-No.093695	1994
4	Patil Rajesh Namdeo	ISTE Life membership-No. LM 30062	2000
		IETE (Member): M 177609	2005
6	Mrs. Vargantwar Manasi Rajesh	ISTE Life membership-No. LM 41077	2004
		IETE (Member)-1796	2005
7	Mrs.Verma Sarita Vijaykumar	ISTE Life membership-No. LM300066	2006
		IETE (Member)- M177605	
8	Mrs. Khandagle Kiran	ISTE Life membership-LM52479	2007
		IETE Associate Member-AM 101949	1994
9	Shep Tukaram Dnyanoba	ISTE Life membership-No. LM5541	2008
10	Mrs. Padole Latabai Kishanrao	IETE Life membership.	2007
12	Mrs. Borde Sumedha sandip	ISTE Life membership-No. LM111757,-	2016
13	Waghmare Hemant	ISTE Life membership-No. LM111759	2016

	Keshavrao		
14	Mrs. Joshi Monika	ISTE Life membership-No. LM111758,	2016
15	Mrs. Pingle Neeta Subhash	ISTE Life membership-No. LM111775	2016
16	Mrs. Deshmukh Vidya H.	ISTE Life membership-No. LM 52491.	2007
17	Mrs. Wakode Jaya Sunil	ISTE Life membership-No. LM 55760	2008
18	Kardile Valmik	ISTE Life membership-No. LM 111761	2016
19	V.K. Pawar	ISTE Life membership-No. LM-78260	2011
20	Vinayak Sable	ISTE Life member-LM111763	2016

b) International Committees: Nil

c) Editorial Boards: Nil

22. Student projects

- Percentage of students who have done in-house projects including inter-departmental/Program

Sr.No.	Academic Year	Percentage of students working on their projects in-house	
		UG	PG
1	2016-17	99.8	100
2	2015-16	98	100
3	2014-15	89.6	100
4	2013-14	97	100
5	2012-13	94.5	100

- Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies

Sr. No.	Academic Year	Percentage of students placed for projects in organizations outside	
		UG	PG
1	2016-17	0.16	0
2	2015-16	2.0	0
3	2014-15	10.4	0
4	2013-14	3.0	0
5	2012-13	5.5	0

23. Awards/ Recognitions received by faculty and students:**a) Awards / Recognitions received by faculty**

Year	Name	Awards/Recognitions
2016-17	Dr. Sayyad Ajij	Best Paper Award (Co-author)-First International Conference on Signal & Image Processing, Aurangabad, Maharashtra.
2015-16	Prof. R. N. Patil	University representation as BoS member (Senate Member), First year syllabus committee
2014-15	Dr. Abhilasha Mishra	EC member of IETE for year 2014-16, Organization 2014-16
	Mrs.M.R.Vargntwar	Certificate of appreciation __TEXAS Instrument
2013-14	Dr. Abhilasha Mishra	IETE-Prof S.N.Mitra Memorial Award 2013 in recognition of outstanding contributions in Antenna Research and propagation studies and creating awareness about antenna in Marathwada Institute.
2012-13	Nil	Nil

b) Awards / Recognition received by student

Sr.No.	Year	Student Name	University Rank
1	2015	Wategaonkar Prachi Sanjay	I
2		Dalvi Priya Shrikrishna	II
3		Deshmukh Sharayu Anant	III
4		Kathar Vaibhav Kumar Vilas	IV
5		Chatur Nayan Girish	V
6	2014	Kulkarni Shashank Satish	III
7	2013	Zarekar Tara Dhondiram	V
8	2010	Prasanna Kumar Gachui	I
9		Kale Prasad Madhukar	II
10		Anjalika Kumari	III
11		Chandan Kumar Jha	IV
12		Dharurkar Pranjali Prakash	V
13		Varun Kumar Tiwari	VI
14	2008	Awand Kumar Mahato	I
15		Poduval Vijita Padmanabhan	II
16		Amolik Vaibhav Ashok	IV
17		Runwal RohitLalit	V
18		Santosh Kumar Singh	V
19	2007	Quasai R. V.	II
20		Pawar Suvidha Sudhakar	III

21		Sutawane Shrikrishna Dilip	IV
22		Gutte Nawalkumar Balajirao	V
23	2006	GhanJayashri Sharandhar	II
24		Pawar Sushant Janardhanrao	I
25	2005	Bhawar SavitaJayram	IV
26	2004	Neekhra Nishant Madanmohan	IV
27		Richa Kumar	I
28	2001	Sachin Jain	III
29		Shifaly Sharma	IV
30		Brij Bhushan	I
31	2000	Manisha Singh	III
32		Abhishek Kumar	I
33		Madhukar Chaudhari	II
34	1999	Tanaya Singh	III
35		Gagandeep Singh	IV
36		Gaurav Kumar	V
37	1995	Pravin Bharti Laxminarayan	I
38		Gaurav Goyal Kantibabu	II

Year: 2012-13 : Students Extra-Curricular activities

Sr.No .	Student Name	National / International	Conference Name	Place/Date
1.	Sayli Bagul	National	GECA COMPSAFES	GECA Aurangabad 8,9/2/2013
2	Succhitra Bedre	National		GECA Aurangabad 8,9/2/2013
3	Rupali Denge	National	TECHTRIX 2013	PES,A'bad,8,9/3/2013
4	Pratiksha Joshi	National	TECHTRIX 2013	PES,A'bad,8,9/3/2013
5	Shweta Talnikar	National		PES,A'bad,8,9/3/2013
6	Shubhani pawar	National		PES,A'bad,8,9/3/2013
7	Pooja kurahade	National		PES,A'bad,8,9/3/2013
8.	Amruta	National		PES,A'bad,8,9/3/2013

	Kulkarni			
9	Dhanshri Sutawne	National		PES,A'bad,8,9/3/2013

Year 2013-14: : Students Extra-Curricular activities

Sr.No.	Student Name	Event	Achievement /Award
1	Rahul Dasalkar	Electronic assembly and testing organized by National Abilympics Association of India, Ahmdabad	Gold medal
2	Amol S.Khandal	Chess Competition at Sports Zest 2013 organized by GECA,A'bad	Won 1 st prize
3	Faijan Khan	National Conference Technovision, organized by Shreeyash College, A'bad	Presented paper
4	Mrudul Behre	National Conference organized by MIT College, A'bad	Presented paper

Year 2014-15: Students Extra-Curricular activities

Sr. No.	Student Name	Event	Achievement/ Award
1	Vaibhav Kathar	Youth Leadership Development Program (Debate) Rotary Club of Aurangabad, 2/08/2014	WINNER
2	Shirish Kathar	Youth Leadership Development Program Rotary Club Of A'bad, 2/08/2014	WINNER
3	Shruti Joshi	Youth Leadership Development Program Rotary Club Of A'bad	WINNER
4	Riddhi Joshi	Extempore Ryla , Rotary Club of A'bad	WINNER
5	YashRekhi	Cybernetics (Inquisitive Hunt) MIT students branch CSI	2 nd WINNER
6	Namrata Somayya	Karmveer Expo, K.K.WaghCOE,Nashik	First Prize
7	Yamini Aher		

8	Sarita Jadhav		
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Year 2015-16: Students Extra-Curricular activities

Sr. No.	Student Name	Event	Achievement/Award
1	Akshay Biware	Badminton, Dr.BAMUUniversity,Aurangabad, 25 th to 29 th Jan, 2015	Represented
2	Akshay Biware	Badminton , India interuniversity tournament, 12 th to 17 th Feb, 2015	Represented BAMU in
3	Harish Surangalikar	Twenty-20 cricket tournament in AISSM,PUNE, 8 th Feb 2016	Team Position- 09/10
4	Harish Surangalikar	Atheltics Intercollege level, 2016	Individual Position- 04
5	Harish Surangalikar	Basket Ball at Nanded, 26 Feb 2016	Team 3 rd position
6	Harish Surangalikar	Basket Ball (SPREE) at Bits Pilani,Goa, 7-9 March 2016	Team 6 th position
7.	Pranav Munje	Fencing Game (National level at Amritsar), Jan-2017	Bronze Medal
8.	Pranav Munje	University Board of Physical Education Sports Intercollegiate Sports_Fencing(Central Zone) 2016-17	IV Foil in Central Zone

24. List of eminent academicians and scientists/ visitors to the department

Sr. No	Name of the Academicians and Scientists / Visitors	Designation	Organization
1	Mrs. Anjali Dahnorkar	Deputy Collector	Revenue Department, Aurangabad
2	Mr. Suresh Todkar	Director	Deogiri Cluster, Aurangabad
3	Shri.K.B. Bhoghe	Ex. IAS Officer, Aurangabad	IIPA, Divisional Commissioner office.

4	Dr. Vijay K. Arora	Director	Deogiri Cluster, Aurangabad
5	Dr.A.R.Nalgirkar	Eye Surgeon	Kamalnayan Bajaj Hospital
6	Mr.Vinay Chitale	Marketing Manager	Enderss–Houser, Aurangabad
7	Dr. Chopade	Vice Chancellor	Dr.B.A.M.University, Aurangabad
8	Dr.R.K.Malviya	Professor	ATMS, Jodhpur
9	Dr.R. Raghvan ,	Professor	National Institute of Technology, Trichy
10	Dr. Ramesh Garg,	Professor	IIT, Kharagpur, India
11	Dr.Ananda Bose	Director	Bose Telecom, Kolkata
12	Dr.D.C. Pande	Director	Electronics & RADAR Development, Bangalore
13	Dr.Debatosh Guha,	Chairman	IEEE Kolkata Chapter, Kolkata University
14	Dr.R.K.Mishra	Professor	Berhampur, University, Orissa
15	Dr.Surendra Pal,	Distinguished Scientist	Indian Space Research Organization, Banglore
16	Dr.S. S.Pattnaik	Professor	NITTR Chandigarh.
17	Dr.ChinmoySaha	Professor	Indian Institute of Space Science and Technology, Thiruvananthapuram
18	Dr. Mahesh Abegaonkar	Associate Professor	Indian Institute Technology, Delhi
19	Mr. Malcolm Warren	Director	International Sales MI Technologies USA
20	Dr. S. S. Pattnaik,	Professor	NITTTR, Chandigarh
21	Dr.D. Bhatnagar	Professor	University of Rajasthan, Jaipur
22	Dr. Bhaskar Gupta	Professor	Jadavpur University
23.	Mr.Abhijeet Patil	Director	Krish InfoTech, Aurangabad
24	Dr.K.V.Kale	Chairman, IETE Aurangabad centre.	Luans Electronics

25	Mr. Mathais Altendorf	Global Managing Director & member of Executive Board	Endress Houser, Maulburg, Germany
26	Mr. Klaus Endress	C.E.O.	Endress Houser Global, Maulburg, Germany
27	Mr. Kulathu Kumar	President	Flowtech Endress Houser, Aurangabad
28	Mr. Roland Keinzler	Corporator	HR, Endress Houser Group
29	Mr. Herdold Hertweck	Director Realization	MbH+Co.KG, Endress Houser Group

25. Seminars/ Conferences/Workshops organized and the source of funding

a) National: -

Sr. No.	Year	Name of the event	Seminars/ Conferences/ Workshops	National/ International	Source of funding
1	2016-17	VLSI	STTP	National	Funded by IIT Bombay
2.	2012-13	IAW-2013	Workshop	National	Partially Funded by IETE Kolkata chapter

b) International:-Nil

26. Student profile programme/course wise

Year	Name of the course /application received	Applicati on received (DTE)	Selected	Enrolled		Pass Percentag e
				M	F	
2016-17	Changed to ETC					
2015-16	ECE(Intake120)	5	9	3	6	Currently in 2 nd year
2014-15	ECE(Intake 20)	25	24	20	04	Currently in 3 rd year
2013-14	ECE(Intake 120)	80	86	54	32	Currently in 4 th year
2012-13	ECE(Intake 120)	120	124	87	37	86.61%

Year	Name of the course /application received	Applicati on received	Selected	Enrolled		Pass Percentag e
				M	F	
2016-17	ETC(Intake:60)	7	6	4	2	Currently in 1 st year
2015-16	ETC(Intake:60)	34	15	9	6	Currently in 2 nd year
2014-15	ETC(Intake:60)	12	12	8	4	Currently in 3 rd year

Year	Name of the course /application received	Applicati on received	Selected	Enrolled		Pass Percentag e
				M	F	
2014-15	II Shift serenaded					
2013-14	ECE (II Shift)	7	7	7	0	Currently in Final year
2012-13	ECE (II Shift)	42	38	34	4	91.6%

27. Diversity of Students:

Name of the Course	Academic Year	% of students from the same state	% of students from other states	% of students from abroad
UG	2012-13	99.99	0.0062	00
	2013-14	100	00	00
	2014-15	100	00	00
	2015-16	100	00	00
PG	2012-13	100	00	00
	2013-14	100	00	00
	2014-15	100	00	00
	2015-16	100	00	00
Ph.D.	NA			

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.? :

Academic Year	2016-17	2015-16	2014-15	2013-14	2012-13
Gate	--	--	--	5	--
Others(GRE/TOEFL)	--	4	5	6	6

29. Student progression Against % Enrolled

Academic Year	2015-16	2014-15	2013-14	2012-13
UG to PG	25%	35%	40%	40%
PG to Ph.D.	Nil	Nil	Nil	Nil
Ph.D. to post-Doctoral	Nil	Nil	Nil	Nil
Employed				
Campus selection and Other than campus recruitment	2.91%	7.3%	16.25%	22.05%
Entrepreneurship/Self- employment	2.91%	2.68%	3.12%	3.67%

30. Details of Infrastructural facilities

Laboratory Space (14):	999.6 sq.m
Class – rooms (6)	418.20 sq. M
Seminar Hall (1)	67.50 sq.m
Departmental Library (1)	19 sq.m
H.O.D. Office (1)	48 sq.m
LCD Projector	2
Overhead Projector	0
Video CDs	5
Printed Charts	9
PCs	81
Networking & Leased Line	1GBPS
Internet facility	Available

LibraryDepartmental Library (Coordinator: **Mr. A. G Deshmulh**)

Category of Books	Available
Total numbers	1003
Ref. Books	776
Text Books	223
Hand Books	04

Laboratories

Sr. No.	Laboratory name	Major equipment : (Cost above Rs. 50,000)
1	Power Electronics-317	High Voltage Power

		Electronics Lab
2	VLSI-318 B	Vivado S/w
3	Electronics Devices & Circuits301	Nil
4	Linear Integrated Circuit-302	Nil
5	Instrumentation And Control 303	PLC,DSO
6	MPP-304	Logic Analyzer, ARM Compiler debugger(IDE),ARM Compiler debugger(IDE)
7	Communication-305A	Spectrum Analyser, Satellite Comm.Trainer, Microwave Bench, Fiber Optic Comm. Kits, Doppler Radar Trainer, LAN Trainer
8	PCB-407	Nil
9	DSP-306A	Matlab 7,Matlab 10

31. Number of students receiving financial assistance from College, University, government or other agencies

Agency	2015-16	2014-15	2013-14	2012-13
Government	380	481	471	456

Number of students receiving financial assistance

Sr.No.	Scholarship	2012-13		2013-14		2014-15		2015-16		2016-17	
		M	F	M	F	M	F	M	F	M	F
1.	OBC-GOI	55	31	56	37	56	30	47	26	35	15
2.	SC-GOI	35	23	46	21	29	70	26	16	24	15
3.	VJNT-GOI	43	10	40	11	30	10	34	13	17	06
4.	SBC-GOI	4	---	02	---	03	00	03	---	---	---
5.	ST-GOI	02	---	---	---	---	---	---	---	---	---
6.	OBC-FREE SHIP	19	10	10	05	10	04	05	01	---	---
7.	SC-FREE SHIP	04	03	04	04	02	02	---	---	---	---
8.	VJNT-FREE SHIP	04	06	02	06	04	06	02	05	---	---

9.	SBC-FREE SHIP	03	03	02	02	01	01	01	---	---	---
10.	ST-FREE SHIP	---	---	---	---	---	---	---	---	---	---
11.	EBC-Central Minority	110	84	145	70	138	79	117	71	28	03
12.	Central Minority	07	---	---	01	88	01	00	01	---	---
13.	State Minority	---	---	07	---	05	---	02	01	03	01

32. Details on student enrichment programmes (special lectures /workshops / seminars) with external experts

Count of enrichment programmes organized for students	2016-17	2015-16	2014-15	2013-14	2012-13
Guest lecturers/workshops	12	17	3	3	8
Industrial visits	8	4	4	6	Nil

33. Teaching methods adopted to improve student learning

To improve teaching learning methodology, department adopt practices like content beyond syllabus, finding curriculum gap and planning lesson plan accordingly. The motive of using innovative methodology is to make teaching and learning more interesting and to give the students more practical knowledge .The various methodology used are –

- Classroom lectures
- Laboratory experiments
- Projects
- Assignments
- Group discussions
- Students Seminar
- Power point lectures
- Industrial Visits
- Guest lectures

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Year	2016-17	2015-16	2014-15	2013-14
No. of Students	05	12	03	14

Tree Plantation	01	01	01	01
Blood Donation	01	01	01	01
Special Camp	01	01	01	01

35. SWOC analysis of the department and future plan

Strengths:

- Dedicated, experienced, qualified faculties and good lab facilities
- Good learning environment through activities like guest lecture industrial visits, orientation program etc.
- Department run two PG Programs

Weakness:

- Industry interaction is not strengthened
- Research & development and consultancy, interaction with professional Society is less.

Opportunities:

- Industry partnership can be possible.
- Research & development can be improved

Challenges:

- Less electronics industry in the region.
- Decreased quality of education due to large number of institutions in the region
- Poor enrolment ratio

Road Map/Future plan

- To update facilities at various laboratories to keep pace with the latest technology change
- To work forward the continuous improvement in the academic excellence of students by adopting effective teaching practices & motivating the students to achieve their overall developments.
- To encourage the teaching & nonteaching faculties to pursue high qualification & to enhance their knowledge/skills.
- To improve R & D activities by setting a research center at department.
- To enhance industry institute interaction by joint collaboration with industries, research institute & national laboratories.

EVALUATIVE REPORT OF THE DEPARTMENTS**Department of Mechanical Engineering****1. Name of the Department:** Mechanical Engineering**2. Year of Establishment:** 1984**3. Names of Programs offered (UG, PG, etc.)**

Name of Program	Year of Start
UG:-Bachelor of Mechanical Engineering	1984
UG:-Bachelor of Mechanical Engineering (II Shift)	2011-12
PG:-Master of Engineering (Manufacturing)	2008-09
PG:-Master of Engineering (Heat Power)	2010-11
PG:-Master of Engineering (Automation)	2013-14
Ph.D Research Center	2013-14

4. Names of Interdisciplinary courses and the departments/units involved:

Sr. No.	Name of Interdisciplinary Course	Beneficiary Department	Supporting Department
1.	ME –Automation	Mechanical Engineering	- Electrical and Electronics Engineering - Electronics and Telecommunication

5. Annual/ semester/choice based credit system (Programme wise):**UG:** Semester Pattern**PG:** Semester Pattern**6. Participation of department in the courses offered by other departments:**

Sr. No.	Subject/courses offered	Department
1	Basic Mechanical Engineering	Electrical and Electronics Engineering, Electronics & Telecommunication, Civil Engineering, Computer Science
2	Engineering Graphics	Electrical and Electronics Engineering, Electronics & Telecommunication, Civil Engineering, Computer Science

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:

Post	Sanctioned	Filled
Professor	06	06
Associate	09	09
Assistant Professor	39	31
Adjunct Faculty	14	14
Total	68	60

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./ M. Phil. etc.)

Sr	Name of the Faculty	Qualification	Designation	Specialization	Exp. in Yrs	PhD students Guided
First/Regular Shift						
1	Dr. N.G. Patil	PhD	Professor & Principal	Manufacturing	23	4 Ongoing
2	Dr. C.L. Gogte	PhD	Professor	Metallurgy	36	5 Ongoing
3	Dr. N.S. Bhalkikar	PhD	Professor	Industrial Engg.	27	
4	Dr. P.H. Waghodekar	PhD	Professor	Industrial Engg.	40	
5	Dr. V.G. Ukadgaonker	PhD	Emeritus Professor	Design	40	
6	Mr. K.B. Bokankar	ME	Professor	Heat Power	40	
7	Dr. H.M. Dharmdhikari	PhD	Associate Professor	IC Engine	24	
8	Dr. D.V. Nehete	PhD	Associate Professor	Design	20	
9	Dr. S.V. Lahane	PhD	Associate Professor & HOD	Fuels and Comb. IC Engine	12	
10	Mr. S.R. Andhale	ME (PhD app.)	Associate Professor	CAD-CAM	22	
11	Dr. V.B. Pansare	PhD	Associate Professor	Production	21	
12	Mr. V.A. Kane	ME	Associate Professor	Production	40	
13	Mr. S.S. Patil	M.Tech.	Associate	Tool Design	23	

		(PhD app.)	Professor			
14	Mr. K.C. Raipurkar	ME	Associate Professor	Mechanical	33	
15	Mr. S.R. Patil	ME	Assistant Professor	Manufacturing	26	
16	Mr. S.D. Patil	ME (PhD app.)	Assistant Professor	Manufacturing	15	
17	Mrs. D. Ravikumar	M.Tech.	Assistant Professor	Energy	8	
18	Mr. M.V. Kulkarni	ME	Assistant Professor	Industrial Engg.	11	
19	Mr. M.D. Gayakwad	ME	Assistant Professor	CAD-CAM	13	
20	Mr. A.V. Gadekar	ME	Assistant Professor	Automobile Engg	6	
21	Mr. P.V. Kulkarni	M.Tech.	Assistant Professor	Production	31	
22	Mr. R. V. Deshmukh	ME	Assistant Professor	Automobile Engg	10	
23	Ms. K.J. Godihal	M.Tech.	Assistant Professor	CAD	15	
24	Mr. V.S. Damdhar	ME	Assistant Professor	Manufacturing	5	
25	Mr. A.P. Paliwal	M.Tech.	Assistant Professor	Energy	4	
26	Mr. S.L. Muley	ME	Assistant Professor	Design	12	
27	Mr. M.A. Patil	M.Tech.	Assistant Professor	Mechatronics	5.5	
28	Mr. S.S. Shaikh	ME	Assistant Professor	Design	3	
29	Mr. A.P. Patil	ME	Assistant Professor	Thermal Engg	20	
30	Mr. N.R. Chavda	ME	Assistant Professor	CAD-CAM	0.5	
31	Mr. A.T. Pokarnekar	ME	Assistant Professor	CAD-CAM	0.5	
32	Mr. T. B. Shaikh	M.Tech.	Assistant Professor	Energy	7	
33	Mr. N. S.	M.	Assistant	Thermal &	0.5	

	Deshmukh	Tech.	Professor	Fluid		
34	Mr. S. R. Gaikwad	M.Tech.	Assistant Professor	Mechanical Design	0.5	
35	Mr. R. B. Dabhade	M. Tech.	Assistant Professor	CAD-CAM	2	
Second Shift						
36	Dr. P.U. Zine	PhD	Associate Professor	Production	14	
37	Mr. P.D. Bhatkar	ME	Assistant Professor	Manufacturing	12	
38	Ms. P. Priadarshni	ME	Assistant Professor	CAD-CAM	9	
39	Mr. S. Kulkarni	M.Tech.	Assistant Professor	CIE	1.5	
40	Mr. K.D. Jadhav	M.Tech.	Assistant Professor	Manufacturing	2.5	
41	Mr. R.B. Lahoti	ME	Assistant Professor	Manufacturing	3	
42	Mr. P.J. Kale	M.Tech.	Assistant Professor	Production	1.5	
43	Mr. N.V. Kalyankar	M.Tech.	Assistant Professor	CAD-CAM	1	
44	Mr. N.A. Shaikh	ME	Assistant Professor	Design	0.5	
45	Mr. S.S. Waghmare	M.Tech	Assistant Professor	Thermal Engg	0.5	
46	Mr. A. Tiwari	M.Tech	Assistant Professor	Indu. Product Design	0.5	
Adjunct Faculty						
47	Mr. J. K. Padalkar	MMS	Adjunct Faculty	Mechanical Engg	30	
48	Mr. A. C. Deshmukh	MS	Adjunct Faculty	Mechanical Engg	28	
49	Mr. B. M. Joshi	B.Tech.	Adjunct Faculty	Mechanical Engg	30	
50	Mr. J. S. Aphale	ME	Adjunct Faculty	Engg	43	
51	Mr. U. M Dashartha	MBA	Adjunct Faculty	Mechanical Engg	29	

52	Mr. C. P. Tripathi	B.Tech.	Adjunct Faculty	Mechanical Engg	50	
53	Mr. V. R. Deshpande	BE	Adjunct Faculty	Mechanical Engg	30	
54	Mr. S. G. Sohoni	BE	Adjunct Faculty	Mechanical Engg	28	
55	Mr. S. S. Inje	BE	Adjunct Faculty	Mechanical Engg	12	
56	Mr. R. Kombade	BE	Adjunct Faculty	Mechanical Engg	23	
57	Mr. V. Borade	BE	Adjunct Faculty	Mechanical Engg	23	
58	Mr. A. Thakur	BE	Adjunct Faculty	Mechanical Engg	30	
59	Mr. S.Raithatha	BE	Adjunct Faculty	Mechanical Engg	40	
60	Dr. S. Kaleemuddin	PhD	Adjunct Faculty	Mechanical Engg	19	

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):

Student Teachers Ratio	UG	PG
	14.4:1	12:1

14. Number of academic support staff (technical) and administrative Staff ; sanctioned and filled:

Academic support staff	Sanctioned by Management	Filled
Technical staff	02	02
Administrative staff	Nil	Nil

15. Qualifications of teaching faculty DSc/D.Litt/ Ph.D/M.Phil/ PG./MASLP

Sr. No	Qualification	Number
1	Ph.D.	11
2	PG (M.E./M.Tech) M.Sc/ MBA	40
3	B.E./B.Tech)	09

16. Number of faculty with ongoing projects from a) National b)International funding Agencies and grants received:

a. National:

Number of faculty with ongoing projects	Grants Received (Rs.)
One (Dr. C. L. Gogte)	INR 50000

b. International:

Number of faculty with ongoing projects	Grants Received (material)
Two (Dr. C. L. Gogte and Mr. V. S. Damdhar)	CNT (20gm) + CF (1 role)

c. Grants received:

Number of faculty with ongoing projects	Grants Received
Dr. N. G. Patil Participating in 18 th CRIP Conference on Electro-physical and Chemical Machining (ISME XVIII) to be held from 18/04/2016 to 22/04/2016 in Tokyo Japan sponsored by DST, Government of India	INR 45 Thousand
Dr. S. V. Lahane CSIR and DST International Travel grants (about 1.2 lakhs) for attending and presenting a paper in ASME ICES 2012 at Torino, Italy	INR 1.2 lakh
Prof. M. A. Patil 1. Rajiv Gandhi Science & Technology Commission Mumbai, through NMU, Jalgaon on project entitled, "Experimental investigation on NO _x and PM reduction through Nanoceria particles and surface texturing" 2. Received 0.6 Lacs INR from BCUD, North Maharashtra University, Jalgaon for the project entitled, "Design and Development of Magneto strictive fuel injector" 3. Received 0.5 Lacs INR from Raison Group of Institution for the project entitled, "Design and Development of Magneto rheological damper with DC inputs"	INR 4.5 lakh INR 0.6 lakh INR 0.5 lakh

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Dr. C. L. Gogte MODROBS Project to Develop CIM Laboratory	INR 6 Lakh by AICTE
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18. Research Centre /facility recognized by the University:

The Department has recognized as a Ph.D. Research Center by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

19. Publications:**a) Publication per faculty**

Sr. No	Name of Faculty	No. of paper published in peer reviewed journals	No. of publications	No. of paper published in Conference		Monographs/	Books with	Citation index	SNIP/SJR	Impact factor	h-index
				Nat	Int.						
1	Dr. N. G. Patil	11	--			02	--	145	--	1.568	5
2	Dr. C. L. Gogte	13	01	04	09	--	--	38	--	--	4
3	Dr. N. S. Bhalkikar	2	--	--	--	--	--	--	--	--	--
4	Dr. P. H. Waghodekar	60	--	62	13	--	--	352	--	--	3
5	Dr. H. M. Dharmadhikari	08	--	--	03	--	--	--	--	--	--
6	Dr. D. V. Nehete	02	--	--	04	01	--	7	2.89	2.77	1
7	Dr. S. V. Lahane	13	--	11	09	01	--	109	2.04	3.61	4
8	Dr V. B. Pansare	04	--	01	04	--	--	06	--	--	2
9	Dr. P. U. Zine	02	--	06	02	--	--	09	--	1.76	1
10	Mr. S. R. Andhale	06	--	04	--	--	--	04	--	--	1
11	Mr. S. S. Patil	08	--	13	04	03	--	27	--	1.3	2
12	Mr. P. J. Kale	01	--	--	02	--	--	--	--	--	--
13	Mr. T. B. Shaikh	03	--	01	--	--	--	--	--	--	--
14	Mr. M. A. Patil	05	--	--	--	--	--	03	--	--	1
15	Mr. A. T.	01	--	--	--	--	--	--	--	--	--

Pokarnekhar										
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Particulars	2012-13	2013-14	2014-15	2015-16	2016-17
National Conference	4	4	5	1	-----
International Conference	11	5	2	17	
National Journal	4	1	-----	2	----
International Journal	13	7	13	25	3
Book Chapter	-----	-----	1	2	1

20. Areas of consultancy and income generated:

Sr. No.	Year	Name of project	Funding agency	Amount Received
1	2017	CEP on Uni-graphics for students	Registered participants	10000
2	2016	CEP on Uni-graphics for students		109500
3	2016	Dimensional stability of D2 Steel used in Measuring instruments	Customized Tech. Pvt. Ltd. Bangalore	25000
4	2015		Customized Tech. Pvt. Ltd. Bangalore	25000
5	2015	CEP on Uni-graphics for students	Registered participants	237000
6	2012	Student of Other engineering college for their projects	Registered participants	5000
			Total	4,11,500

At the Institute level:

<u>A)COE/ Metallurgy and materials engineering:</u> 1. MOU and joint projects with VNIT, Nagpur. 2. Joint projects with KCTECH, JOUNJU, South Korea, 3. Joint project with JNARDDC, Nagpur. 4. Project on FSW with Singapore institute of Mfg. Technology, Singapore. 5. Completed project related to polymers (PTFE) with M/S NIRLEP utensils, Aurangabad.	<u>A) COE/ Metallurgy and materials engineering:</u> 1. No. of projects related to materials and Nano materials with COE Pune and VNIT Nagpur. - Development of Al-CNT Composites.
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6. Completed project relate to pressure die casting with M/S OMR Bagla Automotive, Aurangabad.	- Development of AA 6061 + CNT Composites. 2. E-waste management. - Recovery of metallic values from E-waste. - Proposal to manage E-waste of Auranagabad in collaboration with IIT-Mumbai.
<u>B) COE/ Computer Aided engineering:</u> 1. Completed project related to Formability analysis of back panel of Auto rickshaw with Yeshshree Press Components Pvt.Ltd Waluj.Aurangabad. 2. Completed project related to Design of test rig for engine starting handle with Yeshshree Press Components Pvt.Ltd Waluj.Aurangabad. 3. Completed project related to Design Calculations for Clamp with MAN diesel India Ltd , Waluj,Aurangabad. 4. Completed project related to Finite element analysis of two wheeler side stand with Yeshshree Press Components Pvt.Ltd Waluj.Aurangabad. 5. Completed project related to Optimizations of two wheeler side stand using FEA with Yeshshree Press Components Pvt.Ltd Waluj, Aurangabad. 6. Finite element analysis of leaf spring with AKAR Tools (Plant IV) Pvt Ltd.Aurangabad.	<u>B) COE/ Computer Aided engineering:</u> 1. Further Consulation Projects on Design and Analysis with Industries. 2. Biomedical Engineering Workshop. 3. Training program for industries (CAD/CAE)
Ongoing Projects : 3D Modelling and analysis of human femur bone. Design and analysis of crash attenuator for passenger cars. Design and development of all terrain wheel chair.	

Details of Consultancy/Testing related:

Activity	Amount received	Date
Student of Other engineering college for their projects	Rs 5000/-	4/4/2012
Research Scholar of SGGS & IT, Nanded	Rs 1000/-	24/022011
National Centre of science and technology	Ex gratia	14/11/2011

Siemens Ltd	Ex gratia	31/07/2012
Government of India Archaeological survey of India	Ex gratia	2/10/2010 19/09/2010
M/S Swajit abrasive Pvt Ltd Aurangabad	15000/-	25/07/2011 23/02/2011 03/01/2011 25/07/2010
Research Scholar of SGGs & IT, Nanded	Rs 3000/-	28/02/2011
Yashshree Press Components Pvt Ltd Aurangabd	Ex gratia	April 2011 to March 2012
Yashshree Press Components Pvt Ltd Aurangabd	Ex gratia	Jul-12
Students of UG and PG	71200/-	13/12/2011 09/07/2011

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:

Name of Faculty	Journal Name/Committees Name	Category
Prof. (Dr.) N. G. Patil	International Journal of Machining and Machinability of Materials, Inderscience, U.K	Reviewer
	International Journal of Advanced Manufacturing Technology, Springer, USA	
	Journal of Engineering Manufacture, Springer, USA	
	Materials and Manufacturing Processes, Taylor & Francis, UK	
	Journal of Composite Materials, Sage, UK	
	Journal of Machining and Forming Technology, Nova Science, USA	
	Journal of Manufacturing Research, NOVA Science, USA	
	ASME 2007 International Manufacturing Science and Engineering Conference, Atlanta,	
Dr. Subhash V. Lahane	International Journal of Sustainable and Green Energy (IJSGE), USA	Editorial Board Member
	Journal of Mechanical Design and Vibration	
	Journal of Recent Trends in Fluid Mechanics (STM Journal)	

	Fuel (Elsevier)	Reviewer
	Applied Thermal Engineering (Elsevier)	
	Internal Combustion Engine Division (ICED), (ASME)	
	Society of Automotive Engineer (SAE), International	
	Journal of Mechanical Design and Vibration	
	Cogent Engineering (UK) in partnership with Taylor & Francis.	
	American Journal of Vehicle Design.	
	International Journal of Engineering Research and Technology (IJERTREW578)	
	Institute for Research and Development (IRD) India.	Board member
Dr. H. M. Dharmadhikari	Reviewer for the International Journal of Ambient Energy, a Taylor & Francis publication. Reviewer for the International Journal of Sustainable Energy, a Taylor & Francis publ. Reviewer for the journal International Journal of Green Energy, a Taylor & Francis publication.	Reviewer
Atul Patil	Journal: Heat and Mass Transfer, Springer.	Reviewer

22. Student projects

a) Percentage of students who have done in-house projects including inter Departmental/Programme

Sr. No.	Academic Year	No. of student on roll	No. of students doing in house projects	%
1	2016-17	177	126	71
2	2015-16	202	166	82
3	2014-15	197	175	89
4	2013-14	259	235	91
5	2012-13	157	133	85

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:

Sr. No.	Academic Year	No. of student on roll	No. of students doing in house projects	%
1	2016-17	177	51	29
2	2015-16	202	36	18
3	2014-15	197	22	11
4	2013-14	259	24	9
5	2012-13	157	24	15

23. Awards/ Recognitions received by faculty and students:

a) Awards / Recognitions received by faculty

Year	Name	Awards/Recognitions
2015-16	Dr. N. G. Patil	International Travel Grant from DST
2012-13	Dr. S. V. Lahane	International Travel Grant from DST and CSIR

b) Awards / Recognition received by student

Year	Name	Award won /Recognitions
2015-16	05 students participated in CCQC-2015 organized by QCFL, Nagpur chapter and the Group was awarded gold award on 13 Sep 2015, held at Nagpur.	Gold Medal
2015-16	Maroti M Devkatte has participated in State level championship organized by Nehru Yuva Kendra Aurangabad.	Bronze medal
2015-16	Maroti M Devkatte has participated Maharashtra State level Karate Championship	Gold Medal
2014-15	03 students participated in '24 th chapter conventional 'QC at Nagpur and with Group was awarded	Silver Award
2014-15	Anil Varma participated in University Sports Championship	Silver medal
2014-15	Anil Varma participated in "4 th State level CHESSBOXING Championship	Gold Medal in weight 62-54 kg.
2013-14	03 Students participated in Horizen Kaizen held at JNEC, on 22-23/03/2014 and won first prize.	First prize

24. List of eminent academicians and scientists/ visitors to the department

Sr. No.	Name of Eminent person/ Expert	Designation and affiliation	Date of visit
1	Raj Tilak	Scientist VSSC, ISRO	11/11/16
2	Dr. M S Kulkarni	Professor IIT, Bombay	27/6/16
3	Dr.S. Srinivas Rao	Professor, NIT, Warangal, Telangana	5/3/16
4	Dr. K. Rajaraman	CN & CS, University of Hyderabad, AP	4/3/16
5	Dr. V. M. Bhandari	Sr.Principal Scientist, CSIR-NCL, Pune	4/3/16
6	Dr. B. M. Toksha	Professor & Head, MIT , Aurangabad	3/3/16
7	Dr D. V. Gokhale	NCIM ,Pune Maharashtra	2/3/16
8	Dr Baig M M V	Head, Deptmerment of Biotechnology, Yashwant Vidyalyaya, Nanded.	4/3/16
9	Dr. S. K. Raina	Global Transgenes Ltd, Aurangabad	4/3/16
10	Dr. T. Sudarshan	President & CEO Material Modification Inc., Fair flex, Virginia.	10/4/12
11	Dr G D Khedekar	Director Paul Hebert Biodiversity Studies Dr BAMU Aurangabad	1/3/16
12	Dr.B.A.Chopade	Vice Chancellor, Dr.B.A.M.U, Aurangabad.	1/3/16
13	Mr.Bhushan Raut	Dy.RTO, Vasai, Mumbai	12/9/15
14	Dr.Krishnamurthi Sheepati	Professor, JNNCE, Navule, Shimoga, Karnataka.	7/1/15
15	Dr.N.P.Argade	Director, CSIR,NCL,Pune	6/1/15
16	Dr. M. Chauvan,	Director, Dattaji Bhale Blood Bank, Aurangabad	6/1/15
17	Dr. P. Kulwal,	Associate Professor, Mahatma Phule Agricultural University, Rahuri, Ahmednagar	6/1/15
18	Dr. N. R. Karmarkar,	Department of Geography, Pune University	7/1/15
19	Dr. K. M Paknikar,	Director, Agharkar Research Institute, Pune	9/1/15
20	Dr. S. K. Apte,	Head Bio Medical group B. A. R. C. Mumbai	10/1/15
21	Dr. Pierpolo Carlone	Prof. Department of Industrial Engg. , Salerone, Italy.	17/10/16

25. Seminars/ Conferences/Workshops organized and the source of funding**a) National:**

List of Workshop/seminar/FDP/Training programs Organized by Department					Sponsorship	Participants
Sr No	Type of Program organized	Date		Total Days		
		From	To			
A.	Workshop					
1	Workshop ON ISRO's FEAST FEA technology	11 Nov 2016	11 Nov 2016	01 Days	SVR InfoTech and MIT	54
2	Autobotz , MIT, Aurangabad (Seminar Hall)	25 Sep 2016	27 Sep 2016	03 days	Self Sponsored	120
3	Basic Robotic Workshop, Saint Lawrence High School, Aurangabad.	29 Aug 2016	30 Aug 2016	02 days	Self Sponsored	40
4	Characterization and Surface Engineering	April 9th 2015	10th April 2015	02 days	IIM and MIT	30
5	Reliable Welds	5 th July 2013	6 th July 2013	02 days	IIM and MIT	29
6	Two week ISTE workshop on Fluid Mechanics	May 20, 2014	May 30, 2014	Two Weeks	MHRD	38
7	Two week ISTE workshop on Engineering Thermodynamics	11 Dec 2012	21 Dec 2012	Two Weeks	MHRD, Delhi	26
8	Workshop on Advanced Heat & Cryogenic Techniques	07 July 2012	08 July 2012	02 Days	IIM and MIT	100
B.	FDPs					
1	Simulation modeling Techniques In Industrial automation, Hydraulics, Pneumatics and	11 Feb 2017	11 Feb 2017	One Day	Self-Sponsorship	37

	Digital CNC					
C.	Training Programs					
1	Two days faculty training on FEAST technology	24 March 17	25 March 17	02 Days	Self-sponsored	20
2	Training program of UG-NX for Bajaj Auto Ltd. Employees.	07 Dec 2015	15 Dec 2015	08 Days	Self-Sponsorship	03

b) International:-Nil

26. Student profile programme/course wise

Name of the Course/ Programme	Academic year	Application received and selected	Selected	Enrolled		Pass Percentage
				Male	Female	
UG	2016-17	Admission process is as per the rules and regulation of DTE	129	125	04	Currently in FE
	2015-16		155	150	05	Currently in SE
	2014-15		170	158	12	Currently in TE
	2013-14		186	175	11	Currently in BE
	2012-13		168	156	12	86.79 %
PG Mfg	2016-17		2	1	1	Currently in First year
	2015-16		13	10	3	Currently in Second Year
	2014-15		13	13	0	24.12 %
PG HP	2016-17		3	3	0	Currently in First year
	2015-16		7	7	0	Currently in Second Year
	2014-15		8	8	0	22.22 %
PG Auto	2016-17		3	3	0	Currently in First year
	2015-16		4	4	0	Currently in Second Year
	2014-15		5	4	1	0.0 %

27. Diversity of Students

Name of the Course	Academic Year	% of students from the same state	% of students from other states	% of students from abroad
UG	2016-17	99.5	0.5	-
	2015-16	100	Nil	-
	2014-15	99.5	0.5	-
	2013-14	98.84	1.15	-
	2012-13	100	Nil	-
PG	2016-17	100	-	-
	2015-16	100	-	-
	2014-15	100	-	-
	2013-14	100	-	-
	2012-13	100	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc? :

Academic Year	2016-17	2015-16	2014-15	2013-14	2012-13
GATE	7	1	5	2	-
Others(GRE/Toffel)	-	4	2	-	-

29. Student progression

Student Progression	Against % Enrolled				
	2016-17	2015-16	2014-15	2013-14	2012-13
UG to PG	--	5	10	10	2
PG to Phd.	--	2	1	--	--
Phd. To Post Doctoral	--	--	--	--	--
Employed					
• Campus selection		15.48	7.05	8.06	9.2
• Other than campus recruitment	--	49	61	73	75
Entrepreneurship/self-employment	--	--	--	--	--

30. Details of Infrastructural facilities

Laboratory Space (15):-	1089.48 sq. m.
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Class – rooms (7):-	462 sq. m.
Seminar Hall (1):-	66 sq. m.
Departmental Library (1):-	35 sq. m.
HoD Office (1):-	22 sq. m.
LCD Projector:	6
Printed Charts:	20
PCs:	47 nos.
Networking & Leased Line:	1 MBPS
Internet facility:	Available
Library –	
Departmental Library (Coordinator :)	Prof S. V. Kulkarni

Category of Books	Available
Total numbers	769
Ref. Books	727
Text Books	41
Hand Books	01
Journal National	Online Journals are available for access at
Technical Papers	Online Journals are available for access at

(CDs, Catalogues, Project Reports, Magazines etc)

Internet facilities for Staff & Students – Available

WI-FI facility is given

Class rooms with ICT facility- --- 6

Classrooms--- 7

Laboratories -- 15

Sr.No.	Name of Laboratory	Major Equipment
1	Automatic Control Systems	Hydraulic, Pneumatic, Electro Pneumatic Trainers, Controllers - Position, Speed, Temp, Pressure
2	Automobile Engineering	Cut Model of Car, Engines, Transmission Systems, Gear System, Propellers, Steering, Breaking - EPS,
3	CAD/CAM	PCs, Software - AutoCAD, Uni-graphics, Solid Edge, Printers

4	CAE	UG Altair Hyper mesh
5	Dynamics of Machines	Gyroscope, Balancing - Static and Dynamic, Governor, Gear Tooth Profile, Cam profile, four bar mechanism
6	Engineering Metallurgy	Microscopes, CCTV Microscope, Polishing Machines, Ovens, Scratch testing, Image analyzer
7	Heat Transfer	Test Rigs for Coduction, Convection, Radiation, Heat Exchanger, Drop Film, Reynolds No.,
8	Hydraulic Machines	Test Rigs for Pelton, Francis, Kaplan Turbines, Centrifugal, Reciprocating, Gear Pumps
9	IC Engines	Test Rigs for Petrol Engines, Diesel Engines, Multi-cylinder engines, Blower, Compressor
10	Machine Tools	All types of Machine Tools
11	Metrology & Mech. Measurement	Linear Measurement, Force Measurement, Surface Finish, Vernier, Micrometers, Temp, Pressure, Meas.,
12	Refrigeration & Air Conditioning	Test Rigs for Refrigeration, Air Conditioning, Ice Plant, Water cooler, deep freezer, refrigerators,
13	Research Lab1-MED	Advanced Machine tools
14	Research Lab2-MED	CNC machines
15	Thermal Engineering	Models of Boilers, IC Engines, Flash, Fire, Orsat, Viscosity, Bomb Calorimeter, Redwood Viscometer

31. Number of students receiving financial assistance from College, university, government or other agencies

Agency	2015-16	2014-15	2013-14	2012-13
Government	606	578	590	497

Number of students receiving financial assistance

Sr. No.	Scholarship	2012-13		2013-14		2014-15		2015-16		2016-17	
1	OBC-GOI	114	4	126	6	123	7	128	12		
2	SC-GOI	67	9	81	11	76	8	81	10		
3	VJNT-GO	55	8	74	8	43	38	82	8		

4	SBC-GOI	6	0	9	1	9	1	8	1		
5	ST-GOI	3	1	5	0	2	1				
6	OBC- Free ship	31	1	23	1	22	1	21	2		
7	SC- Free ship	9	1	17	4	18	3	18	3		
8	VJNT- Free ship	14	2	8	1	7	1	8	0		
9	SBC- Free ship	4	0	2	0	1	0	0	0		
10	St- Free ship	1	0	3	0	3	0				
11	EBC	144	13	169	26	182	23	185	23		
12	Central Minority Fresh	2	1	5	1	2	0	3	0	0	0
13	Central Minority renewal	2	0	0	1	2	1	2	0	4	0
14	State Minority	4	1	8	0	4	0	11	0	2 5	0

32. Details on student enrichment programs (special lectures /Workshops / seminars) with external experts

Count of enrichment programmers organized for students	2016-17	2015-16	2014-15	2013-14	2012-13
Guest lecturers/workshops	3	4	Nil	1	2
Industrial visits	5	3	3	1	Nil
Internship	19	46	48	1	Nil

Guest lectures/workshops:

1. Students attended workshop on Aero design organized by SAE India at Chennai on 7-8 January 2017
2. Expert talk by Rajendra Tribhuvan, Arshad Khan, from Elevation Academy, Pune on 20/09/2016 on the Topic "CAE Analysis".
3. Expert Talk by Dr.V.G.Ukadgaonker, on IP Theory on 28/09/2016.
4. Expert talk by Nilesh Joshi on working principle of compressor, basics and opportunities on 19/03/2016
5. Session on 3D Printing by CAD/CAM guru in 05/02/2016
6. Career in Civil Services by Dy RTO Mr. Bhushan Raut in 12/09/2015
7. Advance simulation in Biomedical Engineering by Mr. Datta Parle in 0/08/2015
8. A 2day Robotic Workshop under AXIS '13 conducted in association with VNIT Nagpur at MIT, Aurangabad.
9. Expert Lecture talk on Opportunities in Automobile Design using CAD and CAE, by Prasanna Joshi, CADCAMGuru, PUNE

10. One day web based workshop at Endress Hauser Aurangabad on 23/08/2012

Industrial Visit:

1. Industrial visit at Kirloskarwadi Sangli on 15/03/2017 to 19/03/2017
2. Industrial visit at Bhagyalakshmi Rolling mills on 11/01/2017
3. Industrial Visit at Shri Ganesh press and coat industries Pvt Ltd Waluj 2017
4. Industrial Visit for faculties and students at Perkins India Pvt Ltd on 20/10/2016
5. Industrial visit at SN Metallurgical Associates Aurangabad on 26-27/09/2016
6. Industrial visit to Marathwada Auto Cluster "Tool Tech Exhibition" 4/3/2016
7. Visit to Volkswagon, Chakan plant, Pune 15/04/2015
8. Visit to State Transport (S.T.) workshop, Chkalhana Aurangabad on 16/02/2015
9. Industrial visit to Mahanand Doodh Dairy on 2015
10. Industrial visit to Mahanand Doodh Dairy on 2014
11. Industrial visit to Mahanand Doodh Dairy on 2013

33. Teaching methods adopted to improve student learning

Department has initiated FDP (Faculty Development Program) for every Subject. The senior faculty members guide the other faculty members of the subject in understanding the fundamentals. Common strategies are finalized by senior faculty member.

Notes of various units and standard readings in the laboratory are prepared at the beginning of the semester. This activity helps the faculty members of the subject to maintain the same uniformity across various classes.

To inculcate the knowledge delivery skills a faculty induction program was conducted at institute level. Faculty members from department are also encouraged to take up the program in summer, winter vacations. To improve students' learning following parameters are consider:

- a) Assignments are given to the students based on each unit.
- b) Power point presentations and NPTEL Videos, resource materials are used by the faculty for delivery of subject matter.
- c) Industrial visits are organized.
- d) Guest lecturers of eminent personalities from academic institutions as well as industries are organized to enhance the student knowledge.
- e) Summer, winter Internship program are organized to bridge the gap between theory and practical.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Students are involved in:

- NSS Activity
- Blood Donation Camp
- SAE Supra
- SAE Baja
- Robocon
- ASME
- Tree plantation
- Smart city (Road show)
- Helmet drive
- Surya - Kumbh
- Surya- Mitra

Faculties are involved in:

- Indian Institute of Metals (IIM)
- Indian Society for Technical Education (ISTE)
- Institution of Engineers (India)
- American Society of Mechanical Engineers (ASME)
- National Society of Fluid Mechanics and Fluid Power (MFMFP)
- Combustion Institute- India Section
- Society of Automotive Engineers (SAE)
- International Association of Computer Science and Information Technology (IACSIT)
- IIIE

35. SWOC analysis of the department and future plan

 Strengths

- Well qualified (IITs, NITs, COEP, DrBATU) and dedicated faculty members
- State of the art laboratories
- Recognized PhD Research Centre of DrBAMU

 Weakness

- Necessity of establishing rapport with industry for on campus placement
- Needs to improve research and development in terms of funded projects

 Opportunities

- To become centre of excellence in major area of Mechanical engineering
- To explore involvement of alumni in academic and placement activities.

Challenges

- Preparing employable Mechanical engineers to face the global challenges
- Academic flexibility

Road Map/Future plan

Collaboration with other Institutes like IITs, NITs and research organizations for faculty and students development.

EVALUATIVE REPORT OF THE DEPARTMENTS**Department of Basic Science and Humanities**

1. **Name of the department:** Basic Science and Humanities
2. **Year of Establishment:** 1984
3. **Names of Programmes offered:**

Name of the Department	Year of Establishment
First Year All programs	1984

4. **Names of Interdisciplinary courses and the departments/units involved:** NIL
5. **Annual/ semester/choice based credit system (Programme wise):**

UG: Choice based credit system (w.e.f. 2016-2017)

6. **Participation of the department in the courses offered by other departments:**

Sr.No.	Subject/courses offered	Organizing Department	Supporting Department
1.	Basic Electrical Engineering	Basic Science and Humanities	Dept. of Electrical and Electronic Engineering
2.	Computers Fundamentals-1	Basic Science and Humanities	Dept. of Computer Science Engineering
3.	Engineering Graphics	Basic Science and Humanities	Dept. of Mechanical Engineering
4.	Basic Civil Engineering	Basic Science and Humanities	Dept. of Civil Engineering
5.	Engineering Mechanics	Basic Science and Humanities	Dept. of Civil Engineering
6.	Basic Mechanical Engineering	Basic Science and Humanities	Dept. of Mechanical Engineering
7.	Basic Electronic Engineering	Basic Science and Humanities	Dept. of Electronic and Tele-communication
8.	Computers Fundamentals-2	Basic Science and Humanities	Dept. of Computer Science Engineering

7. **Courses in collaboration with other universities, industries, foreign institutions, etc. :** NIL
8. **Details of courses/programmes discontinued (if any) with reasons:**

Sr. No.	Name of programme	Year
1	Information Technology	2015-16
2	Electronic and communication II nd shift	2014-15

9. Number of teaching posts:

Academic Year	Post	Sanctioned	Filled
2016-17	Professor	01	01
	Associate Professor	02	01
	Assistant Professor	18	13

10. Faculty profile with name, qualification, designation, specialization,(D.Sc./D.Litt./Ph.D./ M. Phil. etc.)

Sr.No.	Name of the Faculty	Qualification	Designation	Specialization	Experience	No. Ph.D. Student guided
1	Mr. R. D. Mahajan	M.Sc, DBM	Asst. Professor	Mathematics	29	NA
2	Mr.M.A. Patil	M.A.	Professor	Communication skills	10.5	NA
3	Dr. S.J. Sonkamble	Ph.D	Asso.Professor	Physics	5.3	NA
4	Mr. A. C. Dabhole	M.Sc,B.Ed	Asst. Professor	Mathematics	9.9	NA
5	Ms. S. P. More	M.Sc,B.Ed	Asst. Professor	Physics	9.4	NA
6	Ms. D. S. Sharma	M.Sc	Asst. Professor	Chemistry	9.4	NA
7	Ms. U. R. Borsarkar	M.Sc,B.Ed, M.Phil.	Asst. Professor	Mathematics	11	NA
8	Ms. M. M. Patil	M.Sc,B.Ed	Asst. Professor	Physics	7.5	NA
9	Ms. J. V. Kulkarni	M.Sc,B.Ed	Asst. Professor	Chemistry	7.5	NA
10	Ms. S .A. Deshmukh	M.Sc,B.Ed	Asst. Professor	Mathematics	7	NA
11	Ms. A. V. Gumte	M.Sc	Asst. Professor	Chemistry	7	NA
12	Mr. J.R. Gaikwad	M.Sc	Asst. Professor	Mathematics	9.6	NA
13	Ms. N.M. Ambad	M.A,B.Ed	Asst. Professor	Communication skills	8	NA

14	Mr. A.B. Adhe	M.Sc,B.Ed	Asst. Professor	Mathematics	6	NA
15	Laudrik Roma M.	M.A,M.Ed	Asst. Professor	Communication skills	4.2	NA

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):**

Student Teachers Ratio	UG
	15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Academic support staff	Sanctioned by Management	Filled
Technical staff	1	1
Administrative staff	Nil	Nil

15. Qualifications of teaching faculty with DSC/D.Litt./Ph.D./M.Phil./PG./MASLP

Sr. No.	Qualification	Number
1	Ph.D.	01
2	Ph.D.(Pursuing)	05
3	PG(M.Sc., M. A.)	09

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil****18. Research Centre /facility recognized by the University: Nil****19. Publications: Publication per faculty**

Sr. No	Name of Faculty	No. of paper published in peer reviewed journals (National/ international)	No. of publications listed in international data base	No. of paper published in Conference	Monographs/ chapter in books/ books edited no with details of	Citation index	SNIP/SJR	Impact factor	h-index
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				Na t	Int.						
1	Mr. A. C. Dabhole	1	--	--	--	--	--	--	--	--	--
2	Ms. U. R. Borsarkar	1	--	--	--	--	--	--	--	--	--
3	Ms. S.P.More	1	--	--	--	--	--	--	--	--	--

20. Areas of consultancy and income generated:Nil

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:Nil

22. Student projects

- Percentage of students who have done in-house projects including inter-departmental/ProgramNil
- Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies:
Nil

23. Awards/ Recognitions received by faculty and students:

a) Awards / Recognitions received by faculty

Year	Name	Awards/Recognitions
2015-16	Ms. U.R.Borsarkar	First Prize(Paper presentation) at Dept. of Mathematics, Dr.BAMU, Aurangabad.
	Mr. A.C. Dabhole	Second Prize(Paper presentation) at Dept. of Mathematics, Dr.BAMU, Aurangabad.
2014-15	Ms. U.R.Borsarkar	First Prize(Paper presentation) at Dept. of Mathematics, Dr.BAMU, Aurangabad.

b) Awards / Recognition received by student: Nil

24. List of eminent academicians and scientists/ visitors to the department

Sr. No	Name of the Academicians and Scientists / Visitors	Designation	Organi-zation
1	Dr. Avinash Saoji	Founder of PRAYAS, General Physician	PRAYAS
2	Dr.Bhawana Talkalkar	Doctor (Neurosurgeon)	Apex Hospital, Aurangabad
3	Dr.Ranjan Garge	Doctor	Ex Principal Govt. Science college

			Aurangabad
4	Dr. Vijay Diwan	Vice-Principal	S.B. Science college
5	Shri. Vivek Deshpande	Owner	Rurdrani Infrastructure Ltd, A'bad
6	Shri. Mahesh Patil	Secretary	Govt. Edu. Body
7	Shri. Ram Bhogle	Managing Director	Nirlep Appliances, Aurangabad

25. Seminars/ Conferences/Workshops organized and the source offunding

a) National: -

“Two-weeks ISTE workshop on Engineering Physics”, Workshop was funded by the National Mission on Education through ICT (MHRD, Government of India) Date: 08th - 18th December, 2015. Workshop coordinator: Prof. Madhuri.M.Patil

b) International:-Nil

26. Student profile programme/course wise

Name of the Course/ Programme	Academic year	Application received and selected	Selected	Enrolled		Pass Percentage
				Male	Female	
UG (First Year Engg)	2016-17	Admission process is as per the rules and regulation of DTE	343	274	69	-----
	2015-16		423	344	79	-----
	2014-15		493	421	81	-----
	2013-14		606	470	136	-----
	2012-13		682	544	138	-----

27. Diversity of Students :

Name of the Course	Academic Year	% of students from the same state	% of students from other states	% of students from abroad
UG	2016-17	35	10.15	-
	2015-16	40.9	11.21	-
	2014-15	39.16	11.8	-

	2013-14	50.1	10.01	-
	2012-13	58.16	12.5	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.? : NA

29. Student progression: NA

30. Details of Infrastructural facilities

Laboratory Space (3):	434.93 sq.m
Class – rooms (6)	510.8 sq.m
H.O.D. Office (1)	73.15 sq.m
LCD Projector	1
Printed Charts	5
PCs	6
Networking & Leased Line	1GBPS
Internet facility	Available

Library

Departmental Library (Coordinator: **Ms. M. M. Patil**)

Category of Books	Available
Total numbers	236
Ref. Books	41
Text Books	195

Laboratories

Sr. No.	Name of Laboratory	Major Equipment
1.	Physics Laboratory	Laser Diode, Laser Source(Laser Training System), Noise level meter, transistor characteristics kit, P -N junction diode kit, Spectrometer
2.	Chemistry Laboratory	Pulse polaro-graph, AAS, BOD incubatorRedwood viscometer
3.	Language Laboratory	Computers

31. Number of students receiving financial assistance from College, University, government or other agencies

Agency	2015-16	2014-15	2013-14	2012-13
Government	295	348	409	468

Sr.No.	Scholarship and freeship	EBC	STC	PTC	Handicap	Minority	Central sector
2012-13	309	156	---	---	---	3	---
2013-14	233	149	---	---	---	27	---
2014-15	209	130	---	---	---	9	---
2015-16	183	106	---	---	---	6	---
2016-17	---	---	---	---	---	---	---

32. Details on student enrichment programmes (special lectures /workshops / seminars) with external experts

Count of enrichment programmes organized for students	2016-17	2015-16	2014-15	2013-14	2012-13
Guest lectures/ workshops	Anti-ragging (Prof. S.D.Patil)	-----	Sakaar Group Program	Workshop on Self Defence	Womans' Day (Woman in field work)
	Training and placement (Prof.S.S.Patil)		Womans' Health Awareness Program	Tarun-yabhan	-----
	Open Educational resources Dr.B.G.Toksha		-----	Milun Sarya Jani	
	Motivational talk by Mr. Rajesh Chavan (Electrical Engineer)			Sakaar Group Program	
	-----			Motivational lecture by Dr.Arvind Saoji	
Industrial visits	Visit to Science on	-----	-----	-----	-----

	wheel 16 Sept. 2016				
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33. Teaching methods adopted to improve student learning

Department faculty provides notes of various units at the end of theory lectures and standard manuals in the laboratory. This activity helps the faculty members of the subject to maintain the same uniformity across various classes. Department organize the induction / orientation program at the beginning to acquaint the students about the best practices and teaching-learning resources in the department and Institute to improve students' learning following parameters are consider:

- Assignments are given to the students based on each unit.
- Power point presentations and resource materials are used by the faculty for delivery of subject matter.
- Guest lecturers of eminent personalities from academic institutions as well as industries are organized to enhance the student knowledge..

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Students are involved in:

- NSS Activity
- Blood Donation Camp
- Robocon
- Tree plantation
- Helmet drive

35. SWOC analysis of the department and future plan

✚ Strength:

- Qualified and experienced staff and good academic culture
- 5 faculties pursuing (part time) Ph.D.
- Faculty retention is high.
- Well-equipped laboratories.

✚ Weakness

- Contribution of faculty in research publications is less

✚ Opportunities

- Collaborative and interdisciplinary research can be undertaken

✚ Challenges

- Students are with lack of focus and aptitude towards learning.

Road Map/Future plan:

- To provide excellent academic inputs to first year students so that they will be prepared to achieve their goals at higher classes.

EVALUATIVE REPORT OF THE DEPARTMENTS

Department of Architecture

1. Name of the department: Architecture
2. Year of Establishment: 1984
3. Names of Programmes offered:

Name of the program	Year of Establishment
B. Arch.	1984

4. Names of Interdisciplinary courses and the departments/units involved: Nil

5. Annual/ semester/choice based credit system (Programme wise):

Name of the program	Evaluation System
B. Arch	Semester System

6. Participation of the department in the courses offered by other departments: Nil

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Sr. No.	Course offered	University	Year
1	B.ARCH- V22	YCMOU*, Nasik	2011**
2	M.ARCH(General) V41	YCMOU, Nasik	2011**
3	FDAD	YCMOU, Nasik	2014
4	B.DES	YCMOU, Nasik	2014

*YCMOU: Yashwantrao Chavan Mukta Open University, Nashik

** : Fresh admissions discontinued from Academic Yr.2016-17

8. Details of courses/programmes discontinued (if any) with reasons:

*New admissions for V-22-B.Arch and V-41-M.Arch have been stopped from Acd. Yr.2016-17 but previous admissions are continued.

9. Number of teaching posts:

Academic Year	Post	Sanctioned	Filled
2016-17	Professor	2	1
	Associate Professor	4	1
	Assistant Professor	8	10

10. Faculty profile with name, qualification, designation, specialization,(D.Sc./D.Litt./Ph.D./ M. Phil. etc.)

Sr. No	Name of the Faculty	Qualification	Designation	Specialization	Prof.Experience (Yrs)	Teaching experience (Yrs)	No. of PhD. Student guided
1.	Mr.S.V.Mhaske	B.Arch	Asso. Prof.	Architectural Design and Building Construction	24	25.5	NA
2	Prof. S.R. Borawake	B.Arch DBM	Prof.	Business Management	43	10	NA
3	Ms. K.K. Bhatia	B.Arch M.Arch PGDCM	Asst. Prof.	Construction Management PG-General	17.5	12.5	NA
4	Ms.P.P. Pranjale	B.Arch M.Arch	Asst. Prof.	PG-General	15.5	10.5	NA
5	Ms.S.A. Dhavale	B.Arch M.Arch	Asst. Prof.	PG-General	15.5	9.5	NA
6	Ms.D.K. Hejiib	B.Arch M.Arch	Asst. Prof.	PG-General	16.5	9.5	NA
7	Ms.L.P. Aphale	B.Arch M.Arch	Asst. Prof.	PG-General	16.5	5	NA
8	Ms.D.N. Totla	B.Arch M.Arch	Asst. Prof.	PG-General	15.5	12.5	NA
9	Ms.V.M. Vaidya	B.Arch	Asst. Prof.	Basic Design and services	10	6	NA
10	Mr.C.P. Bharambe	B.Arch PGPACM	Asst. Prof.	Construction Management	5	0.33	NA
11	Mr.A.Y. Shaikh	B.Arch	Asst. Prof.	Computer Application	13	0.33	NA

				in Architecture			
12	Ms.C.A. Shinde	B.Arch M.Plans	Asst. Prof.	Landscape Architecture	0.5	0	NA

11. List of senior visiting faculty:

Sr. No.	Visiting Faculty	Profession/ Qualification
1	Ar.Rajan Nadkarni	Architect
2	Ar.Sharad Mahajan	Architect
3	Ar.Anirudha Yelnurkar	Software expert
4	Ar.Dhananjay Pund	Architect
5	Ar.Manmeet Arora	Architect
6	Ar.Ashwini Gambhir	Architect
7	Ar.Renuka Deshpande	Architect
8	Prof.T.Somwanshi	Finance expert
9	Ar.Sumedh Waghmare	Architect
10	Ar.Rahul Deshmukh	Architect
11	Ar.Sharada Atre	Architect
12	Ar.Mrudul Deshmukh	Architect
13	Ar.Shaikh Altaf	Architect
14	Ar.Vaishali Citalangi	Architect
15	Ar.Sampada Takalkar	Architect
16	Ar.Rashmi Dharashivkar	Architect
17	Ar.Gauri Chatupale	Architect
18	Prof.Jitendra Pawar	Artist (G.D. Art)
19	Ar.Babasaheb Mhaske	Architect
20	Ar.Swapnil Shroff	Architect
21	Ar.Daksha Shroff	Architect
22	Ar.Vijay Sangvikar	Architect
23	Ar.Mohd. Faizuddin	Architect
24	Prof.Ramesh Harne	Artist (G.D. Art)

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Sr. No.	Percentage of lectures delivered Out of total lectures/ week	Percentage of practical classes Out of total lectures/ week
2012-13	1.09	6.12
2013-14	1.64	7.17

2014-15	1.08	9.74
2015-16	0.72	9.55
2016-17	0.66	14.64

13. Student -Teacher Ratio (programme wise):

Programme	Student Teacher Ratio*	
	UG	PG
ARCH (First Yr. to Fifth Yr.)	1:10	NA

*As per CoA(Council of Architecture)norms

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Academic support staff	Sanctioned by Management	Filled
Technical staff	1	1
Administrative staff	1	1

15. Qualifications of teaching faculty with DSC/D.Litt./Ph.D./M.Phil./PG./MASLP

Sr. No.	Qualification	Number
1	M.Arch (PG)	7
2	B.Arch.(UG)	5

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc.and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications:

Publication per faculty

Name of The Faculty	Published in peer reviewed journals (national / international)	monographs/ Chapter in Books/ Edited	ISBN/ISSN numbers with Details of publishers	Citation Index (average)	SNIP	SJR	Impact factor (Max)	H-index (Average)
Mr.S.R. Borawake	2							
Ms. K. K. Bhatia	3							

Ms.P.P.Pranjale	4							
Ms. S.A. Dhavale	4							
Ms. D.K. Hejiib	2							
Ms. L. P. Aphale	4							

20. Areas of consultancy and income generated:

Sr. No.	Year	Type of Consultancy	Description of work and Funding Agency	Amount Received (Rs)/ Income generated / Saved by consultancy.
1	2012-13	MIT Hospital up gradation	The existing MIT hospital which was 20 yrs old has been fully modernized and refurnished into a superspecialty hospital with a total investment of 5crores.	2,00,000
2		Polytechnique Extension Building	Space requirement for MIT polytechnique was enhanced with the construction of polytechnic extension building	2,50,000
3		IBS	Interior Design of Director's cabin and office of G.S. Mandal	1,80,000
4		Nursing College Building	G+4 Building having total constructional area of 10937 Sq.m.	50,000
5		New Girls Hostel Building	G+6 Building having total constructional area of around 5000 sqm.	1,50,000
6		New boys Hostel Building	G+5 building	2,00,000
7		canteen	Design n execution	50,000
8		Principal Cabin	Interior Design of Principal's Chamber B. Tech. MIT (T)	50,000
9	2013-14	Medical store	Interior design and execution at MIT campus, Aurangabad.	30,000
10		Computer lab I d	Interior Design and execution in Architecture department.	50,000

11		Seminar hall (105 hall)	Interior Design and execution in MIT (E) main building.	50,000
12		Studio design and development	Interior Design and execution in Architecture department.	35,000
13	2015-16	Central library	MIT CIDCO Interior Design	70,000
14	2016-17	New comp. lab	Interior Design and execution in Architecture department.	30,000

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:

Name of Faculty	Name of Committee	Category
Mr. S.V. Mhaske	AICTE	Expert member as a Registered Architect- for institute inspections.
	CoA	Expert Member for institute inspections CoA.
	IIA	Associate member of Indian Institute of Architects (IIA), Mumbai.
	IoV	Fellow of Institute of Valuers, Delhi.
	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.	Member of Ad-hoc Board of Studies in Architecture.
	Sant Gadge Baba Amravati University, Amravati.	Member of Ad-hoc Board of Studies in Architecture.
	ISTE	LM of Indian Society for Technical Education.
Mr. S.R. Borawake	AICTE	Expert member as a Registered Architect for institute inspections.
	CoA	Expert Member for institute inspections CoA.
Ms. K. K. Bhatia	AICTE	Expert member as a Registered Architect- for institute inspections.
	IIA	Member
Ms. P.P. Pranjale	AICTE	Expert member as a Registered Architect for institute inspections.
	Council of Architecture (CoA), New Delhi.	Empanelment for following roles: 1) Inspection / Accreditation visits to Academic Institutions 2) Research Assignments

		3)Representation / Nomination on various Selection Committees
	LIC- Dr. BAMU, Aurangabad	Expert Member for institute inspections
Ms. S.A. Dhavale	AICTE	Expert member as a Registered Architect- for institute inspections.
	IIA	Member
Ms. D.K. Hejiib	AICTE Inspection Committee. Adhoc Board Of Studies Of Interior Designing And Textiles	Member
	IIA	Member
Ms. L.P. Aphale	IIA	Member
Ms. N.A.Pulsay	IIA	Member

22. Student projects

Percentage of students who have done in-house projects including inter-departmental/Program

Sr.No.	Academic Year	Percentage of students working on their projects in-house	
		UG	PG
1	2016-17	100 %	--
2	2015-16	100 %	---
3	2014-15	100 %	-
4	2013-14	100 %	-
5	2012-13	100 %	-

Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies

Sr. No.	Academic Year	Percentage of students placed for projects in organizations outside	
		UG	PG
1	2016-17	NA	-
2	2015-16	NA	-
3	2014-15	NA	-
4	2013-14	NA	-
5	2012-13	NA	-

23. Awards/ Recognitions received by faculty and students:

a) Awards / Recognitions received by faculty

Year	Name	Awards/Recognitions
2015-16	Ms. K.K. Bhatia	“Award of excellence” by SAP, India Pvt. Ltd. And ‘Top performer (top 253) of the programme’ for FDP , conducted by IIT, Bombay In 2016 May-July.
	Ms. P.P. Pranjale	‘Top performer(top 383) of the programme’ for FDP , conducted by IIT, Bombay In 2016 May-July.

b) Awards / Recognition received by student

Year	Name	Award won//Recognitions
2015-16	Shivani Rajeev Gaikwad	NIASA Thesis award (Nomination)
	Rashmi Dilipsingh Thakur	NIASA Thesis award (Nomination)
	Smruti Mahatole.	Second position in International Dance Festival at Bulgaria
	Renuka Sampagaon	1 st Prize in Essay Competition- “Build Beautiful with Ultratech”
	Ketaki Kulkarni	University level Swimming Competition- Gold Medal -50 mts. Breast stroke Silver Medal-5 mts, Back stroke Bronze Medal-50 mts. Butterfly stroke
2014-15	Nikhil Authankar	NIASA Thesis award (Nomination)
	Kiran Bang	NIASA Thesis award (Nomination)
	SaurabhMirkute Akshata Chavhan Chaitali Joshi Aishwarya Nawale Snehal Jain Nikita Agrawal.	“My dream city-Aurangabad organized by CII and won 2 nd Prize (cash Rs. 5000/- and certificate)
	Kshitija Bardapurkar	Silver Medal in Taekwondo in State Level Sports Competition.
	Shruti Rawat	NIASA Thesis award (Nomination)
2013-14	Kshitija Bardapurkar	Bronze Medal in Chess in University Sports Competition. Bronze Medal in Taekwondo in

		University Sports Competition.
	Students Participated in NASA convention.	Citation in Photography Competition in Zonal Nasa Convention -2014 At Solapur
2012-13	Siddharth Mukherjee	Photography Award

24. List of eminent academicians and scientists/ visitors to the department

Sr. No	Name of the Academicians and Scientists / Visitors	Designation	Organization	Topic
1	Ar.Usha Rangarajan	Principal Architect	Landmark Design Group, Pune	Green and Energy Efficient Architecture
2	Ar. Kalyan Mukherjee	HOD	Om Dayal College of Architecture, Kolkatta	Knowledge interface faculty interaction
3	Ar.Rahul Kadam	Director	Edifice Consultant Pvt.Ltd	Architectural Pedology
4	Ar. Geert Robberchts	Convener Belgium chapter	INTACH	Heritage Conservation in Aurangabad- A Special case of Bani- Begam- Bagh.
5	Ar. Dean D'Cruz	Principal Architect	Mozaic Architects GOA	Talk on-Energy Efficient Design
6	Ar. Anita Dake	Principal Architect	Vector Designs, Pune	Workshop on-Tensile Structure
7	Ar. Rajesh Phadke	Chief Architect and Planner	GIFT City, Gandhinagar, Gujarat	Smart Cities
8	Ar. Sonali Dhopte	Director	Excelize Architectural Services Pvt.Ltd	Softwares in Architecture
9	Ar. Ajay Kulkarni	Principal Architect	Interface Designers, Aurangabad	An Introspection - Past and Present
10	Ar. Tina Dharamsey	Production Designer	Abstract Designers,	Set Designing

			Mumbai	
11	Mr.BaijuPatil	World famous wild life photographer	Baiju's Photo studio, Aurangabad	Guidance on wildlife photography

25. Seminars/ Conferences/Workshops organized and the source offunding

a) National: -Zonal NASA 2015 funded by the Institute and National Association of Student of Architecture (NASA) (Partially funded by college)

- Seminars: 6
- Workshops: 1
- Architectural competitions: 25

b) International:-Nil

26. Student profile programme/course wise

Name of the Course/ Programme	Acad-emic year	Application received	selected	Enrolled		Passing percentage
				Male	Female	
UG						
	2012-13	Admission process is as per the rules and regulation of MASA- CAP	35	13	22	Currently in 5 th year Arch.
	2013-14	Admission process is as per the rules and regulation of MASA- CAP	41	14	27	Currently in 4 th year Arch.
	2014-15	Admission process is as per the rules and regulation of MASA- CAP	40	17	23	Currently in 3 rd year Arch.
	2015-16	Admission process is as per the rules and regulation of	40	11	29	Currently in 2 nd year Arch.

		MASA- CAP				
	2016-17	Admission process is as per the rules and regulation of DTE	40	13	27	Currently in 1 st year Arch.

27. Diversity of Students

Name of the Course	Academic Year	% of students from the same state	% of students from other states	% of students from abroad
UG	2012-13	97.5	2.5	0
	2013-14	100	0	0
	2014-15	100	0	0
	2015-16	97.5	2.5	0
	2016-17	100	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defenceservices, etc.? :

Academic Year	2015-16	2014-15	2013-14	2012-13
Gate	1	--	--	--
Others(GRE/TOEFL)	1	--	1	2

29. Student progression

Student progression	Against % Enrolled			
Academic Year	2015-16	2014-15	2013-14	2012-13
UG to PG	--	05	12	02
Employed Campus selection Other than campus recruitment	27	16	15	13
Entrepreneurship/Self-employment	01	03	05	02

30. Details of Infrastructural facilities

Laboratory Space (3):	185.72 sq.m
Studios (6)	675.0 sq. m
Class – rooms (2)	113.98 sq. m
Lecture Theatre (2)	133.88 sq.m
Departmental Library (1)	174.75 sq.m
H.O.D. Office (1)	24 sq.m
LCD Projector	---
Overhead Projector	3

Video CDs	67
Printed Charts	0
PCs	51
Networking & Leased Line	1Gbps
Internet facility	Available

Library

Departmental Library (Coordinator: **Prof. S.R. Borawake, Mr.Chetan Bharambe**)

Category of Books	Available
Total numbers	2974
Ref. Books	1798
Text Books	1151
Hand Books	25
Journal National	16 + 35 e-journals (ASCE)
Technical Papers	5 Proceedings
IS Codes	275

- CDs - 14
- Catalogues - 8
- Project Reports-822
- Magazines-16
- Internet facilities for Staff & Students – Yes
- WI-FI facility is given -- No
- Class rooms with ICT facility-Yes
- Classrooms-2

Laboratories

Sr.No.	Name of Laboratory	Major Equipment
1	Model making lab	ZODIAC Cut, curve, create machine
2	Environmental lab	Infrared Temp. Gun Model MTX-2 Distance Meter BOSCH Model DLE-40 Lux Meter Taiwan Model LX-101/A Digital Barometer with Altimeter Model AL-7010, Digital Anemometer Lutron Model AM-4205/A
3	Computer lab	Computers-40, Printer & scanner-1

31. Number of students receiving financial assistance from College, University, government or other agencies

Agency	2015-16	2014-15	2013-14	2012-13
Government	17	13	29	49

Number of students receiving financial assistance

Aca. Yr.	Scholarship and freeship	EBC	STC	PTC	Handicap	Minority	Central sector
2012-13	11	9	NA	NA	-	28	01
2013-14	12	-	NA	NA	-	16	01
2014-15	9	-	NA	NA	-	3	01
2015-16	5	-	NA	NA	-	11	01

32. Details on student enrichment programmes (special lectures /workshops / seminars) with external experts

Count of enrichment programmes organized for students	2015-16	2014-15	2013-14	2012-13
Guest lecturers/workshops	6	2	3	3
Industrial visits	17	13	6	7
Internship	32	28	24	57

Note: Internship is the part of the course.

33. Teaching methods adopted to improve student learning

- Practical exposure
- Continuous assessment
- Field / site visits and case studies
- Interaction with professional expertise
- One to one interaction of teacher and student
- Correspondence and feedback to parents
- Adopting various information tools

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Activities at Orphanage - Date: 13th And 14th Sept. 2014

13th Sept. 2014-Celebration of the NASA day included the visit at the Orphanage at Beed bypass, Bhagwaan-Baba Prathamik Shala, Yogeshwari Balakashram. The activity carried out at the orphanage was Drawing competition held in presence of the college staff and the voluntarily present students. The competitions winners and all the students in the orphanage were gifted with basic drawing stationary and sweets.

Accompanying Staff: Prof. Swapna Dhavale, Prof. Leena Aphale & Prof. Tanmayee Panse.

On 14th Sept 2014.-Students visited the historical monuments and all important building premises of our city –Aurangabad. The activity was conducted from 11:30 am to 5:00 pm. The students' propagated the importance of keeping the premises of these historical monuments clean to the visitors.

At Institute Level we have a NSS cell, Students and Staff Participate in Various NSS activities.

Environment Care

Date : 5th August 2016.

Students of architecture (II year A&B section) went on a one day trip to Bhangasi Mata Garh. Staff Coordinators: Prof. Pranita Pranjale and Prof. Leena Aphale. In this trip the nature's activity like sowing seeds of various trees and plants was carried out, which taught and encouraged them to save our environment.

World Architecture Week Celebration

Blood Donation: 2nd Oct.2016- The students participated in blood donation camp organized by IIA, Aurangabad chapter in celebration of World Architecture Week.

Heritage Walk: 3rd Oct.2016-All the students and faculty participated in Heritage Walk to make people aware of our heritage and their conservation.

35. SWOC analysis of the department and future plan **Strength:**

- All the senior faculty members in the department are fully dedicated and motivated teachers. They always extend full cooperation to the college and administration. Whenever any events (like ZONASA, QIP programmes, Seminars, etc.) are held from time to time. Our library, college premises, teaching environment is extremely good.

 Weakness

- Need to improve research and development in terms of funded projects

 Opportunities

- Consultancy strengthening
- Strategic alliance with leading Architectural and Infrastructural agencies

 Challenges

- Mushrooming of Architecture Colleges
- Student aptitude improvement
- Adoptability of good technological designs.

Road Map/Future plan

- Educational growth for higher research and development.
- Sustainability designing concept
- Approach towards culture and Architecture should go hand in hand.

EVALUATIVE REPORT OF THE DEPARTMENTS**Department of Master of Computer Applications**

1. **Name of the department:** Master of Computer Applications
2. **Year of Establishment:** 2008-09
3. **Names of Programmes offered:**

Name of the program	Year of Establishment
Master of Computer Applications	2008

4. **Names of Interdisciplinary courses and the departments/units involved:** Not Applicable
5. **Annual/ semester/choice based credit system (Programme wise):**

Name of the program	Evaluation System
Master of Computer Applications	Choice Based Credit System

6. **Participation of the department in the courses offered by other departments:**

Sr. No.	Name of Course	Department
1	Infosys Connect Programme	CSE

7. **Courses in collaboration with other universities, industries, foreign institutions, etc. :** NA
8. **Details of courses/programmes discontinued (if any) with reasons:** NA
9. **Number of teaching posts:**

Sr. No.	Post	Sanctioned	Filled
1.	Professor	01	00
2.	Associate Professor	03	00
3.	Assistant Professor	16	15
Total		20	15

10. Faculty profile with name, qualification, designation, specialization,(D.Sc./D.Litt./Ph.D./ M. Phil. etc.)

Sr.No	Name of the Faculty	Qualification	Designation	Specialization	Experience (yrs.)				
					Industry	Teaching	Total	Research	students Guided in last
1	Dr. M. H. Kondekar	PhD, M.PhilMCA	Assistant Professor	Image Processing	03	14	17	00	NA
2	Mrs.S. S. Savant	MPhil MCA	Assistant Professor	Image Processing	00	16	16	00	NA
3	P. L. Chintal	MCA	Assistant Professor	Cyber Law & Security	2.5	14	16.5	00	NA
4	Mrs.V. A. Bhuyar	MCA	Assistant Professor	RDBMS,D WDM	00	12	12	00	NA
5	Dr. V. V. Shaga	Ph.D, MCA	Assistant Professor	SE	1.5	8	9.5	00	NA
6	Mr.A. R. Mudiraj	MCA	Assistant Professor	ERP	00	9.10	9.10	00	NA
7	Mrs. R. J. Bhakkad	MCA	Assistant Professor	Cryptography	00	6.9	6.9	00	NA
8	Mr,S. Sayyad	MCA	Assistant Professor	Big Data Analysis	00	05	05	00	NA
9	Mr.A. Shaikh	MCA MPhil	Assistant Professor	Networking	03	13	16	00	NA
10	Ms. S. D. Thorat	MCA	Assistant Professor	RDBMS, DWDM,	00	09	09	00	NA
11	Ms. S. S. Kute	MCA	Assistant Professor	Brain computer Interface	00	5.11	5.11	00	NA

12	Ms. A S. Pisote	MCA	Assistant Professor	CD	00	07	07	00	NA
13	Mr. L. K. Shinde	MCA	Assistant Professor	OOAD	00	3.8	3.8	00	NA
14	Ms. SapnaChudhari	MCA	Assistant Professor	Java, Android	00	02	02	00	NA
15	Mr. Suresh Bhavar	MCA	Assistant Professor	LOS	04	02	06	00	NA

LOS: Linux Operating System

OOAD: Object Oriented Analysis and Design

RDBMS: Relational Database Management System

ERP: Enterprise Resource Planning

DWDM: Data Warehousing and Data Mining

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):

Sr.No	Academic Year	Sanctioned Intake	Faculty Strength	Student Teacher Ratio
1	2016-17	60	15	15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Academic support staff	Sanctioned by Management	Filled
Technical staff	1	0
Administrative staff	1	0

15. Qualifications of teaching faculty with DSC/D.Litt./Ph.D./M.Phil./PG./MASLP

Sr. No.	Qualification	Number
1	PhD	02

2	M.Phil	03
3	PG	10

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sr. No.	Description	Funding Agency
1	Aakash Center for the Aakash for Education Project received 246 Aakash Tablets.	NMEICT under MHRD, New Delhi and IIT Bombay

18. Research Centre /facility recognized by the University: Nil

19. Publications: Publication per faculty

Sr. No.	Name of Faculty	International Journal	National Journal	International Conference	National Conference	Total	Books Edited	Impact Factor
1	Dr. M. H. Kondekar	5	1	1	7	14	--	--
2	S. S. Savant	6	1	4	1	12	--	--
3	P. L. Chintal	3	0	1	1	5	--	--
4	V. A. Bhuyar	2	0	2	1	5	--	--
5	Dr. V. V. Shaga	2	1	2	0	5	--	--
6	A. R. Mudiraj	5	0	2	1	8	--	--
7.	R. J. Bhakkad	2	0	2	0	4	--	--
8	S. S. Sayyad	7	0	0	0	7	--	--
9	ShaikhParvez	1	1	1	4	7	--	--

10	A. R. Chitte	0	0	3	1	4	--	--
11	S. D. Thorat	5	0	3	0	8	--	--
12	S. S. Kute	3	0	2	0	5	--	--
13	A S. Pisote	0	0	1	1	2	--	--
14	L. K. Shinde	1	0	0	1	2	--	--
15	Dr. M. A. Joshi	6	0	4	2	12	--	--
16	Other Faculties (Who Left Department)					19	--	--

20. Areas of consultancy and income generated:

Sr. No.	Name of Student	Class	Title of project	Name of industry	Year
1	Jawed Shaikh	TY MCA	Touch Rugby	Touch Ruby Association-India	2016
2	Amol Gaikwad	TY MCA	V-Lab	IIT,Bombay	2016
3	Kaustubh Khadke	TY MCA	Clean India-An Android App	Municipal Corporation, Aurangabad	2015
4.	Jawed Shaikh	TY MCA	Catering Services	Namrata Caters Aurangabad	2015
5.	Shaikh Shahbaz	TYMCA	Rural Development Through Technology	Sterlite Technologies Pvt Ltd.	2014
6.	Yogesh Lakhole	TYMCA	Android App (Birth Defect Lite)	Children Surgical Hospital	2014
7.	Yogesh Lakhole	TYMCA	Gate Entry System	Yeshshree Press Comps Pvt	2014

8.	Rameshwar Warade Snehal Chaudhary	TYMCA	MIT Hospital Management Project- (PALASH)	MIT Hospital	2013
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Faculty Participation

Sr. No.	Name of Faculty	Nature of Work	Details	Remark
1.	Dr. M.H Kondekar, Vikrant Shaga	Website Development	www.indiatouch.org	Touch Rugby Association India
2.	Vikrant Shaga , Amar Mudiraj	Software Development	Automation Software for Catering Services	Namrata Caters Aurangabad
3.	Dr.Madhuri Joshi	An Android App	Clean India- An Android App	Municipal Cooperation, Aurangabad
4.	Prashant Chintal	MIT- Hospital Management	MIT Hospital Management software-PALASH	MIT-Hospital
5.	Dr.Madhuri Joshi	Web Development	V-Lab Development	IIT,Bombay
6.	Dr. Vikrant Shaga	An Android App	Children Surgical	Padiatriacian
7.	Dr.Chitra Desai, Prashant Chintal, Dr.Vikrant Shaga	An android App	Rural Development Through Technology	Sterlite Technologies Pvt Ltd.

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:

Sr. No.	Name of the Faculty	Name of Professional Body
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1.	Dr.M.H.Kondekar	International Association of Computer Science & IT, Singapore
		Advisory Board Member, BIOINFO Computer Engineering
		International Association of Engineers
2.	Shubhashree Savant	Computer Society of India
		International Association of Engineers
3.	Vrushali Bhuyar	Computer Science Teachers Association
4.	Prashant Chintal	Computer Society of India
		Editorial Board Member – BioInfo Journal
		International Association of Engineers
5.	Vikrant Shaga	Computer Society of India
		International Association of Engineers
		Computer Science Teachers Association
6.	Amar Mudiraj	Computer Society of India
		International Association of Computer Science and Information Technology
		International Association of Engineers
		Association of Computing Machine
7.	Rupali Bhakkad	Computer Science Teachers Association
8.	Shaikh Parwez	International Association of Engineers
9.	Sayyad Samee	Computer Science Teachers Association
10.	Seema Kute	Computer Science Teachers Association
		International Association of Computer Science and Information Technology
		International Association of Engineers
11.	Surabhi Thorat	Computer Science Teachers Association
12.	Amol Chitte	Computer Science Teachers Association
13.	Anita Pisote	International Association of Engineers
14.	Laxmikant Shinde	International Association of Engineers

15.	Dr.Madhuri Joshi	Institution of Electronics and Telecommunication Engineers
		International Association of Engineers
		International Association of Computer Science and Information Technology
		Computer Science Teachers Association(Senior Member)

22. Student projects

- a. Percentage of students who have done in-house projects including inter departmental (I)
- b. Percentage of students placed for projects in organizations outside the institution (O)

Course	2012-13		2013-14		2014-15		2015-16		2016-17	
MCA TY	I	O	I	O	I	O	I	O	I	O
	100	100	100(2)	100	100(4)	100	100(1)	100	100(1)	100
MCA SY	I	O	I	O	I	O	I	O	I	O
	100	0	100	0	100	0	100	0	100	0

23. Awards/ Recognitions received by faculty and students:**a) Awards / Recognitions received by faculty**

1. Prof. Rupali Bhakkad has been completed certification in RHCE (Red Hat Certified Engineer) in 30th Aug 2010.
2. Prof AmolChitte is certified RHCE (Red had certified Engineer 130038120, Version 6.0) Mar 2013.
3. Prof. Anita Pisote became the top performer in National Level FDP conducted by IIT Bombay and AICTE in Aug-2016.
4. Suresh Bhawar Completed Certification in RedHat Security Specialist-2013.
5. Suresh Bhawar Completed Certification in RedHat Security Network Services-2013.
6. Suresh Bhawar Completed Certification in RedHat Certified Engineer-2012.

b) Awards / Recognition received by student

AY	Awards	Awarded
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2010-2011	04	• Mohit Jain won 2nd Prize in the Tatwa-Programming ka Master Mind event at Dr.B.A.M.U. • Mohit Jain was runner up in the Code Zone event at Hi-Tech Engg, Aurangabad.
2012-2013	16	• Ashish Kulkarni won check of Rs. 50000 /- and Anoop Kulkarni won the Tablet in “AGST” State Level Scolership Competition • Nandkishor Misal won 2nd Prize in the Arm Wrestling Competition at MIT (E), Aurangabad. • Nikita Vikhona won 2nd Prize in the event Debet Competition at MIT (E). • Anuvijaya won 2nd prize in the event Teshshtra-Movie Making Competition at M.G.M., Aurangabad • Rohit Anand won 3rd prize in the event Wall Paper Competition at Barinarayan Barwale Mahavidyalaya.
2014-2015	02	• Nikhil Chaudhari won 1st prize in the event Blind C Competition at Dr. B.A.M.U.
2015-2016	01	• Shailesh Wagh has been awarded Bronze medal in senior men's-under 30 year –team. • Amit Garge received Smita Ushir Memorial Award (Univeristy Topper)
2016-2017	01	• Priya Suste Participated in International Volley Ball Competetion Held At Goa during 27-02-2017 to 07-03-2017

University Rankers MCA Department

Sr.No	Year	Name	Rank
1.	2012-13	Krishna Pandurang Shrikhande	I
2.		Priya Bapusaheb Pandit	II
3.	2013-14	Ankita Arun Sharma	I
4.		Poonam Jagannath Jankar	II
5.		Gajanan Bapurao Joshi	III
6.	2014-15	Nilesh Kalyanrao Kajale	I
7.		Ashwini Santoshrao Mhaske	II
8.		Minal Rajesh Khandelwal	III
9.	2015-16	Amit Rajendra Garge	I
10.		Sonali Sanja Somase	II
11.		Damini Pradipsing Gour	III

24. List of eminent academicians and scientists/ visitors to the department

Sr. No.	Name of the Delegate	Topic	Year
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1	Dr. Sameer Sahastrabuddhe, Senior Project Research Scientist Dept of CSE, IIT Bombay, Powai, Mumbai	3-D Animation using Blender	2017
2	Dr. Mukta Dhopeswarkar, Assistant Professor, Department of Computer Science & IT ,Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	DBMS, Neural Network, Artificial Intelligence	
3	Dr. Mansi Baheti, Assistant Professor, Department of Computer Science & IT ,Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	HCI, Speech Recognition	
4	Dr. Mebel Farnandis, Dean English Department, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Communication Skill and Professional Ethics	2016
5	Dr. B.A. Chopade, Hon. Vice Chancellor, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Bio Informatics	2015
6	Dr. K.V.Kale, Director, BCUD, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Remote Sensing	
7	Dr. Maya Ingle, Professor & Senior System Analyst, School of Computer Science and IT, D.A.V.V., Khandwa Road, Indore (M.P.) INDIA	Natural language Processing	
8	Dr. Mullur Pushpalata, Professor, Department of Computer Science, University of Mysore, India	Big Data Analytics	
9	Dr. Vijay Chaurasia, Assistant Professor, Deptt. of Electronics & Comm. Engg. Co-ordinator, Industry Institute Interaction Cell & Research Progress Council MIET, Gondia	Image Processing	
10	Dr. R.R. Deshmukh, Head, Department of Computer Science & IT ,Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Human Computer Interaction	
11	Dr. Ulhas Shinde, Dean, Engineering and Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Software Engineering	

12	Dr. Bharti Gawali, Professor ,Department of Computer Science & IT ,Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Speech Theraphy	2014
13	Mr. Madhusudan Jathar, Head, Security and Electronic Support Lab,RRCAT, Dept of Automic Energy, Indore,MP,INDIA	Embedded Systems	
14	Dr. R.R. Manza, Assistant Professor, Department of Computer Science & IT ,Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Image Processing	

25. Seminars/ Conferences/Workshops organized and the source offunding

a) Conference: -

Year	Seminars Conferences/ Workshops	Title	Date	Funding Agency
2015	National Conference	NCICA-2015	23 & 24 Jan 2015	DRDO (Rs. 50000)

Workshops/STTP

Sr. No	Name of STTP	Funded by	Date	No of Participation	Funding Utilized
1.	Database Management System	MHRD GOI and IIT Bombay	21-31 May 2013	75	2,20,826/
2.	Introduction to Research Methodologies	MHRD GOI and IIT Bombay	25 June to 04 July- 2012	45	1,28,575/-
3.	Design and Algorithm	MHRD GOI and IIT Kharag.	25th to 30th May 2015	39	1,09,844/-
4.	Cyber Security	MHRD GOI and IIT Bombay	10-20 July 2014	22	1,17,095/-
5.	Computer Programming	MHRD GOI and IIT Bombay	20 May-21 June 2014	34	1,04,315/-
6.	Aakash for Education for	MHRD GOI and	10 to 11 Nov 2012	47	246 Tab Received#

	Teachers	IIT Bombay			
7.	Aakash Android Application Programming Workshop for Students	MHRD GOI and IIT Bombay	23-24 & 03-04 March 2013	66	17,000/-
Total Fund Utilized under STTP and Workshops					6,97,655/-
# each tab costing approx Rs. 3200/- & Total cost of tablets is 7,87,200/-					

Year	Seminars Conferences/ Workshops	Title	Date	No of Participants	Funds Received
2016-17	Technical Event	Zidnyasa	21 Jan 2017	302	5,000/-
2015-16	Technical Event	Zidnyasa	13 Feb 2016	147	10,000/-
2014-15	Technical Event	Zidnyasa	20 Feb 2015	264	25,000/-
2013-14	Technical Event	Zidnyasa	20 Feb 2014	82	10,000/-

26. Student profile programme/course wise

Year	Name Of the Course	Applications Received	Selected	Enrolled		Passing Percentage
				Male	Female	
2012-13	FYMCA	179	179	130	49	82.24
	SYMCA	113	113	78	35	92.79
	TYMCA	52	52	35	17	96.15
2013-14	FYMCA	82	82	53	29	78.87
	SYMCA	208	208	144	64	94.52
	TYMCA	110	110	72	38	96.26
2014-15	FYMCA	34	34	20	14	87.05
	SYMCA	150	150	84	66	69.67
	TYMCA	190	190	131	59	90.15
2015-16	FYMCA	51	51	21	30	100
	SYMCA	32	32	20	12	83.33
	TYMCA	135	135	71	64	87.40
2016-17	FYMCA	43	43	20	23	Appeared
	SYMCA	50	50	20	30	Appeared
	TYMCA	32	32	20	12	Appeared

27. Diversity of Students

Name of the Course	Academic Year	% of students from the same state	% of students from other states	% of students from abroad
PG	2012-13	100	00	00
	2013-14	100	00	00
	2014-15	100	00	00
	2015-16	100	00	00
	2016-17	100	00	00

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.? :

Sr. No.	Name of The Student	Name of Exam Qualified	Year of Passing
1.	Abhijit Reswal	GATE	2015
2.	Swapnil Waghmare	M.Phil	2015
3.	Vaibhav Khamgaonkar	PET	2012

29. Student progression

Student progression

Sr.No.	Student Progression	Number
1.	PG to M.Phil.	01
2.	PG to Ph.D.	Nil
3.	Ph.D. to Post-Doctoral	Nil
4.	Employed	Campus Selection 04 Other Than Campus Recruitment 150
5.	Entrepreneurship /Self-employment	06

30. Details of Infrastructural facilities

Laboratory Space (06):	385 sq.m
Class – rooms (1)	90 sq. m
Lecture Theatre (1)	90 sq.m
Departmental Library (1)	15.13sq.m
H.O.D. Office (1)	51 sq.m
LCD Projector	03
Printed Charts	09
PCs/ Printer with Scanner/ Printer without Scanner	135/1/2

Networking & Leased Line	1GBPS
Internet facility	Available

Library

Departmental Library

Category of Books	Available
Total numbers	437
Ref. Books	245
Text Books	437
Hand Books	Nil
Journal National	Nil
Technical Papers	Nil
IS Codes	Nil

Laboratory Details

Sr. No.	Laboratory	Major Equipments(PC's/Printer With Scanner /Printer without Scanner/LCD Projector)	No of PC
1.	Open Source Lab	Pentium (R), Dual-Core CPU, E500 @ 2.93 GHz. 2GB RAM, PAE, 320GB HDD, Inbuilt Speakers, TFT Monitor, Optical Mouse and Multimedia Keyboard	15
2.	Network Security Lab	Pentium (R), Dual-Core CPU, E500 @ 2.93 GHz. 2GB RAM, PAE, 320GB HDD, Inbuilt Speakers, TFT Monitor, Optical Mouse and Multimedia Keyboard	15
3.	Database Lab	Pentium (R), Core 2 Duo CPU, E500 @ 2.93 GHz. 2GB RAM, PAE, 320GB HDD, Inbuilt Speakers, TFT Monitor, Optical Mouse and Multimedia Keyboard	15
4.	Programming Lab	Pentium (R), Core 2 Duo CPU, E500 @ 2.93 GHz. 2GB RAM, PAE, 320GB HDD, Inbuilt Speakers, TFT Monitor, Optical Mouse and Multimedia Keyboard	15
5.	Project Development Lab	Pentium (R), Dual-Core CPU, E500 @ 2.93 GHz. 2GB RAM, PAE, 320GB HDD, Inbuilt Speakers, TFT Monitor, Optical Mouse and Multimedia Keyboard	15
6.	Object Oriented Programming Lab	Pentium (R), Dual-Core CPU, E500 @ 2.93 GHz. 2GB RAM, PAE, 320GB HDD, Inbuilt Speakers, TFT Monitor, Optical Mouse and Multimedia Keyboard	60
Total		PC's=135, Printer With Scanner=1, Printer without Scanner=2, LCD Projector =03	

31. Number of students receiving financial assistance from College, University, government or other agencies

Agency	2015-16	2014-15	2013-14	2012-13
Government	142	280	276	219

Number of students receiving financial assistance

32. Details on student enrichment programmes (special lectures

Year	Sr.No.	Scholarship and freeship	EBC	STC	PTC	Handicap	Minority (State/Central)	Central sector
2012-13	FYMCA	23/45	47	0	0	0	0	0
	SYMCA	10/21	43	0	0	0	0	0
	TYMCA	5/14	11	0	0	0	0	0
2013-14	FYMCA	12/17	33	0	0	0	2	0
	SYMCA	18/47	60	0	0	0	6	0
	TYMCA	13/22	42	0	0	0	4	0
2014-15	FYMCA	15/6	43	0	0	0	0	0
	SYMCA	32/34	32	0	0	0	3	0
	TYMCA	20/37	51	0	0	0	7	0
2015-16	FYMCA	7/8	23	0	0	0	0	0
	SYMCA	4/7	38	0	0	0	3	0
	TYMCA	27/25	23	0	0	0	0	0
2016-17	FYMCA	11/0	28	0	0	0	0	0
	SYMCA	15/0	13	0	0	0	0	0
	TYMCA	12/0	16	0	0	0	0	0

/workshops / seminars) with external experts

Sr. No.	Event	2014-15	2015-16	2016-17	Total
1	Expert Talks	4	8	8	20
2	Spoken Tutorial	11	19	9	39

3	Presentation by Students	2	0	0	02
4	Workshop(s) for students	2	1	1	04
5	Seminars	1	0	4	05

33. Teaching methods adopted to improve student learning

At the forefront of the commencement of classes, the Teaching program is channelled through proper planning of academic activity well in advance through Academic calendar by the faculties for their respective subjects. This is in turn made available in their course file. For the betterment of teaching, faculties' emphasis on pedagogical methods and various instructional methods such as:-

- Mini Projects
- NPTEL Video Lectures
- Effective Use of Virtual Lab
- Experts Talks
- Moodle Based Learning
- Use of Multimedia Library
- Industrial Visits
- Seminars on various topics
- Workshops on Related Topics
- Spoken Tutorial
- Group Discussions
- Tutorial classes per Subject

Apart from this, feedback is collected from students every mid-term. These feedbacks are analysed by head of department for the improvement of teaching and learning methodologies

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr. No.	Nature of Service	Year
1	Tree Plantation	2014-15
2	Donation to NAAM foundation	2015-16
3	Social Awareness Rallies	2015-16
4	Orphange Home Visit	2015-16
5	Safety First Seminar	2013-14
6	CMIA Activity- PhofalaVillage Visit	2014-15
7	ICT in Education for Rural	2013-14

8	Harmony Activity Club	2015-16,16-17
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35. SWOC analysis of the department and future plan

Teaching program is channelled through proper planning of academic activity well in advance through Academic calendar, teaching plan in all subject, portion complete schedule, etc. HOD co-ordinate and control such schedules by regular departmental meetings and through informal feedback from students so that our effort to sustain the quality of education is successful.

- 1 Faculty from professional fields and higher learning centres are invited regularly for guest lectures.
- 2 Faculties are encouraged to participate in seminars, present papers in Conferences, attend workshops regarding syllabus, for quality improvement.
- 3 Dedicated placement cell.
- 4 Quality enhancement is taken care by various methods such as regular class tests, presentations, industrial visit, seminars, etc.

Strength:

- Peaceful Environment and good infrastructure.
- Well qualified, dedicated and diversified Faculty with specialization in different areas.
- Student centered and activity based teaching and learning.
- Library facilities provided to the students.

Weakness:

- Faculty Knowledge development as per industry need
- Rapid change in technologies
- Competition in higher education for similar type of courses

Opportunities:

- Grow with fast evolving technology
- Plan the different courses for the student's betterment ship and their career like offering certified courses and other value based programs.
- Faculty and Students enrollment for International Certifications.

Challenges:

- Up-gradation of laboratory facilities
- Cope-up with the rapid advances taking place in all the disciplines on continuous basis among alumni, faculty and outgoing students
- Be globally competitive in engineering education, services and research.

Future plans:

- Setting up of Ph.D Reserach center for the department.
- Conduct the International Conference.
- To motivate the staff members for research

Declaration by the Head of the Institution

 G.S. Mandal's
**MARATHWADA INSTITUTE OF TECHNOLOGY
AURANGABAD**
Approved by All India Council for Technical Education (AICTE), New Delhi
Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

Ref. No.: MIT/ENGG/2016-17/NAAC/ 01 Date: 30.03.2017

Declaration by the Head of the Institution

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

This Self-Study Report (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 provide in this SSR during the peer team visit.

Place : Aurangabad
Date : 30th March, 2017


(Dr. N. G. Patil)
PRINCIPAL
Marathwada Institute of Technology,
Aurangabad-431010



MIT Campus, Beed Bypass Road, Aurangabad – 431 010 (M.S.); India.
Phone (Principal): (0240) 2375111, (Office): 2375375, 2375155; Fax: (0240) 2376154.
E-mail: principal.mite@mit.asia; nilesh.patil@mit.asia Website: www.engg.mit.asia

Certificate of Compliance



G.S. Mandal's
MARATHWADA INSTITUTE OF TECHNOLOGY
AURANGABAD
 Approved by All India Council for Technical Education (AICTE), New Delhi
 Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

Ref. No.: MIT/ENGG/2016-17/NAAC/ 02 Date: 30.03.2017

Certificate of Compliance

This is to certify that **Gramaudyogik Shikshan Mandal's Marathwada Institute of Technology, Aurangabad** fulfils all norms

1. Stipulated by **Dr. Babasaheb Ambedkar Marathwada University, Aurangabad** and
2. Regulatory Council **All India Council for Technical Education, New Delhi** and **Council of Architecture, New Delhi** and
3. The affiliation and recognition is valid as on date.

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

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

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

Place : Aurangabad
Date : 30th March, 2017


 (Dr. N. G. Patil)
PRINCIPAL
 Marathwada Institute of Technology,
 Aurangabad-431010



MIT Campus, Beed Bypass Road, Aurangabad – 431 010 (M.S.); India.
 Phone (Principal): (0240) 2375111, (Office): 2375375, 2375155; Fax: (0240) 2376154.
 E-mail: principal.mite@mit.asia; nilesh.patil@mit.asia Website: www.engg.mit.asia

ANNEXURE

Annexure-I	University Affiliation Letter for AY 2016-17
Annexure-II	Translated (in English) letter of affiliation of all UG and PG programs
Annexure-III	DTE, Maharashtra First Approval Letter for AY 1984-85
Annexure-IV	AICTE, New Delhi- First Approval Letter for AY 1994-95
Annexure-V	AICTE, New Delhi- Latest Approval Letter for AY 2016-17
Annexure-VI	Council of Architecture, New Delhi- Latest Approval Letter
Annexure-VII	Recognition as Research Center in Mechanical Engineering by Affiliating University
Annexure-VIII	NBA Accreditation Proof (Dated- July 2008)
Annexure-IX	ISO 9001:2000 Certificate
Annexure-X	Master Plan of MIT, Aurangabad
Annexure-XI	ISTE Certificate

Annexure- I (i)

University Affiliation Letter for AY 2016-17

डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ,
औरंगाबाद - ४३१ ००४ (महाराष्ट्र) (भारत)
(नॅक समिती तर्फे 'अ' दर्जा प्राप्त)

दूरध्वनी कार्यालय : (०२४०)२४०३११८/२४०३११९
कुलसचिव : (का) २४०३३३३
(नि) २४००२०३, २४०३३१०
फॅक्स : (०२४०) २४०३३३५
Website : www.bamu.net
e-mail : bcd.office@bamu.ac.in



विद्यापीठ परिसर,
औरंगाबाद - ४३१ ००४
(महाराष्ट्र) (भारत)

संदर्भ क्रमांक : शैक्ष/संलग्न/एबीएस/२०१६-१७/ 11191-11200 दिनांक : 28-06-2016

प्रति,
मा. प्राचार्य,
[EA63584] मराठवाडा इन्स्टिट्यूट ऑफ टेक्नॉलॉजी, इंजिनियरिंग कॉलेज,
बीड बायपास रोड, सातारा, औरंगाबाद, जि. औरंगाबाद

विषय :- जून २०१६ पासून पदवी / पदव्युत्तर अभ्यासक्रमांचे संलग्नीकरण चालू ठेवणे बाबत.

संदर्भ :- प्रस्ताव क्र. ३०९, ३१० व ३११ अन्वये विद्या परिषदेने घेतलेला निर्णय दि. १ व २ जून २०१६

महोदय/महोदया,

जून २०१६ पासून आपल्या महाविद्यालय संलग्नीकरण चालू ठेवणे बाबत आपल्या अर्जाच्या / प्रस्तावाच्या अनुषंगाने महाविद्यालयास भेट देऊन अहवाल सादर करण्यासाठी संलग्नीकरण समिती निवृत्त करण्यात आली होती.

सादर संलग्नीकरण नुतनीकरण समितीने प्रस्तुत प्रकरणी आपल्या महाविद्यालयास भेट देऊन सादर केलेल्या अहवालावर विद्या परिषदेच्या दि. १ व २ जून २०१६ रोजी झालेल्या बैठकीत विचार होऊन महाराष्ट्र विद्यापीठ कायदा १९९४ कलम ८३ (४) मधील तरतुदीनुसार परिशिष्ट "अ" मध्ये दर्शविलेल्या अभ्यासक्रम व प्रवेश क्षमतेसह अटी व शर्तीच्या अधिन राहून जून पासून पासून एका वर्षाकरीता पदवी / पदव्युत्तर अभ्यासक्रमासाठी संलग्नीकरण चालू ठेवणे / नैसर्गिक वार्षीस मान्यता देण्यात येत आहे.

महाराष्ट्र विद्यापीठ कायदा १९९४ कलम ८३ (४) च्या तरतुदीनुसार विद्या परिषदेचा उपरोक्त निर्णय आपल्यास कळविण्यात येत असून विनंती करण्यात येते की, विद्या परिषदेने संलग्नीकरणाबाबत निर्धारित केलेल्या अटीची पूर्तता तीन महिन्यात करावी व अटीच्या पूर्ततेबाबतचे हमीपत्र विद्यापीठास दि. 12-07-2016 पर्यंत सादर करावे. तसेच या अटीच्या पूर्तते बाबतचा अहवाल दि. 28-09-2016 पूर्वी विद्यापीठास सादर करावा.

विद्यापीठाने निर्धारित केलेल्या प्रपत्र "अ" प्रपत्र "ब" व प्रपत्र "क" नुसार संलग्नीकरण नुतनीकरण समितीच्या अहवालानुसार आपल्या महाविद्यालयात पदवी / पदव्युत्तर अभ्यासक्रमास घालील कोष्टकात दर्शविल्या प्रमाणे गुण प्राप्त झालेले आहेत.

समिती "अ"

पदवी / पदव्युत्तर अभ्यासक्रम	कमाल गुण	एकूण प्राप्त गुण	किमान आवश्यक गुणांची टक्केवारी	एकूण प्राप्त गुणांची टक्केवारी
प्रपत्र "अ"	140	102	55 %	72.86 %
प्रपत्र "ब"	192	169	45 %	88.02 %
प्रपत्र "क" (अभियांत्रिकी/ औपनिर्माणशास्त्र/ वास्तुकला विद्याशाखा) अॅप्लर ऑफ आर्किटेक्चर बी. ई. इन कंप्युटर सायंस अँड इंजिनियरिंग बी. ई. इन इलेक्ट्रॉनिक्स अँड टेलिकॉम्युनिकेशन इंजिनियरिंग बी. ई. इन मेकेनिकल इंजिनियरिंग बी. ई. (मिझिल इंजिनियरिंग) बी. ई. (इन्ट्रोमेशन टेक्नॉलॉजी) बी. ई. इन इलेक्ट्रॉनिक्स अँड कम्प्युटेशन इंजिनियरिंग बी. ई. इलेक्ट्रॉनिक्स अँड कम्प्युटेशन इंजिनियरिंग (सेकंड शिफ्ट)	50	42	45 %	84 %

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Annexure- I (ii)

समिती "ब"

	पदवी / पदव्युत्तर अभ्यासक्रम	कमाल गुण	एकूण प्राप्त गुण	किमान आवश्यक गुणांची टक्केवारी	एकूण प्राप्त गुणांची टक्केवारी
प्रपत्र "अ"	—	140	107	55 %	76.43 %
प्रपत्र "ब"	—	192	171	45 %	89.06 %
प्रपत्र "क"	(अभियांत्रिकी/ औषधनिर्माणशास्त्र/ वास्तुकला विद्याशाखा) बी.ई. इन इलेक्ट्रॉनिक्स अँड इलेक्ट्रॉनिक्स इंजिनियरिंग बी.ई. मेकॅनिकल इंजिनियरिंग (सेकंड शिफ्ट) बी.ई. सिव्हिल इंजिनियरिंग (सेकंड शिफ्ट)	50	42	45 %	84 %
प्रपत्र "क"	(अभियांत्रिकी विद्याशाखा) एम.ई. इन सॉफ्टवेअर इंजिनियरिंग	100	69	45 %	69 %
प्रपत्र "क"	(अभियांत्रिकी विद्याशाखा) एम.ई. इन कम्प्युटर सायन्स अँड इंजिनियरिंग	100	72	45 %	72 %
प्रपत्र "क"	(अभियांत्रिकी विद्याशाखा) एम.ई. इन मेकॅनिकल डिजाइन अँड इंजिनियरिंग	100	71	45 %	71 %

समिती "क"

	पदवी / पदव्युत्तर अभ्यासक्रम	कमाल गुण	एकूण प्राप्त गुण	किमान आवश्यक गुणांची टक्केवारी	एकूण प्राप्त गुणांची टक्केवारी
प्रपत्र "अ"	—	140	108	55 %	77.14 %
प्रपत्र "ब"	—	189	155	45 %	82.01 %
प्रपत्र "क"	(अभियांत्रिकी विद्याशाखा) मास्टर ऑफ कम्प्युटर एप्लीकेशन्स	100	80	45 %	80 %
प्रपत्र "क"	(अभियांत्रिकी विद्याशाखा) एम.ई. इन इलेक्ट्रॉनिक्स अँड इलेक्ट्रॉनिक्स इंजिनियरिंग	100	78	45 %	78 %
प्रपत्र "क"	(अभियांत्रिकी विद्याशाखा) एम.ई. एम्बेडेड सिस्टीम्स	100	80	45 %	80 %
प्रपत्र "क"	(अभियांत्रिकी विद्याशाखा) एम.ई. कम्प्युटेशनल इंजिनियरिंग	100	78	45 %	78 %
प्रपत्र "क"	(अभियांत्रिकी विद्याशाखा) एम.ई. मॅन्युफॅक्चरिंग प्रोसेस इंजिनियरिंग	100	94	45 %	94 %
प्रपत्र "क"	(अभियांत्रिकी विद्याशाखा) एम.ई. (ऑटोमोबाइल)	100	80	45 %	80 %
प्रपत्र "क"	(अभियांत्रिकी विद्याशाखा) एम.ई. स्ट्रक्चरल इंजीनियरिंग	100	81	45 %	81 %

प्रस्तुत प्रकरणी आपणाय असलेली कळविण्यात येते की, यापूर्वी विद्यापीठाने दिलेल्या वेगवेगळ्या आदेशांची पूर्तता व अटीच्या अधिन राहून पदवी / पदव्युत्तर अभ्यासक्रमासाठी हे संलग्नकरण देण्यात येत आहे, याची कृपया नोंद घ्यावी.

अभ्यासक्रम व प्रवेश क्षमतेबाबत माहिती (परिशिष्ट "अ"):

अ.क्र.	पदवी व पदव्युत्तर अभ्यासक्रमाचे नाव	वर्ष	वार्षिक संलग्नित विषयांची नावे	वार्षिक संलग्नित अभ्यासक्रमा करीता निर्धारित केलेली तुकडी निहाय प्रवेश क्षमता	प्रस्तुत महाविद्यालयामध्ये कायम संलग्नित असलेल्या अभ्यासक्रमाची नावे	कायम संलग्नित असलेल्या अभ्यासक्रमा करीता निर्धारित केलेली तुकडी निहाय प्रवेश क्षमता	शेरा
१	२	३	४	५	६	७	८
1	बी. ई. (ईन्फॉर्मेशन टेक्नॉलॉजी)	प्रथम वर्ष	सर्व अनिवार्य विषय	00	--	--	
	बी. ई. (ईन्फॉर्मेशन टेक्नॉलॉजी)	द्वितीय वर्ष	सर्व अनिवार्य विषय	00	--	--	
	बी. ई. (ईन्फॉर्मेशन टेक्नॉलॉजी)	तृतीय वर्ष	सर्व अनिवार्य विषय	60 विद्यार्थी	--	--	
	बी. ई. (ईन्फॉर्मेशन टेक्नॉलॉजी)	चतुर्थ वर्ष	सर्व अनिवार्य विषय	60 विद्यार्थी	--	--	

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Annexure- I (iv)

11	एम.ई. कंप्यूटर सायंस इंजिनियरिंग	प्रथम वर्ष	--	24 विद्यार्थी	--	--
	एम.ई. कंप्यूटर सायंस इंजिनियरिंग	द्वितीय वर्ष	--	24 विद्यार्थी	--	--
12	एम.ई. इन मेकेनिकल हिट पावर इंजिनियरिंग	प्रथम वर्ष	--	18 विद्यार्थी	--	--
	एम.ई. इन मेकेनिकल हिट पावर इंजिनियरिंग	द्वितीय वर्ष	--	18 विद्यार्थी	--	--
13	एम.ई. इन सॉफ्टवेयर इंजिनियरिंग	प्रथम वर्ष	--	1 तुकड़ी	--	--
	एम.ई. इन सॉफ्टवेयर इंजिनियरिंग	द्वितीय वर्ष	--	1 तुकड़ी	--	--
14	एम.ई. मेकेनिकल मॅन्युफॅक्चरींग इंजिनियरिंग	प्रथम वर्ष	--	18 विद्यार्थी	--	--
	एम.ई. मेकेनिकल मॅन्युफॅक्चरींग इंजिनियरिंग	द्वितीय वर्ष	--	18 विद्यार्थी	--	--
15	एम.ई. एम्बेडेड सिस्टीम्स	प्रथम वर्ष	--	24 विद्यार्थी	--	--
	एम.ई. एम्बेडेड सिस्टीम्स	द्वितीय वर्ष	--	24 विद्यार्थी	--	--
16	एम.ई. स्ट्रक्चरल इंजीनियरिंग	प्रथम वर्ष	--	18 विद्यार्थी	--	--
	एम.ई. स्ट्रक्चरल इंजीनियरिंग	द्वितीय वर्ष	--	18 विद्यार्थी	--	--
17	मास्टर ऑफ कॉम्प्युटर एप्लीकेशन	प्रथम वर्ष	--	60 विद्यार्थी	--	--
	मास्टर ऑफ कॉम्प्युटर एप्लीकेशन	द्वितीय वर्ष	--	60 विद्यार्थी	--	--
	मास्टर ऑफ कॉम्प्युटर एप्लीकेशन	तृतीय वर्ष	--	180 विद्यार्थी	--	--
18	एम.ई. (ऑटोमेशन)	प्रथम वर्ष	--	18 विद्यार्थी	--	--
	एम.ई. (ऑटोमेशन)	द्वितीय वर्ष	--	18 विद्यार्थी	--	--
19	एम.ई. इन इलेक्ट्रिकल ड्राईव्हज ऑड कंट्रोल	प्रथम वर्ष	--	18 विद्यार्थी	--	--
	एम.ई. इन इलेक्ट्रिकल ड्राईव्हज ऑड कंट्रोल	द्वितीय वर्ष	--	18 विद्यार्थी	--	--
20	एम.ई. कम्प्युनिकेशन इंजिनियरिंग	प्रथम वर्ष	--	18 विद्यार्थी	--	--
	एम.ई. कम्प्युनिकेशन इंजिनियरिंग	द्वितीय वर्ष	--	18 विद्यार्थी	--	--

बढी :

- 1) नियमित प्राचार्यांची नेमणूक करण्यात यावी.
- 2) नियमित अर्हताधारक अध्यापकांची नेमणूक करण्यात यावी.
- 3) नॅक / पुनर्संस्थापन करण्यात यावे.

समिती "अ"

- 1) Appointment of regular principal.
- 2) University approved faculty to be appointed
- 3) Appointment of regular Librarian

समिती "ब"

- 1) APPROVAL FOR UG AND PG FACULTY TO BE OBTAINED FROM UNIVERSITY
- 2) APPROVED LIBRARIAN TO BE APPOINTED
- 3) SPONSORED RESEARCH TO BE ENHANCED

समिती "क"

- 1) Approval for PF faculty to be obtain from university
- 2) Approved Librarian to be appointed
- 3) Sponsered Research to be Enhanced

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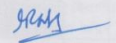
संचालक
महाविद्यालये व विद्यापीठ
विकास मंडळ

Annexure- I (v)

प्रतिलिपी : [परिशिष्ट "अ"]

१. मा. संचालक, (उच्च शिक्षण), महाराष्ट्र राज्य, शिवाजी नगर, पुणे यांना माहितीस्तव अशेषित.
२. मा. संचालक, तंत्र शिक्षण, महाराष्ट्र राज्य, मुंबई.
३. मा. सह संचालक, (उच्च शिक्षण), औरंगाबाद विभाग, औरंगाबाद यांना माहितीस्तव अशेषित.
४. मा. सह संचालक, (तंत्र शिक्षण), देवगिरी महाविद्यालयमंडळ, औरंगाबाद.
५. मा. परीक्षा नियंत्रक, डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद. यांना माहितीस्तव अशेषित.
६. उपकुलसचिव (आरक्षण कक्ष) डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद. यांना माहितीस्तव अशेषित.
७. मा. व्यवस्थापकीय संचालक, महाराष्ट्र ज्ञान मंडळ मर्वा, (MKCL) आय सी. सी. ट्रेड टॉवर, ५ वा मजला, ए चिंग सेनापती बापट मार्ग, पुणे यांना माहितीस्तव अशेषित.
८. अधीक्षक, व्यवसायिक विभाग, (शैक्षणिक विभाग) डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद. यांना माहितीस्तव अशेषित.
९. सहाय्यक अधीक्षक, पात्रता युनिट (शैक्षणिक विभाग) डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद. यांना माहितीस्तव अशेषित.


 संचालक
 महाविद्यालये व विद्यापीठ
 विकास मंडळ

"True Copy"

 Principal
 Marathwada Institute of Technology
 Aurangabad - 431028.

Annexure- II (i)

Translated (in English) letter of affiliation of all UG and PG programs

G:\NAAC Certificate/ NAAC Certificate Letter

Dr. Babasaheb Ambedkar Marathwada University
(NAAC Re-Accredited "A" Grade)

Academic Section (0240) 2403118/2403119
Registrar (Office) 2403334,(R.) 2400203
B.C.U.D. Office 0240-2403124,2403335
Fax (0240) 2403224, 2403334
Telegram BAMUSITY
Web Site www.bamu.net
E-mail bcud.office@bamu.ac.in



UNIVERSITY CAMPUS,
AURANGABAD-431 004
(Maharashtra) (INDIA).

TO WHOM IT MAY CONCERN

This is to certify that G. S. Mandal's, Marathwada Institute of Technology, Aurangabad, Maharashtra is affiliated to the Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra Since 1984 and approved by the AICTE. The following Courses are taught in this college as per approval.

Sr.No.	Name of the Courses[s]	Duration of the Course	Affiliation. Permanent / Temporary	Period of Validity for the year[s]
01	Civil Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
02	Civil Engineering (Second Shift) (UG)	Four Year	Temporary	Academic Year 2016-17
03	Computer Science and Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
04	Electrical and Electronics Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
05	Mechanical Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
06	Mechanical Engineering (Second Shift) (UG)	Four Year	Temporary	Academic Year 2016-17
07	Information Technology (UG)	Four Year	Temporary	Academic Year 2016-17
08	Electronics and Communication Engineering (UG)	Four Year	Temporary	Academic Year 2016-17

46

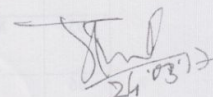
Annexure- II (ii)

G:\NAAC Certificate/ NAAC Certificate Letter

09	Electronics and Telecommunication Engineering (UG)	Four Year	Temporary	Academic Year 2016-17
10	Bachelor of Architecture (UG)	Five Year	Temporary	Academic Year 2016-17
11	Structural Engineering (PG)	Two Year	Temporary	Academic Year 2016-17
12	Computer Science and Engineering (PG)	Two Year	Temporary	Academic Year 2016-17
13	Software Engineering (PG)	Two Year	Temporary	Academic Year 2016-17
14	Embedded Systems (PG)	Two Year	Temporary	Academic Year 2016-17
15	Communication Engineering (PG)	Two Year	Temporary	Academic Year 2016-17
16	Mechanical in Heat Power Engineering (PG)	Two Year	Temporary	Academic Year 2016-17
17	Mechanical Manufacturing Engineering (PG)	Two Year	Temporary	Academic Year 2016-17
18	Automation (PG)	Two Year	Temporary	Academic Year 2016-17
19	Electrical Drives and Control (PG)	Two Year	Temporary	Academic Year 2016-17
20	Master of Computer Applications (PG)	Three Year	Temporary	Academic Year 2016-17

Ref. Acad/Aff/ABL/2016-17/ 41023

"True Copy" Dated : 22-03-2016

Principal
Marathwada Institute of Technology
Aurangabad - 431028.*
*
*
*
AIn Charge Officer
Dr. Babasaheb Ambedkar Marathwada
University, Aurangabad.

Annexure- III (i)
DTE, Maharashtra First Approval Letter for AY 1984-85

Annexure - 11

ANNEXURE - B

No. 10-TU-1084-Si716
 Directorate of Technical
 Education, Maharashtra State,
 Elphinstone Technical H.Sch.,
 3, Mahapalika Marg, Djobitalao
 Post Bag No. 1947,
 Bombay 400001

Date: 23 July 1984.

To
 The Secretary,
 Gramudyogik Shikshan Mandal's
 Marathwada Institute of Technology,
 (Engineering College),
 Aurangabad.

Sub : Permission to start Engineering College catering for Degree
 Courses in Engineering / Technology on "NO GRANT BASIS".

Sir,

With reference to Government letter, Education and
 Employment Department No. CMS/S/5214 dated 21st July 1984
 addressed to you and copy endorsed to this office on the subject
 mentioned above, you are hereby permitted to start the
 Engineering College with 180 intake capacity catering for Degree
 in Engineering from the academic session 1984-85.

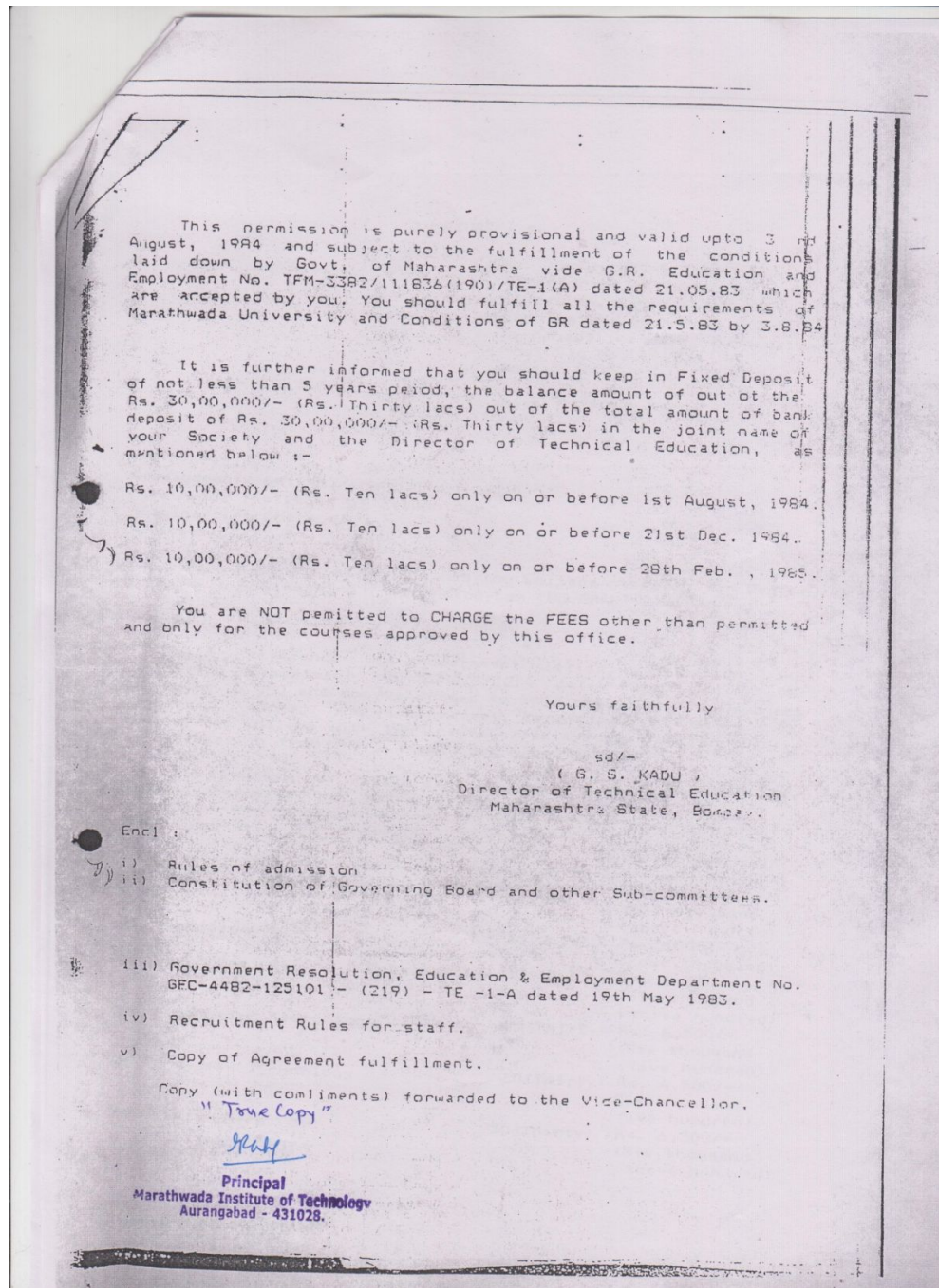
The coursewise intake capacity and the tuition fee per
 student, per year, per course are as under :-

S.No.	Course	Intake	Tuition fee per student per year
01.	Water & Land Management Engg.	30 (Thirty)	Rs. 6300/- (Six thousand three hundred)
02.	Architecture	30 (Thirty)	Rs. 4000/- (Four thousand)
03.	Plant Engineering & Management	30 (Thirty)	Rs. 6,300/- (Six thousand three hundred)
04.	Production Technology	30 (Thirty)	Rs. 6,500/- (Six thousand five hundred)
05.	Computer Technology	30 (Thirty)	Rs. 6,500/- (Six thousand five hundred)
06.	Electronics	30 (Thirty)	Rs. 6,300/- (Six thousand three hundred)

"True Copy"

[Signature]
 Principal
 Marathwada Institute of Technology
 Aurangabad - 431028.

Annexure- III (ii)



Annexure- IV (i)

AICTE, New Delhi- First Approval Letter for AY 1994-95

8.2

अखिल भारतीय
संस्कृतिक शिक्षा परिषद्
ALL INDIA COUNCIL FOR
TECHNICAL EDUCATION
(A STATUTORY BODY OF THE GOVERNMENT OF INDIA)
New Delhi-110 002
Phone: 3326673, 3326681

No.F.P-2/D-111/NC(ED)/93
April 21, 1994

To:
The Secretary,
Education & Employment,
Technical Education Dept.,
Marathwada Engineering Technological Institute,
Bombay - 400 032

Sub: AICTE Approval to Gramodik Shikhsan Sanstha's Marathwada
Institute of Technology, Aurangabad for conduct of
Engineering Degree courses.

Sir,

I am directed to state that on consideration of the recommendations made by the AICTE Task Force for Maharashtra State, the All India Council for Technical Education has accorded conditional approval to the Gramodik Shikhsan Sanstha's Marathwada Institute of Engineering, Aurangabad, Maharashtra to conduct the following full time degree courses for the academic year 1994-95 with annual intake shown against each:

S.No.	Name of the Course	Intake
1.	Production Engg. ✓	45 (Forty Five)
2.	Electronics Engg. ✓	60 (Sixty)
3.	Computer Engg. ✓	60 (Sixty)
4.	Civil Engineering ✓	30 (Thirty)
5.	Mechanical Engg. ✓	60 (Sixty)

The approval is subject to fulfilment of the specific and general conditions given below:

- 1) One Professor and two Assistant Professors must be appointed by 1.1.1995 for each discipline.
- 2) 10% of the faculty must be given opportunity for upgradation of qualifications/professional development.
- 3) Various laboratories must be strengthened with additional equipment.
- 4) A qualified Principal must be appointed as per AICTE norms and guidelines.

The Management including the Governing Body of the Institution shall be constituted and the Chairman shall be appointed as per the guidelines of the AICTE.

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Principal
Marathwada Institute of Technology
Aurangabad - 431028.

Annexure- IV (ii)

(16) No new courses shall be started or an on-going course shall be discontinued by the institution without the prior approval of the AICTE.

(17) The intake in any year shall not be affected without the prior approval of the AICTE.

(18) Adequate funds shall be available with the institution to meet the financial obligations of recurring and non-recurring nature including endowment fund, as prescribed by the AICTE.

(19) All infrastructural, instructional and other facilities shall be provided as per AICTE norms prescribed from time to time.

(10) Teaching and other staff shall be selected according to the procedure, qualifications, experience and pay scales as prescribed by AICTE from time to time, and that they shall be paid full salaries and allowances regularly and in time.

(11) The tuition and other fees shall be charged as prescribed by the State Government within the overall criteria/limits prescribed by the AICTE from time to time.

(12) The institution shall not charge any capitation fee or donation for admission or other higher charges from the students/guardians of the students in any form.

(13) Admissions shall be made on merits and as per the norms and guidelines of the AICTE.

(14) The State Government policies for admissions of SC/ST, other weaker sections of Society etc. shall be followed by the institution.

(15) Institution by virtue of the approval of the AICTE shall not automatically become eligible to receive financial grants or assistance from the Central or State Government.

(16) Institution shall maintain records and books of accounts as prescribed by the Competent authority.

Accounts of the institution shall be audited by an accountant or any agency authorised by the authority and shall be open for inspection by the body authorised by it.

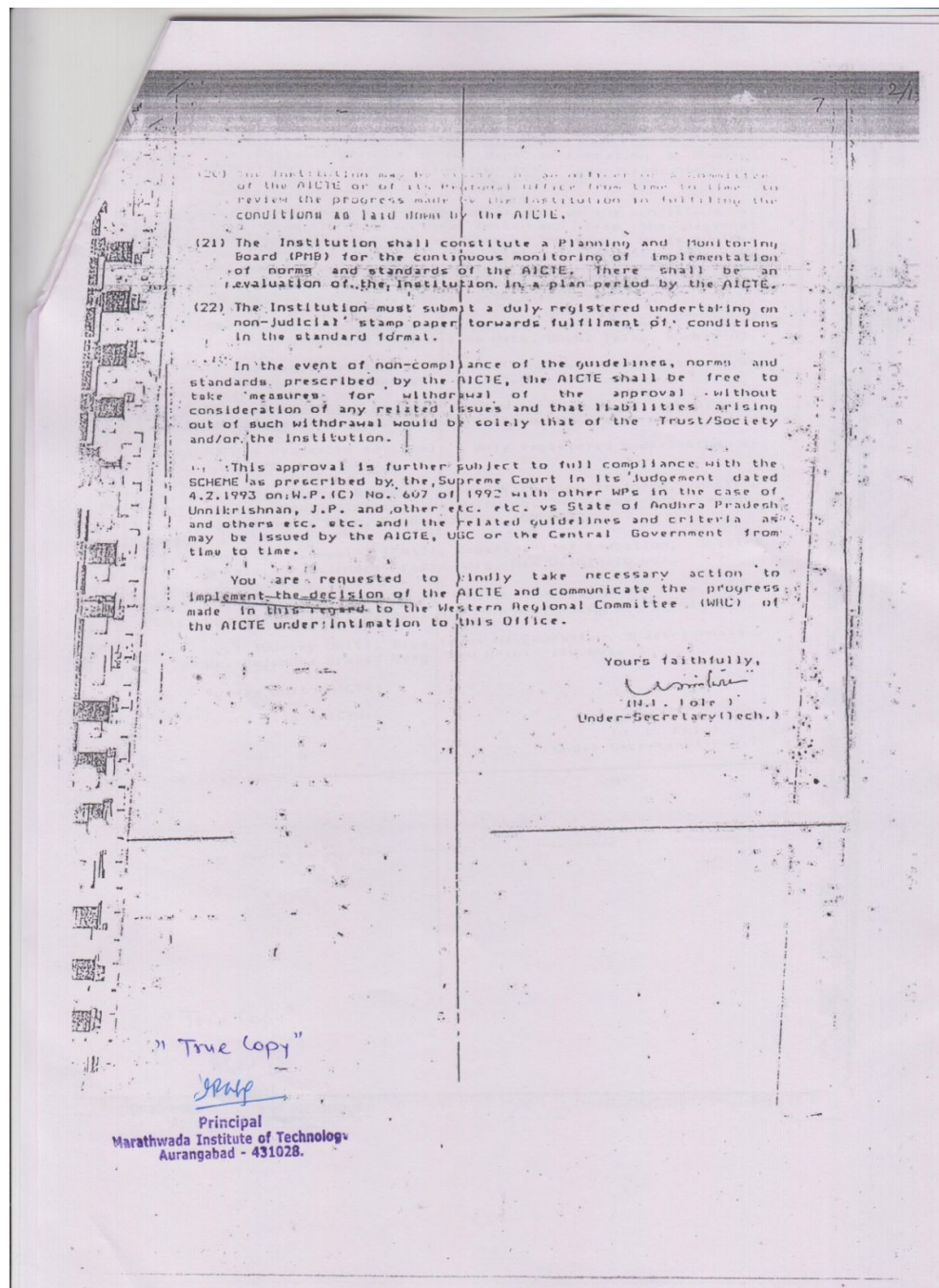
It shall be subject to a Special Audit and presentation by the AICTE.

It shall conform to the norms as prescribed by the competent authority for the maintenance of

"True Copy"

Principal
Principal
Marathwada Institute of Technology,
Aurangabad - 431028.

Annexure- IV (iii)



Annexure- IV (iv)

Copy to:

1. The Regional Officer, MHRD, Dept. of Education & Member-Secretary, Western Regional Office, Industrial Assurance Building, 2nd Floor, Nariman Road, Bombay-400 020.
He is requested to monitor compliance of the conditions as laid down in this approval letter and keep the Regional Committee and the AICTE informed of the same. He is further requested to intimate the State Government and the Management of the Institution about the deficiencies/shortcomings (pointed out by the Task Force) in its report on during the academic years 1993-94 & 1994-95.
2. The Director of Technical Education, Elphinstone Technical School Building, 3, Mahapalika Marg, Dhobi Talao, Bombay-01.
He is requested to monitor compliance of the conditions as laid down in this approval letter.
3. The Principal, Gramod Shikshan Sanstha's Marathwada Institute of Technology, Aurangabad, Maharashtra.
He is requested to submit a duly registered undertaking in the format enclosed.
4. The Director, Board of Apprenticeship Training, Western Region, New Administrative Building, 2nd Floor, AT1 Campus, Slon-Trombay Road, Slon, Bombay- 400 0032.
5. Shri S. D. Awale, JEA(T), Department of Education, Shastri Bhavan, Dr. Rajendra Prasad Marg, New Delhi-110 001.
6. The Programme Director, Indian Society for Technical Education, I.I.T. Campus, New Mehrauli Road, New Delhi-16.
7. J. I. (Survey Unit), Department of Education, Shastri Bhavan, Dr. Rajendra Prasad Marg, New Delhi- 110 001.
8. Survey Unit (AICTE).
9. Record file (AICTE).

(H. E. Patel)
Under Secretary (Tech.)

"True Copy"

Shri
Principal
Marathwada Institute of Technology
Aurangabad - 431028.

Annexure- V (i)

AICTE, New Delhi- Latest Approval Letter for AY 2016-17



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. Western/1-2809355914/2016/EOA Date: 25-Apr-2016

To,

The Secretary,
Tech. & Higher Education Deptt.
Govt. of Maharashtra, Mantralaya,
Annexe Building, Mumbai-400032

Sub: Extension of approval for the academic year 2016-17

Ref: Application of the Institution for Extension of approval for the academic year 2016-17

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F.No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	Western	Application Id	1-2809355914
Name of the Institute	MARATHWADA INSTITUTE OF TECHNOLOGY	Permanent Id	1-7162801
Name of the Society/Trust	GRAMAUDYOGIK SHIKSHAN MANDAL	Institute Address	BEED BYPASS, AURANGABAD, AURANGABAD, Maharashtra, 431028
Institute Type	Unaided - Private	Society/Trust Address	MIT CAMPUS, AURANGABAD, AURANGABAD, Maharashtra, 431010

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2016-17

Application Id: 1-2809355914			Course	Full/Part Time	Affiliating Body	Intake 2015-16	Intake Approved for 2016-17	NRI Approval status	PIO / FN / Gulf quota Approval status	Foreign Collaboration/Twinning Program Approval status
Program	Shift	Level								
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	AUTOMATION	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	18	18	Yes	Yes	NA

"True Copy"

Application Number: 1-2809355914
Note: This is a Computer generated Report.No signature is required.
Printed By : ae537891


Principal
Marathwada Institute of Technology
Aurangabad - 431028.

Page 1 of 4
Letter Printed On: 26 April 2016

Annexure- V (ii)



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)
7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMMUNICATIONS ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	18	18	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	24	24	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	ELECTRICAL DRIVES AND CONTROL	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	18	18	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	EMBEDDED SYSTEMS	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	24	24	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	HEAT POWER ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	18	18	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	MANUFACTURING ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	18	18	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	SOFTWARE ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	18	18	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	STRUCTURAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	18	18	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	CIVIL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	120	120	Yes	Yes	NA

"True Copy"

Application Number: 1-2809355914

Note: This is a Computer generated Report.No signature is required.

Printed By : ae537891

[Signature]
Principal
Marathwada Institute of Technology
Aurangabad - 431028.

Page 2 of 4
Letter Printed On: 26 April 2016

Annexure- V (iii)



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	ELECTRICAL AND ELECTRONICS ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	ELECTRONICS & TELECOMMUNICATION	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	120	120	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	ELECTRONICS & TELECOMMUNICATION ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	MECHANICAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	120	120	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDERGRADUATE	CIVIL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	Yes	Yes	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDERGRADUATE	MECHANICAL ENGINEERING	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	Yes	Yes	NA
MCA	1st Shift	POSTGRADUATE	MASTERS IN COMPUTER APPLICATIONS	FULL TIME	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	60	60	Yes	Yes	NA

The above mentioned approval is subject to the condition that MARATHWADA INSTITUTE OF TECHNOLOGY shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

Note: Validity of the course details may be verified at www.aicte-india.org

"True Copy"

[Signature]

Principal

Marathwada Institute of Technology
Aurangabad - 431028.

Application Number: 1-2809355914

Note: This is a Computer generated Report.No signature is required

Printed By : ae537891

Page 3 of 4
Letter Printed On: 26 April 2016

Annexure- V (iv)



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

Dr. Avinash S Pant
Vice - Chairman, AICTE

Copy to:

1. **The Regional Officer,**
All India Council for Technical Education
Industrial Assurance Building
2nd Floor, Nariman Road
Mumbai - 400 020, Maharashtra
2. **The Director Of Technical Education,**
Maharashtra
3. **The Registrar,**
Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
4. **The Principal / Director,**
MARATHWADA INSTITUTE OF TECHNOLOGY
BEED BYPASS,
AURANGABAD,
Maharashtra, 431028
5. **The Secretary / Chairman,**
GRAMAUDYOGIK SHIKSHAN MANDAL
MIT CAMPUS,
AURANGABAD, AURANGABAD,
Maharashtra, 431010
6. **Guard File(AICTE)**

"True Copy"


Principal
Marathwada Institute of Technology
Aurangabad - 431028.

Application Number: 1-2809355914
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Printed By : ae537891

Page 4 of 4
Letter Printed On: 26 April 2016

Annexure- VI (i)

Council of Architecture, New Delhi- Latest Approval Letter

वास्तुकला परिषद्
Council of Architecture
वास्तुविद्य अयोग, 1972 के अधिनियम द्वारा भारत सरकार का एक स्वायत्त संवैधानिक निकाय
(An Autonomous statutory body of Govt. of India, under the Architects Act, 1972)

Ref: CA/5/Academic-MH08
July 26, 2012

EXTENSION OF APPROVAL

1. The Principal
G.S.Mandal's Marathwada Institute of Technology
Post Box No.327, Satara Village Road
Beed bypass Road
AURANGABAD-431028 (Maharashtra)
Tel. (O): 0240-2376496, Prin.:0240-2376776

2. The Head
Department of Architecture
G.S.Mandal's Marathwada Institute of Technology
Post Box No.327, Satara Village Road
Beed bypass Road
AURANGABAD-431028 (Maharashtra)
Tel. (O): 0240-2376496, Prin.:0240-2376776

Sub: Extension of Approval to *Department of Architecture, G.S.Mandal's Marathwada Institute of Technology, Aurangabad, Maharashtra*, to conduct of 5 year full-time Bachelor of Architecture Degree Course, from the Academic Session - 2012-2013.

Sir,

I am directed to state that the Executive Committee of the Council of Architecture (CoA) at its 119th Meeting held on 19th July 2012, considered the report of the Expert Committee that visited the MH08-Department of Architecture, G.S.Mandal's Marathwada Institute of Technology, Aurangabad, Maharashtra, on 6th July 2012 (copy enclosed), for Extension of Approval of 5 year full-time Bachelor of Architecture (B.Arch.) degree course from the Academic Session - 2012-2013.

2. The Executive Committee after detailed discussions decided to grant extension of approval for B.Arch. degree course with an intake of 40 from the academic session 2012-2013, for a period of five years, subject to recruitment of full-time faculty/ fulfillment of conditions/ suggestions as contained in the report of the Expert Committee and / or prescribed by the Council and submission of compliance report of the same within 3 months. The admission of students for the academic session 2012-2013 be made only after the recruitment of requisite faculty as per norms of COA & the list be sent to the Council for displaying on its website.

3. Accordingly, the Executive Committee is pleased to accord *recognition/extension of approval* to your institution as details given below:

NAME OF THE FULL-TIME COURSE	DURATION	LEVEL OF COURSE	PERIOD OF APPROVAL WITH INTAKE
Bachelor of Architecture	Five Years Full-Time	Under Graduate Degree Course	40 2012-2013, 2013-2014, 2014-2015, 2015-2016 & 2016-2017

4. The institution should initiate necessary remedial actions based on the enclosed inspection report and send its observations on the same, if any, for further consideration of the Executive Committee.

5. The Experts Committee of the Council may visit your premises/conduct surprise inspection, if found necessary, to ascertain the facts that the said course is imparted as per the Rules/Regulations/Guidelines prescribed by CoA, from time to time, under the Architects Act, 1972.

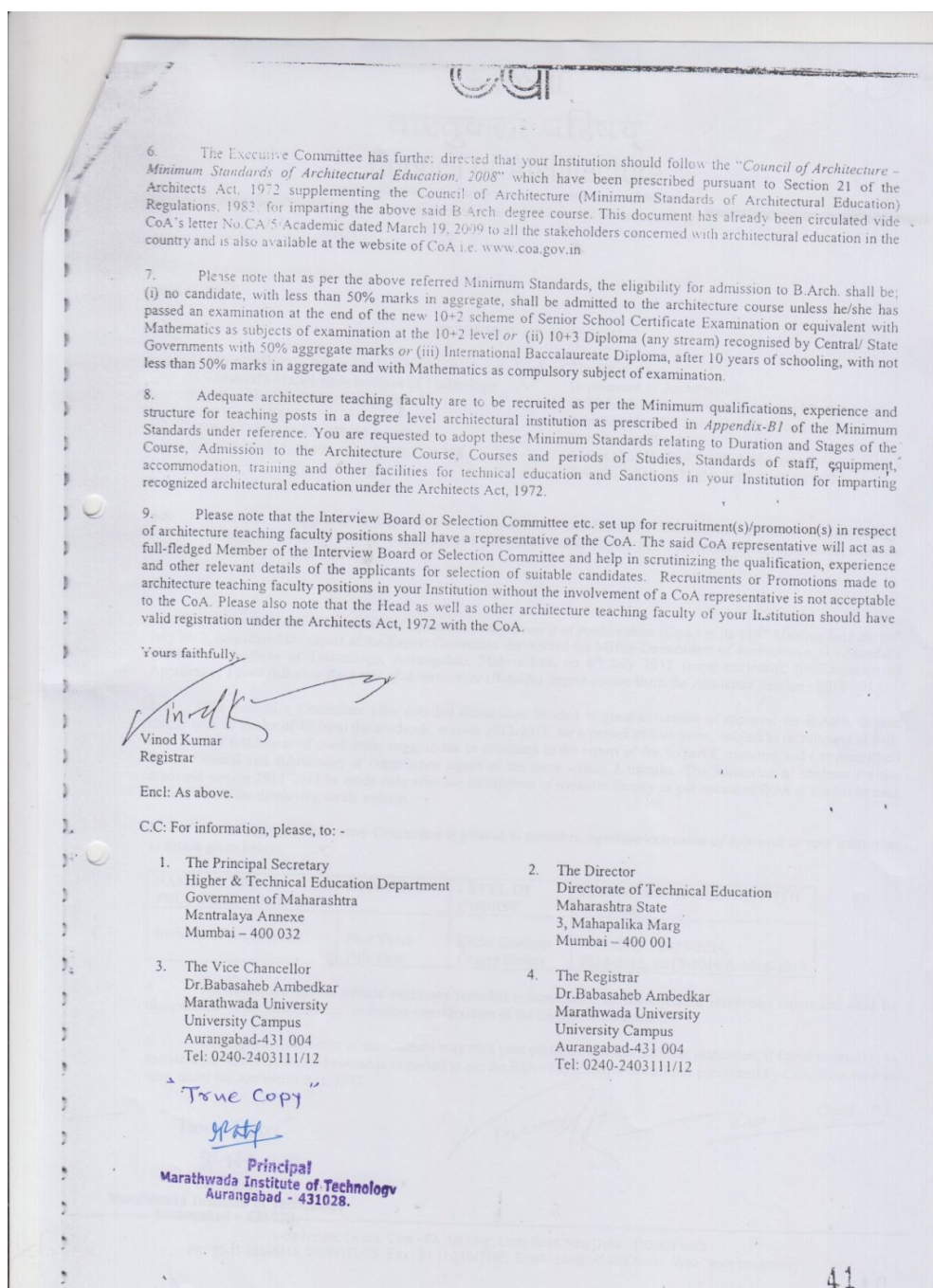
Contd.. P/2.

True Copy
[Signature]
Principal
Marathwada Institute of Technology
Aurangabad - 431028

India Habitat Centre, Core - 6A, 1st Floor, Lodhi Road, New Delhi - 110 003 India
Ph.: 91-11-24648415, 24654172-73, Fax : 91-11-24647746, Email : coa@ndf.vsnl.net.in, Web : www.coa.gov.in

40

Annexure- VI (ii)



Annexure- VII

Recognition as Research Center in Mechanical Engineering by Affiliating University

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY
NAAC Re- Accredited "A" Grade

Office : 2403399, 2403400
Telephones :
Registrar : (Office) 2403333
(Resi.) 2400203, 2403310
Fax : 0240-2403113/2403335
Telegram : BAMUSITY
Web Site : WWW.bamuniversity.org.
E-Mail : vc@bamu.net
E-Mail : registrar@bamu.net
E-Mail : registrar@bamuniversity.org



UNIVERSITY CAMPUS,
AURANGABAD-431 004
(Maharashtra (INDIA))

Ref. No. ACAD/AFFIL/ ABL/2013-2014/46742-48 Date :- 30-01-2014.

To,
The Principal,
Marathwada Institute of Technology &
Engineering College,
P. B. No. 327, Beed Bypass Road,
AURANGABAD.

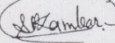
Subject :- Recognition as Research centre in Mechanical Engineering

Ref. :- 1) Your letter no. MIT/ESIT/BCUD/Res-rch/2013/2504 dated :20-08-2013.

Sir,

With reference to the subject noted above, I am to inform you that after verification of the report of the committee appointed for to verify the Physical and other facilities available at the centre. The Hon'ble Vice-Chancellor has granted recognition to start Research Centre for Mechanical Engineering from the academic year 2013-2014 for a period of three (3) years at first instance, Under Section 14(7) of the Maharashtra Universities Act. 1994 on behalf of Academic Council.

It is further directed that after every three years it is compulsory to renew the recognition to apply in the prescribed format of recognition along with necessary recognition fee. I am further to inform you that you have permitted to admit up to (10) ten students only for research leading to Ph.D. Degree.

Your faithfully,

DIRECTOR,
Board of College and
University Development.

"True Copy"

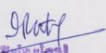

Principal
Marathwada Institute of Technology
Aurangabad - 431028.

PTO

Annexure- VIII

NBA Accreditation Proof (Dated- July 2008)

NATIONAL BOARD OF ACCREDITATION (NBA)					
List of Accredited Programmes in Technical Institutions					
39.	Govt. Polytechnic, Nanded - 431 602	Mechanical Engg. Electrical Engg. Civil Engg. Production Engg.	DIP DIP DIP DIP	5 Years 5 Years 5 Years 3 Years	Dec. 12, 2003 Dec. 12, 2003 Dec. 12, 2003 Dec. 12, 2003
✓ 40.	G. S. Mandal's Marathwada Institute of Technology, Post Box.No. 327, Aurangabad	Mechanical Engg. Computer Science & Engg.	UG UG	3 years 3 years	July 19, 2008 July 19, 2008
41.	Indira Institute of Management 85/5-A, New Mumbai Pune Highway, Pune - 411 033, M.S.	MBA (*) MCA	PG PG	3 Years 3 Years	Jan. 22, 2008 Jan. 22, 2008
42.	Institute of Diploma in Pharmacy, Wanadongri, Hingna Road, Nagpur-441110	Pharmacy	DIP	3 Years	March 14, 2005
43.	Institute of Armament Tech. Pune	Modeling & Simulations Lasers & Electro-Optics Combat Vehicles Naval Weapons Guided Missiles Weapons Marine Engg. Air Armament	PG PG PG PG PG PG PG PG	3 Years 3 Years 3 Years 5 Years 5 Years 5 Years 5 Years 5 Years	Feb. 21, 1998 Feb. 21, 1998 Feb. 21, 1998 Feb. 21, 1998 Feb. 21, 1998 Feb. 21, 1998 Feb. 21, 1998 Feb. 21, 1998


Principal
Marathwada Institute of Technology
Aurangabad - 431028.

Note: Typing errors, in Nomenclature of Programmes and omissions if any, may be brought to the attention of Advisor (QA), AICTE, New Delhi.

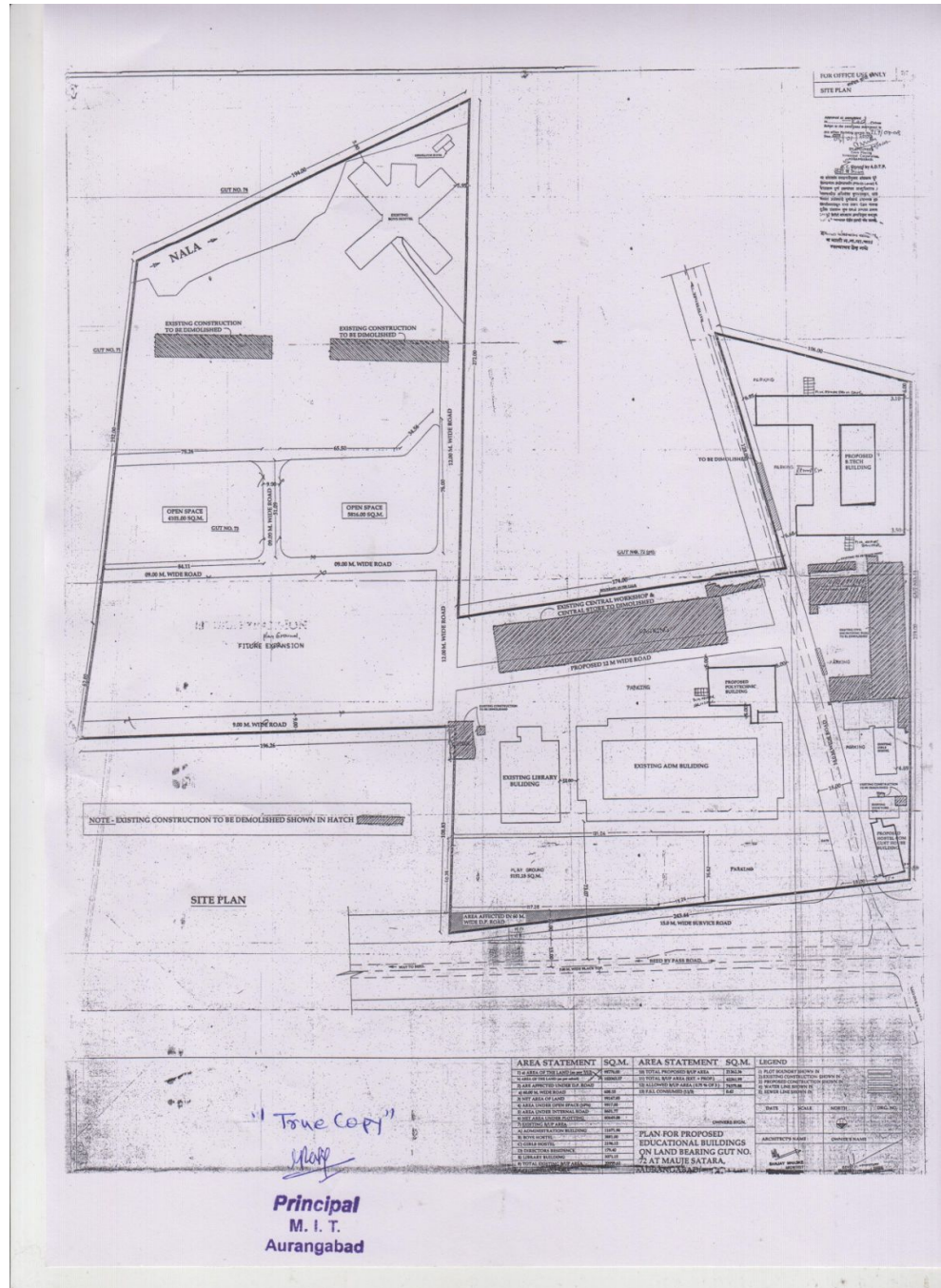
Annexure- IX

ISO 9001:2000 Certificate



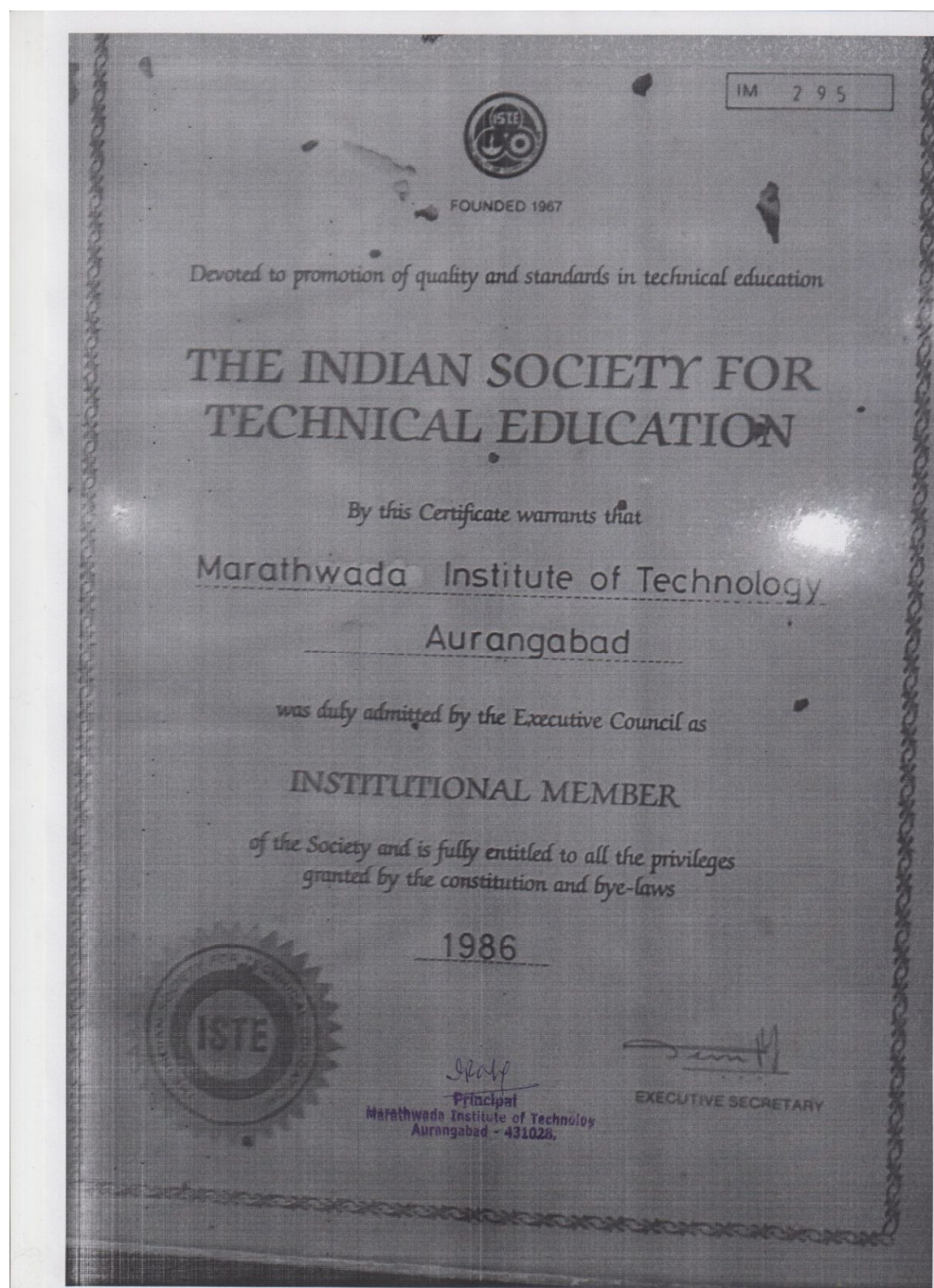
Annexure- X

Master Plan of MIT, Aurangabad



Annexure- XI

ISTE Certificate





Government of India

Ministry of Human Resource Development

Department of Higher Education

Statistics Division

New Delhi

Certificate



Reference No. C-34376-2016

This is to certify that NILESH GANPATRAO PATIL of Marathwada Institute of Technology Engineering College, Satara Road, has successfully uploaded the data of All India Survey on Higher Education(AISHE) 2016-2017.

(B N Tiwari)

Deputy Director General

Dated: 04/04/2017