

# The Annual Quality Assurance Report (AQAR) of the IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC.

## Part – A

**AQAR for the year**

**2016-2017**

### 1. Details of the Institution

1.1 Name of the Institution

Dr. Babasaheb Ambedkar Technological University, Lonere,  
Raigad- 402103

1.2 Address Line 1

Dr Babasaheb Ambedkar Technological University, Lonere

Address Line 2

Vidyavihar, Lonere

City/Town

Lonere

State

Maharashtra

Pin Code

402103

Institution e-mail address

registrar@dbatu.ac.in

Contact Nos.

02140-275142

Name of the Head of the Institution:

Dr. V. G. Gaikar

Tel. No. with STD Code:

02140275142

Mobile:

09422494101

Name of the IQAC Co-ordinator:

Dr. L. N. Singh

Mobile:

8087369025

IQAC e-mail address:

[lsingh@dbatu.ac.in](mailto:lsingh@dbatu.ac.in)

1.3 NAAC Track ID (For ex. MHC0GN 18879)

OR

1.4 NAAC Executive Committee No. & Date:

(For Example EC/32/A&A/143 dated 3-5-2004.  
This EC no. is available in the right corner- bottom  
of your institution's Accreditation Certificate)

EC(SC)\_05\_A&A\_083 dated 3-3-2015-Dr.  
Babasaheb Ambedkar Technological  
University, Lonere-Maharashtra

1.5 Website address:

[www.dbatu.ac.in](http://www.dbatu.ac.in)

Web-link of the AQAR:

[www.dbatu.ac.in/AQAR2016-17.doc](http://www.dbatu.ac.in/AQAR2016-17.doc)

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 <sup>st</sup> Cycle	B	2.35	2015	05 years
2	2 <sup>nd</sup> Cycle				
3	3 <sup>rd</sup> Cycle				
4	4 <sup>th</sup> Cycle				

1.7 Date of Establishment of IQAC: DD/MM/YYYY

21/10/2011

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11 submitted to NAAC on 12-10-2011)

- i. AQAR 2015-2016 (06/02/2018) (DD/MM/YYYY)  
ii. AQAR \_\_\_\_\_ (DD/MM/YYYY)  
iii. AQAR \_\_\_\_\_ (DD/MM/YYYY)  
iv. AQAR \_\_\_\_\_ (DD/MM/YYYY)

1.9 Institutional Status

University State ☒ Central ☐ Deemed ☐ Private ☐

Affiliated College Yes ☐ No ☒

Constituent College Yes ☐ No ☒

Autonomous college of UGC Yes ☐ No ☒

Regulatory Agency approved Institution Yes ☒ No ☐

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education ☒ Men ☐ Women ☐

Urban ☐ Rural ☒ Tribal ☐

Financial Status Grant-in-aid ☒ UGC 2(f) ☒ UGC 12B ☒

Grant-in-aid + Self Financing ☐ Totally Self-financing ☐

1.10 Type of Faculty/Programme

Arts ☐ Science ☐ Commerce ☐ Law ☐ PEI (Phys Edu) ☐

TEI (Edu) ☐ Engineering ☒ Health Science ☐ Management ☐

Others (Specify)

--

1.11 Name of the Affiliating University (for the Colleges)

NA

1.12 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc.

Autonomy by State/Central Govt. / University

YES

University with Potential for Excellence

--

UGC-CPE

--

DST Star Scheme

--

UGC-CE

--

UGC-Special Assistance Programme

--

DST-FIST

--

UGC-Innovative PG programmes

--

Any other (*Specify*)

--

UGC-COP Programmes

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## **2. IQAC Composition and Activities**

2.1 No. of Teachers	<input type="text" value="15"/>		
2.2 No. of Administrative/Technical staff	<input type="text" value="04"/>		
2.3 No. of students	<input type="text" value="--"/>		
2.4 No. of Management representatives	<input type="text" value="01"/>		
2.5 No. of Alumni	<input type="text" value="--"/>		
2.6 No. of any other stakeholder and Community representatives	<input type="text" value="01"/>		
2.7 No. of Employers/ Industrialists	<input type="text" value="01"/>		
2.8 No. of other External Experts	<input type="text" value="01"/>		
2.9 Total No. of members	<input type="text" value="23"/>		
2.10 No. of IQAC meetings held			
2.11 No. of meetings with various stakeholders:	No.	<input type="text" value="--"/>	Faculty <input type="text" value="01"/>
	Non-Teaching Staff, Students	<input type="text" value="--"/>	Alumni <input type="text" value="--"/>
			Others <input type="text" value="--"/>
2.12 Has IQAC received any funding from UGC during the year?	Yes	<input type="text" value="0"/>	No <input checked="" type="text" value="v"/>
If yes, mention the amount	<input type="text" value="--"/>		
2.13 Seminars and Conferences (only quality related)			
(i) No. of Seminars/Conferences/Workshops/Symposia organized by the IQAC			
Total Nos.	<input type="text" value="0"/>	International	<input type="text" value="0"/>
National	<input type="text" value="0"/>	State	<input type="text" value="0"/>
Institution Level	<input type="text" value="0"/>		
(ii) Themes	<input type="text" value="---"/>		

#### 2.14 Significant Activities and contributions made by IQAC

- Live online attendance system for first year
- Online remedial examination
- Digital evaluation of answer books for all examinations
- Increase in awareness among students and faculty for product based projects
- Signed 5 MoUs with industries for increasing industry institute interaction
- Increase in submission of research projects by faculty and students to various agencies
- Preparation of course files for all courses, monitoring of quality of question papers
- Regular academic audit of all department by the advisory member
- Monitoring of feedback from parents, students and alumni

#### 2.15 Plan of Action by IQAC/Outcome

The plan of action towards enhancement of quality of the university includes:

- Timely submission of AQAR (short-term)
- Strengthening office of IQAC (short-term)
- IQAC seminars on quality, excellence etc. (short-term)
- Idea boxes to invite ideas (short-term)
- Inviting suggestions from public, intellectuals (short-term)
- On-line AQAR data collection (mid-term)
- University admin staffs in committees (short-term)
- Governor's tri-monthly report (short-term)
- Data collection strategy (short-term)
- Supervise the functioning of various committees to ensure transparency in all activities.
- Preparation of budgets for annual activities and getting approval from the management.
- To strengthen the grievance readdressal mechanism by incorporating a complaint and suggestion box or email.
- To schedule regular meetings between Management and Staff.

2.16 Whether the AQAR (2016-17) was placed in statutory body      Yes ☒      No ☐

Management ☒      Syndicate ☐      Any other body ☐

Provide the details of the action taken

AQAR of 2016-17 was placed before AC and EC for its approval. It is approved by AC on its Meeting No.11 held on 08/06/2018. Subsequently, it was placed before EC Meeting No. 13 held on 15/6/2018 for its approval. EC also approved the same.

## Part – B

### Criterion – I

#### 1. Curricular Aspects

##### 1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	14	-	-	-
PG	07	-	07	-
UG	08	-	-	-
PG Diploma	NA	-	-	-
Advanced Diploma	01	-	-	-
Diploma	08	-	-	-
Certificate	NA	-	-	-
Others	NA	-	-	-
<b>Total</b>	38	-	-	-
Interdisciplinary	-	--	-	-
Innovative	-	-	-	-

##### 1.2 (i) Flexibility of the Curriculum: CBCS / Core/ Elective option / Open options

##### (ii) Pattern of programmes:

Pattern	Number of UG programmes	Number of PG programmes	Number of Diploma programmes
Semester	08	04	06
Trimester	NA	--	--

Annual	NA	--	--
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1.3 Feedback from stakeholders\* Alumni ☒ Parents ☒ Employers ☒ Students ☒  
(On all aspects)

Mode of feedback : Online ☐ Manual ☒ Co-operating schools (for PEI) ☐

*\*Please provide an analysis of the feedback in the Annexure*

**Please refer Annexure B**

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

First year syllabus was revised in the academic year 2016-2017. Subsequently the syllabus for remaining years is revised in the academic year 2017-2018.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

No, Teacher Training Centre (TTC) is proposed for funding from MHRD

## Criterion – II

### 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
56	28	20	06	02

2.2 No. of permanent faculty with Ph.D.

35

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
28	22	20	11	06	06	02	00	56	39

2.4 No. of Guest and Visiting faculty and Temporary faculty

00

02  
(Mech)

54

2.5 Faculty participation in conferences and symposia:



No. of Faculty	International level	National level	State level
Attended	29	-	-
Presented papers	30	02	-
Resource Persons	01	-	-

## 2.6 Innovative processes adopted by the institution in Teaching and Learning:

The faculty members have been increasingly making use of technology to supplement their teaching in the last four years. For example, NPTEL courses, video films and animations, course materials and reference materials downloaded from internet are being used extensively. This has resulted in an improvement in the teaching and learning process. It has been evident from the students' feedback. Recognition to the teachers, who effectively use these resources, is given in the annual performance appraisals.

Departments have started using technology to reduce paper work and promote eco-friendly environment and Digital India by collecting students, feedback using Google forms, and by collecting synopsis of community projects using Google form.

For the benefit of the society, the students were asked to take up the problems faced by various ministries of the government and to come up with the solutions as a part of their Community Projects.

**2.7 Total No. of actual teaching days during this academic year: 180 Days**

**2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)**

Open book for some subjects,  
Provision for giving  
photocopy of answer-book, if  
asked by student

**2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop**

23	03	08
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**2.10 Average percentage of attendance of students**

85%

**2.11 Course/Programme wise distribution of pass percentage:**

Title of the Programme	Total No. of students appeared	Division (OVERALL)				
		Distinction %	I %	II %	III %	Pass %
Chemical	60	15	35	15	--	01
Civil	68	19	54	26	--	--
Computer	297	11	39	20	--	4
Electrical	67	15	62	22	--	-
EXTC	136	29	41	16	--	--
IT	65	16	24	23	02	16
Mechanical	66	13.63	53.03	18.18	10.60	04.54
Petrochemical	73	12.32	52	28.76		6.84

### 2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

IQAC arranges departmental/ general staff meetings on regularly. To evaluate the Teaching & Learning outcomes every faculty member is advised to submit lesson plan at the beginning of each semester for respective subjects while it is also mandatory on the part of each faculty member to submit the course file for his/her subjects at the end of each semester containing Lecture notes, PPT presentations, Reference materials, Teaching Plan, Date-wise coverage of syllabus as per time table, Attendance of students supported by the signatures of the students in each lecture, Declaration of methodology of continuous assessment and Mid-term examination, Dates of submission of question papers, and online uploading of marks, Model answers of question papers along with Justifications for discrepancies, if any. It also schedules periodic meetings of the research scholars for research evaluation.

### 2.13 Initiatives undertaken towards faculty development

- Ensure the financial Support for staff and students to attend conferences and seminars.
- Introduce best teacher/best student of the year award in association with alumni.
- Training programme for non-teaching staff in file management, clerical and secretarial works.
- Training program for all faculty members to create awareness about IPR and patentability.

<b><i>Faculty / Staff Development Programmes</i></b>	<b><i>Number of faculty</i></b>
Refresher courses	16
UGC – Faculty Improvement Programme	NIL
HRD programmes	2 (Digital Launch RUSA)
Orientation programmes	NIL
Faculty exchange programme	NIL
Staff training conducted by the university	15
Staff training conducted by other institutions	04
Summer / Winter schools, Workshops, etc.	07
Others(Research Symposium)	01

#### **2.14 Details of Administrative and Technical staff**

<b>Category</b>	<b>Number of Permanent Employees</b>	<b>Number of Vacant Positions</b>	<b>Number of permanent positions filled during the Year</b>	<b>Number of positions filled temporarily</b>
Administrative Staff	27	10	00	24
Technical Staff	30	18	00	17

### **Criterion – III**

## **3. Research, Consultancy and Extension**

### **3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution**

- Advancing funds for sanctioned projects
- Providing seed money
- Ensure the financial Support to attend conferences and seminars
- Simplification of procedures related to sanctions / purchases to be made by the investigators
- Autonomy to the principal investigator/coordinator for utilizing overhead charges
- Timely release of grants
- Timely auditing
- Submission of utilization certificates to the funding authorities

### 3.2 Details regarding major projects

	Completed	On-going	Sanctioned	Submitted
Number	1	Nil	Nil	1
Outlay in Rs. Lakhs	10 Lakhs	Nil	Nil	74.0

### 3.3 Details regarding minor projects

	Completed	On-going	Sanctioned	Submitted
Number	1	Nil	Nil	1
Outlay in Rs. Lakhs	1.45	Nil	Nil	10 Lakhs

### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	39	01	Nil
Non-Peer Review Journals	Nil	Nil	Nil
e-Journals	Nil	Nil	Nil
Conference proceedings	<b>100</b>	10	Nil

### 3.5 Details on Impact factor of publications:

Range 1.5 - 2.5 Average 2 h-index 15 Nos. in SCOPUS 08

### 3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations **Departmental projects funded by DST-FIST, UGC-SAP/CAS, DPE, DBT, ICSSR, AICTE, etc.**

Scheme and Funding Agency	Non-recurring	Recurring	Total	Project Fellow
DST	19.5 Lakh	--	19.5 Lakh	--

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects		DST	19.5	
Minor Projects	NIL	NIL	NIL	NIL
Interdisciplinary Projects	NIL	NIL	NIL	NIL
Industry sponsored	NIL	NIL	NIL	NIL
Projects sponsored by the University/ College	NIL	NIL	NIL	NIL
Students research projects <i>(other than compulsory by the University)</i>	NIL	NIL	NIL	NIL
Any other(Specify)	NIL	NIL	NIL	NIL

Total	NIL	NIL	NIL	NIL
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3.7 No. of books published i) With ISBN No.  Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP	<input type="text" value="--"/>	CAS	<input type="text" value="--"/>	DST-FIST	<input type="text" value="01"/>
DPE	<input type="text" value="--"/>			DBT Scheme/funds	<input type="text" value="--"/>

3.9 For colleges	Autonomy	<input type="text" value="--"/>	CPE	<input type="text" value="--"/>	DBT Star Scheme	<input type="text" value="--"/>
	INSPIRE	<input type="text" value="--"/>	CE	<input type="text" value="--"/>	Any Other (specify)	<input type="text" value="--"/>

3.10 Revenue generated through consultancy

3.11 No. of conferences

organized by the Institution

Level	International	National	State	University	College
Number	02	--	--	--	--
Sponsoring agencies	TEQIP-2	--	--	--	

3.12 No. of faculty served as experts, chairpersons or resource persons

3.13 No. of collaborations International  National  Any other

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs:

From funding agency	<input type="text" value="DST"/>	From Management	<input type="text" value="--"/>
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Total

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	4

3.17 No. of research awards/ recognitions received by faculty and research fellows of the institute in the year		Granted	-
	International	Applied	-
		Granted	1
	Commercialised	Applied	2
		Granted	-

Total	International	National	State	University	Dist	College
00	00	00	00	00	00	00

**3.18 No. of faculty from the Institution who are Ph. D. Guides and students registered under them**

35

95

3.19 No. of Ph.D. awarded by faculty from the Institution

05

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF

55

SRF

42

Project Fellows

--

Any other

--

3.21 No. of students Participated in NSS events: **377**

University level

353

State level

24

National level

--

International level

--

3.22 No. of students participated in NCC events:

University level

100

State level

--

National level

8

International level

--

3.23 No. of Awards won in NSS:

University level

--

State level

03

National level

--

International level

--

3.24 No. of Awards won in NCC:

University level

10

State level

National level

8

International level

### 3.25 No. of Extension activities organized

University forum  College forum   
 NCC  NSS  ANY OTHER

### 3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

Sr. No.	Name of the Course	Duration	Name of the Coordinators/ Speakers	Participants
1.	Guest Lecture by Grad2Guru on Soft Skills Development	July 5, 2016	Mr. Kiran Dhawan, Founder & Director, Grad2Guru.	More than 70 students from the department attended the talk
2.	An IEEE Skill and Knowledge Enhancement Program was organized by IEEE Student Branch, Bombay Section, Dr. BATU, Lonere	July 8- 9, 2016	Sachin Sadre, Jagdish Bisawa	More than 50 students from the University attended the talks.
3.	An Informative session by T.I.M.E. Institute on "How to plan career after Engineering"	July 21, 2016	Mr. Ramesh Mishra, Deputy manager, T.I.M.E. and Mr. Sanket Pawar, Business development head for CAT product.	Around 200 students from University have attended the session
4.	Expert talk on current expectations of the industries from the youth of India	August 12, 2016	Dr. Munir Sayyad, from Reliance Jio Info-com	More than 80 students from the department attended the talk

5.	Expert Talk “Motivation and Goal Setting” organized by DBATU, Lonere	13 <sup>th</sup> August 2016	Mr. Sachin Sadre, Deputy General Manager, RBI and Mr. Atish Dhongade	More than 80 students from all department of the university attended the program
6.	One day workshop on IPR organized by the department on September 2, 2016, which was conducted by experts from RGNIIPM, Nagpur.	September 2, 2016	Experts from RGNIIPM, Nagpur	This was attended by about 100 faculty members and research scholars. This activity was sponsored by RUSA.
7.	Patent Filing, Search & Drafting	26-30 Sept 2016		01
8.	Two day workshop on Embedded Systems and Robotics organized by Robo-Edutech Pvt. Ltd. Delhi and IIT Bhubaneshwar	Oct 8-9, 2016	Dr. S.L. Nalbalwar	About 69 students from B. Tech have attended the said Workshop
9.	Workshop on CST and LaTeX was organized by the department during	October 23-25, 2016	Dr. Pravin Prajapati, Associate Professor, A.D. Patel Institute of Technology, Gujarat.	More than 20 students from the University attended the program
10.	Advances in Control Systems	7-11 Nov, 2016		01
11.	International Conference on Communication and Signal Processing	Dec. 26-27, 2016	Dr. B.R. Iyer Dr. S.L. Nalbalwar	90 Participants from all over nation.
12.	Convergence of IoT, Big Data and High Performance	Dec. 26,	Prof. Virendra Kumar Bhavsar	90 Participants from



	Computing	2016	Coordinator, Advanced Computational Research Lab.	all over nation.
13.	Photonic Crystals: Artificial Materials to Control Light	Dec. 26, 2016	Raghunath K Shevgaonkar  Department of Electrical Engineering, IIT Bombay	90 Participants from all over nation.
14.	Novel Planar Electromagnetic Bandgap (EBG) Structure	Dec. 26, 2016	Dr. M. P. Abegaonkar, Centre For Applied Research in Electronics  Indian Institute of Technology Delhi	90 Participants from all over nation.
15.	Meditation based Learning Enhancement	Dec. 27, 2016	Prof. R. R. Manthalkar,  Professor, Dept. of E & TC Engineering, SGGSIE&T, Nanded.	90 Participants from all over nation.
16.	Short Run Economic Impact of Disruptive Technologies in Emerging Economies	Dec. 27, 2016	Mr. Sachin Sadare  Founder, IndiaNutz, India	90 Participants from all over nation.
17.	Applications of Partially Reflective Surfaces in Antenna Design	Dec. 27, 2016	Dr. Pravin Prajapati  AD Patel Institute of	90 Participants from all over nation.

			Technology, Gujrath	
18.	Expert Talk on Multirate DSP	11/01/2017	Prof. V.M. Gadre, IITB	150 UG,PG students and Research Scholars
19.	New Trends in Biomedical Signal Processing	16-21 Jan 2017		01
20.	Faculty Development Programme on RF and Microwave  Sponsored by SPFU  Conducted by Dr. Girish Kumar, IITB	Feb 6-10,2017	Dr. A.B. Nandgaonkar  Dr. B.R. Iyer	30 Participants from Engineering colleges and Polytechnic from Maharashtra
21.	Expert Talk on Entrepreneurship	9/2/2017	Dr. Girish Kumar, IITB	150 UG,PG students and Research Scholars
22.	Expert Talk on Radiation Hazards	8/2/2017	Dr. Girish Kumar, IITB	150 UG,PG students and Research Scholars
23.	Career in Automation	15/03/2017	Mr. Vivek Sardal, Prolific Systems & Technologies Pvt. Ltd	40 UG Students
24.	A journey of courage and confidence	17/03/2017	Lieutenant Commander Ravindra Kale	35 UG Students
25.	Two days' workshop on familiarization with FPGA	Sept. 20-21, 2016	Prof. P. K. Katti	More than 50 students from the department attended the talk
26.	One day workshop on "Hands on experience with Psim"	Jan 21, 2017	Dr. K. Vadirajacharya	All M. tech and final year B. tech students attended the session.

27.	Two days workshop on VFD from BOSCH	Feb 8,9		All M. tech students attended the session.
28.	1-week Faculty Development Program on “Software Architecture”	29 <sup>th</sup> September 2016	Dr. Arvind Kiwelekar	More than 30 Participants from Engineering colleges and Polytechnic from Maharashtra
29.	Training Programme on Oracle and Java	9 - 11 July 2016	Anshul Verma Greeks Lab, Delhi	More than 70 students from the department
30.	Training Programme on Oracle and Java	16 - 17 July 2016	Milind Rahangdale,  Premedia Services, Hadapsar,Pune.	More than 70 students from the department
31.	Training Programme on Oracle and Java	22 - 24 July 2016	Mithiles Pande, Greeks Lab, Delhi	More than 70 students from the department
32.	Training Programme on Oracle and Java	7 - 9 October 2016	Anshul Verma Greeks Lab, Delhi	More than 70 students from the department
33.	Training Programme on Oracle and Java	22- 25 October 2016	Shreekant Vanga, PDQ Software, Hydrabad	More than 70 students from the department
34.	Guest lecture on “Basics of Polymer Chemistry and Biodegradable Polymer from Renewable Resources”	21 October 2016	Prof S.S. Metkar	Dr. Bhaskar Idge ,Scientist Polymer Division NCL Pune
35.	Guest lecture on “Challenges in Industrial Waste Water Treatment, Recycling and	22 October 2016	Prof. S. M. Mhatre	Dr. Bhandari, Scientist ,Chemical Engineering

	Reuse”			Division
36.	Guest lecture was arranged on “Research Methodology”	18 March 2017	Prof. S. M. Mhatre	Dr. Shirish Chaudhari, NMU Jalgaon
41.	International Conference under TEQIP II: iCMMD2016	20-21 December, 2017	Dr R S Pawade	150
42.	Racing Mania (Robo Race)	03-05 March, 2017	Dr H S Joshi	120
43.	SAE Chapter Activities <ul style="list-style-type: none"> <li>i. Expert Talk in IIT Guwahati by Robosepiens Pvt Ltd.</li> <li>ii. Industrial Visit Accurate Engineering Pvt Ltd</li> </ul>	16 July, 2016        27 Aug, 2016	Dr R S Pawade        and        Dr H N Warhatkar	70        45
44.	ISHARE Chapter <ul style="list-style-type: none"> <li>i. Jamboree4</li> <li>ii. IQL</li> <li>iii. Job Junction</li> </ul>	15 Jan, 2017  22 Sept, 2016  22 Oct, 2016	Dr Neeraj Agrawal	44  110  49

### Expert talks by Alumni

Sr. No.	Name of the Topic	Name of Alumni	Participants
1.	Current expectations of the industries from the youth of India	Dr. Munir Sayyad, Reliance Jio Info-com	UG Students
2.	Introduction to Raspberry Pi	Dr. Rahul Waghmare Ph. D Student IIST	M. Tech Students
3.	Video Signal Processing	Prof. S.M. Kulkarni, Research Scholar, JNTU, Kakinada	M. Tech Students
4.	GATE Exam	Mr. Bhushan Mahajan	UG Students
5.	Seminar on Start-ups and Entrepreneurship	Sunil Chavan and Ajay chavan, Co-founder, Dejavuh Pvt Ltd. (06 <sup>th</sup> January 2017)	More than 70 students from the department

**Workshops attended by Faculties, Research scholars and PG students:**

Sr. No.	Title	Date	No. of Participant
1.	CST and LaTeX	23-25 <sup>th</sup> Oct2016	20
2.	RF and Microwave Design	06 <sup>th</sup> -10 <sup>th</sup> Feb, 2017	30
3.	Electromagnetics & Wave Propagation	27 <sup>th</sup> Feb – 4 <sup>th</sup> March , 2017	30
4.	SCILAB and SCICOS	17 <sup>th</sup> – 28 <sup>th</sup> May 2016	02
5.	Outcome Based Education	23 <sup>rd</sup> – 28 <sup>th</sup> June 2016	06
6.	Research Symposium-3, SGGS Institute of Engg. and Technology, Nanded.	25 <sup>th</sup> – 26 <sup>th</sup> July, 2016	01
7.	Intellectual Property Rights	2 <sup>nd</sup> September,2016	06
8.	Software Architecture	29 <sup>th</sup> September – 3 <sup>rd</sup> October 2016	05
9.	Adaptation of Product Design engineer –Mechanical Courseware	15 <sup>th</sup> June 2017	01
10.	Machine learning tools for Engineers	12 <sup>th</sup> -21 <sup>st</sup> June 2017	01

**Academic Awareness activities conducted**

- 1. An MoU for Smart Attendance with EtaServe software solution Pvt limited, Bangalore** has been signed on 17/05/2017. Purpose of the MoU is joint industry and research activity, exchange of visiting experts for purpose of conducting research. It is decided to develop smart attendance system for the university and its affiliated institutes and commercializing the developed product.
- 2. MoU for Smart Attendance with EtaServe software solution Pvt limited, Bangalore** has been signed on 17/05/2017. EtaServe Software Solution Pvt. Ltd. is providing 'Brigit' – The app to bridge the gap, as a platform on the mobile and web to be used by Dr. Babasaheb Ambedkar Technological University, Lonere, M.S. for communication among the staff, students, their parents and relatives. EtaServe is NOT selling the app to institutes or parents. EtaServe is providing a service so as to strengthen communication within the institute at free of cost.
- 3. MoU for Communication Lab development:** Under this MoU Reliance Jio, Mumbai is ready to setup a state-of-the-art telecommunication lab under certain constrains. The constraints are two smart classrooms, with Fiber optics setup, high speed internet, room for server set up. Reviewing and discussion about clauses in MoU are going on. Under this MoU, courses will be proposed by Reliance. Experts from our university will be conducting these courses. If and when required training will be provided to expert faculty who will be conducting the course. By end of August, final decision will be taken about the MoU.
- 4. MoU for Oracle India Private Limited, Haryana** has been signed on 12/05/2016. Purpose of the MoU is a joint industry and research activity, give knowledge of recent technology to students and guide them to build projects.
- 5. MoU for Seth GS Medical College and KEM hospital, Mumbai** has been signed on 19/08/2016. Purpose of the MoU is joint research activity. It is decided to develop medical application related to ECG.
- 6. International Conference (ICCASP 2017):** The two - day International Conference -2016 (ICCASP 2016) was organized in University by the Department of Electronics and Telecommunication Engineering on 26th and 27th December 2016. The inaugural function held at 10.00am in the Conference Hall of the University and was attended by Prof. V.G. Gaikar, Hon. Vice-Chancellor, Prof. Virendra Kumar Bhavsar Coordinator, Advanced Computational Research Lab. Faculty of Computer Science, University of New Brunswick,

Fredericton, Canada, Dr. Mahesh Abegaonkar, Centre For Applied Research in Electronics, Indian Institute of Technology Delhi, Prof. R. R. Manthalkar Professor, Dept. of E & TC Engineering, SGGSIE&T, Nanded, Dr. S.B. Deosarkar, Professor, Dr. B.A.T.U. Lonere, Dr. S. L. Nalbalwar, Head, Department Electronics & Telecommunication, Dr. B.A.T.U. Lonere, Prof. Virendra Kumar Bhavsar from Canada delivered Key note address at inaugural function.

About 12 plenary talks and panel discussion of distinguished academicians, professionals, industrialists and management thinkers are also organized at this event in such a way that every delegate will have an opportunity to attend each session.

During inauguration, in his welcome speech, Dr. S. L. Nalbalwar invited all the participants to express themselves and share their views and experience in this symposium. He was convinced that this conference would engage all the participants in information sharing, to promote intellectual interaction and provide food for thoughts.

Hon. Vice-Chancellor, Dr. V. G. Gaikar gave his expert opinion on need for interdisciplinary collaboration to invent and innovate. He emphasized on the use of technology for the betterment of society and nation. He assured all the help for new innovations to convert the academics into consumer technology.

Around 150 technical papers were received from various institutions and Industries all over India, including premier institutions like IITs, NITs. Out of these 58 papers were finalised for Oral Presentation and 8 papers for Poster presentation, after double blind review system through easy chair submission. Papers broadly classified into three area i) Signal/Image processing, ii) Antenna Design and Microwave, iii) Internet of Things.

## **7. TEDX DBATU 2016**

This event was conducted by the department on 15 October 2016. In this event, talks were delivered by Hon. Vice-Chancellor, Dr. V.G. Gaikar, Padmashree Dr. Anil Joshi, followed by spectacular fusion of hip-hop and classical dance. Later, Padmashree Dr. Sharad Kale, Dr. Dhananjay Sharma, Aakash Lonkar, Nikhil Sharma (A.K.A. Mumbiker Nikhil), Dr. P. K. Katti, Prof. Y. N. Patil and students, Chandrakant Agame, Rishi Patil, Rishikesh Kinhalkar gave talks on various topics. The program concluded with the spectacular performance which included extravaganza of dance and music. Dr. S.L. Nalbalwar and Dr. P.K. Brahmanekar worked as Coordinators for this event. Talks Included:

1. Dr. V.G. Gaikar: Engineers and Engineering: Blending of Challenges
2. Dr. Anil P. Joshi: Ecological Growth Measures
3. Dr. Sharad P. Kale : Environmental Sustainability
4. Dr. Dhananjay Sharma : Low cost Surgery
5. Sachin Shende: Addressing Education Gap
6. Nikhil Sharma : Depression and how to motivate oneself
7. Aakash Lonkar : Animal Based Therapy
8. Prof. Y.N Patil : Social Media
9. Dr. P. K. Katti : Rooftop solar Energy
10. Chandrakant Agame : Relationship
11. Rishi Patil : Life

**8. The Video Lectures prepared by IIT faculty** from NPTEL videos are regularly shown to the students for enhancing their understanding and performance in the core subjects of the course. Course contents of the curriculum for most of the subjects are taken from NPTEL pool.

**9. GATE coaching:** Remotely situated institutes like ours must conduct practices beneficial to students during final year of graduation. Department conducts, throughout the year, the GATE coaching classes for all the students till their examination and these classes are included in their weekly time table as if they are the part their academic schedule. Every year almost all students of the final year B. Tech are appearing for the examination. In this year, about 11 students have cleared the GATE - 2017 examination.

**10. Industrial Training:** Each student undergoes an industrial training during summer vacation at the end of 2<sup>nd</sup> year B. Tech for 2-weeks and 3<sup>rd</sup> year B. Tech for 4 weeks. This training gives exposure to the students to latest industrial practices and modern technologies, develops interest of core subjects among students; which would in turn help them to identify research-oriented projects.

**11. Technical Project related to Community Services:** Student undertake projects related to community services. Through such projects, they get exposure to the real life problems of the community. This gives them an opportunity to seek solutions to such problems. As a social responsibility in account, we have included a task called COMMUNITY PROJECT in our curriculum, which has some Credits. For community projects this year, we are allowing



students to undertake the challenges posted on [innovate.mygov.in](http://innovate.mygov.in) portal for Smart India Hackathon'17.

Smart India Hackathon'17 is a portal for posting submissions for different challenges posted by government agencies and departments. The structure of problem is clearly mentioned on the website, so that one can have a brief look at challenge. To provide the solution of challenge, you have to participate in the Hackathon. Format for the same is also available on the respective website.

**12. Open Book Examination:** Department started an open book examination for some of the B.Tech / M.Tech courses. Motive behind this is to improve conceptual understanding and thinking ability rather than memorizing ability. It is ideally suited to teaching programs that especially aim at developing the skills of critical and creative thinking. A more important reason for using open book examinations is that they have a tremendous impact on promoting the right mental sets in both learning and teaching.

**13. Cynosure 2017:** Cynosure'17 is the technical festival arranged by Dr. Babasaheb Ambedkar Technological University. Being the only State Technological University, Dr. BATU envision the visitors the taste of this year's theme "STARTUP FOR A BETTER TOMORROW". All the departments have put in their respective events to bring in all the emerging Engineers from all over India to experience the taste of our fest.

Various departments arranged four events in the technical fest as:

**ROBO DEL BARCOS, MICRO-APP, IGNITE,  
CRIME SCENE INVESTIGATION, INIGMA, MATHMAZE,**

IT department has arranged events in the technical fest as:

**GOOGLER, TINY TANG.**

**14. Industrial Visit:** University motivates the students to participate in industrial visits. This opportunity makes the student to fill the gap between the current trends and course curriculum. Following Industrial visits were arranged for B. Tech students in this year.

Sr. No.	Duration	No. of Students	Industry Visited
1.	7 <sup>th</sup> – 12 <sup>th</sup> April, 2017	EXTC Second Year B.	ISRO, Vishweshwarayya

		Tech: 69 Students & faculty members	Museum Bangalore
2.	5 <sup>th</sup> – 12 <sup>th</sup> March, 2017	Electrical Third Year B. Tech: 61 Students & faculty members	ISRO
3.	7 <sup>th</sup> – 11 <sup>th</sup> March, 2017	Electrical Second year B. tech: 40 Students & faculty members	Royal Motors,
4.	19 <sup>th</sup> – 21 <sup>st</sup> 2016	Petrochemical third year B.Tech students participated in a three day S.T.T.P. “Unit operations and Unit Processes” in two groups, each of 35 students & faculty members.	RCF Chembur-Mumbai RCF Thal-Alibag
5.	25 <sup>th</sup> October 2016	Second year B.Tech students: Prof. Vijaybabu, Head Chemical Engineering Department, coordinated the entire activity.	EMBIO Limited Mahad

6. **Alumni Meet:** An alumni meet was organized by EXTC department on 25 November 2016. 34 alumni from EXTC batch of 2016 attended the event. Electrical department had organized on 27<sup>th</sup> December 2016 and 21 alumni attended the event. They shared their experience as well as interesting moments of campus life to the audience. They also shared their expectations from Department and how they can contribute for the development of the

department. An interactive session was organized with alumni so that students may get the proper guidance for the various opportunities after engineering, preparation for various exams like GATE, GRE, TOEFL, and research opportunities. Everyone agreed to increase their support for improving placement of department by encouraging more and more industries to visit campus for placements.

7. **Farewell:** EXTC Departmental farewell under TEESA organized a farewell on 25<sup>th</sup> May 2017 for final year B. Tech Students. Graduating students shared their experience about University/ department/ faculty. Students also discussed the problems faced by them during their graduation so that the appropriate solution may be found for the betterment of their juniors.

Electrical Engineering Departmental under EESA organized a farewell on 17<sup>th</sup> April 2017 for final year B. Tech and M tech Students. Graduating students shared their experience about University/ department/ faculty. Students also discussed the problems faced by them during their graduation so that the appropriate solution may be found for the professional betterment of their juniors.

## **Criterion – IV**

### **4. Infrastructure and Learning Resources**

#### **4.1 Details of increase in infrastructure facilities:**

<b>Facilities</b>	<b>Existing</b>	<b>Newly created</b>	<b>Source of Fund</b>	<b>Total</b>
Campus area	75357 Sq feet	--	University	--
Class rooms	3600 Sq feet	900	--	--
Laboratories	4200 Sq feet	--	University	100000
Seminar Halls	800 Sq feet		University	60000
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	--	10	TEQIP	60,0000

Value of the equipment purchased during the year (Rs. in Lakhs)	40,00000	80,05,004/-	TEQIP	1,20,05004
Others	--	--	--	--

#### 4.2 Computerization of administration and library:

For Administration it is planned in 2017-18 and library is fully computerized.

#### 4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
<b>Text Books</b>	37108	NA	1165	2026146	38273	NA
<b>Reference Books</b>	6239	NA	117	NA	6356	NA
<b>e-Books</b>	-	-	-	-	-	-
<b>Journals</b>	NA	NA	99	NA	99	NA
<b>e-Journals</b>	NA	NA	8		8	2149775
<b>Digital Database</b>	NA	NA	NA	NA	NA	NA
<b>CD &amp; Video</b>	481+27	NA	NA	NA	481+27	NA
<b>Others (specify)</b>	News papers		24(daily)	59972	24	

#### 4.4 Technology up gradation (overall)

	Total Comput ers	Comput er Labs	Internet	Browsin g Centres	Compute r Centres	Offic e	Depar t- ments	Others
<b>Existing</b>	325 PCs	15 Labs	Leased Line from BSNL of 1Gbps Accessed through centralized facility	all	53 PCs	21 PCs	231 PCs	20PCs (Library)
<b>Added</b>	112 PCs	05 Lab	Line from RelTel 10 Mbps Accessed through centralized	00	00	10 PCs	92 PCs	10PCs

			facility					
<b>Total</b>	437 PCs	16 Labs	--	00	53 PCs	31 PCs	323 PCs	30PCs

#### 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

1. Conducted two workshops on internet security
2. Technology up gradation (overall)

#### 4.6 Amount spent on maintenance in lakhs:

i) ICT	--
ii) Campus Infrastructure and facilities	161
iii) Equipments	13
iv) Others	--
<b>Total:</b>	174

### Criterion – V

## 5. Student Support and Progression

### 5.1 Contribution of IQAC in enhancing awareness about Student Support Services

We have a system for student support and mentoring. The Vice Chancellor controls the Student Affairs which covers overall discipline among the students, redressing their grievances, sports activities, cultural activities, NSS and NCC activities, student's health care, maintaining and updating student's database and Alumni activities. These activities are conducted through the Registrar, Heads of the Departments, Hostel Rectors, NSS and NCC coordinators, Teacher in-charge for sports activities and Teacher-in-charge for cultural activities. University also appoints conveners for various student activities for the smooth conduct of these activities.

We support and mentor the students for various aspects including academics and extra-curricular activities. We encourage the students to participate in the activities of their choice.

We organize regular guest lectures of the professionals from industry to guide our students about the expectations and requirements of the industry, team dynamics, corporate etiquettes etc. The students are provided ample opportunity of interaction with these experts. We also conduct mock aptitude tests for the final year students. The training and placement officer regularly interacts with the students and guide them for the group discussions and preparation for interviews.

We also organize special lectures on Personality Development and Soft Skills for the benefit of the students. The experts and professionals are invited in every semester. The students are also encouraged to contact the experts so as to arrange the lectures at their Department level. The University takes care all expenses including honorarium, travel expenses and provide local hospitality to the invited guests. The students also get guidance on carrier path identification through these guest lectures.

## 5.2 Efforts made by the institution for tracking the progression

Continuous assessment of students is carried out during mid-semester and end semester using mini project, presentation, demo, assignment, objective test etc.

For faculty, it is mandatory to submit Course files along with attainment of proper COs and POs.

### 5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
2584	198	95	00

### (b) No. of students outside the state

17+5

### (c) No. of international students

00

<b>MEN</b>		No.	%	<b>WOMEN</b>		No.	%
	UG	1759	68		UG	825	32
	PG	143	72		PG	55	28

Demand Ratio : 0

Drop-out % : 15

## 5.4 Details of student support mechanism for coaching for competitive examinations (If any)

GATE coaching remotely situated institutes like ours must conduct practices beneficial to students during final year of graduation. University conducts, throughout the year, the GATE coaching classes for all the students till their examination and these classes are included in their weekly time table as if they are the part their academic schedule. Every year almost all students of the final year B. Tech are appearing for the examination. In this year about 13 students have cleared GATE -2017 examination

No. of students beneficiaries

100

### 5.5 No. of students qualified in these examinations

NET

00

SET/SLET

00

GATE

17+04

CAT

00

IAS/IPS etc.

01

State PSC

00

UPSC

00

Others

06(GRE)

### 5.6 Details of student counselling and career guidance

University has organized various expert talk and training programs for UG and PG students. In academic year 2016-17 total 24 programs organized by the University.

No. of students benefitted:

426

### 5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
02+4	60+72	04+6	10

### 5.8 Details of gender sensitization programmes

Women Cell is available and expert lectures on the awareness are given by the eminent personalities

### 5.9 Students Activities

#### 5.9.1 No. of students participated in Sports, Games and other events

State/ University level

1620

National level

1

International level

0

No. of students participated in cultural events

632

0

0

State/ University level

National level

International level

## 5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports: State/ University level

680

National level

08

International level

00

Cultural: State/ University level

148

National level

00

International level

00

## 5.10 Scholarships and Financial Support

	Number of students	Amount
<b>Financial support from institution</b>	Nil	Nil
<b>Financial support from government</b>	GoI Scholarship-1636(Applied) GATE Scholarship-75	GoI Scholarship is Fees Paid by the student according to caste 12400 GATE scholarship
<b>Financial support from other sources</b>	71 (TEQIP- (PhD+M. Tech) 03 (Posco)	Rs. 27500 per month per PhD student Rs.12400 per month per M Tech student Rs. 30,000
<b>Number of students who received International/ National recognitions</b>	Nil	Nil

## 5.11 Student organised / initiatives

Fairs : State/ University level

12

National level

01

International level

--

Exhibition: State/ University level

02

National level

--

International level

--

29

## 5.12 No. of social initiatives undertaken by the students

## List of some of the social initiatives undertaken by the students

Sr. No.	Event	Description
1	International Yoga Day 2015	International Yoga Day was celebrated with great enthusiasm in our University on 21 <sup>st</sup> June, 2017 which was organized by our NCC Unit. More than 400 cadets participated for this International Yoga event.
2	Disabled People Survey	Survey of disabled people in nearby areas was conducted on 23 <sup>rd</sup> July, 2015 by our NCC Unit.



		The needs as well as lifestyle of those people were studied and understood by our cadets discovering a new approach to their lives.
3	Cleaning Survey at Mangrul Village	On 20 <sup>th</sup> October, 2015 cadets conducted a cleanliness drive at Mangrul village which is adopted by our NCC Unit of our University. Cadets cleaned the place very efficiently.
4	Cycle Expedition at Raigad Fort	On 31 <sup>st</sup> January, 2016, our NCC Unit has organized a cycle expedition at Raigad fort. Active cadets of our Unit participated in it.
5	Snake Show	The objective of this programme was to create awareness among the students about the snakes so that we can maintain the ecosystem by preserving different types of snakes.
6	Run for 'Spirit of India	Our Cadets joined the Australian former MP and tourism minister, Mr. Pat Farmeron his run for his social act named as Spirit of India. Cadets ran with the team up to 25 km from Lonere.
7	Blood Donation and Thalassemia Screening drive	Blood donation camp was organized on September 2017. Total 277 units of blood were collected in the drive by the team of J. J. Hospital Mumbai. During the drive, blood samples of 330 first year B. Tech students were tested for thalassemia screening.

### 5.13 Major grievances of students (if any) redressed:

- To change the CGPA system adopted by the university.
- To provide hostel accommodation.

## **Criterion – VI**

### **6. Governance, Leadership and Management**

#### **6.1 State the Vision and Mission of the institution**

**Mission:** The University is committed to provide quality technical education, research and development services to meet the needs of industry, business, service sector and the society, at large.

**Vision:** The University is committed to becoming a leading ‘Center of Excellence’ in the field of Engineering, Technology and Science as a seat of learning with a national character and international outlook

#### **6.2 Does the Institution has a management Information System**

Yes, The Vice Chancellor of the university has taken keen interest in developing MIS for the academic administration of the University which takes care of all the activities right from admission/ registration to the declaration of results.

The system of on-line academic monitoring has been introduced since the last 3 semesters which is a unique system. The Vice-Chancellor personally monitors the status of activities through this web based MIS and issues necessary instructions to the Heads of the Departments and concerned officers from time to time. The finance is also managed through Tally (ERP) base MIS which has been found very effective.

#### **6.3 Quality improvement strategies adopted by the institution for each of the following:**

##### **6.3.1 Curriculum Development**

The University follows a systematic process towards designing and developing the curriculum. The University has adopted the following step-by-step mechanism for this purpose:

##### **a. Board of Studies (BoS)**

Each University Department has its own Board of Studies (BoS). The main function of the BoS is to frame the curriculum and the contents of individual courses and to identify the electives to be offered. The BoS includes experts from industries, academia and research organizations. While framing the curriculum, the BoS takes into account the feedback from various stakeholders, needs of the industry, profession and society, needs of the research organizations, thrust areas of the country, etc. The curriculum for first year of UG and PG programmes has been revised and implemented with effect from July 2016. Subsequently, the University is going to propose revised curriculum for second year onwards for UG and PG programmes from July 2017. It is decided to implement the system in line with the choice based credit system. On an average, about 50% members on the BoS are experts from industries who suggest the courses relevant to industrial needs.

**b. Academic Council (AC)**

The Academic Council formulates common structure for all the courses conducted by the University, reviews and approves the syllabi prepared by each BoS, prepares academic calendar, and periodically reviews examination results. AC also discusses the reports placed by research committee, advisory board and IQAC and give suggestions for improvements from time to time. Care has been taken to have sufficient representation of experts from industries. That has really helped us to increase industry-institute interaction and possibility of industry sponsored UG and PG projects.

**c. Executive Council**

The executive council is the highest body with the Vice-Chancellor as its ex-officio chairman. It is the principal statutory authority vested with the powers of supervision, control, and execution. The council reviews almost all the afore-stated academic activities including the curricula before its implementation. It also suggests improvements, modifications and any such new policies for improvement and enhancement of the quality of education.

**d. Internal Quality Assurance Cell (IQAC)**

The IQAC reviews and monitors the progress of various academic activities on monthly basis, takes preventive and corrective measures for quality assurance. It also recommends best practices to be followed by all the Departments of the University for the purpose of improvement of quality of academic and administrative activities. It also reviews the curricula prepared by each Department and gives suggestions for improvement.

While framing the curricula, it is necessary to ensure that the curricula are relevant for the industry, research organizations and profession. The Boards of Studies (BoS) and Academic Council have representatives from industry and research organizations; who give valuable inputs so as to make the curricula relevant. In addition, feedback from stakeholders including our alumni working in industry and industry personnel helps in making the curricula relevant for industry, research and innovation.

In view of the above, the University has introduced innovative courses like ‘mechatronics’ in Mechanical Engineering, Communicative English and Self-study Seminar for all disciplines, Technical Projects on Community Services, to name a few.

All India Council for Technical Education (AICTE), which is the regulatory body for technical education, periodically brings out ‘model curriculum’. All the Departments have referred to the model curricula of their respective disciplines while framing the curricula. These model curricula have certainly provided

valuable inputs. It is worth-mentioning that the University is amongst the few in the country to have implemented choice-based credit system.

**e. Academic Audit:** Every year academic audit of each department is carried out by the members of Advisory Board. The report of the Advisory Board is placed in Academic Council through IQAC for mentoring the departments.

### **6.3.2 Teaching and Learning**

The University conducts remedial coaching classes for the weak students on a regular basis. There is a separate remedial coaching cell for this purpose. A faculty member has been appointed as the Coordinator for this Cell. He is assisted by three members from supporting staff. Each Department prepares a separate time-table for remedial courses. Usually, these classes are conducted during evenings or on holidays.

**Academic Calendar:** At the beginning of every academic year, the University prepares an academic calendar quite meticulously. This academic calendar is placed before the Academic Council and Executive Council for their approval. Once approved, all the activities including teaching, tests and end-semester examinations are conducted as per the academic calendar without any slippages. Thus, the academic calendar is ‘**non-negotiable**’ document for us. Over the years, the University has been conducting all the examinations as per the academic calendar and declaring the results **within 30 days** as per the norm **without any hassle**.

**Teaching Plan:** As regards the ‘Teaching Plan’, each teacher has to upload the teaching plan on the website as an integral part of the ‘on-line academic monitoring system’; which has been developed by the University.

**Continuous Evaluation System:** The University has adopted a ‘continuous evaluation system’ in better and spirit ever **since its inception in its letter and spirit**. At present, the evaluation consists of two tests and an end-semester examination (ESE) for theory courses. The tests and end-semester examinations (ESE) are conducted strictly as per the academic calendar. For laboratory courses, evaluation is done immediately after each lab experiment is over.

**Transparency in Evaluation:** Transparency is the ‘hall-mark’ of the University examination system. While the answer-books of the tests are shown to the students after evaluation by the concerned teacher, photocopies of the answer-books of the end-semester examinations (ESE) are made available to the students on payment of prescribed fees. The University has standardized a format for the evaluation of the

laboratory courses. This format is available on the website as an integral part of the ‘on-line attendance system’. Thus, the student can monitor his or her own performance on a continuous basis.

The University is fully aware of the fact that for holistic development of students, it is necessary to give enough attention to extra- and co-curricular activities along with sound curriculum. Courses such as self-study seminar, technical project on community services (group project) and final year project (group project), industrial training and internship and industrial visits promote self- and participatory learning. In addition, assignment, quizzes, course seminars also promote self- and participatory-learning.

The students also take part in various technical competitions and technical festivals held in-house and outside. The students of all branches collectively organize a Technical Festival namely “Cynosure” every year with tremendous enthusiasm and excitement. This is a multidisciplinary event which provides a platform to the students to show their talent in various activities such as paper presentation, model building, design, robotics, etc. In addition, some branches have Students’ Chapter of some professional associations, e.g. ISHRAE, SAE-India Club, etc. These chapters conduct various activities throughout the year. These activities also promote all-round development of the students. Thus, through the above activities, the students develop traits such as learning on one’s own, learning from others, learning to learn which are essential attributes for life-long learning.

### **6.3.3 Examination and Evaluation**

In the recent years, the University has carried out following examination reforms:

- (i) The University has introduced in all the Departments a choice-based credit system from the academic year 2010-11 in stepwise manner. With this system, new relative grading system has also been put in place in all the Departments.
- (ii) All the tests and end-semester examinations (ESE) are conducted strictly as per the academic calendar.
- (iii) Answer books of the tests are shown to the students. However, photocopy of answer-books of ESE can be made available after payment of certain fees. This has led to the transparency.
- (iv) Evaluation of ESE answer-books is carried out in Centralized Assessment Programmes (CAP). As a result, all the results can be declared within 30 days of completion of the exam. The examination results are posted on the University website.
- (v) The reforms such as payment of exam fees on-line have enhanced efficiency.
- (vi) All the results are declared within 30 days of completion of the exam. The results are published on the University website.

- (vii) The University exercises utmost care and precaution in every step of the examination process as follows:

Paper Setting: The faculty members have to submit three sets of question papers in sealed envelope to the Exam Section.

Printing of Question Papers: The printing of question papers is done in a separate room by taking security measures just one day in advance.

Conduct of Examination: The conduct of examination is done under strict vigil. There are squads to keep the vigil. All the ESE answer-books are evaluated in the CAP Centre by taking security measures.

#### **6.3.4 Research and Development:**

The University has Research Committees at the Department level. Every Department offering Ph. D. programmes has its Research Committee constituted as per the provisions made there in the Ph. D. Rules and Regulations. Each Departmental Research Committee comprises a Chairman who is the Head of the Department. All faculty members having the designation of 'Professor' are the members of the Committee, one Associate Professor of the Department (on rotation basis) will be the member and all guides are also members of the Research Committee. Each Research Committee also has five external members as nominated by the Academic Council of the University. The Committee meets as and when required, to discuss the problems of Ph.D. students. The recommendations of the Research Committees are being placed in Academic Council that takes appropriate decisions on the recommendations of the Research Committee.

Research fellowships are also available for all the full time Ph. D. students.

#### **6.3.5 Library, ICT and physical infrastructure / instrumentation**

A special Body "Building & Works Committee" headed by the Vice-Chancellor and represented by Hon. Chancellor's Nominee, PWD officers & Invited Experts takes care of the requirement of physical infrastructure.

Necessary policies for planning the facilities are decided and submitted for final approval to the Executive Council & then GOM and /or GOI for generating funds. Available facilities are handed over to Department concerned. This distribution is done as per the Government norms wherever applicable. Periodic reviews are taken to avoid the under-utilization of facilities.

University believes that a healthy teaching-learning environment is one of its biggest assets. A well-equipped library and classrooms with modern teaching aids such as LCD projectors stand in testimony of

this. Our library has well demarcated space for Book Bank scheme, Reading Section, Reference Section, Study Section, Offices for Librarian & Assistant librarian and e-Learning facilities.

The University has provided office space to all faculty members, Heads of the Departments and all section heads. Separate rest rooms for women students and staff are provided in the University main building. As stated above, the proposed Women's Common Room has necessary facilities such as rest room, changing room, dining space, entertainment space and toilet-blocks. This will be a common facility for girl students of all Departments and women employees.

As per the directives of National Building Code and AICTE Building Norms, facilities required for differently abled persons are provided. This includes basic provision of entrance ramp, lift and level toilets at ground floor. One of the class rooms at ground floor has been earmarked for allotting to differently abled students on demand by Department concerned. Security Guards keeping vigil inside the building have been instructed to render necessary physical help.

Playfield of 5.1 hectares is prepared. The facility of indoor games is available. The proposal of sports complex of divisional level capacity is under consideration. (Additional information is already given under the head 'student facilities')

#### **6.3.6 Human Resource Management**

The University is facing shortage of faculty in all the disciplines due to various reasons. However, the existing faculty members are well qualified to cater to the curriculum and academics. The University also appoints teachers on contract basis and teaching assistants (PhD scholars and GATE-qualified M. Tech students) to make up for the shortage of faculty.

#### **6.3.7 Faculty and Staff recruitment**

The University encourages diversity in its faculty recruitment. University does recruit the faculty as per State Government's norms and regulations. University is keeping continuous follow-up with Government in order to fill up the vacant posts and create a new posts for UG and PG programmes.

#### **6.3.8 Industry Interaction / Collaboration**

While framing the curricula, it is necessary to ensure that the curricula are relevant for the industry, research organizations and profession. The Boards of Studies (BoS) and Academic Council have representatives from industry and research organizations; who give valuable inputs so as to make the curricula relevant. The University has a liberal policy for consultancy work and encourages faculty

members to undertake consultancy work like testing of materials, product development, construction work, Industrial consultancy (like expert opinions) and Extension Activities for industry personnel.

The University-industry interaction includes summer training of our students and training of the employees of the University. The University has completed training programmes for reputed industries like Larson & Toubro, Sandoz Ltd., Privi Organics Ltd., Excel Industries Ltd., etc. The University have generated good amount of revenue through these training programmes. To serve the purpose, the University has signed many MOU's with different industries

### 6.3.9 Admission of Students

The admission for all the courses UG (B. Tech) and PG (M. Tech) run by the University is done through on-line Centralized Admission Process (CAP) which is conducted by the Directorate of Technical Education, Government of Maharashtra. The information about the University is included in the handbook published and distributed by the Directorate of Technical Education. However, the Rules and Regulations governing examinations and evaluation of the courses run by the University have been made available to the students on the website of the University, which can be accessed on-line. The University also publishes information about hostel admissions, admission schedule, fee structure, instructions regarding on-line payment of fees, instructions regarding online registration, code of conduct, and information about the Departments, the authorities of the University, syllabus, academic calendar etc. on its website. The information about the anti-ragging committee formed as per UGC directives and contact numbers of the persons to be contacted in case of emergency (or to report any incidence of ragging) is also made available on the Website of the University. Other information about the function is available on the Website of the University under RTI link

### 6.4 Welfare schemes for

<b>Teaching</b>	EPF, Financial Assistant, Casual Leave, 5 months Maternity Leave
<b>Non-teaching</b>	EPF, Financial Assistant, Casual Leave, 5 months Maternity Leave
<b>Students</b>	Financial Assistant to students for projects, Anti Ragging Committee, Department wise different comities to organise various extracurricular activities,

6.5 Total corpus fund generated

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6.6 Whether annual financial audit has been done

Yes

√

No



6.7 Whether Academic and Administrative Audit (AAA) have been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes		Yes	
Administrative	Yes		Yes	

6.8 Does the University/ Autonomous College declare results within 30 days?

For UG Programmes      Yes ☒ No ☐

For PG Programmes      Yes ☒ No ☐

**6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?**

- i. The University has carried out following examination reforms:  
As mentioned earlier, the University has introduced choice-based credit system from the academic year 2010-11 in all the Departments.  
With this system, new relative grading system has also been put in place in all the Departments.
- ii. All the tests and end-semester examinations (ESE) are conducted strictly as per the academic calendar.  
Answer books of the tests are shown to the students. However, photocopy of answer-books of ESE can be made available only after payment of certain nominal fees. This has led to greater amount of transparency in the examination system.
- iii. Evaluation of ESE answer-books is carried out in Centralized Assessment Programmes (CAP). As a result, all the results are declared within 30 days of completion of the examination.
- iv. The examination results are posted on the University website.
- v. The reforms such as payment of exam fees online have enhanced efficiency of the system manifold.
- vi. Our University has implemented Digital Valuation System for checking of answer books.

**6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?**

NA

**6.11 Activities and support from the Alumni Association**

Each Department organizes alumni meet every year to make the students aware of the job scenario and currently available job opportunities in the market. Interaction with alumni also helps the students to prepare for on campus interviews and competitive examinations pertaining to their respective disciplines.

**6.12 Activities and support from the Parent – Teacher Association**

We conduct Parent – Teacher meets yearly at department level to get track of student's progress and to get suggestions from parents for several issues. Parents are also involved as members for various university/department committees such as Anti-Ragging Committee, Grievance Committee etc.

**6.13 Development programmes for support staff**

- Refresher courses
- HRD programmes
- Orientation programmes
- Staff training conducted by the University
- Staff training conducted by other institutions
- Summer / winter schools, workshops, etc.

**6.14 Initiatives taken by the institution to make the campus eco-friendly**

**(i) Energy conservation**

Department of Electrical Engineering conducts energy audit of the campus as the student project every year. Optimum use of electricity is ensured through spreading awareness among the students and the employees. We will be replacing maximum possible lamps/ lights with LED in near future.

**(ii) Use of renewable energy**

The proposal is being prepared by the Department of Electrical Engineering for funding from MEDA.

**(iii) Plantation**

The University plants about 200 plants every year in monsoon as NSS and NCC activity. Many plants have grown up in last 10 years making campus beautiful. We also encourage this by tree plantation ceremony at the inauguration of every event in the campus

**(iv) Hazardous waste management**

The hazardous waste in the form of used chemicals from chemistry and chemical/petrochemical engineering laboratories is diluted many times in water and disposed carefully. We have the policy of minimal use of hazardous chemicals in these laboratories.

**(v) E-waste management**

All e-waste (old computers, printers, electronics components) are stored in separate room. We do not have any facility for disposal of e-waste in University. The University arrange to sell this e-waste to proper buyers of e-waste.

**(vi) Dustbin Fixing:** Dustbins have been fixed throughout the campus for separation of dry and wet garbage with help NSS and NCC students.

## **Criterion – VII**

### **7. Innovations and Best Practices**

7.1 Innovations introduced during this academic year which have created a positive impact on the Functioning of the institution. Give details.

- Use of Google forms to collect various data like Students feedback
- Digital payment gateway for accepting various fees and dues.
- Every year National/International conferences are organised to encourage students for the research.
- Every year workshops are being organised to improve different soft skills of students.
- Students were encouraged to do projects based on real life problems faced by industry or society. As a part of this, students participated in Hackathon-2017 organised by Central Government of India.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

- Implementation of Online library management
- Collecting the student's data by means of technology like Google Forms.
- Online evaluation of answer sheets through intranet.
- Start of affiliating colleges to the university.
- Signed MoU with various industries.

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

- Online collection of student's surveys on faculty and on course content.
- Establishing excellent rapport with the nearby industries to draw the benefit of carrying out consultancy work for the industries and also accommodating students for industrial training Program.

*\*Provide the details in annexure (annexure need to be numbered as i, ii,iii)*

#### 7.4 Contribution to environmental awareness / protection

<ul style="list-style-type: none"><li>• Energy conservation</li><li>• Use of renewable energy</li><li>• Plantation</li><li>• E-waste management</li></ul>	<div>√</div>
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#### 7.6 Any other relevant information the institution wishes to add. (For example SWOC Analysis)

**Strengths:** 1. University is having qualified, experienced and dedicated faculty members  
2. University has very good rapport with nearby industries.

**Weaknesses:** 1. Shortage of regular faculty,  
2. Lack of infrastructure and required facilities for development of students.

**Opportunities:** 1. University can explore more collaborative projects with industries.  
2. University can also explore the possibilities of placement of graduates

**Challenges:** 1. University has to attract qualified faculty.  
2. The University also required to attract calibre students

#### 8. Plans of institution for next year

- University would like to achieve at least 30% placement of their graduates.
- University would like to get more number of centrally funded projects.
- Community radio system for University and nearby villages.
- E-class room implementation using smart class room
- Recording studio for creation and decimation of information
- Online Portal Grievance for students, faculty and staff issues.
- To establish Atal Incubation Centre for idea, innovation & product development
- To upgrade computing facilities by adding 50 Desktop machines and five server class machines.
- To arrange guest lectures and workshops under TEQIP-III.
- To create a culture of Competitive Programming
- Video Surveillance throughout the University campus.
- Digitization of all activities related to academic to improve quality
- Online quizzes

Name Dr. D. N. Singh

[Signature]

Signature of the Coordinator, IQAC

Name Dr. V. G. Gaikar

[Signature]

Signature of the Chairperson, IQAC

Vice-Chancellor

Dr. Babasaheb Ambedkar Technological University

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Maharashtra (India)



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## Annexure: B

### Feedback Analysis Report (winter 2017: July - Nov 2017) Feedback Analysis of Theory COURSES

Semester I	Subject		Name of Faculty	Division	Total Avg out of 5	Total Average
	Math – I		TRUPTI VARHE	Div A	4.27	4.27
			AJAY PAWAR	Div B	3.85	3.85
	Chem		DR.MUJAWAR	Div A	4.84	4.84
			SHAMAL PALEKAR	Div B	4.15	4.15
	BET		PRATIKSHA KURUNDWADE	Div A	3.90	3.90
			SWARAJ KADAM	Div B	4.05	4.05
	CP		ROSHAN KOTKONDWAR	Div A	3.48	3.48
			HARSHA GAIKWAD	Div B	3.68	3.68
	EM		H.H.JOSHI	Div A	3.98	3.98
			JOGI	Div B	3.78	3.78
	BETX		SAMPADA THORAT	Div A	3.17	3.19
				Div B	3.21	

Semester III	Subject		Name of Faculty	Division	Total Avg out of 5	Total Average
	NA		RAMESH BANDGAR	Div A	3.54	3.54
			DR.A.B.NANDGAONKAR	Div B	3.68	3.68
	EDC		DR.BRIJESH IYER	Div A	3.99	3.99
			SANDIP BAVKAR	Div B	4.17	4.17
	DE		N.S.JADHAV	Div A	3.58	3.6
				Div B	3.79	
	EMIII		DR.BANSOD	Div A	3.64	3.64
			RAVINDRA SONAWANE	Div B	3.90	3.9
	PCE		ANIKET JANGAM	Div A	4.17	4.2
				Div B	4.35	
	E-I		SWAPNESH SHINDE	Div A	3.86	4.0
				Div B	4.15	

Semester V	Subject		Name of Faculty	Average out of 5		Total Average
				Div A	Div B	
	AC		MEGHA KAMBLE	3.54	3.06	3.25
	MCA		KUNAL KAMBLE	3.7	4.0	3.86
	DSP		PALLAVI INGALE	3.35	2.86	3.10
	EMF	A	ROSHAN BONDE	4.2	-	4.2
		B	DR.S.B.DEOSARKAR	-	3.66	3.66
	ELE-II (NEDM)		SUDHANSHU TAYDE	3.55	3.51	3.53

Semester VII	Subject	Name of Faculty	Average out of 5		Total Average
			Div A	Div B	
	DIP	SNEHAL GAIKWAD	4.06	4.07	4.05
	OC	ATUL KHODE	3.17	3.49	3.33
	ELE-IV (VLSI)	SUMEET ISAI	4.15	4.27	4.21
	MTT	S.V.KHOBRADE	3.76	3.46	3.61
	COSS	SWATI PAWAR	3.02	3.00	3.01

**Feedback Analysis of PRACTICAL Courses**

Semester I	Name of Faculty	Subject	Average Out of 5
	SAMPADA THORAT	BETX	3.82
	SWAPNESH SHINDE		3.46
	SURAJ KULKARNI		3.65
	ROSHAN KOTKONDDAR	CP	3.72
	HARSHA GAIKWAD		3.79
	HARSHADEEP JOSHI		4.69
	AJAY CHAVAN	EM	4.65
	ASHISH PALIWAR		4.68
	SHIRISH KADAM		3.37
	DR.H.M.MUJAWAR		3.84
	SHAMAL PALEKAR	Chemistry	4.20
	Ms. ISANE		4.45
	P.B.LOKHANDE		4.37
	PRATIKSHA KURUNDWADE		3.65
	SWARAJ KADAM	BET	3.90
	VAIBHAV KOLEKAR		4.06

Semester III	Name of Faculty	Subject	Average Out of 5
	PALLAVI INGALE	EMIT	3.90
	ROSHAN BONDE		4.19
	SANDIP BAVKAR	EDC	4.09
	DR.BRIJESH IYER		3.9
	SNEHAL GAIKWAD		3.69
	RAMESH BANDGAR	PCE	4.10
	MEGHA KAMBLE		4.18
	ROSHAN BONDE		3.88
	N.S.JADHAV	DE	3.46
	ANIKET JANGHAM		4.13
	ATUL KHODE		4.50
	JYOTIRANI KALGI		4.12
	SNEHAL GAIKWAD		4.18

	<b>Name of Faculty</b>	<b>Subject</b>	<b>Average Out of 5</b>
<b>Semester V</b>	KIRAN KURANGHKAR	PCE	<b>4.21</b>
	KUNAL KAMBLE	MP	<b>3.94</b>
	MEGHA KAMBLE		<b>3.46</b>
	SANDIP BAVKAR	SS	<b>2.73</b>
	SNEHAL GAIKWAD		<b>3.96</b>
	SWATI PAWAR		<b>3.53</b>
	SUMEET ISAI		<b>4.18</b>
	JYOTIRANI KALGI		<b>3.68</b>
	AKSHAY SATPE	EDC-II	<b>3.86</b>

	<b>Name of Faculty</b>	<b>Subject</b>	<b>Total Average Out of 5</b>
<b>Semester VII</b>	SUMEET ISAI	MTT	4.07
	ANIKET JANGHAM		3.69
	SUDHANSHU TAYDE	DC	4.06
	ROSHAN BONDE		4.40
	JYOTIRANI KALGI		3.16
	ATUL KHODE	OC	3.51
	SWATI PAWAR		3.00
	SUDHANSHU TAYDE	AAT	3.93
	PALLAVI INGLE		3.22
	SURAJ KULKARNI		2.45
	RAMESH BANDGAR		3.81
	KIRAN KURANGHKAR		2.70
	AKSHAY SATPE		3.13
	PRASAD DUTANDE	DIP	3.52