



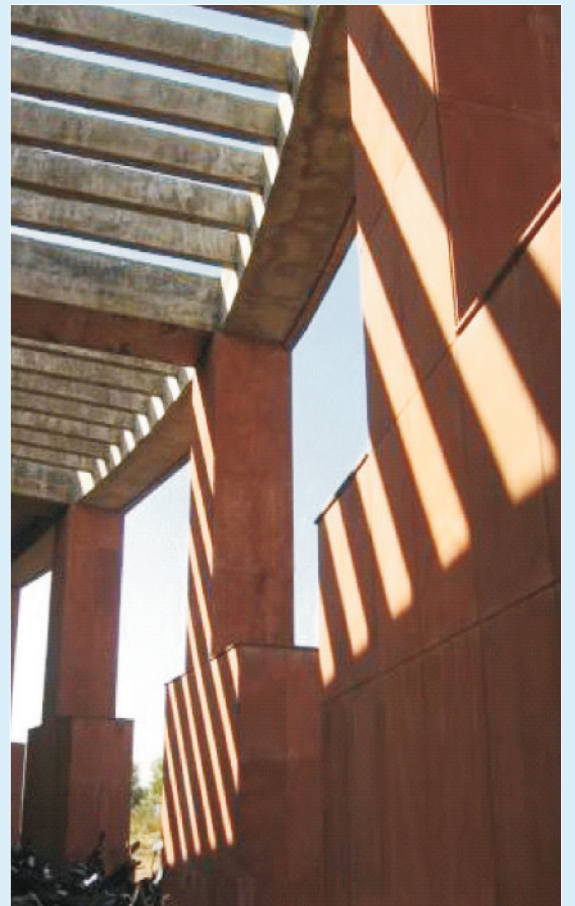
# Annual Report

2017-2018

वार्षिक अहवाल

२०१७-२०१८

(University Act No. XXIX of 2014)



डॉ. बाबासाहेब आंबेडकर तंत्रशास्त्र विद्यापीठ, लोणेरे - रायगड  
Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad

**Our Guiding Spirit**



**Bharat Ratna Dr. Babasaheb Ambedkar**

**Our Inspiration**



**Chhatrapati Shivaji Maharaj**

**“We are Indians, firstly and lastly.”**

**“Men are mortal. So are ideas.  
An idea needs propagation as much as  
a plant needs watering.  
Otherwise both will wither and die.”**

**Bharat Ratna Dr. Babasaheb Ambedkar**



Dr. Babasaheb Ambedkar Technological University,

Maharashtra State



Annual Report 2017-2018

Vidyavihar, Lonere Dist. Raigad- 402103  
Maharashtra





**His Excellency the Chancellor  
C. Vidyasagar Rao  
Dr. Babasaheb Ambedkar Technological University**



**Vice-Chancellor  
Dr. V. G. Gaikar  
Dr. Babasaheb Ambedkar Technological University**



**Dr. S. S. Bhamare  
Registrar  
Dr. Babasaheb Ambedkar Technological University**





Dr. Babasaheb Ambedkar Technological University,  
Maharashtra State  
(University Act No. XXIX of 2014)

# Annual Report 2017-2018

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Annual Report Committee:

- Dr. A. P. Shesh, Convener
- Dr. S. R. Bhagat, Member
- Prof. M. F. A. R. Satarkar, Member
- Prof. Mrs. M. D. Laddha, Member
- Prof. Mrs. S. R. Hivre, Member
- Dr. A. R. Chavan, Member-Secretary



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## Vice-Chancellor's Report at Convocation

The Chief Guest of today's function Dr. Devang Khakhar, Director, Indian Institute of Technology, Mumbai, Hon'ble members of the Executive Council, the Academic Council and other Statutory Bodies of the University, invited guests, graduating students and their proud parents, the faculty members and the non-teaching staff of the University, members of press, representatives of electronic and print media, ladies & gentlemen; On the behalf of Dr. Babasaheb Ambedkar Technological University, I extend a very warm welcome to all of you on this 21<sup>st</sup> Convocation of the University on 12<sup>th</sup> January, 2018. I am indeed delighted to welcome you all to the main campus of the University.

On 1<sup>st</sup> March, 2016 in a major milestone in the history of the University since its inception, the State Government declared the University as the State Technological University to which Engineering & Technology, Pharmacy, Architecture and Hotel Management and Catering Technology institutes from the State shall get affiliated. In the academic year 2016-17, the University initiated the affiliation process by inviting the applications. I am happy to inform you that 71 institutes were affiliated in the very first year, of which Engineering and Technology Institutions are 49, Architecture 05 and Pharmacy 17. For the academic year 18-19, another 39 institutes have applied for the affiliation out of which Engineering and Technology Institutions are 20, Pharmacy 18 and Architecture 1. I am happy to inform you all that in the academic year 2018-19, the University will complete a century of affiliating institutes.

The total current student's strength is 12808 and next year it is expected to increase to 35000 students. The University has started one Regional centre at Aurangabad and three sub-centres at Kolhapur, Solapur and Jalgaon in hired premises. Very soon a sub centre at Nanded and another Regional Center at Nagpur will get activated.

### Academics and Academic Reforms

This year, the University has admitted 12328 UG students, 954 PG students and about 490 students on Diploma side. Of these about 34.5% students are girl students. The University has introduced "Choice Based Credit System" for all Bachelors & Masters Programmer courses. In general, on an average, the passing percentage is above 80% in the first attempt. With supplementary and remedial examinations, the passing is above 95%. In this convocation, total of 1254 degrees and diplomas will be awarded, which include 10 PhDs, 97 MTechs, 685 B. Tech. Degrees, 27 Advanced Diplomas and 435 Diplomas.

This year, the faculty members have published 42 papers in peer reviewed journals and presented 103 papers in National and International Conferences. The average H index of the University is 15. Considering that the research programs started late in the University, this number is matching general expectation.

The University strives to provide the best of the education to the students of the University, despite the odds and disadvantage of being located at a remote place. We have revamped UG and PG syllabi using experts from academia and Industry and developed a more student-friendly evaluation system. The new system offers flexibility of continuous assessment (20%) during the semester, mid-term examination (20%) and end-semester examination for 60% of credit. We made a provision of electives right from the second year onwards to give more choice to the students, and based on local expertise of the faculty at colleges.

The University has adopted e-learning approach and use of open source platform. Access to MOOC and NPTEL is, therefore, accepted in the learning process. The following MoUs from various departments including EXTC, Civil, Mechanical and Computer Engineering departments for strengthening the Research & Development activities have been signed with different agencies.

1. EtaServe Software Solution Pvt. Ltd, Bangalore.
2. Pradnya Niketan Society and Valuable Edutainment Pvt. Ltd
3. Maritime Research Centre, Pune.
4. ITIE Knowledge Solutions, Bangalore
5. Tribal Development Department of Government of Maharashtra
6. ATA Freight Line, US
7. Konkan Railway
8. Oracle India Pvt. Ltd.
9. Seth GS Medical College
10. KEM Hospital, Mumbai



The evaluation process is becoming increasingly transparent and from this academic year complete e-governed digital evaluation system has been implemented.

Wi-Fi internet connectivity is available in academic complex and internet facility in the entire campus is provided with fiber optic cables as backbone. We are augmenting the network facilities at the hostels very soon for faster connectivity. The University has initiated e-depository of all vital information for all stakeholders and e-resources for students. We are enlarging the landscape of the learning space by e-resources and other facilities.

For the last ten years, the University has been consistently declaring all its results for Summer and Winter Examinations in a stipulated time period of 30 days or in maximum 45 days and implemented most of the reforms suggested by the Agrawal Committee. For the first time, the University has implemented the digital evaluation system successfully for summer 2017 Examinations, which has been continued for winter 2017 Examination. The University has signed an MoU with Central Depository Services Limited (CDSL) for Demat formatting of degrees. In a span of a year or two, the entire Degree and Grade sheets of the University will be available in the Demat format for verification purpose. The CDSL's National Academic Depository (C-NAD) provides a system of creating electronic form and making it available for verification of the details of students who have acquired educational qualifications on passing the examinations conducted by the University and service related thereto.

Every year, the Departments at the University conduct GATE guidance classes for the students. This year 21 students are qualified for GATE & 6 students for GRE. Remedial coaching under UGC scheme for SC/ST students is also provided by the University.

### **Governance Reforms**

The University has prepared framework for e-Governance in terms of University Information Management System & e-office, Financial Management, Affiliation system and Digital Evaluation system. Already, the affiliation and digital evaluation systems are working effectively.

### **Infrastructure Development**

I am happy to inform you all that the work of a New Girls' hostel is nearing completion and may be put up to use from the ensuing Academic year. Also the work of the one more girls' hostel will commence within the next two months. The construction of approach road in front of University building is in the final stage. The University is planning to make playground facility available to students in a month's time. Roofing work for all the hostels as well as staff quarters will commence immediately and will be completed by the end of June so that hostel facilities can be provided to the needy students. Other amenities, maintenance of hostel work, painting work and other issues will be taken out in the ensuing months. The civil work takes much longer time because of involvement of multiple agencies and rigid accounts code of the GoM.

### **Regulatory Compliance**

The University has received recognition under 12(B) of UGC Act and has started receiving development grants from UGC. Besides, the University has been accredited by NAAC in 2015. The Internal Quality Assurance Cell (IQAC) is in place and has chalked out a schedule for the Academic Audit for all departments of the University. The audit from Government of Maharashtra, Accountant General Office, Mumbai, has been started from the last month and will be completed by 15<sup>th</sup> January 2018.

### **Research Activities**

The University is committed to provide guidance and directions in quality technical education, research and development to meet the needs of industry, businesses, and the society at large, Through RUSA, the research and innovation activities will take place in the University. Various projects have been proposed and we are sure to acquire RUSA approval for a Centre for Product Design Innovation and Entrepreneurship. The University is being projected as the Technical partner with other state Universities.

The University has been receiving funds under Technical Education Quality Improvement Programme of MHRD. I am very happy to inform you all that the University has been selected as mentor ATU for ATUs of three other states, Uttar Pradesh, Himachal Pradesh and Uttarakhand.

In the last few years, the faculty members have started working with UG students promoting undergraduate research. The students are trained in computer programming skills and simulations to conduct research oriented projects. This has even led to presentations of papers in national or international

conferences. We are witnessing a gradual but definite shift towards more relevant projects being designed in the departments of the University.

Despite several odds and difficulties of frequent power cuts, inadequate hostel facility, remoteness of location, lack of amenities such as hospital and school, delays in releasing funds and in appointments and promotions, faculty members of the University have put in relentless effort to sustain research activities until now and they hope that the State Government shall provide more opportunities and support for building this University into a Centre of Excellence. We are looking forward to opportunities of expansion in postgraduate education, research and innovation, industrial collaborations for R&D projects, consultancy, and continuing education for employees and public-private partnership.

### **Awards and Recognitions**

The faculty members of the University work on several Government bodies as well as on functional bodies of other Universities, based on their research expertise. Dr. S M. Pore is selected as structural consultant to Konkan Railway Corporation Ltd, Ratnagiri Gas & Power Pvt. Ltd (RGPTL), Zilla Parishad, Raigad and PWD for their major roads, bridges and building projects. He also has been appointed as Advisory Board Member for National Rural Health Mission.

Our students continue to get awards and accolades for their achievements in State and National Level conferences and other technical festivals. Shivam Yadav from third year Mechanical Engineering successfully published his Research “Assessment of Optical Performance of Aspheric Germanium Lens Manufacturing using Single Point Diamond Turning in ASME 2017 at Los Angeles. He also published two book chapters in reputed publications.

The students of Civil Engineering department carried out various surveys for campus development and planning rural development activity for the surrounding villages. As a matter of pride, all students of Civil Engineering department have been accepted for industrial training of 35 days by Konkan Railway Corporation Ltd., PWD, ZP, Water Resources Department, *Pant Pradhan Gram Sadak Yojna*, etc.

### **Petrochemical Engineering Institute**

Petrochemical Engineering Institute signed the MoU for Employability Skills Development Programme with Mahindra CIE and Naandi foundation, Hyderabad. The Institute organized training programme on Energy Efficiency in Thermal and Electrical utilities with support of MEDA, Pune. Recently two faculty members from Electrical Engg. Department, Dr N S Lingayat has been selected as Principal and Dr. Kharbas as HoD at Government Polytechnic, Ahmadnagar, through MPSC selection process.

### **Community Development**

The University has been promoting community service through its expertise. A number of final year projects are designed as Community Projects to address the problems faced by the local society. Department of Civil Engineering has significantly contributed to Water management for villages around the campus. With the initiative of Rotary Club of Goregaon, the department successfully co-ordinated and the work of construction of two cement bandharas has been commenced on 30<sup>th</sup> December, 2017. In association with Raigad Chapter of Medical Association, the Rugna Sahayak Prashikshan programme of 9 months has been administered to 20 candidates. In association with other industries, the University is taking up projects of street lights, sanitation and healthcare for the neighboring villages.

Considering the surrounding industrial requirements and local uneducated youth population the University has started a 250 hours Skill training programme on “CNC Operator Machining Technician” under *Pradhan Mantri Kaushalya Vikas Yojana* (PMKVY). The University is planning to start similar industry-specific certification courses in the areas of Automotive, Construction, Electronics and Hardware, Plumbing, and Telecom Sub-sector.

### **Industry Linkages**

POSCO TJ Park Foundation, South Korea, has signed an MoU with the University for offering fellowships to 10 students of the University every year. The support is given on the Merit basis and the recipient should not be getting aid from any other source. This year also the company offered scholarships to 10 students. ATA Fright Lines has supported 3 Ph. D. fellowships.

We have increased our interaction with industries in formal as well as informal way. The Boards of Studies and Departmental Advisory Committees have significant representation of industry experts. Their

input has been valuable in framing the current syllabi. The University conducted a Chemical Safety Training programme in association with CCPS, USA and RIL, for 45 faculty members of engineering colleges.

### **Conferences and Workshop**

Every department organized workshops, conferences and refresher courses for engineering teachers and researches throughout the year.

### **Alumni Interaction**

Alumni are the backbone for growth of any organization as their glory and success reflect on the University. Every Department organized Alumni meet during the year. Alumni from different batches and different disciplines attended these events. They shared their experience as well as interesting moments of campus life to the audience. They also shared their expectations from the University and how they could contribute to the development of the University. The interactive sessions with current students were useful for proper guidance for various opportunities after engineering, preparations for various exams like GATE, GRE, TOEFL, and research opportunities.

### **Steps in future**

The jurisdiction of this University spans now the entire state. Few regional and sub-regional Centres have come in existence. To give the full fledged effect of the affiliating Technical University of the State, the University is expecting sanction of staff from the State Government. The work of finalizing the First statutes, Ordinances and Rules and Regulations for governance is in the final stage. The University has prepared a Perspective Plan and Institutional Development Plan and we have embarked only on the First phase of the plan. The emphasis will shift to Research and Innovation with Interdisciplinary Research and Innovation Centres. The interaction with industry shall be enhanced by taking sponsored research projects from industry leading to innovation in products and services. Each Regional and sub-regional centre shall strive for better coordination between the University, colleges, industry and society. Academic audit will be an integral part of the activities with training programmes and continuing education programmes for industry and academia. In this endeavor, we expect whole hearted support from every stakeholder. The success of this University shall be synonymous with success of State's plan and we hope that together we can achieve the goal of making this University the Centre of Excellence.

Jai Hind !

Jai Maharashtra !





# Chapter One

## About the University

Dr. Babasaheb Ambedkar Technological University has been designated as an Affiliating Technical University (ATU) of the state from 2<sup>nd</sup> March 2016 and within six month's time the University has set up the process of affiliation rolling for Engineering (Engg.), Pharmacy (Pharm.), Architecture (Arch.) and Hotel Management and Catering Technology (HMCT) Colleges in the State.

Having one University to look into all technology courses is a belated but welcome step taken by the state government. In all other states, the ATU's have been established long time ago with mandate to all professional colleges compulsorily joining them in one go. In the state of Maharashtra, the affiliation has been made optional and thus affiliation shall take place in phases.

With major academic bodies, such as Executive Council (EC), Academic Council (AC), Boards of Studies (BoS) and Planning, Monitoring and Evaluation Board (PMEB) in place, the University has now started functioning with limited resources at its disposal.

The PM&E Board of the University has started planning various activities of the University. The board has taken the recommendations of the Dr. Narendra Jadhav committee for higher education based on the reports of committees led by Dr. Kakodkar, Dr. Nigvekar and Dr. Takwale as a base to prepare the perspective plan of the university. The reports from All India Council of Technical Education (AICTE), Ministry of Human Resource Development, Ministry of Skill Development, and several reports of industries and CII also formed the resource base of this plan.

### Administrative Setup of the New State Affiliating Technical University

The University shall be governed by the main centre at Lonere, Dist. Raigad, while the four regional centres at Aurangabad, Mumbai, Nagpur and Pune and five sub-centres at Amravati, Jalgaon, Kolhapur, Nanded and Solapur, shall be established for decentralized operations of the university. Each centre will be headed by a Director/Jt. Director and shall be developed as an autonomous centre to look after the colleges within its region of management.

A 'Regional Center' means a Center established or maintained by the University, as its constituent unit, for the purpose of coordinating and supervising the work of students and institutions and for rendering any other assistance including training, conducting classes and administering examinations and for performing such other functions as may be conferred on such center by the Executive Council (EC).

The organizational structures and plan for filling the statutory positions over a period of five years is specified in Section 1.1 below. The roles, responsibilities and powers have been specified for each position.

With the new status of Affiliating Technical University, the University requires critical manpower. The proposed plan includes appointments of faculty members in University Departments meeting the requirements of regulatory bodies like AICTE, NBA and NAAC, induction of Deans at the Main Centre, creating and filling University Officers on Statutory positions of Directors at main centre, Regional Centres and Sub-centres.

The new offices shall also require supporting staff, whose numbers have been enumerated and planned over a period of five years with expansion of the University covering all 370 Engineering colleges, 179 Pharmacy colleges, 80+ Architecture colleges and 40+ HMCT colleges. For efficient organization, their deployment in early phase of the development of the University is a must.

Currently, the University is heavily understaffed. The required number of faculty members to run all the current courses as per the AICTE norms is 176. However, only 94 positions of faculty members have been sanctioned by the Government and only 56 faculty members have been recruited. The situation is similar at non-teaching staff level. It is a matter of utmost importance to fill all the vacant positions with the highest priority. The University has been following with concerned officers in the Government to fill up all the vacant positions. The University, however, has been functioning with ad-hoc faculty and non-teaching staff.

### **Regional Centres**

- (1) The Regional centre shall establish the following divisions or cells:
  - a) Examination cell;
  - b) Research and Development and Industry Co-ordination cell;
  - c) Administration and Finance cell;
  - d) Information and Communications Technology cell;
  - e) Students Grievances Centre.
- (2) Each of the divisions or cells shall be headed by a Joint Director,
- (3) The Sub-centres shall be operated and maintained as University's constituent unit, having University's complements of facilities, faculty and staff.

The Regional Centre is the direct connectivity between the affiliated colleges and the University. Its primary role is to ensure timely and orderly conduct of the examination at designated examination Centres in the region. But it shall address many more functions of the University.

### **Regional sub-Centres**

There shall be five sub-regional Centres, one each at **Amaravati, Jalgaon, Nanded, Solapur and Kolhapur.**

- (1) Each Sub-Regional Centre shall have the following Administrative Directors
  - a) Jt. Director- Head of the Centre
  - b) Dy. Director -Examination
  - c) Dy. Director- ICT
  - d) Jt. Director-Administration and Finance
- (2) The Sub-center shall establish, within its campus, all or any of the following divisions or cells and such other facilities as it may deem fit:
  - a) Examination cell;
  - b) Administration and Finance cell;
  - c) Information and Communications Technology cell;
  - d) Students Grievances Center.
- (3) Each of the divisions or cells shall headed by Deputy Director,

### **University's Strategic Aims**

1. To improve quality of technical education throughout the State.
2. To develop an ecosystem to provide choice based and unbiased education.
3. To expand facilities for post-graduate education by increasing intake capacity of existing programmes and starting new programmes.
4. To enhance doctoral research by building world-class research facilities.
5. To conduct sponsored research projects from industry.
6. To lead innovation in the state for new products and services for overall economy development.
7. To establish Technology Business Incubators and Innovation Parks on the campus.
8. To increase consultancy services and number of problem-solving projects from industry.
9. To adopt e-Governance in functioning of University and disseminate technological knowledge.
10. To introduce entrepreneurship development programmes and to motivate students to become entrepreneurs.
11. To enhance training programmes and continuing education programmes for industry.
12. To start part-time and joint M. Tech. programmes with Industry.

13. To build National and International Networking for knowledge exchange and technology developments

### **E-Governance of the Administration**

The University is establishing e-Office of NIC for the administrative functions of the University and it shall be completed by end of 2018. The Centres, sub-centres and affiliated colleges shall be connected through e-Office to track all communications, to bring transparency and accountability in the administration.

The e-Office is developed by NIC, Government of India. It is being adopted by the Government organizations, including Mantralaya. Punjab Technical University is amongst the State Universities who has adopted e-Office for governance. Dr. B A T. University shall be the first University who shall be deploying e-Office in the State of Maharashtra. The e-Office promises to provide a paperless flow of documents between Main Centre, Regional Centres, Sub-Centres and all affiliated colleges. The NIC-Maharashtra Unit has agreed to provide all the necessary support for successful deployment of the platform in the University.

The e-Governance shall bring accountability in the functioning of each officer of the University, cut down delays and give responsible governance. It is expected to avoid storage of papers, make them secure and available in real time throughout the State. The University shall be able to update in real terms all of its records and their applications. The University shall develop necessary ICT infrastructure for successful implementation at the Main centres and Regional Centres.

The financial transactions of the University are already gone cashless with Netbanking and bank transfer from 2016-17. All academic operations, including admissions, communications to faculty, colleges, and students, are being converted into a State-wide University Information Management System (UMIS) from 2016-17. The information of all faculty members and students of every department and college is obtained through the UMIS. The University has started its own Intranet within the main centre for dissemination of knowledge and e-learning resources for all stake holders alike. However, e-resources, including library, e-books and e-journals will have to be substantially improved to make them available to students of all affiliated colleges. The Open course wares and Open Access Journal links are already provided to the students on the University Website.

### **Affiliation of Engineering, Pharmacy, Architecture and HMCT Colleges**

As the affiliating University of Technology in the State of Maharashtra, Dr. Babasaheb Ambedkar Technological University has started the affiliation of Engineering & Technology, Pharmacy, Architecture and HMCT colleges from September 2016.

In the AY year 2017-18, the University has affiliated 53 Engineering, 14 Pharmacy and 4 Architecture colleges. Another 50 colleges are expected in the academic year 2017-18 to file applications for affiliation. The affiliation has been planned in phased manner over the next four years. Since the affiliation is made optional to the existing colleges, the applications will have to be filed by the interested colleges on their own. It is hoped that in the next five years, all colleges from the State will get affiliated to the University so that a common syllabus will be implemented throughout the State, eliminating the perceived regional discrepancies in the quality of education and that of graduates.

The affiliation shall be on the basis of the parameters recommended by UGC and can be either temporary or permanent. The mandatory parameters shall have to be met by the Institute to get permanent affiliation. The Local Inspection committee also shall evaluate the capability of the management and leadership qualities by direct interaction with chairman and principal of the Institute.





## Chapter Two

### Authorities of the University

The Annual Report of the Dr. Babasaheb Ambedkar Technological University for the year ending on 31<sup>st</sup> March, 2018 has been prepared as per the directives of the Executive Council.

Chancellor: His Excellency : Shri. C. Vidyasagar Rao

Vice-Chancellor: Dr. V. G. Gaikar

#### 1.1 Authorities of the University:

##### i) Executive Council:

In accordance with Section 27-29 of the Dr. Babasaheb Ambedkar Technological University Act No. XXIX of 2014, the Executive Council of this University is hereby constituted for the period of three years with effect from 7<sup>th</sup> October, 2016 to 6<sup>th</sup> October, 2019.

The composition of the Executive Council was as follows for the 2017-18:

Sr. No.	Name & Address	Email	Mobile No.	Position in the Council
01	Dr. Vilas G. Gaikar Vice-Chancellor Dr. Babasaheb Ambedkar Technological University, Lonere	vgg.dbatu@gmail.com	9422494101	Chairman
02	Dr. Sunil S. Bhamare Registrar, Dr. Babasaheb Ambedkar Technological University, Lonere	registrar@dbatu.ac.in	9422494172	Secretary
03	Prof. G. D. Yadav Vice-Chancellor, ICT Mumbai	gdyadav@yahoo.com	022-33612222	Member
04	Dr. Abhay Wagh Director of Directorate of Technical Education (or his representative)	director@temaharashtra.gov.in	022-2621726	Member
05	Padmashree Milind Kamble Pune	milind.kamble@dicci.com	8805078800	Member
06	Prof. Anand Kusre Mumbai	anand.kusre@iitb.ac.in	9821112472	Member
07	Dr. Vivek Vadke Thane	vivekvadke2@gmail.com	9819610055	Member
08	Prof. B. N. Jagatap IIT Mumbai	bnjagatap@gmail.com	9757000237	Member
09	Dr. Ulhas B. Shinde Principal, Chh. Shahu College of Engineering, Kanchanwadi, Paithan Road, Aurangabad 431 004	drshindeulhas@gmail.com	9011191795	Member

10	Dr. D. N. Mudgal Director, Ashokrao Mane Group of Institutions, Vathar tarf Vadgaon, Tal. Hathkangle, Dist. Kolhapur 416 112	dnmudgal@gmail.com	9921322323	Member
11	Dr. J. B. Patil Principal, SES's R. C. Patel Institute of Tech. The Shirpur Education Society's Shirpur Dist. Dhule	jbpatil@hotmail.com	9923466699	Member
12	Dr. J. B. Dafedar Principal, Orchid Engg, College, Solapur	office@orchidengg.ac.in	9421040150	Member
13	Dr. Mrs. Geeta Lathkar Mahatma Gandhi Mission's College of Engineering, Near Airport Hingoli Road Dist. Nanded (M.S.) 431 605	director@mgmcen.ac.in	9850455553	Member
14	Dr. K. S. Jain K. K. Wagh College of Pharmacy, Hirabai Haridas Vidyanagri, Amrutdham, Panchavati, Nashik 422 003 (M.S.)	principal- bpharmacy@kkwagh.edu.in	9422322070	Member
15	Ar. Vijay Sohoni Vidyavardhan's Institute of Design Environment & Architecture (IDEA) at. IDEA Campus, Chandsi, Nashik 422 003 (M.S.)	vjsohoni@gmail.com	9822055188	Member
16	Dr. L. P. Dhamande Principal, DES's College of Engineering & Technology, Dhamangaon Rly, Dist. Amravati (M.S.)	lpdhamande@rediffmail.com	07222-237335	Member
17	Dr. L. N. Singh Dr. Babasaheb Ambedkar Technological University, Lonere	lsingh@dbatu.ac.in	8087369025	Member
18	Dr. H. A. Mujawar Dr. Babasaheb Ambedkar Technological University, Lonere	hamujawar@dbatu.ac.in	9420057976 9423838226	Member
19	Prof. S. V. Khobragade Dr. Babasaheb Ambedkar Technological University, Lonere	svkhobragade@dbatu.ac.in	9421900190	Member
20	Dr. M.S. Tandale Dr. Babasaheb Ambedkar Technological University, Lonere	mstandale@dbatu.ac.in	9423215468	Member



**ii) Academic Council:**

<b>Sr. No.</b>	<b>Name &amp; Address</b>	<b>Email</b>	<b>Mobile No.</b>	<b>Position in the Council</b>
01	Dr. Vilas G. Gaikar Vice-Chancellor Dr. Babasaheb Ambedkar Technological University, Lonere	vgg.dbatu@gmail.com	9422494101	Chairman
02	Dr. Sunil S. Bhamare Registrar Dr. Babasaheb Ambedkar Technological University, Lonere	registrar@dbatu.ac.in	9422494172	Secretary
03	Dr. Y. S. Mahajan Head of Chemical Engineering Dr. Babasaheb Ambedkar Technological University, Lonere	ysmahajan@dbatu.ac.in	9421259080	Member
04	Dr. M. Sadaiah Head of Mechanical Engg. Dr. Babasaheb Ambedkar Technological University, Lonere	msadaiah@dbatu.ac.in	9423092195	Member
05	Dr. K. Vadirajacharya Head of Electrical Engg. Dr. Babasaheb Ambedkar Technological University, Lonere	kvadirajacharya@dbatu.ac.in	9422486442	Member
06	Dr. S. M. Pore Head of Civil Engg. Dr. Babasaheb Ambedkar Technological University, Lonere	smpore@dbatu.ac.in	9423936380	Member
07	Dr. S. M. Jadhav Head of Information Technology Engg. Dr. Babasaheb Ambedkar Technological University, Lonere	smjadhav@dbatu.ac.in	9422660916	Member
08	Dr. S. L. Nalbalwar Head of Electronics & Telecommunication Engg. Dr. Babasaheb Ambedkar Technological University, Lonere	slnalbalwar@dbatu.ac.in	9423178000	Member
09	Dr. Madhukar Dabhade Principal, Institute of Petrochemical Engineering Lonere - Raigad	dabhadema@rediffmail.com	9422494173	Member

10	Dr. B. B. Singh Head of Mathematics Dept. Dr. Babasaheb Ambedkar Technological University, Lonere	bbsingh@dbatu.ac.in	9422126078	Member
11	Dr. L. N. Singh Head of Physics Dept. Dr. Babasaheb Ambedkar Technological University, Lonere	Lns2k@yahoo.com	9421006876	Member
12	Dr. A. P. Shesh Head of English Dept. Dr. Babasaheb Ambedkar Technological University, Lonere	apshesh@dbatu.ac.in	9422692151	Member
13	Prof. V. P. Jawanjal Head of Petrochemical Engg. Dr. Babasaheb Ambedkar Technological University, Lonere	vpjawanjal@dbatu.ac.in	9423890578	Member
14	Dr. H. A. Mujaawar Head of Chemistry Dept. Dr. Babasaheb Ambedkar Technological University, Lonere	hamujawar@dbatu.ac.in	9422005797	Member
15	Dr. M.S. Tandale Dr. Babasaheb Ambedkar Technological University, Lonere	mstandale@dbatu.ac.in	9423215468	Member
16	Prof. S. V. Khobragade Dr. Babasaheb Ambedkar Technological University, Lonere	svkhobragade@dbatu.ac.in	9421900190	Member
17	Dr. Arwind Kiwelekar Head of Computer Engg. Dr. Babasaheb Ambedkar Technological University, Lonere	awk@dbatu.ac.in	7588713195	Member
18	Prof. Devarajan PV Prof of Pharmaceutical Chemistry Department of Pharmaceutical Sciences and Technology, ICT, N.P. Marg, Matunga, Mumbai 400 019	pv.devarajan@ictmumbai.edu.in	022-33612222	Member
19	Prof. Prashant Deshmukh 1/15 B, Padmarashan Society, Near Walvekar Lawn Pune Satara Road, Pune 411 009	architectpda@gmail.com	9890194799	Member

20	Prof. Jaganath Aghav College of Engineering, Pune	jagannath.aghav@gmail.com	9423438089	Member
21	Prof. Y. V. Joshi Professor of Electronics & Telecommunication Engineering from SGGS Institute of Engineering and Technology, Nanded	yvjoshi@sggs.ac.in	9422189396	Member
22	Prof. V. M. Bhandari Pune	vm.bhandari@ncl.res.in	9423207083	Member
23	Prof. Nitin Deshmukh	nitin.deshmukh@kotak.com	9819850583	Member
24	Prof. Balasubramaniam Mumbai	cwsbalu@barc.gov.in	9869038116	Member
25	Prof. Sameer Rane	samir.rane@yahoo.co.in	9820665928	Member
26	Prof. Mohan Khedekar Nagpur	mohankhedkar@eee.vnit.ac.in	9422148053	Member
27	Prof. V. K. Rathod ICT, Mumbai	vk.rathod@ictmumbai.edu.in	9869534394	Member
28	Prof. M. B. Kumthekar Professor of Civil Engineering, GCoE, Karad	kumthekarmb@yahoo.com	9422039224	Member
29	Mr. Milind Meshram	mwmeshram@rctltd.com	9890194799	Member
30	Dr. Ulhas Shiurkar MSP Mandal's Deogiri Institute of Engg. & Management Studies Aurangabad	shiurkar@gmail.com	9011078272	Member
31	Dr. Ajay Jadhav Dnyanshri Institute of Engineering & Tech., Sajangad Road At. Sonavadi Gajavadi, Sajangad Dist. Satara (M.S.) 415 013	ajay_jadhav@rediffmail.com	8600009009	Member
32	Dr. Rahul Barjibhe Shri Sant Gadgebaba College of Engg. & Tech. , Near Z.T.C. Bhusawal, Jalgaon- Maharashtra	rahulbarjibhe@yahoo.com	9665704444	Member
33	Dr. Anil K. Deshmane Bhagwant Education & Research Charitable Trust's Bhagwant Institute of Tech. At. Gate No.1242 Tadsaundane Road, Latur Kurduwadi Bypass Stop Barshi Dist. Solapur (M.S.) 413 401	anil13dec@gmail.com	02184-220031	Member

34	Ar. Arshad Shaikh Principal RPET's Ramesh's Phirodia College of Architecture, Nagar Solapur Road, Ahmadnagar 414 001 (M. S)	creative_concept@rediffmail.com	8329169151	Member
35	Dr. Mrs. Sadhana Chidrawar Matoshri Pratisthan Group of Institution School of Engg. & Management at. Jijaunagar Khupsarwadi Dist. Nanded (M.S.) 431 606	deanenggmgi@gmail.com	9923151401	Member
36	Dr. A. V. Yadav Principal, Gourishankar Institute of Pharmaceutical Education & Research Limb- Satara	Avyadav03@rediffmail.com	9830601832	Member
37	Dr. S. R. Chaudhari Principal J. D. College of Engg. & Management, Kalmeshwar Road, Nagpur	principal@jdcoem.ac.in	9657720271	Member

### iii) Board of Studies

#### Chemical Engineering & Petrochemical Engineering

Sr. No.	Name and Designation	Position
1.	Dr. Y.S. Mahajan, Head, Chemical Engineering, DBATU, Lonere	Chairman
2.	Dr. V.R. Patwardhan, Retired Scientist, Chemical Engineering Division, NCL, Pune	Member
3.	Dr. Sonali Mhatre, DBATU, Lonere	Member
4	Mr. Raj Narkhede, GEXCON	Expert
5	Dr. P.V. Vijaybabu, Professor, Department of Chemical Engg. Dr. BATU, Lonere	Co-opted member
6	Dr. V. S. Sathe, Department of Chemical Engg., Dr. BATU, Lonere	Co-opted member
7	Prof. V. P. Jawanjal, Head, Department of Petrochemical Engg., Dr. BATU, Lonere	Co-opted member

#### Civil Engineering

1	Dr. S. M. Pore Associate Professor and Head Department of Civil Engineering, Dr. Babasaheb Ambedkar Technological University, Lonere – Raigad	Chairman
2	Dr. A. R. Kambekar Associate Professor Sardar Patel College of Engineering, Mumbai	Member

3	Dr. S. B. Kadam Associate Professor Department of Civil Engineering, WCE, Sangli	Member
4	Dr. D. D. Sarode Associate Prof. Civil Engineering ICT, Mumbai	Member
5	Dr. S. R. Bhagat Associate Professor Department of Civil Engineering, Dr. Babasaheb Ambedkar Technological University, Lonere – Raigad	Member

### **Computer Engineering**

1	Dr. Arvind W Kiwelekar, Dr. B. A. Technological University	Chairman
2	Dr. Laxman D. Netak Dr. B. A. Technological University	Member
3	Mr. Sameer Ganu, Persistent Systems Pvt. Ltd. Pune	Industry Expert
4	Mr. Sachin Kadam GS lab, Pune	Member
5	Mr. Yogesh Murarka Philips, Bangalore	Member
6	Dr. S. P. Abhang CSMS, Aurangabad	Member
7	Dr. D. B. Bhosale AMGOI, Kolhapur	Member

### **Electrical Engineering**

1	Dr. K. Vadirajacharya Head, Dept. of Electrical Engg., DBATU, Lonere	Chairman
2	Dr. D.B. Telenge Prof and Head Electrical Engg. dept CoE Pune	Member
3	Prof. V.L. Sonavane Ex- Member MERC Mumbai	Member
4	Dr. S.D. Agashe Prof and Head Instrumentation and control systems dept CoE Pune	Member
5	Dr. D. N. Sonawne Prof in Instrumentation and control systems CoE Pune	Member
6	Dr. R. N. Nagarale Professor in control systems, CoE Ambejogi	Member
7	Prof. S. L. Kurkute Dean, Arvind Gavali CoE Satara	Member
8	Shri. Sudhakar Vide Asst Vice President Reliance Energy Ltd. Mumbai	Member

### **Electronics & Telecommunication Engineering**

1	Dr. S L. Nalbalwar Head, Department of Electronics and Telecommunication Engineering Dr. Babasaheb Ambedkar Technological University, Lonere – Raigad	Chairman
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2	Dr. D. S. Bormane Principal, JSPM's, RSCoE, Pune	Member
3	Dr. R. N. Awale Professor of Electronics Engineering, VJTI, Mumbai	Member
4	Dr. S. B. Deosarkar Professor of E & TC Dr. Babasaheb Ambedkar Technological University, Lonere – Raigad	Member
5	Dr. A. B. Nandgaonkar Associate Professor of E & TC Dr. Babasaheb Ambedkar Technological University, Lonere – Raigad	Member
6	Dr. Munir Sayyad General Manager, Reliance Jio, Mumbai.	Expert

### Information Technology

1	Dr. S. M. Jadhav Head, Department of Information Technology	Chairman
2	Dr. J. A. Aghav, College of Engineering, Pune	Member
3	Mr. Samir Rane, Rolta India Pvt. Ltd, Mumbai	Member
4	Mr. Sham Dhage, IBM, Pune	Member
5	Mr. Rajesh Gandhi, Global Project Manager, Philips Health Tech., Pune	Member
6	Mr. Sameer Ganu, PSPL, Pune	Member
7	Prof. B. B. Meshram, VJTI, Mumbai	Member
8	Prof. S. R. Sutar Department of Information Technology	Co-opted Member
9	Prof. V. J. Kadam Department of Information Technology	Co-opted Member

### Mechanical Engineering

1	Dr. M. Sadaiah Head, Department of Mechanical Engineering Dr. Babasaheb Ambedkar Technological University, Lonere- Raigad	Chairman
2	Mr. Anand Chapekar Tech Mahindra, Pune	Member
3	Prof. M. S. Tandale Professor, Department of Mechanical Engineering Dr. Babasaheb Ambedkar Technological University, Lonere – Raigad	Member
4	Dr. V. K. Suri Retired Scientist, BARC, Mumbai	Member
5	Dr. M. S. Kale Industry Expert, Pune	Member
6	Shri R. P. Javale RCF, Thal Alibaugh	Member
7	Dr. V. G. Sargade Professor, Department of Mechanical Engineering Dr. Babasaheb Ambedkar Technological University, Lonere- Raigad	Member

## Chemistry

1	Dr.H.A.Mujawar, Associate Professor and Head	Chairman
2	Dr.B.B.Idge, Senior Scientist, National Chemical Laboratory, Pune.	Member
3	Dr.S.D.Tupare, Associate Professor, KES College of Science, Nagothne, University of Mumbai.	Member
4	Dr.P.B.Lokhande, Associate Professor	Member
5	Dr.M.H.Pendse, Associate Professor and Head, Walchand College of Engineering, Sangli.	Member

## English

1	Dr. A. P. Shesh, Head Dept. of English	Chairman
2	Dr. B. B. Singh, Head, Dept of Mathematics	Member
3	Dr. Shivaji Sargar, Head, Dept. of English, Mumbai University, Mumbai	Member
4	Dr. Satyawani Hanegawe, Associate Professor, Dept. of English, K.J. Somaiyya College of Arts and Commerce, Mumbai	Member

## Mathematics

1	Dr. B. B. Singh Head, Department of Mathematics, Dr. Babasaheb Ambedkar Technological University, Lonere	Chairman
2	Dr. R. N. Pralhad Former Scientist 'G', Armament Research and Development Establishment (ARDE) : A DRDO Unit Pashan, Pune-411021	Member
3	Dr. M. Y. Gokhale Professor and Head, Department of Mathematics, MIT, Pune- 411038	Member
4	Dr. Akhil Ranjan Professor, Department of Mathematics, IIT Bombay, Mumbai-400076	Member
5	Dr. V. J. Bansod Department of Mathematics, Dr. Babasaheb Ambedkar Technological University, Lonere	Member

## Physics

1	Dr. L.N. Singh (Chairman)	M.Sc., Ph.D. (IIT Bombay)	Head, Department of Physics, Dr. Babasaheb Ambedkar Technological University, Lonere
2	Dr. Dattatray Wavhal (Member)	M.Sc., Ph.D. (Physics)	Professor and Head, Department of Physics Veeramata Jijabai Technological Institute, Mumbai
3	Dr. R. R. Deshmukh (Member)	M.Sc., Ph.D. (Physics)	Associate professor Department of Physics Institute of Chemical Technology, Mumbai
4	Dr. S.M. Yusuf (Member)	M.Sc., Ph.D. (Physics)	Senior Scientist, Solid State Physics Division, BARC Mumbai
5	Dr. Mrs. S.G. Dahotre (Member)	M.Sc., Ph.D. (Physics) Department of Physics Dr. Babasaheb Ambedkar Technological University, Lonere	Associate Professor Department of Physics. Dr. Babasaheb Ambedkar Technological University, Lonere



**iv) Planning and Evaluation Monitoring Board:**

<b>Sr. No.</b>	<b>Name</b>	<b>Email</b>	<b>Mobile No.</b>	<b>Position in the Council</b>
01	Dr. Vilas G. Gaikar Vice-Chancellor Dr. Babasaheb Ambedkar Tech University, Lonere	vgg.dbatu@gmail.com	9422494101	Chairman
02	Dr. Sunil S. Bhamare Registrar Dr. Babasaheb Ambedkar Technological University, Lonere	registrar@dbatu.ac.in	9422494172	Secretary
03	Director, Technical Education or his representative DTE, Mumbai	director@dtmaharashtra.gov.in	022-22621726	Member
04	Prof. G. D. Yadav Vice-Chancellor ICT Mumbai	gdyadav@yahoo.com	022-33612222	Member
05	Prof. Prashant Deshmukh 1/15 B, Padmarashan Society, Near Vavlekar lown, Pune Satara Road Pune 411 009	architectpda@gmail.com	9890194799	Member
06	Prof. Tarun Malkani	tamlkani@gmail.com	9820182680	Member
07	Prof. Pradeep Waychal	pradeep.waychal@gmail.com	9820431482	Member
08	Dr. B. N. Jagatap Ex-Director, BARC and Professor Emeritus, IIT Mumbai	bnjagatap@gmail.com	9757000237	Member
09	Dr. Pritam Datta Director, Capegemini, Pune	datta.pritam@gmail.com	9823580069	Member
10	Dr. S. A. Khot Sharad Institute of Thchnology college of Engineering at yadrav (Ichalkanji) Tal. Shirol Dist. Kolhapur- 416 121 (M.S.)	sakhot.2000@gmail.com	7350542020	Member
11	Dr. S. A. Patil Shanti Education Society's A.G. Patil Institute of Technology at. 18/2/2 A Pratapnagar, Opp. SRP Camp, Vijapur Road Dist. Solapur- 413 008 (M.S.)	principal@agpit.edu.in	9730160904	Member

12	Prof. V. G. Arajpure Godavari Foundation's Godavari College of Engineering At-P-51 Additional MIDC Bhusaval Road Jalgaon-425 003 (M.S.)	vgarajpure07@rediffmail.com	9850886555	Member
13	Dr. Abhijeet Wadekar Principal, P.E.S. College of Engineering, Panchakki Road Nagsenvana, Aurangabad- 431 002 (M.S.)	principal@pescoe.ac.in	9890248834	Member
14	Prof. P.V. VijayBabu Dr. Babasaheb Ambedkar Technological University, Lonere	pvvijaybabu@dbatu.ac.in	9422494063	Member
15	Prof. Arvind Kiwelekar Dr. Babasaheb Ambedkar Technological University, Lonere	awk@dbatu.ac.in	7588713195	Invitee

**v) Building and Works Committee:**

Sr. No.	Name	Composition	Position
1	Professor V. G. Gaikar	The Vice-Chancellor: or Director-Administration in his absence	Chairman
2	Professor G. D. Yadav	The Chancellor's Nominee on the Executive Council	Member
3	Shri. V. D. Chhatre	One nominated member of Executive Council	Member
4	Superintending Engineer, PWD, Navi Mumbai	Superintending Engineer of the Public Works Department in-Charge of the territorial circle in which the University is located	Member
5	Executive Engineer, PWD, Mahad	Executive Engineer of the Public Works Department In-Charge of the territorial circle in which the University is located	Member
6	Mr. Shashank Mehendale	One eminent Engineer from the Private Sector	Member
7	Mr. Prashant Deshmukh	One eminent Architect from the Private Sector nominated by the Chancellor	Invitee Member
8	Dr. S. S. Bhamare	Registrar	Member
9	Dr. V. S. Sathe	I/c Finance Officer	Member
10	Professor S. M. Pore Professor S. L. Nalbalwar Professor Vadirajacharya	Three Heads of the University Departments	Members
11	Mr. V. S. Chavan	University Engineer	Member Secretary

**Sub-committee of Buildings and Works Committee is constituted to open the Tenders.**  
**(As per the section 86 of the Act)**

<b>Sr. No</b>	<b>Name</b>	<b>Position</b>
1	Prof. V. G. Gaikar, Vice-Chancellor	Chairman
2	Two members of the Buildings and Works Committee Dr. S. M. Pore Dr. S. L. Nalbalwar	Members
3	Dr. V. S. Sathe, Finance Officer	Member
4	Mr. V. S. Chavan, University Engineer	Member Secretary

**vi) Finance Committee:**

The Finance Committee has been constituted as per the section 34(1) of the Act.

<b>Sr No</b>	<b>Name</b>	<b>Qualification</b>	<b>Position</b>
1.	Professor V. G. Gaikar	Vice-Chancellor	Chairman
2.	Director, Technical Education (or his nominee)	Director of Technical Education or his representative, not below the rank of Joint Director;	Member
3.	Dr. Amit Datta	Representative of the All India Council of Technical Education Director, WRC, AICTE	Member
4.	Not appointed	Four representatives of the Regional Center, (to be nominated by the Vice Chancellor)	Members
5.	Not appointed	Three representatives of the Sub Centers to be nominated by the Vice Chancellor by rotation.	Members
6.	Dr. S. M. Pore Dr. S. L. Nalbalwar	Two members from Dean of Research and Development and Deans of Faculties, to be nominated by the Academic Council	Invitees
7.	Professor G. D. Yadav	Two members, to be nominated by the Executive Council from amongst its members, one of whom shall be the nominee of the Chancellor on the Executive Council	Members
8.	Mr. Mangesh Kinare	Nominated by State Government	Member
9.	Dr. S. S. Bhamare	Registrar	Member
10	Dr. V. S. Sathe	I/c Finance Officer	Secretary

**vii) Purchase and Sales Committee:**

The Purchase and Sales Committee is constituted

<b>Sr. No</b>	<b>Name</b>	<b>Qualification</b>	<b>Position</b>
1	Professor V. G. Gaikar	The Vice-Chancellor; or Director-Administration in his absence	Chairman
2	Professor P. V. Vijay Babu Dr. S. L. Nalbalwar Dr. S. M. Jadhav	Three Heads of the Departments nominated by the Vice-Chancellor	Members
3	Prof. Anand Kusare Prof. S. V. Khobragade	Two Members of Executive Council (subject to approval of Executive Council)	Members

4	Dr. S. S. Bhamare	Registrar	Member
5	Dr. V. S. Sathe	I/c Finance Officer.	Member Secretary

**The following will be Sub-Committee of Purchase and Sales Committee for Sale**

Sr. No	Name	Position	Remarks
1	Dr. V. G. Gaikar	Chairman	Till the appointment of Director-Administration
2	Dr. S. L. Nalbalwar Dr. S. M. Jadhav	Members	
3	Finance Officer	Member Secretary	

**viii) Library Committee:**

Library Committee is constituted (As per the Section 78 of the Act and statutes 15. 1 and 15. 2).

Sr. No.	Name	Qualification	Position
01	Professor V. G. Gaikar	Vice-Chancellor	Chairman
02	To be appointed	Three Heads of University schools nominated by the Vice-Chancellor	Members
03	Dr. M. A. Dabhade Dr. S. L. Nalbalwar Prof. V. P. Jawanjal	Three Heads of departments, nominated by the Vice-Chancellor	Members
04	Dr. R. P. Kate	Two teachers, to be nominated by the Executive Council	Members
05	Dr. S. S. Bhamare	Registrar	Member
06	Dr. S. P. Vaidya	Librarian	Secretary

■ ■ ■

# Chapter Three

## Departments of University

### Department of Chemical Engineering



**Dr. Y. S. Mahajan**  
Head

#### 1. Message from Head of Department

It gives me immense pleasure to present the annual report of the Chemical Engineering department. The department strives to impart good quality education coupled with imbibing good culture to the students. As a result of which the students passing out from the department are doing extremely well in the industries and academia.

Apart from imparting good quality education students are encouraged to participate in sports and extracurricular activities which will help them for their holistic development. Students are also encouraged to appear for GATE, GRE and CAT examinations so as to pursue higher education. Our students have been performing extremely well in games and sports. Our students are very active in NCC, NSS and cultural activities.

The Department provides all kinds of guidance for their higher studies and professional career. GATE guidance classes are conducted for the students. Chemfraternity, a technical festival of the department, is a special attraction for the students. Students gain good experience of coordinating different activities during Chemfraternity. The department is very keen to arrange expert lectures for the students by inviting eminent speakers from IITs, ICT and NITs. The department maintains excellent rapport with the nearby industries in Mahad, Roha, Loteparshuram and Patalganga.

The department will continue to support and encourage all the students for their overall development in the field of Chemical Engineering and prepares them to face challenges at global level.

**Dr. Y. S. Mahajan**  
Head, Department of Chemical Engineering

#### 2. Vision and Mission Statements for Department

##### **Vision:**

The vision of the department is to get national recognition for undergraduate Chemical Engineering program coupled with research strengths in the areas of Heat Transfer, Systems Engineering, Mass Transfer with Chemical Reactions and Biochemical Engineering.

##### **Mission:**

We provide a high-quality education experience that will prepare graduate to assume leadership positions within chemical and other associated industries. We foster and encourage the pursuit of new knowledge and innovative scholarship in chemical sciences and engineering. We provide leadership to the chemical engineering profession through dedicated teaching and service.

### 3. About the Department:

The department of Chemical Engineering was established in the year 1992 with B. Tech. program having an intake of 60 students. During the year 2000, M. Tech. program in Chemical Engineering and during 2001 M.Tech. program in Environmental Engineering with intake of 18 students each, were introduced. The department has also started Ph.D program from the academic year 2003 and the department has the distinction of producing first Ph.D. in the University. Currently 12 research scholars are pursuing their Ph.D. program.

The department has a dedicated team of faculty members. Majority of the faculty members are Ph.D. holders. The department has collaboration with ICT Mumbai to carryout innovative research programs. The focus of the department is to produce high quality engineers with strong fundamentals in Chemical Engineering.

The department maintains excellent rapport with nearby chemical industries. The department actively participates in the TEQIP program, a world bank assisted quality improvement program. The department has also received funding from AICTE, UGC, ONGC and DST for various research projects. The department has very good analytical facility to support the research projects.

Majority of the students passed out from the department are extremely doing well in industry and academia. During last two academic years some of our students are placed in industries like Technoforce Consulting Engineers, JSW Ispat Ltd., Technimont ICB Ltd., Cognizant, Palladian Consultants, Privi Organics Ltd., etc.

Good number of students of this department competes in the competitive examinations like GATE, CAT, TOFEL, and GRE. Many students go abroad to pursue higher education. As per the curriculum requirements, the students have to undergo industrial exposure and industrial training at the end of second and third years of B. Tech. program, respectively. The department also organizes industrial visits to nearby Chemical industries for better understanding of the theoretical aspects. Students are encouraged to participate in conferences, seminars, workshops, paper publications, annual sports, etc. The department and the Chemical Engineering Association (ChEA) regularly organize "Chemfraternity", a state level technical festival, with the support of industries.

The Department of Chemical Engineering is one of the most preferred destinations in the state of Maharashtra.

### 4. Program Educational Objectives (PEOs) & Program Outcomes (POs)

#### Program Educational Objectives

##### Objective Objectives Identifier

PEO1	To provide knowledge of sound mathematical principles underlying various concepts of Chemical Engineering.
PEO2	To develop ability to understand complex issues in the analysis, design, implementation and operation of Chemical Engg. Systems.
PEO3	To provide knowledge of mechanisms for building large-scale Chemical-based systems.
PEO4	To develop ability to provide Engineering-based solutions to the problems from other disciplines of science and engineering.
PEO5	To impart skills necessary for adapting rapid changes taking place in the industries.
PEO6	To provide knowledge of ethical issues arising due to deployment of new technologies in the society on large scale.

## Program Outcome (POs)

### Outcome Identifier      Outcomes

- PO1**      The graduates will possess the knowledge of various discrete mathematical structures and numerical techniques.
- PO2**      The graduates will demonstrate the use of Logic in representing and reasoning knowledge based systems.
- PO3**      The graduates will have ability to apply mathematical formalisms to analyze the problems.
- PO4**      The graduates will have knowledge of design software and concepts essential to implement this software.
- PO5**      The graduates will have ability to analyze problem, specify most feasible solutions to the problem and to evaluate alternative solutions.
- PO6**      The graduates will have in-depth knowledge of core subjects of Chemical Engineering.
- PO7**      The graduates will have broad understanding of the impact of Chemical Engineering solutions in economic, environmental and social context.
- PO8**      The graduates will demonstrate use of analytical tools in gathering requirements to provide feasible solutions.
- PO9**      The graduates will have knowledge of design rules and patterns necessary to formulate concept based solutions.
- PO10**      The graduates will demonstrate the ability to build human centric interfaces to design tools.
- PO11**      The graduates will have ability and attitude to address the ethical issues.
- PO12**      The graduates will demonstrate the ability to work and collaborate in heterogeneous streams.
- PO13**      The graduates will possess skills necessary to communicate design engineering ideas. The skills set include verbal, written and listening skills

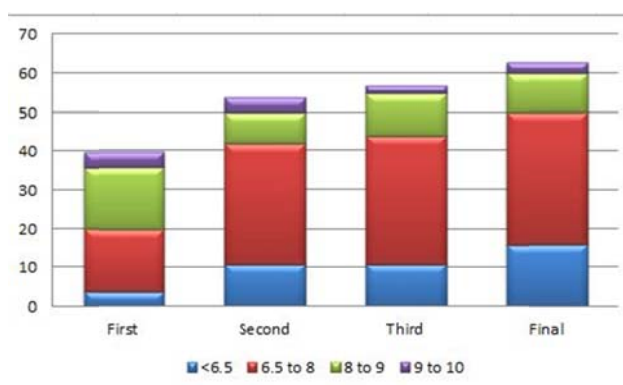
## 5. Overview of Academic Programs

Academic Program	Academic Program	Duration	Intake
<b>Undergraduate</b>			
Bachelor of Technology (B. Tech.)	Chemical Engineering	Four Years	60
<b>Postgraduate</b>			
Master of Technology (M. Tech.)	Chemical Engineering	Two Years	18
<b>Ph.D.</b>	Chemical Engineering		8 Currently registered

### 5.1 UG Students Statistical Information:

YEAR	OPEN	OBC	SC	ST	VJNT	SBC	TFWS	JKSS	Male	Female	Total
<b>FIRST</b>	19	27	8	1	7	2	0	0	49	15	64
<b>SECOND</b>	20	22	13	3	8	3	2	0	54	17	71
<b>THIRD</b>	26	26	12	3	12	4	2	0	62	23	85
<b>FINAL</b>	23	23	12	3	10	1	2	0	55	19	74

## 5.2 Result Analysis:



Number of passing undergraduates in each year of the course is as shown in the Chart for current academic year

## 5.3 Campus Placements:

Sr. No.	Name of Student	Company
1	Mr. Viraj Patil	Laxmi Organics
2	Mr. Aditya Mulay	Nalco Waters
3	Mr. Suraj Nogja	Sudarshan Chemicals
4	Mr. Sanyog Mandlekar	Sudarshan Chemicals
5	Mr. Vikas Barai	Technoforce
6	Mr. Upadesh Tetgure	Technoforce
7	Mr. Pratik Malusare	Supreme Petrochemicals
8	Mr. Pravin Shelar	Supreme Petrochemicals

## 6. Faculty and Staff

### Faculty:



Dr. P. V. Vijay Babu  
Professor of Chemical  
Engg. B. Tech. NIT  
Warangal, 1984  
M. Tech. NIT  
Warangal, 1987  
Ph.D., IIT Bombay,  
1992



Dr. Vivek S. Sathe  
Associate Professor  
B.E. (Chemical  
Engineering) Pune  
University  
M. Tech. (Chemical  
Engineering) IIT,  
Bombay  
Ph.D IIT, Madras



Dr. Yogesh S. Mahajan  
Associate Professor  
B.E (Chemical  
Engineering) Mumbai  
University  
M. Tech. (Chemical  
Engineering)  
IIT, Bombay  
Ph.D IIT, Bombay



Prof. A. M. Ghugal  
Associate Professor  
B. Tech. (Chemical  
Engineering) LIT,  
Nagpur  
M. Tech.  
(Petrochemical  
Engineering)  
LIT, Nagpur





Dr. Abhijit R. Chavan  
Associate Professor  
B. Tech. (Petrochemical  
Engineering)  
Dr. BATU, Lonere  
M. Tech. (Chemical  
Engineering)  
IIT, Kanpur  
Ph.D IIT, Bombay



Prof. Mrs. Suvarna  
Dhongade  
Assistant Professor  
B. Tech., (Chemical  
Engineering) JDIT,  
Amaravati University  
M. Tech. (Chemical  
Engineering) Dr.  
BATU, Lonere

#### Adhoc faculty



Prof. Sharad D. Pinjari  
Assistant Professor  
B.E. (Chemical  
Engineering)  
Shivaji University  
M. Tech. (Chemical  
Engineering)  
NIT, Warangal  
Prof. Siddhesh Palande  
Assistant Professor  
B. Tech. (Chemical  
Engineering)  
Mumbai university.  
M. Tech. (Chemical  
Engineering)  
Dr. BATU, Lonere



Prof. Reshma Devale  
Assistant Professor  
B. Tech. (Chemical  
Engineering) Dr.  
BATU, Lonere  
M. Tech. (Chemical  
Engineering)  
Dr. BATU, Lonere  
Prof. Vaishali  
Waghmare  
Assistant Professor  
B. Tech. (Chemical  
Engineering) NIT  
Nagpur  
M. Tech. (Chemical  
Engineering)  
LIT, Nagpur



#### Staff



Mr. B. D. Bairagi  
Lab Technician



Mr. Y. N. Kamble  
Lab Technician



Mr. S. D. Patil  
Lab Technician



Mr. P. B. Thale  
Peon

### 7. Additional Responsibilities to the Faculty

#### Dr. P. V. Vijay Babu

1. Member Secretary, DBATU Act 2014 modification committee
2. Member, Campus Development Committee
3. Coordinator, DBATU-GexCon Collaborative Program on Safety
4. Member, New Grading system drafting committee

5. Member of University Finance Committee
6. Convener of Industry-Institute Interaction Cell of the University
7. Coordinator for committee to propose amendments in Rules and Regulations for Ph. D. Program

**Dr. V.S. Sathe**

1. In-charge Finance Officer

**Dr. Y.S. Mahajan**

1. Member, Academic Council
2. Chairman, BoS
3. Member, University Library Committee
4. Chairman, Research Committee in Chemical/Petrochemical Engineering

**Dr. A.R. Chavan**

1. Member, University Annual Report Preparation Committee

**8. Advisory Board:**

To provide guidance to the department, an Advisory Board has been constituted. The Advisory Council/ Board is entrusted with responsibility of conducting academic audit of department, suggesting dynamic curriculum and providing input for research activities. The Advisory Board comprises of the following persons.

Sr. No.	Name and Designation	
1.	Head, Chemical Engineering, DBATU, Lonere	Chairman
2.	Dr. Sanjay Mahajani, Professor, Chemical Engineering, IIT Bombay	Member
3.	Dr. Ashwin Patwardhan, Associate Professor, Chemical Engineering, ICT Mumbai	Member
4.	Dr. Ashish V. Orpe, Scientist, Chemical Engineering Division, NCL, Pune	Member
5.	Mr. D.M. Chati, Vice-President (Operations), Embio Ltd., Mahad	Member
6.	Mr. D.R. Degwekar, Vice-President (Operations), Excel Industries Ltd., Roha	Member
7.	Mr. S.B. Pathare, Executive Vice-President (Operations), Privi Organics Ltd., Mahad	Member

**9. Faculty Research and Publications:**

**Publications/Conferences:**

1. VD Talnikar, OA Deorukhkar, A Katariya, YS Mahajan, Value-Added Esterification for the Recovery of Trifluoroacetic Acid: Batch Kinetics and Reactive Distillation Studies. - Chemical Engineering communications, 2017, Volume 204, Issue 3, Pages 356-364
2. AG Diwan, YS Mahajan, Study of the effect of various parameters on the result of stress analysis obtained by using tetrahedral and hexahedral mesh elements- Journal of Chinese Institute of Engineers, 2017, Volume 40, Pages 101-109

**10. Laboratory**

**Major Instruments in Laboratory**

Sr.No.	Name of Major Equipment/Facility	Cost(>Rs.1,00,000)
1	HPLC (High Performance Liquid Chromatograph)	Rs. 16,92,000/-
2	GPC (Gel Permeation Chromatograph)	Rs. 19,00,000/-
3	Prep-LC (Preparative Liquid Chromatograph)	Rs. 17,00,000/-
4	HPTLC (High Performance Thin Layer Chromatograph)	Rs. 17,50,000/-
5	FTIR (Fourier Transform Infra Red Spectrometer)	Rs. 12,00,000/-

6	TGA-DSC (Thermo Gravimetry Analyzer and Differential Scanning Calorimeter)	Rs. 12,50,000/-
7	Brookfield Viscometer	Rs. 1,50,000/-
8	Gas Chromatograph	Rs. 3,60,000/-
9	Gas Chromatograph	Rs. 3,90,000/-
10	Karl Fischer Titrator	Rs. 1,85,000/-
11	Emerson UPS-1 + Batteries	Rs. 1,04,000/-
12	Emerson UPS-2 + Batteries	Rs. 1,05,000/-
13	UV-Visible Spectrometer	Rs. 4,00,000/-
14	Refrigerated Centrifuge	Rs. 5,20,000/-
15	Focused microwave for synthesis	Rs. 21,60,000/-
16	Nitrogen Generator	Rs. 9,95,625/-
17	Diffused Microwave Reactor	Rs. 9,90,000/-
18	Reactor Assembly for low temperature reaction	Rs. 1,99,660/-
19	Batch Reactor Assembly	Rs. 2,30,625/-
20	Analytical Weighing Balance	Rs. 1,84,275/-
21	Ultrasonic Reactor	Rs. 2,63,350/-

## 11 Projects:

### 11.1 Some UG Projects

Sr No	Topic	Name of student
1	Adsorptive mode of phenol Abatement from aqueous solution using Bagasse ash	Mahendra Jamankar Akshay Atule Kiran Gophane
2	Recovery of Trifluoroacetic acid using liquid liquid extraction by molecular dynamics simulation	Shivangi Borate Aishwarya Lohi
3	Multicomponent distillation and sequencing using VB. Net	Apurva R. Murale Prathamesh A. Patil
4	Studies on Ethanol production from glucose using Saccharomyces Cerevisiae	Sayali H. Waghmare Reshma B. Karande Pratiksha S. Kasurde
5	Extractive Distillation of Tert-Butylamine and methanol using N,N-Dimethyl formamide	Charudatta S. Ponkshe Vinayak S. Deshmukh
6	Simulation of aqueous Tetrahydrofuran (THF) USING Aspen	Sarita S. Patil Shruti S. Mhamunkar
7	Production of n- propyl propionate with IER-15 using reactive chromatography	Tejas B. Bairagi Raj R. Shirke Akshay I. Sable
8	Matlab toolbox for Heat Exchanger	Anjali S. Warne
9	Manufacturing of THF from 1, 4 butanediol in presence of ion exchange resin (AMBERLYST -15)	Akash K.Manglekar Pradnya C. Choulkar
10	Control of distillation column	Aditya G. Jadhav

11	Water based silver nano fluid for heat transfer applications	Abhijeet Koturwar Gaurav Chavhan Vaibhav Kamble Akshay Sankhe
12	Rotating disc contactor	Rakesh V. Ambildhuke Kunal R Rathod
13	Simulation of ammonia production from synthesis gas using aspen plus	Roshan S. Dhondage
14	Extraction of mangiferin from different varieties of mangifera indica	Afifa R. Dakhway Pratiksha K. Yesare Prem P. Jadhav Rohit S. Divekar
15	CFD studies of Multicomponent tubular reactor with isothermal cooling	Rupali T Gorade
16	Fabrication of horizontal tube viscometer for study of non-newtonian fluid	Shubham U. Palandurkar Sharda D. Turkar Nikhil M. Kinkar
17	Extraction of oil from lemon grass using Hydro- Distillation	Kartik V. Satre Mahesh D. Shinde Basavraj V. Kanade
18	Synthesis of methyl butyrate using catalyst Amberlyst 15 : kinetic study	Sphurti P. Kulkarni Pranit P. Shetye
19	CFD studies of multicomponent tubular reactor with isothermal cooling	Sahil R. Kawade
20	Heat transfer augmentation by using screw tapes	Kaustubh V. Barbind Ishwar R. Chinchole Amit M. Sabde
21	Experimental determination of vapour liquid equilibrium data and separation of complex azeotropic mixture using suitable software	Mayur M. Bhongade Bhushan R. Dhote
22	Ultrasound assisted crystallisation of boric acid	Kamesh M. Chikhale Pranjal S. Meshram
23	Production of hydrogen from water by splitting reaction	Sumit V. Tembhurne Balaji S. Shelke
24	Extraction of silica from Peddy husk	Vishal J. Sonigara Pankaj M. Kove

## 11.2 PG Projects

Sr No.	Topic of student	Name of Student
1	Ultrasound assisted crystallization of Boric acid	Suhas Shankar Ghongade
2	Purification of Tert-Butylamine from it's azeotrope with methanol	Akash Dadaso Kshirsagar
3	Characterization of used engine oil by using True Boiling Point (TBP) Distillation	Rathod Pravin M.
4	Experimental Studies on Heat transfer Augmentation for laminar flow of Liquid through a square duct	Shreyas Ravindra Bachal

5	Separation of Trifluoroacetic Acid from dilute aqueous solutions: Experimental investigation and simulation in the molecular modelling Environment	Mrunmayee Khare
6	Dynamic Simulation of Distillation Column	Pravin Anandrao Hate
7	Self Condensation of Cyclohexanone	Ravikumar S. Mahato
8	Development and Fabrication of Dual Chamber Microbial Fuel Cell to treat Distillery Wastewater	Irsha Baliram Dhotre
9	Performance Assessment of Biogas Purification for Power Generation	Ravindra Tukaram Bhosale
10	Production of THF from 1,4- Butanediol using Amberlyst-15	Omkar C. Khardekar
11	Separation of Methanol-Toluene from spent process stream Batch Distillation	Umesh Vinayak Dahibhate

### 12.1 List of Ph.D. Students

Sr. No.	Name of the student	Topic	Status
1	Onkar Devrukhkar	Experimental Investigation and control studies on bench scale extractive distillation column	Completed
2	Sangeeta Metkar	Design and Control of Chemical process systems	Ongoing
3	R. B. Bhandare	Process development with reaction kinetic studies	Ongoing
4	Annasaheb Bandsode	Controller Design for MIMO systems	Ongoing
5	Anil Ranveer	Studies on electricity generation by MFC	Ongoing
6	Suresh V. Ranade	Managing and monitoring Common Effluent treatment plants	Ongoing
7	Prashant A. Giri	Optimal Column Sequencing for Multicomponent mixtures	Ongoing

### 13. Academic Achievements

List of students Qualified the GATE 2018 Examination is as follows:

Sr. No.	Name of Student	Marks Obtained
1	Mr. Prasad Korade	53.57
2	Mr. Siddharth Rath	50.23
3	Mr. Anom Alone	43
4	Mr. Mohit Jagtap	47.60

### 14. Other Activities Conducted by Department

**GATE Coaching:** Every year the Department of Chemical Engineering conducts GATE guidance classes for the students of Chemical and Petrochemical Engineering. Four students from Chemical Engineering have obtained valid GATE score at GATE exam. GATE score is essential for securing jobs in public sector companies like HPCL, IPCL, BPCL, etc.

**World Water Day Celebrations:** Every year the Department of Chemical Engineering conducts World Water Day on March 22. We invite nearby school children to participate in quiz and elocution

competitions and also spread awareness about water conservation through them. This year also the Department of Chemical Engineering celebrated World Water Day with great zeal.

**Industrial Exposure and Training Programs:** As per the curriculum requirements the students of 2<sup>nd</sup> year B.Tech. will have to undergo two weeks industrial exposure program during the summer vacation in a processing industry. Similarly, the students of 3<sup>rd</sup> year B.Tech. will have to undergo four weeks of industrial training in any chemical process industry during summer vacation. These programs will be highly useful for students to better understand theoretical aspects of Chemical Engineering. During last summer vacation about 140 students undergone above programs.

**Parents Meet:** The Department of Chemical Engineering organized Parent Teacher meet on 25 October, 2017. Many parents attended this meet and had fruitful discussion with faculty.

**Industrial Visits:** Every year the Department conducts industrial visits for students of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, final year B.Tech. and M.Tech. students. Students are taken to nearby industries in Mahad, Roha and Loteparshuram to show them different chemical engineering operations and processes.

## 15. Extra-Curricular Activities

### Parent Meet 2K17:



## 16. Departmental Strengths, Weaknesses, Opportunities and Challenges

### Strengths

- Highly dedicated and motivated faculty members.
- Good supporting staff
- Disciplined students
- 

### Weaknesses

- Insufficient faculty availability
- Insufficient space

### Opportunities

The department of Chemical engineering maintains excellent rapport with nearby industrial houses, viz. MIDC Mahad, MIDC

Roha, MIDC Lote Parshuram, and MIDC Patalganga. In view of this there is a

- Good scope for consultancy work and IRG
- Good scope for collaborative projects
- Good scope for expansion of the department

### Challenges

- Managing all Departmental activities with the help of available faculty members.
- Recruitment of qualified faculty members having Ph.D. qualifications
- Managing with rural environment



## Department of Civil Engineering



**Dr. S. M. Pore**

Associate Professor & Head

### From desk of Head of Department

It gives me immense pleasure to present Annual Report for Year 2017-18. Seeds sown somewhere around 2008-09 are now showing sprouts and I am sure this will grow to become a landmark in the history of our University. It is well said that beginning of all great things is small, our department is not an exception. Started in 2008 with intake of 60, we have to our credit addition of 400 good civil engineers in service to our nation. From 1st batch itself we have tried for on and off campus placement of students and it's our pride that nearly all students are placed. Few students have opted for higher education and did well through IIT, NIT and State Engineering Colleges. In spite of limited facilities on all fronts, department is able to step forward only because of patience and enthusiastic cooperation by students. They have definitely carved a niche on campus. Recognition as a State University will boost morale of every family member of the Department.

In 2012, Ph.D. programme was introduced. At present 05 research scholars are working in the research area of Structural Engineering and Materials. Fellowship to full time Ph.D. students is available under TEQIP project. B. Tech. curriculum designed is a perfect blend of requirements of AICTE model, syllabus of other universities and real needs of Industries in India. The focus of the department is to produce graduates & post graduates with strong fundamentals needed for application oriented professionals.

The department has received handful amount of funding from AICTE, UGC, TEQIP and State Government for various research projects. The department has required basic laboratories to cater for curricular requirements. Faculty members have strong background of research in current issues of the discipline.

Number of students of this department have succeeded in competitive examinations like GATE, MPSC, UPSC and other. Few students could go abroad to perceive higher studies. As a part of academic schedule, our students need to undergo industrial training at the end of second and third year during summer vacations in industries of repute around us. The organizations such as PWD, WRD, ZP and few private industries have responded very positively. The department regularly organizes workshops, training, seminars, expert lectures and conference in the emerging areas technology.

**Dr. Sachin M. Pore**

### Vision

Dissemination of technical knowledge and expertise for education of students and progress of industry, society, our country.

### Mission

We aim at providing quality engineering education tuned with modern scientific and technological development.

**Department at a Glance:**

Currently running B. Tech. Program and Ph. D. Program

04 Part time and 01 Full time Research Scholars

289 Undergraduate Students

02 Regular and 08 Contract Basis Faculty, 05 Supporting Staff

1100 sqm of space, 08 well equipped laboratories, 02 UG Classrooms, 01 PG Room

15 Major and 987 minor equipment

06 journal papers, 48 conference papers

28 students got campus placements, almost all remaining helped out to get placed off-campus

06 well equipped laboratories, 15 Major and 987 minor equipment

20 consultancy projects, 31 material testing assignments helped IRG of 9.70 Lakhs

01 Infrastructure Grant Proposal earned grants of 2.00 Crore from AICTE

**Objectives & Outcomes****Programme Educational Objectives (PEOs)**

- PEO1 To prepare students to excel in technical fields in order to pursue postgraduate programs or to succeed in industry, R&D institutions through global and new emerging areas.
- PEO2 To provide students with a sound foundation of scientific and engineering fundamentals.
- PEO3 To prepare students to cater changing needs of industry and make them worthy of finding solutions for the real life problems.
- PEO4 To develop in students, professional and ethical attitude, effective communication skills, leadership, teamwork attitude and a responsible citizen.

**Programme Outcomes (POs)**

- PO1 The graduates will possess the basic knowledge of science and engineering to identify and formulate problems in industry.
- PO2 The graduates will have an ability to understand methodologies to solve problems in Civil Engineering Industry.
- PO3 The graduates will possess the knowledge of advanced and emerging topics in the fields.
- PO4 The graduates will demonstrate the skills to use modern engineering tools, software and equipment to analyse and solve real-life problems.
- PO5 The graduates will have broad understanding of the impact of Civil Engineering field in economic, environmental and social context and will be aware of the contemporary issues.
- PO6 The graduates will possess skills necessary to communicate engineering ideas.
- PO7 The graduates will demonstrate ability to work and collaborate in heterogeneous teams.
- PO8 The graduates will demonstrate awareness of professional and ethical responsibilities.



## 2. Students Statistical Information

### Enrolment Data for 2017-18

Year	Open		SC		ST		OBC		VJNT		SBC		Total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
First	11	04	05	03	04	02	17	07	07	01	00	00	44	17	61
Second	09	04	05	02	01	00	14	05	05	03	00	00	37	14	51
Third	22	07	07	03	06	02	16	03	11	03	00	01	65	19	84
Final	22	04	08	03	05	01	21	10	10	01	00	00	68	19	87

### Examination Performance for 2017-18

Year	CGPA				FF	Total
	Below 6.5	6.5 - 8	8 - 9	9 - 10		
First	00	04	16	00	38	58
Second	00	22	19	00	26	67
Third	08	34	16	02	21	81
Final	23	41	09	02	04	79

## 3. Advisory Board

Advisory Board for Civil Engineering Department is formed to provide time to time guidance and monitor the activities. The Advisory Board is entrusted with responsibility of conducting academic audit of department, suggesting dynamic curriculum and providing input for research activities. The meetings of the Board of Studies were called on 21st July, 2017 and 8th May, 2018 to discuss several issues related to the curriculum.

S.N.	Name	Designation	Institute
1	Dr. S. M. Pore	Associate Prof. and Head	DoCE, DBATU
2	Mr. A. A. Toro	Exe. Engg, Water Supply	RZP, Alibag
3	Mr. Umesh Magdum	Civil Engineer (Maintenance)	POSCO, Maharashtra, Vile
4	Dr. Sarode D.D.	Associate Professor	GED, ICT, Mumbai
5	Dr. Kadam S. B.	Associate Professor	DoCE, WCE, Sangli
6	Mrs. Sarode S. D.	Dy. Manager	B. E. Billimoria & Co. Limited
7	Dr. S. R. Bhagat	Associate Professor	DoCE, DBATU

### Investment for Laboratories

S.N.	Name of the Laboratories	Total Cost (Rs.)
1	Survey Laboratory	782278.00
2	Concrete Lab	1218355.00
3	Geotechnical / Soil Lab	1059524.00
4	Hydraulics Lab	122062.00
5	Computational Lab	920989.00
Total		4103208.00

#### 4. Major Instruments in Laboratory

S.N.	Name of Instrument	Qty.	Cost	Date of Purchase
1	Combined set up to demonstrate Bernoulli's Theorem & Type of Flow on the basis of Reynold's number	01	71,250.00	14.12.2010
2	Precision Direct Reading Vernier Theodolite	05	62,500.00	04.02.2011
3	HP pro Desktop SFF 2110, E7500/2GB DDR3 RAM/320 GB HDD/Key board optical mouse	15	4,09,500.00	01.04.2011
4	Trimble M3-5" Total Station	01	4,75,965.00	15.04.2011
5	Direct Shear Outfit with Electronic Microprocessor Loading Unit	01	4,35,490.00	21.03.2013
6	Motorized Sieve Shaker with built in Digital Timer. Standard sets of sieves	01	1,80,136.00	21.03.2013
7	Automatic Compression Testing machine 3000 KN	01	11,73,497.00	27.03.2013
8	Unconfined Compression Test Apparatus	01	90,046.00	21.03.2013
9	Multi Media Projector	03	1,02,195.00	05.10.2015
10	HP 400G1 All-in-one Desktop computer	06	2,33,100.00	05.11.2015

#### 5. Laboratories

The department has fully functional laboratories of Concrete Technology, Hydraulics, Building Construction, and Engineering Geology.



400 Samples of Rocks & Minerals, 150 Models, 150 Charts in Engineering Geology Laboratory



Surveying Instruments, Comp. Testing M/c, Two Tailor-made Hydraulic Benches for 05 Experiments

## 6. Faculty and Staff



Dr. Sachin M. Pore  
B.E. (Shivaji University,  
Kolhapur),  
M. E. (Shivaji University,  
Kolhapur),  
Ph.D. (IIT Roorkee)  
Experience: 19 Years



Dr. Sariputta R. Bhagat  
B.E. (Amravati  
University, Amravati),  
M. Tech. (IIT Delhi),  
Ph. D. (IIT Roorkee)  
Experience: 18 Years



Ms. Aakanksha A. Darge#  
B.Tech. (DBATU, Lonere)  
M.E. (SPPU, Pune)  
Experience: 04 Years



Ms. Priyanka P.  
Mohire#  
B.Sc., M.Sc. (Geology)  
(SPPU, Pune)  
Experience: 04 Years



Ms. Ashvini M. Sadavarte#  
B. Tech. (DBATU, Lonere)  
M.Tech. (Walchand College,  
Sangli)  
Experience: 01 Year



Ms. Rashmi C. Halge#  
B. Tech. (DBATU,  
Lonere)  
Experience: 01 Year



Balasaheb R. Mule#  
B. Tech. (DBATU, Lonere)  
Experience: 01 Year



Ms. Madhuri R.  
Lomate#  
B. Tech. (DBATU,  
Lonere)  
Experience: 01 Year



Mr. Shrikrishna A. Patil#  
B. Tech. (DBATU, Lonere)  
Experience: 01 Year



Mr. Amol Y. Suradkar#  
B. Tech. (DBATU,  
Lonere)  
Experience: 01 Year

## Supporting Staff



Govind V. Jadhav  
Laboratory Assistant  
B.A., M. A. (DBAMU,  
Aurangabad)  
Experience: 08 Years



Sandesh M. Jambhare#  
Laboratory Assistant  
B.Sc. (Mumbai  
University)  
Experience: 03 Years



Paresh H. Tembe  
Laboratory Assistant  
Diploma (DBATU, Lonere)  
Experience: 03 Years

#indicates faculty on contract basis, \$ indicates staff on contract basis

## 7. Contributions of Faculty

1. Department took active role in ISO certification Process for University.
2. Hon. District Collector, Raigad nominated Dr. Pore as member of District Level Committee in area of Water Conservation and Management.

### Dr. Sachin M. Pore

1. Working on various administrative committees of DBATU, namely. Academic Council, Building Works Committee, Campus Development Committee, Finance Committee, Anti-Ragging Committee and few other.
2. Worked as External Examiner for M.E. Dissertation Examination of Pune University, Shivaji University.
3. Designed musical fountain, executed and commissioned at Rajbhavan Nagpur by group of students from Civil Engg., Electrical Engg., ExTC Engg.
4. Working as Technical Consultant for many projects of Airport Authority of India, State PWD and ZP. Nature of work involves structural design and structural auditing for buildings, bridges & water tanks.
5. Working as Technical Auditor for Jal-yukta Shivar Yojna, Raigad for District Collector, Raigad
6. Completed Project of Design and Construction of Laboratory Complex, Research Centre, Teachers' Training Centre Incubation Centre, Repairing of Workshop of more than Rs. 25 Cr. for DBATU successfully & submitted all the necessary documents to University.
7. Worked as Structural Consultant for Development of Belgavi Airport at Sambra Belgavi for Airport Authority of India and REPPL, Ratnagiri (ENRON)

### Dr. Sariputt R. Bhagat

1. Member, Industry-Institute Interaction Cell (TEQIP-II).
2. Member, Civil Works Committee (TEQIP-II).
3. Member, University Committee, Rashtriya Uchchar Shiksha Abhiyaan (RUSA).
4. Member, Annual Report Committee of the University.

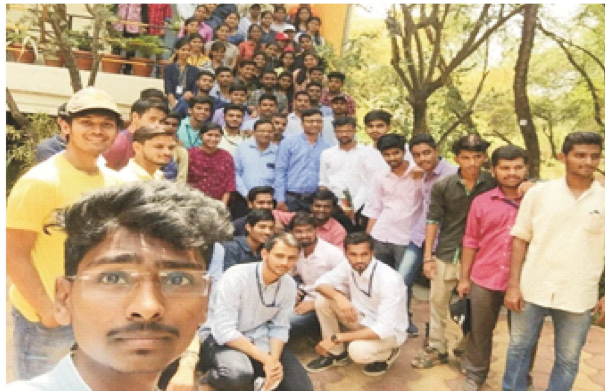


5. Project Nodal Officer, Civil Works including Environment Management (TEQIP-II)
6. Actively involved in material testing and quality control services through Concrete Laboratory,
7. Geotechnical Laboratory and Environmental Engineering Laboratory.
8. Member of Board of Studies in Civil Engineering
9. Co-ordinator for BTP/BTS and PG

## 8. Industrial Visits for Students



Visit to Sewage treatment plant PCMC Akurdi, Pune



Visit to Common Effluent Treatment Plant MIDC Mahad



Visit to Idukki Dam Kerala

## 9. Student Involvements

### 9.1 Best Practices

1. We encourage students to search for industry sponsored projects for their final year project work, during their 3rd year of studies. This helps them to develop rapport in industrial resources. For this purpose our consultancy clients have helped us greatly.
2. Our contacts in PWD, Railways, Irrigation, ZP and similar Civil Engineering Departments in GoM and GoI have given ample access to our students for Industrial Training.
3. Seeds of encouragement to take up competitive exams were sown in 1st batch so that 100 % students appeared in GATE and we have set a tradition to continue.
4. Department keeps track of activities of students on various fronts such as academics, sports, social, cultural, interpersonal relations, leadership, enthusiasm, participation in workshops, etc.
5. GATE qualified students for year 2017-18, are Rohit Chopade, Arbaz Mulani, Vivek Gaikar, Amar Ratnaparkhe.

### List of B. Tech. Students Placed in Campus Placement

S.No.	Name of the student	Company	Package
1	Akshay Belokar	Progressive Civil Construction Co. Mumbai	2.16 Lakhs
2	Pralhad Choudhari	Progressive Civil Construction Co. Mumbai	2.16 Lakhs
3	Sanjeevani Pawar	Progressive Civil Construction Co. Mumbai	2.16 Lakhs

4	Mahesh Pawar	Progressive Civil Construction Co. Mumbai	2.16 Lakhs
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## 9.2 List of B. Tech. Projects during 2017-18 (Completed in groups)

Sr. No.	Project Title	Students
1	Study of ventilation system in classroom	Sagar Bhamre, Subodh Gharde, Sanweg Gedam, Jyoti Lokhande, Meena Wakode Shashank Mishra, Akshay Birajdar
2	Study of analysis of arch shape weir	Mayur Bhavsar, Shivputra Swami, Rajesh Farde, Akshay Belokar, Shruti Lad, Kedar Yarmalwar, Mayuri Thakre
3	Design of sewage treatment plant for DBATU campus	Rohit Chopde, Hilal Ahmad Dar, Pranjal Malawade, Saud Murudkar, Ahmad Vaskar, Shubham Hadole, Aditya Padature, Aniket Gurav
4	Low Cost housing : bamboo structure	Sakshi Kulkarni, Tayba Chikte, Rahul Kashid, Dheeraj Sharma
5	Groundwater Investigation	Priyanka Patil, Sanket Dagale, Siddeshwar More, Aniket Khurkute, Sudhir Jadhav, Sanjeevani Pawar, Vivek Gaikar, Anup Raut
6	Eco low flushing sanitation	Summit Hiwale, Laxmi Pujari, Valay Patil, Rachana Koli, Prajakta Majgaonkar, Rushikesh Khindre, Santosh Bhoje
<b>The detailed study and design of university road from Y point to Mangrul</b>		
1	20150884	Rohit Shinde
2	20140844	Amar Ratnaparkhe
3	20140828	Suraj Lomate
4	20140811	Rajeshwaree Ghale
5	20140829	Nandkumar Madane
6	20140856	Tushar Yadav
7	20140820	Anand Jadhav
8	20140839	Mahesh Pawar
<b>GROUP 8</b>		
Replacement of cement by silica sand and addition of rice husk in cement concrete		
1	20140841	Pallavi Pote
2	20140840	Harshda Poipkar
3	20140821	Hemant Jadhav
4	20130827	Jenika Khedkar
5	20140853	Shubham Tavare
6	20150881	Arbaz Mulani
7	20140852	Ajinkya Tagad
8	20150880	Vishal Manale
<b>GROUP 9</b>		
Soil stabilisation for subgrade of road		
1	20140850	Shrinath Suryawanshi
2	20140818	Pandit Irpatgire
3	20140832	Pallavi Mhatre
4	20150877	Megha Giri
5	20140819	Snehal Jadhav
6	20140845	Prasad Sagar
7	20140858	Akhilesh Birajdar
8	20140805	Pralhad Choudhari
<b>GROUP 10</b>		
Detailed study on selection of Highway Alignment		
1	20140834	Aditya Narmitwar
2	20120863	Vishal Dhodi
3	20140814	Govind Gond

4	20120861	Nilesh Totawar
5	20140836	Sangam Pannase
6	20160886	Mangesh Wanjare
<b>GROUP 11</b>		
Water conservation in Maharashtra by Jalyukta Shivar Yojana		
1	20140802	Ajay Bankar
2	20130839	Mayur Nikam
3	20140808	Nilay Choudhary
4	20130801	Nirja Alkunte
5	20140817	Rohit Ikhe
6	20140843	Aaditi Pulgurle
7	20150882	Ashish Pethe
8	20140826	Sadashiv Latpate

### 9.3 CESA Team of Volunteers for the Academic Year 2017-18

S.N.	Name	Designation	Responsibility
1	Rohit Chopade	President	Overall planning and conduct of student activities
2	Pranjal Malavde	Vice-president	Overall planning and conduct of student activities
3	Sanjivani Pawar	Treasurer	Management of finance and accounts
4	Kedar Yarmalwar/ Sakshi Kulkarni	Technical coordinator	Planning of technical activities and execution
5	Aditya Padature/ Harshada Poipkar	Cultural coordinator	Planning of cultural activities
6	Srinath Suryawanshi/ Pallavi Mhatre	Sports coordinator	Planning and execution of sports activities
7	Rahul Kashid/ Laxmi Pujari	Literature coordinator	Planning and execution of literary events

### 9.4 Prizes Secured in Various Competitions

#### 3rd Year Civil Engineering

S.No.	Name	Event
1	Jagdip Patil	1st Prize in "Cricket" & 2nd Prize in "Throwball" ("Ranasangram 2018" organized by Dr. BATU, Lonere)
2	Sonali Natve	1st Prize in "Table Tennis, Kabaddi, Throwball" ("Ranasangram 2018" organized by Dr. BATU, Lonere)
3	Nikita Ingale	1st Prize in "Table Tennis" ("Ranasangram 2018" organized by Dr. BATU, Lonere)
4	Priyadarshani Patil	1st Prize in "Table Tennis, Throwball" & 2nd Prize in "Cricket" ("Ranasangram 2018" organized by Dr. BATU, Lonere)
5	Abhhijit Belkade	1st Prize in "Structura Event" ("Cynosure 2018" organized by Dr. BATU, Lonere)
6	Kanchan Choudhary	1st Prize in "Throwball" & 2nd Prize in "Cricket" ("Ranasangram 2018" organized by Dr. BATU, Lonere)
7	Mayuri Waghmare	1st Prize in "Kabaddi, Throwball" ("Ranasangram 2018" organized by Dr. BATU, Lonere)

#### 2nd Year Civil Engineering

S.No.	Name	Event
1	Nikita Bacchav	1st Prize in "Chess" ("Abhiyanta Vasant 2017" organized by Dr. BATU, Lonere)

2	Mukta Mandelkar	1st Prize in “Structura” (“Abhiyanta Vasant 2017” organized by Dr. BATU, Lonere)
3	Akash Patil	1st Prize in “Structura” for most innovative structure (“Abhiyanta Vasant 2017” organized by Dr. BATU, Lonere)

### 1st Year Civil Engineering

S.N.	Name	Event
1	Aadesh Kadu Omkar Shinde Rahul Tarange Yogesh Byale	1st Prize in “Kho-Kho” (“Intercollege Sports Compition 2018” organized by MGM College, Aurangabad)
2	Aishwarya Kanase	1st Prize in “Quiz Compition” (“CESA 2018 ” organized by Dr. BATU, Lonere)
3	Rupesh Mathdevare	1st Prize in “Estate War” (“Cynosure 2018” organized by Dr. BATU, Lonere)
4	Harshal Thakur	2nd Prize in “Throwball”(“ Ranasangram 2018” organized by Dr. BATU, Lonere)
5	Aniket Shinde	2nd Prize in “Kho-Kho”(“ Ranasangram 2018” organized by Dr. BATU, Lonere)
6	Vaishnavi Inamdar Revati Jandhan	1st Prize in “Throwball, Kabaddi” & 2nd Prize in “Cricket” (“Ranasangram 2018” organized by Dr. BATU, Lonere)
7	Rutuja Mhatre	1st Prize in “ Kabaddi”& 2nd Prize in “Cricket” (“Ranasangram 2018 ” organized by Dr. BATU, Lonere)

## 10. SWOT Analysis

### Major Strengths:

- Leadership & guidance from Hon. Vice-Chancellor, Academic Council and Executive Council.
- Curriculum considering Basic needs of course and employability.
- Assured source of grants from University Budget & Prospective resources such as AICTE, UGC, GoM, GoI.
- Well-equipped and running labs for students.
- Young and enthusiastic team of faculty.
- Major Weaknesses:
- Shortage of competent faculty leads to overstressing of available manpower.
- Inadequate furniture and civic amenities.
- Evaluation system is exam-centric leading to high number of examinations and leaving little time for faculty to find interest in project related activities.

### Major Opportunities:

- Number of students of this department compete in the competitive examinations like GATE, TOEFL, and GRE.
- Infrastructure development in country is moving with very fast rate. There is acute shortage of competent civil engineers in all the fields.
- Major Challenges:
- Conducting departmental activities with the help of freshly graduated faculty members.
- Producing engineers of required quality for the industry.
- Future plans of the department:
- To become a reputed seat of knowledge in Civil Engineering.
- To produce Civil Engineers required for Indian Industry.
- To promote institute – industry linkage for effective implementation of program objectives.
- To promote need based research in Civil Engineering.





# Department of Computer Engineering

## Message from the Head of Department:

I am glad to present the annual report of the Department of Computer Engineering for the year 2017-18. I would like to congratulate alumni, students and my colleagues for their professional achievements.

The year 2017-18 was a historic year in terms of alumni contribution to the growth of the department. Two of the alumni Mr. Akshay Ghodake and Mr. Swapnil Bhate played an instrumental role in constituting three Ph. D. fellowships and two M. Tech. Fellowships. The fellowship programme, which will be known as ATA Fellowship programme, is of three years from 2018 to 2020 and a grant of Rs. 46.0 Lakhs has been sponsored to meet the cost of education of Ph. D. and M. Tech. Students. A group of alumni from the year 2013 led by Mr. Abhijeet Katte has constituted a cash prize titled as AWK prize for the best B. Tech. thesis.

We all the members of the Department of Computer Engineering deeply acknowledge their contributions and also proud of their sense of responsibility towards the academic growth of the department.

**Dr. Arvind W. Kiwelekar**

## Vision and Mission Statements of Department:

### Vision:

The vision of the department is to be known as an educational institute that adopts learner-centered approach to education aimed at deep understanding of computer science and engineering concepts as opposed to rote learning.

### Mission:

The mission of the Department of Computer Engineering is to produce quality Computer Engineers, Researchers and Academicians capable of providing generic solutions to engineering problems with their knowledge of computer science concepts, mathematical abstractions and latest technologies.

## About the Department:

The department of Computer Engineering was established in the year 1995 initially with B. Tech. programme having intake of 60 students. In the year 2001, two additional programs were introduced. First, M. Tech. programme in Computer Engineering with an intake of 18. Second, B. Tech. programme in Information Technology with an intake 60 students. In the year 2004, the B. Tech. programme in Information Technology was shifted to the newly created department of Information Technology. In the year 2008, the first research scholar for Ph. D. programme was enrolled in the department.

Graduates of the department are trained with three kinds of knowledge and skills so that they can apply the principles of Computer Science and Engineering to solve real-life problems from diverse application domains. First, the graduates are provided with the conceptual knowledge of the core topics of Computer Science. Second, they are also trained for knowledge of mathematical formalisms underlying various programming concepts. Third, graduates undergo rigorous practical training in which they acquire skills for the state of the art technologies and tools.

## Programme Educational Objectives (PEOs) & Programme Outcomes (POs)

### Programme Educational Objectives (PEOs)

To provide knowledge of mathematical principles underlying programming concepts.

To develop an ability to understand complex issues in the analysis, design, implementation and operation of information systems.

To develop an ability to provide computer-based solutions to the problems from other disciplines of science and engineering.

To impart skills necessary for adapting rapid changes taking place in the field of information and communication technologies.

### Programme Outcomes (POs)

After undergoing the learning process of four years, students of B. Tech. (Computer Engineering) at DBATU will have an ability to build information systems and provide computer based solutions to real life problems. The graduates of this programme will demonstrate following abilities and skill sets.

Outcome Identifier	Outcomes
PO1	The graduates will possess the knowledge of various discrete mathematical structures and numerical techniques.
PO2	The graduates will demonstrate the use of Logic in representing and reasoning knowledge based systems.
PO3	The graduates will have an ability to apply mathematical formalism of Finite Automata and Probability in modeling and analysis of systems.
PO4	The graduates will have knowledge of programming languages and concepts essential to implement software based system.
PO5	The graduates will have an ability to analyze problem, specify algorithmic solutions to them and to evaluate alternative solutions.
PO6	The graduates will have in-depth knowledge of core programming paradigms such as database orientation, object orientation, and agent orientation.
PO7	The graduates will have broad understanding of the impact of a computer based solutions in economic, environmental and social context.
PO8	The graduates will demonstrate use of analytical tools in gathering requirements and distilling relevant information to provide computer based solutions.
PO9	The graduates will have knowledge of design rules and patterns necessary to formulate computer based solutions.

- PO10 The graduates will demonstrate the ability to build human centric interfaces to computers.
- PO11 The graduates will possess the knowledge of advanced and emerging topics in the fields of operating systems, databases and computer networks.
- PO12 The graduates will possess skills necessary to communicate design engineering ideas. The skills set include verbal, written and listening skills.
- PO13 The graduates will understand ethical issues in providing computer based solutions also they will have an ability and attitude to address the ethical issues.
- PO14 The graduates will demonstrate the ability to work and collaborate in heterogeneous teams.
- PO15 The graduates will understand the role of system software such as operating systems, database management systems, compilers, middle-ware and internet protocols in realizing distributed information environment

#### Overview of Academic Programs:

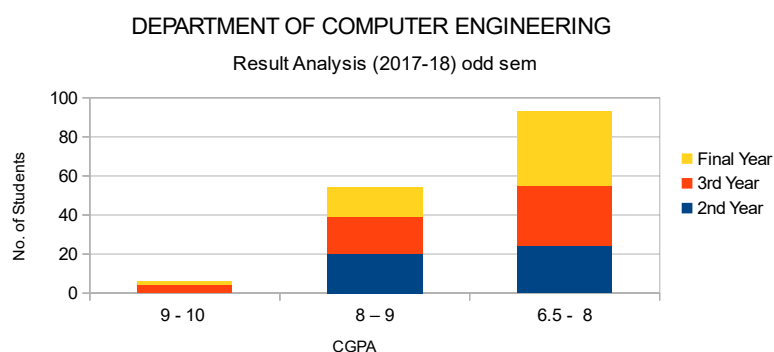
Sr. No.	Name of the Programme	Sanctioned Intake
1	Bachelor of Technology (Computer Engineering) B. Tech.	60
2	Master of Technology (Computer Engineering) M. Tech.	18
3	Doctor of Philosophy Ph. D.	9 on roll

#### Academic Information:

##### UG Students Statistical Information

Year	Open			SC			St			OBC			VJNT			SBC			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
First	16	7	23	9	1	10	4	0	4	18	6	24	4	2	6	0	0	0	51	16	67
Second	15	8	23	4	4	8	2	0	2	15	13	28	3	2	5	2	0	2	41	27	68
Third	19	9	28	7	6	13	1	3	4	20	9	29	4	3	7	1	0	1	52	30	82
Fourth	13	14	27	3	5	8	1	1	2	18	10	28	5	4	9	1	0	1	41	34	75

## Result Analysis :



## Campus Placements:

Sr. No.	Name of Student	Company	Package
1.	Abhishek Pathak	Argence Labs	13.33
2.	Vinayak Kusumkar	Interviewair	7.68
3.	Abhishek Alai	Greenizon(Jai Kisan) Agritech consultancy	3
4.	Kumodini Lokhande	Humgenie PVT LTD	3.6
5.	Ganesh Chavan	CCM Consultancy Mumbai &	3.6
6.	Rushikesh Kinalkar	GS Lab	3.6
7	Snehal Ranpise	BHGE	3
8	Sahil Salvi	Kanaka Software	1.8
9	Shubham Shinde	Syntel	3.1
10	Neeta Tai	Syntel	3.1
11	Aksay Bhujbal	Syntel	3.1
12	Aparna Zope	Syntel	3.1
13	Amruta Kabade	Syntel	3.1

## Faculty and Staff

Regular Faculty		
1	Dr. Arvind W Kiwelekar, Ph. D. Associate Professor and Head	Software Architecture, Artificial Intelligence
2	Dr. Laxaman D Netak, Ph. D. Associate Professor	Computer Networks, Optical Networks
3	Manjushri Laddha, M. Tech. Assistant Professor (Senior Scale)	Object-oriented Programming, Software Testing
4	Harishchandra Akarte, M. E. Assistant Professor (Senior Scale)	Wireless Sensor Networks, Distributed Systems

5	I R A Jhetam, M. Tech. Assistant Professor (Senior Scale)	Databases, Software Engineering
6	Sanjay U. Waikar, M. Tech. System Analyst	System Administration

#### **Adhoc Faculty (2017-18)**

1	Hansraj Wankhede, Ph.D. Assistant Professor	Software Engineering E-learning
2	Harsha Gaikawad, M. E. Assistant Professor	Software Engineering
3	Phadtare Pankaj M. E. Assistant Professor	Information Security, Web Mining
4	Roshan Kotkondawar, M. Tech. Assistant Professor	Compiler Construction, Digital Circuits
5	Sanil Gandhi, M. Tech. Assistant Professor	Programming Languages, Software Architecture
6	Mohan Patil, M.E. Assistant Professor	Software Engineering, Artificial Intelligence
7	Kavita Aher, M.E. Assistant Professor	Database

#### **Supporting Staff**

1	Shubhangi S. More	Laboratory Assistant (Technical) (Regular)
2	Ashwini Batawale	Laboratory Assistant (Adhoc)
3	Abhijit Tembe	Laboratory Assistant (Adhoc)
4	Reshma Chavan	Laboratory Assistant (Adhoc)
5	Sharada S Malgunkar	Peon (Regular)
6	Dipak Tembe	Peon (Adhoc)
7	Sushmita Bondilkar	Peon(Adhoc)

#### **Additional Responsibilities to the Faculty:**

1	Arvind W Kiwelekar, Ph. D. Associate Professor and Head	Co-ordinator, UG Programs, Coordinator CDSTTC, Academic Coordinator, TEQIP III
2	Laxaman D Netak, Ph. D. Associate Professor	Coordinator, Campus-Networks, UGC Procurement Cell

3	Manjushree Laddha, M. Tech. Assistant Professor (Senior Scale)	Co-ordinator, Mahila Takrar Nivaran Samiti,
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### Advisory Board

Sr. No.	Name	Organization
1	Dr. Rushikesh K Joshi, Faculty Member	IIT Bombay
2	Dr. Ameya Karkare, Faculty Member	IIT Kanpur
3	Mr. Shridhar Bhat, Industry Member	Sarvha Systems Pvt. Ltd.
4	Dr. Sandeep Deshmukh, Industry Member	Data Torrent Pune
5	Mr. Ashok Chundurwar, Industry Member	Reliance Jio., Mumbai
6	Mr. Santosh M. Bhilegaonkar	Bosch+Lomb, Pune Division

### Research Committee

1	Dr. Arvind W Kiwelekar, Chairman	Dr. B. A. Technological University
2	Dr. Rushikesh K Joshi, Expert	IIT Bombay
3	Dr. N. L. Sarda, Expert	IIT Bombay
4	Dr. A. V. Tendulkar, Expert	Reliance Industries
5	Dr. J. A Aghav, Expert	College of Engg. Pune

### Faculty Research and Publications:

"An Architectural Perspective of Learning Analytics" for the book on Advances in Learning Analytics, Publisher: Springer, INTELLIGENT SYSTEMS REFERENCE LIBRARY book series. Arvind W. Kiwelekar, Manjushree D. Laddha, Laxman D. Netak, and Sanil Gandhi

### Laboratory:

#### Major Instruments in Laboratory :

Sr. No.	Name of Instrument	Qty.	Total cost
1	Video and Web Streaming Facility	1	7.5 Lakhs
2	Networking Infrastructure	1	10 Lakhs
3	40 Desktops	40	20 Lakhs
4	UPS 20 KVA	2	10 Lakhs

**Projects:****Major UG Projects :**

<b>Sr. No.</b>	<b>Project Topic</b>	<b>Name of the Student</b>
1	BATU Coin: Block chain based Cryptography	Kusumkar Vinayak Balajirao Deshpande Sumedha Sudhir Bornare Smita Sunil
2	Classification of Poems into emotion Category	Tat Neeta Sanjay Baikar Alkesha Ravindra Mankar Rajeshwari
3	Decentralised Graded System: A blockchain Application	More Poonam Rajabhau Bist Urkarsh
4	Ecommerce website using Woocommerce	Kasar Jitesh Dilip Chaudhari Shubham Ravindra Upase Shruti Sahebrao
5	AutoGen Automatic Gap fill question Generator Autogen: Automatic MCQ generation System	Mayekar Sagar Dattaram Bhange Kalpesh Chandarakant Chavan Ajaykumar Gabrusing
6	Integer Sequence Learning	Kinhalkar Rushikesh Salvi Sahil Rajkumar
7	IOT based smart parking system	Ranpise Snehal Sunil Kabade Amruta Anilkumar Patil Pranali Vasant Patil Leena Lau
8	Virtual Reality for Raigad Fort	Wagh Raju Bhagwan Bhoir Snehesh Arun Pratibha Kumari
9	Electronic gadget searching using Ontology	Kale Sankalp Gajanan Rutupama Bal
10	Cashless canteen system	Shinde Shubham Sharad Pitle Prathamesh Manoj Zope Aparna Narendra

**UG Community Projects:**

<b>Sr. No.</b>	<b>Community Project Name</b>	<b>Name of the Student</b>
1	Student Information System	Kusumkar Vinayak Balajirao Deshpande Sumedha Sudhir Bornare Smita Sunil
2	Website for Chemical Department	More Poonam Rajabhau Bist Urkarsh Sasane Ashish Maruti
3	Computer Department Portal	Gharat Snehal Rajendra Oswal Jeenal Rajeshkumar Pawar Sonali Dilip

4	Hostel admission process( Malaygiri)	Tat Neeta Sanjay Baikar Alkesha Ravindra
5	Municipality shop Rent Collector	Sonawane Pooja Dipak Gaikwad Shweta Sopan PATIL Leena Lau
6	NCC Cadet	Bodade Suraj Ashok Bhange Kalpesh Chandarakant Chavan Ajaykumar Gabrusing
7	Online Census System for Lonere Gram Panchayat	Mayekar Sagar Dattaram Wagh Raju Bhagwan Bhoir Snehesh Arun
8	Employee Service Book	Ranpise Snehal Sunil Kabade Amruta Anilkumar Patil Pranali Vasant
9	Digital Sanganak Internet	Mane Chetan Nandkishor Vakil Khanderao Shashikant Yadav Premkumar Ganesh
10	Pathology Informative System Using android Application	Patil Vishal Anil Salvi Sahil Rajkumar Kinhalkar Rushikesh
11	Seminar and Project Management	Nagvekar Ankita Bharat Randive Shubhangi Prakash Sangle Kiran Suresh
12	Hospital Management	Chaukulkar Sangita Uttam Mokashi Pratiksha Ramesh
13	School Student Information System	Dalvi Shweta Shreeram Ghule Sheetal Shrihari Jagde Pranita Vinayak
14	Library Management System	Chavan Sushma Babu Shinde Nikita Vijaykumar Thakre Swati Shantaram

#### **Doctoral Programme:**

#### **List of Ph.D. Students:**

<b>Sr. No.</b>	<b>Name of the Candidate</b>	<b>Registration Year</b>	<b>Broad area of Research</b>	<b>Research Guide</b>
1	Hansraj Wankhede	2013	E-Learning	Dr. A. W. Kiwelekar
2	Sanjay Thakare	2013	Social Network Analysis	
3	Rushali Dhumal	2013	Natural Language Processing	
4	Swanand Navandar	2013	Cognitive Computing/Modeling	
5	Amol Bhutada	2013	Computational Economics	



6	Manjushree Laddha	2017	Learning Analytics	Dr. L. D. Netak Dr. A. W. Kiwelekar
7	Yogesh Patil	2018	Block Chain Technology	Dr. A. W. Kiwelekar
8	Prasad Chandrashekhar Mahajan	2018	Predictive Analytics	Dr. L. D. Netak Dr. A. W. Kiwelekar
9	Rachit Garg	2018	Natural Language Processing	Dr. L. D. Netak Dr. A. W. Kiwelekar

**Conferences /Workshops / Trainings / Academic Awareness activities conducted under TEQIP-II**

Sr. No.	Name of the course	Duration	Name of the Coordinator
1	One week FDP sponsored by TEQIP - III on, "Software Architecture", Organized at Department of Computer Engineering, CoE, Ambejogai.	12th April, 2018 to 17th April 2018	Prof. A. W. Kiwelekar
2	One week FDP sponsored by TEQIP - III on, "Data Science", Organized at Department of Computer Engineering, at Chh. Shahu College of Engineering, Kanchanwadi, Aurangabad,	12 - 16 June 2018.	Prof. L. D. Netak

**Expert Talks by Alumni:**

Sr. No.	Name of the Topic	Name of the Alumni	Participants	Date
1.	RTOS and Internet of Things	Kumarvel P.	69	8th August, 2017
2.	Internship in Industry	Akshay Ghodke	95	21st August, 2017
3.	Gate Awareness Camp	Prasad Chougule and Nitin Awathare	32	8th September, 2017
4.	Data Science	Mr. Sujeet Mishra	13	26th December, 2017

**Workshops attended by Faculty members, Research Scholars and PG Students:**

Sr. No.	Title	Date	No. of participants
1	Electromagnetic Wave Propagation and Antennas, "One week CEP course under TEQIP-II conducted by Indian Institute of Technology (IIT), Bombay", at "Dr. Babasaheb Ambedkar Technological University, Lonere".	27 Feb. to 3 March, 2017.	Prof. L. D. Netak

2	Introduction to Bitcoin, “One day workshop”, at “Indian Institute of Technology, Bombay”	25/11/2017	Prof. L. D. Netak, Prof. Mohan Patil Prof. Sanil S. Gandhi
3	Foundation Programme in ICT for Education “Two week course conducted by Indian Institute of Technology Mumbai”	Aug 3 to Sep 7, 2017	Prof M. D. Laddha
4	Pedagogy for online and Blended Teaching-Learning Process “ Two week course conducted by Indian Institute of Technology Mumbai”	Sep14 to Oct 12, 2017	Prof M. D. Laddha
5	Foundation Programme in ICT for Education “ Two week course conducted by Indian Institute of Technology Mumbai”	Aug 3 to Sep 7, 2017	Prof I. R. A. Jhetham
6	Pedagogy for online and Blended Teaching-Learning Process “ Two week course conducted by Indian Institute of Technology Mumbai”	Sep 14 to Oct 12, 2017	Prof I. R. A. Jhetham
7	Two day Workshop on “Effective Teaching Learning Practices” Conducted by S.B.Patil college of Engineering, Indapur in association with Savitribai Phule, Pune University, Pune	26 Aug and 27, August 2017	Prof. Mohan Patil
9	Two day Workshop on NVIDIA Deep Learning Conducted by Department of Computer Engineering College of Engineering, Pune under TEQIP III	17March -18, 2017	Prof. Mohan Patil Sanil S. Gandhi Roshan R Kotkondawar
10	One week FDP sponsored by TEQIP - III on, “Data Science”, Organized at Department of Computer Engineering, at Chh. Shahu College of Engineering, Kanchanwadi, Aurangabad,	12 June to 16 June 2018	Prof. Mohan Patil
11	“Software Architecture”, One week FDP course under TEQIP-III conducted by “Dr. Babasaheb Ambedkar Technological University, Lonere” at CoE, Ambejogai.	12th April, 2018 to 17th April 2018	Sanil S. Gandhi Roshan R Kotkondawar

#### Other Activities Conducted by Department:

##### Alumni Meet:

Sr. No.	Name of Alumni	Designation
1	Geetanjali Sameer Mahamunkar	Lecturer, IOPE
2	Nilima Satyanarayan Sherkhane	Assistant Professor, Shriwardhan
3	Gaurav Dhiman	IBM Employee, Pune
4	Mohit Singh Chauhan	Presales Engineer, Pune
5	Thosif Ismail Chand	SAP Technical Consultant, Bangalore
6	Prashant Kanade	Professor in Engineering
7	Harshada Surendra Garse	Software Engineer

8	Swarup Kulkarni	Thane Municipal Corporation
9	Gaurav Sisodiya	Associate Consultant with Syntel, Pune
10	Avinash Gangadhar Nirbhavane	Student
11	Ruturaj Gandhi	Founder , Mumbai
12	Mohsin Khan	PSPL
13	Kausthubh Kulkarni	Self Employed, Pune
14	Sanil Gandhi	Asst. Professor, BATU
15	Ichcharam Sonawane	Software Engineer, Pune
16	Vajraghosh Bhambore	Software, Nagpur
17	Surekha Baban Gite	Lecturer, IOPE
18	Manish Khedekar	Frontend Developer, Pune

**Academic Achievements:**

**Faculty Achievements:**

**Citation index of faculty member and impact factor are as follows :**

Sr.No.	Name of the Faculty	Citation index	Impact factor h-index
1	Dr. Arvind W. Kiwelekar	49	4
2	Dr. L. D. Netak	10	2
3	Hansraj Wankhede	4	1
4	Sanil Gandhi	2	1

**Major Students' Achievements:**

Sr.No.	Name	GATE Marks
1	Abhishek Alia	27.67
2	Akash Koturwar	22
3	Manoj Thakre	22
4	Snehal Gharat	37.67
5	Nikita Shinde	17

**Departmental Students Association**

Sr. No.	Name	Designation	Responsibility
1	Akshay Bhujbal	President	Management
2	Aparna Zope	Vice-President	Management
3	Gopal Panchal	Treasurer	Finance
4	Jeenal Oswal	Member	Sports
5	Nitesh Anerao	Member	Sports
6	Prathamesh Pitale	Member	Cultural Coordinator

7	Priyanka Magar	Member	Cultural Coordinator
8	Ashutosh Paralikar	Member	Technical Head

#### **Technical Events by Students Association:**

1. Code Junkies
2. Word Mania
3. Mindopedia
4. Mock Recruitment Drive
5. Instachamps
6. LAN Gaming
7. Paper Presentation
8. Cultural Events-Poem Recitation, Singing, Instruments playing

#### **Departmental Strengths, Weaknesses, Opportunities and Challenges:**

##### **Major Strengths of the Department :**

1. Well designed Academic curricula.
2. Transparent Teaching Learning Process.
3. Informal but strong connections with alumni.

##### **Weaknesses:**

1. Inadequate Faculty / Staff
2. Un-aided PG programme
3. Under-developed Research and consultancy culture

##### **Opportunities:**

1. Increasing demand for Ph.D. programme.
2. Awareness of ICT-based solutions in educational activities.
3. Exponential growth of hand-held devices.

##### **Challenges:**

1. Rural background
2. Frequent power Shut-down
3. Motivating staffs and students for professional attitude.

■ ■ ■

## Department of Electrical Engineering



**Dr. K. Vadirajacharya**

Associate Professor & Head

### **Message from the Head of Department:**

The department of electrical engineering is one of the pioneer engineering departments of the University. The department had passed a beautiful journey of 23 years with selfless service to society and students community. I am proud to be the founder member of this department and happy to note that based on excellent performance of students and staff, the department has got accreditation from NBA for successively two terms from 2003 to 2006 and 2006 to 2009. The beginning of a P.G. course in Power System with an intake of 18 students is an extra feather to the department to initiate research activity. This has led to undertake quality research in emerging field of electrical engineering. The department has seen good number of research registrations leading to Ph.D. in emerging areas of power system and power electronics which added strength to research activity of the department. I am proud to share many of our aluminous have attained prestigious positions in organizations of repute in India and abroad too.

In order to nurture over all personalities of budding engineers Electrical Engineering Students Association (EESA) provides valid platform for conduct of extracurricular activities. Every student of this department gets an opportunity to develop himself through this forum.

With the highly qualified faculty, dedicated staff, state of art laboratory equipment, library facility and placement services the department is heading towards accreditation for forthcoming period. I wish a bright and prosperous future to all my students

**Dr. K. Vadirajacharya**

M.E. PhD (IIT Roorkee) FIE, FCET, CE, LMISTE

Head of Department

### **1. Vision and Mission Statements of Department:**

**Vision:** To be a leading center for transformation of new trends in Electrical Energy and Technology through education, innovation of international acceptance to national industries and local society at affordable cost.

#### **Mission :**

To cater the needs of Electrical Engineering Graduates to excel in the challenges of modern society through sound knowledge of fundamentals and applications, to work intensely with industry leading to the development of cutting edge and commercially-viable technologies.

## **2. About the Department:**

Department was Established in 1995 with an aim to become leader in energy and electrical engineering technology through imparting high quality education to fulfill the needs of national industries in particular and local society in general through cutting edge and commercially viable technologies.

The department run UG programme in Electrical engineering with an intake of 60 since 1995, and PG programme in Electrical Power System with an intake of 18 from 2008. It also registers for research programs leading to PhD in emerging areas of electrical engineering both full time and part time.

**FACILITIES:** Department has well established laboratories in Electrical Power Systems, Power Electronics, Energy Systems, Electrical Machines, Control systems, Electrical measurements and instrumentation with modern equipment and departmental Library, computer center, high band width Internet, Wi-Fi etc.

It encourages extracurricular activities like technical workshop/ seminar NCC/ NSS social get-togethers and sports activities to foster the overall development of graduates through dedicated faculty and staff.

## **3. Programme Educational Objectives (PEOs) & Programme Outcomes (Pos)**

### **Programme Educational Objectives (PEOs)**

#### **Programme Educational Objectives:**

- PEO 1: To provide students with a solid foundation in mathematical, scientific and engineering fundamentals required to solve electrical engineering problems.
- PEO 2: To produce sound knowledge based skillful Electrical Engineers to succeed in industry/technical profession, R&D institutions through global and emerging areas in Electrical Engineering.
- PEO 3: To develop management skills amongst the students with leadership qualities, teamwork skills, professional and ethical attitude.
- PEO 4: To provide students with conducive academic environment, awareness of excellence and the life-long learning needed for successful professional career.
- PEO 5: To train students with good scientific and engineering practices so as to comprehend and simulate to cater changing needs of society, analyze, design, and create novel products and solutions for the real life problems.

### **Programme Outcomes (Pos)**

The graduate will have ability to apply knowledge of various mathematical and numerical techniques, in Electrical engineering with recent developments in technology.

The graduate will have ability to apply mathematical formalism to analyze problems, find feasible and alternative solutions.

The graduate will possess knowledge of various engineering tools and programming/soft computing skills in the domain of Power electronics, power system and control system simulations and their applications

The graduate will possess in-depth knowledge of core Electrical Engineering along with advanced and emerging topics, design rules, and formulate solutions.

The graduate will have ability to coherently work in a multidisciplinary team.

The graduate will demonstrate sensitivity towards professional and ethical responsibility.

The graduate will have ability to communicate effectively in writing as well as through public speaking.

The graduate will demonstrate ability to appreciate and engage in lifelong learning.

The graduate will demonstrated knowledge of contemporary issues.

The graduate will have ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

The graduate will have broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.

#### 4. Overview of Academic Programs:

Academic programme		Duration	Intake
B.Tech.	Electrical Engineering	Four Years	60
M.Tech.	Electrical Power System	Two Years	18

#### 5.1 UG Students Statistical Information

Year	Open			SC			ST			OBC			VJNT			SBC			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
First	10	06	16	07	02	09	03	01	04	19	06	25	05	02	07	00	00	00	44	17	61
Second	12	07	19	04	03	07	03	00	03	19	07	26	06	02	08	00	00	00	44	19	63
Third	12	04	16	14	02	16	03	02	05	24	07	31	05	07	12	00	02	02	58	24	82
Four	20	06	26	08	06	14	03	00	03	15	08	23	03	06	09	01	00	01	50	26	76

#### 5.2 Faculty and Staff:

Sr. No.	Name	Designation	Academic Qualification	Specialization	Area of Interest
1	Dr. P. K. Katti	Professor	M. E., Ph. D.	Energysystems	Integrationofdistributedenergy generation, controlsystems
2	Dr. K. Vadirajachary	Associate Professor	M. E., Ph. D.	Powerquality	Applicationofpowerelectronicstopowersystems,FACTS,Energyaudit

3	Mr. M. F. A. R. Satarkar	Associate Professor	M. E.	Powersystems	Highvoltageengg,Powersystems
4	Mr. R. H. Madhavi	Assistant Professor	M. E., MBA	Powersystems	Controlsystems,Instrumentation
5	Mr. UmeshBarahate	Assistant Professor (Contractual)	M. Tech.	ElectricPowersystems	Powersystems
6	Mr. SwarajKadam	Assistant Professor (Contractual)	M. Tech.	ElectricPowersystems	Powersystems
7	Mr. Nandkumar Patil	Assistant Professor (Contractual)	M. Tech.	ElectricPowersystems	Powersystems
8	Mr. Swaraj Kadam	Assistant Professor (Contractual)	M. Tech.	ElectricPowersystems	Powersystems
9	Mr. Anish Salvi	Assistant Professor (Contractual)	M. Tech.	ElectricPowersystems	Powersystems
10	Mr. Ajinkya Bhaware	Assistant Professor (Contractual)	M. Tech.	ElectricPowersystems	Powersystems
11	Miss. Pratiksha Kurundwade	Assistant Professor (Contractual)	M. Tech.	ElectricPowersystems	Powersystems

#### 6. Additional Responsibilities to the Faculty:

**Dr. K. Vadirajacharya-** Head of Department, Coordinator PMKVY, Member- Campus Development Cell, Member- Building and Works Committee.

**Dr. P. K. Katti-** Affiliation in charge

**Prof. M. F.A.R. Satarkar,** Member, Annual Report Committee

**Mr. H. R . Washikar,** In-charge sports assistant, Member, Medical facility

**Miss P. S. Padaval,** Sports Assistant

Mr. C. A. Juikar



**Advisory Board:**

Sr.No.	Name	Designation
1	Dr. D. J. Doke	Retd Professor CoE Pune
2	Dr. M.K. Khedkar	Ex V.C. Amaravati University, Prof and Head EED VNIT Nagpur
3	Dr. S. E. Talole	Scientist E DIET Pune
4	Sri. Shivaprashad Khened	Director, Nehru Science center Warli Mumbai
5	Sri. V. R. Kulkarni	Vice president, Reliance Infra Ltd Mumbai
6	Sri. Vivek Garg	General manager, M/S Sudharshan Chemicals Datav-Roha
7	Shri. Ajit Deshpande	Freelancer Aurangabad

**7. Faculty Research and publications:****Research Guidance:**

Sr. No.	Name of M.Tech. Candidate and topic	Name of topic	Degree awarded
1	Sumit Bhatpure	Performance of Z-source Inverter with low capacitor voltage stress and small inductance.	Yes
2	P. K. Kurundwade	Performance of Single Stage Solar Inverter Using Hybrid Filter for Power Quality Analysis	Yes
3	Bhushan P. Mokal	Analysis of Power Quality Improvement of BLDC Motor Drive using Cuk converter	Yes
4	Amey W. Nale	Performance Analysis of Grid Connected PV Module with Harmonic Mitigation Using Passive LCL Filter	Yes
5	Prerana B. Ambetkar	“Wireless Zigbee Based Automatic Energy Meter Reading	No, but defense cleared

**8. Research Publications:****International Journals:**

Sr. No	Title	Authors	Journal	ISSN/ISBN No
1	A High Performance Z-source Inverter with low capacitor voltage stress and small inductance”	Sumit Bhatpure, Dr. K. Vadirajacharya	International Journal of Research Publications in Engineering and Technology (IJRPET)	ISSN: 2454-7875 Vol 3, ISSUE 6, Jun.-2017

2	“Performance of Single Stage Solar Inverter Using Hybrid Filter for Power Quality Analysis,”	P. K. Kurundwade, Dr. K Vadirajacharya,	IJCESR,	VOL IV, ISS IV, pp: 28-31, 2017.
3	“Analysis of Power Quality Improvement of BLDC Motor Drive using Cuk converter operating in discontinuous conduction mode”,	Bhushan P. Mokal and Dr. K. Vadirajacharya	IJCESR,	Vol. 4 Issue 6, pp. 15-19, 2017
4	“Wireless Zigbee Based Automatic Energy Meter Reading	Prerana B. Ambetkar and Dr. K. Vadirajacharya	International Journal of Advanced Technology and Innovative Research,	ISSN 2348-2370 Vol.09, Issue.06, May-17, pages:827-31
5	“Performance Analysis of Grid Connected PV Module with Harmonic Mitigation Using Passive LCL Filter”,	Amey W. Nale, Dr. K. Vadirajacharya	IJCESR	ISSN 2394-0697, Vol-4, ISSUE-5,2017
6	“Performance Comparison of PMBLDC drive using PI and ANN Controller”	K. Vадhirajachrya, Tofik Sayyad, Ajinkya Nawale, et al	International Journal of Trend in Research and Development (IJTRD),	ISSN: 2394-9333, Vol-5   Issue-2 , April 2018.

#### International Conference:

Full paper published in Conference Proceedings professional bodies only in the year

Sr. No	Title	Authors	Details of Conference	ISSN/ ISBN No
1	A close loop speed control for high performance Z source inverter fed induction motor drive” presented at,	Sumit Bhatpure, Dr. K. Vadirajacharya	30th International conference on ICIEEE-2017, Gujrat	ISBN-978-93-85225-888, July 2017
2	“Z converter control of V/F induction motor drive using Sine PWM	Sumit Bhatpure, Dr. K. Vadirajacharya	Online conference special issue techno-2017, Pune	ISSN-23943696, April-2017
3	“Performance of Single Stage Solar Inverter Using Hybrid Filter for Power Quality Analysis,”	P. K. Kurundwade, Dr. K Vadirajacharya	Proceedings of ICIEEE, Pune, 19th March, 2017	
4	“Extensive Modelling of DC-DC Cuk Converter Operating In Continuous Conduction Mode”,	Bhushan P. Mokal and Dr. K. Vadirajacharya	Proceedings of IEEE International conference on ICCPCT, 2017.	ISBN: 978-1-5090-4967-7

5	“Modelling of Cuk Converter Operating In Continuous Conduction Mode Including Realization of Parasitic Resistances”,	Bhushan P. Mokal and Dr. K. Vadirajacharya	Proceedings of IEEE International conference on IEEE ICPS, 2017	
6	“Filter Design and Performance Analysis for Grid Connected and Stand-Alone System”,	Amey W. Nale, Dr. K Vadirajacharya	Proceedings of IEEE International conference on ICIEEE, 2017	
7	Battery life enhancement using hybridization of battery and UC”,	Mahadik, Yogesh Vilas; Vadirajacharya, K	Proceedings of IEEE International Conference (ICCPCT), 20 April 2017,1-3.	
8	“Energy management by hybridization of energy sources in vehicular systems”	Mahadik, Yogesh Vilas; Vadirajacharya, K,	Proceedings of IEEE International Conference on (ICCMC), 18 July 2017, 294-297	
9	Comparison of Multiple Attribute Decision Making methods - TOPSIS and PROMETHEE for Distribution Systems	Sachin Kamble K.Vadirajaharya, U.V. Patil	Proceedings of 3 International Conference on (ICCASP 2018), 26-27 Jan 2018	
10	Performance verification of Dc-Dc boost converter	Vaibhav Marne, Vadirajacharya	Proceedings of 3 International Conference on (ICCASP 2018), 26-27 Jan 2018	
11	Observation of Bifurcations one dimensional liner piecewise smooth discontinuous maps with negative slopes	Bhooshan Rajpathak, Jayant Mane and Vadirajacharya K	NCOSE 2018 VNIT Nagpur	
12	“ Design and development of permanent magnet induction generator for renewable energy applications: A review”,	Malaye, Dipti; Dange, Kalpesh; Barbate, Tejas; Narwade, Sänket; Kulkarni, RD; Vadirajacharya, K,	Proceedings of IEEE International Conference on Innovations in Electrical, Electronics, Instrumentation and Media Technology (ICEEIMT), 3 Feb 2017	

13	Design and modeling of low power alternator for solar thermal application”	Dange, Kalpesh; Barhate, Tejas; Malaye, Dipti; Narwade, Sanket; Kulkarni, RD; Vadrajacharya, K	Proceedings of IEEE International Conference on Nascent Technologies in Engineering (ICNTE), 2017, 27 Jan 2017,1-7	
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## 10. Laboratory

### 10.1 Major Instruments in Laboratory :

Sr. No.	Name of Major Equipment/Facility	Cost (>Rs. 1,00,000/-)
1	PV system	1.85Lakh
2	Solar emulator	4.5Lakh
3	PV trainer and PV grid tied training system	4.5Lakh
4	Wind turbine emulator	9.0Lakh
5	Power quality analyzer FLUKE	2.01Lakh
6	Digital LCR meter (5)	1.0 Lakh
7	D Space Unit Crane software	6.5 Lakh
8	Power Electronics Modules	2.4 Lakh
9	Trident tech labs dept (5users) psim software	3.0 lakh
10	FPGA kit (5)	3.75 lakh
11	Function generator	1.0 Lakh
12	Sphere gap apparatus	1.35 Lakh
13	AC test kit	2.0 Lakh
14	AC test kit	2.7 Lakh
15	Online ups system	4.56 Lakh
16	Transmission line simulator	3.5 Lakh
17	Power system analyzer	2.5 Lakh
18	Smart class room	1.5 Lakh
19	Multimedia Projector (2)	0.75 Lakh

## 11 . Projects:

### 11.1 Major UG Projects:UG Projects :

Sr.No.	Project Name	Name of student
1	Performance comparison of PMBLDC motor drive using PI & ANN controller	1)Gajbhiye Shreyash Ravindra 2)Mali Jayesh Dhanaraj 3)Nawale Ajinkya Shridhar 4)Sayyad Tofik S Husensab

		5)Shendge Sainath Ramraje
2	Arresting of hazardous load electrically in EOT crane In event of brake failure	1)Sawant Saurabh Bhairav 2)Kshirsagar Vishal Vilasrao 3)More Akshay K. 4)Bhalke Rushikesh Rajendra
3	Performance analysis of single Phase z-source inverter	1)Devkumar Chunkai Nishad 2)Nimje Rajat Pramod 3)Selkar Manshree Sanjay 4) Appu Remanan
4	Energy conservation through energy audit at M/S EMBIO LTD	1)Bhandari Kalyani Dilip 2)Khamkar Ankita Sanjay 3)Lad Prachi Prakash 4)Wankar Kajal Nishant
5	Study of Microturbines in Electrical Systems and its Applications.	1)Firake Dinanath Mohan 2)Ingle Prasad Shrikant 3)Mhatukade Nikhil Pandurang 4)Naikawadi Snehal Madan 5)Salunkhe Nachiket Suresh
6	Four quadrant dc motor control by using microcontroller	1)Nagargoje Abhijit Ankush 2)Sonare Jitendra Jagan 3)Tekale Pravin Ganpatrao 4)Bhalerao Krushna Lahanu 5)Rathod Papita Shyam
7	Soft Starting Of single Phase Induction Motor	1)Ghodekar Vaishnavi Ganesh 2)Kokani Shubham Madhukar 3)Rathod Vijay Madhav 4)Kharangate Pravin Sakhamam 5)Patait Vijay Raghunath
8	Automatic selection of phase in 3 phase systems	1)Chaudhari Chaitanya 2)Madhukar 3)Mankar Krutika Chandrakant 4)Mokal Mayuri Maruti 5)Jadhav Shubham Mahesh 6)Lokhande Bhushan Jagdish
9	Online monitoring system for transformer breather	1)Bhilare Megha Suryakant 2)Gutte Shubhekshana Pralhad 3)Jadhav Maitrayee Ashok 4)Patil Pradnya Ramesh 5)Pawar Kunal Shivaji
10	Power Factor Correction Of R-L Load By Using PLC	1)Mane Tanuja Mahadev 2)Patil Apurva Ravindra 3)Shahare Rakhi Devanand 4)Gawai Vasundhara Bhaurao 5)Raut Kadambari Vijay

11	Design of Solar Power Plant for Dr. Babasaheb Ambedkar Technological University, Lonere	1)Netke Shrikant Ramling 2)Warwate Vaibhav D. 3)More Rushikesh Navnath 4)Gandule Anil Ashok 5)Lohiya Lalit Satyanarayan
12	Underground cable fault distance conveyed overinternet	1)Harshe Anurag Manohar 2)Kamble Ashwaghosh Buddhghosa 3)Koktare Vishal Bhaskar 4)Tribhuvan Mahesh Sanjay 5)Umare Anitya Prabhudas
13	Reactive power compensation by using FC-TCR	1)Chaudhari Yashwant Harshwardhan 2)Kalaskar Shubham Maroti 3)Patil Prathamesh Rambhau 4)Patil Srushtee Pradeep 5)Shete Shivani Mahesh
14	Three phase fault analysis with auto reset ontemporary fault and permanent trip otherwise	1)Gaikwad Sandesh Bhaskar 2)Jadhav Pankaj Pandurang 3)Pawar Devendra Arun 4)Soshte Chetan Jagdish 5)Marathe Satish Jagannath
15	Solar based UPS	1)Ghatkar Vaibhav Somanath 2)Kashid Laxman Sundar 3)Mokal Krunali Vishwanath 4)Nijawante Rajani Baswaraj 5)Wadajkar Pankajkumar Vishwambhar

#### PG Projects :-

Sr.No.	Project Name	Name of student
1	Isolated DC-DC Multi-Output Converter for Nano-Grid Application	Omkarkumar N. Bhirud
2	Performance Analysis of Grid Interconnection of Renewable Energy Source at Distribution Level with power quality improvement	Shubham L. Deshmukh
3	Grid interconnection of renewable energy sources at distribution level with power quality improvement feature	Anish V. Patil
4	Fuzzy Based Switched Boost Inverter For Solar PV system	Satish S. Dhokare
5	A critical study on condition assessment of high voltage insulator sunder pollution	Iliyasali Ashakali

6	Analysis and mitigation of capacitor switching by synchronous closing method	Amar A. Jambulkar
7	Hybrid Energy Assessment for Remote Areas	Ravi R. Kundankar
8	Multifunction Converter for SPV Based BLDC motor	Vaishali S.Mahadik
9	Design analysis and experimental verification of DC-DC BOOST Converter	Vaibhav P. Marne

## 12 . Doctoral Programme:

### 12.1 List of Ph.D Students:

Sr. No.	Name of the Candidate	Registration Number & Date	Broad area of Research	Research Guide
1	Mr. S.N. Sarwade	13-05-2009	Artificial Intelligence and expert system for adaptive digital distance protection	Dr. P. K. Katti
2	Mr. V.S. Bugude	25-09-2012	Coordination of Distributed generation (AC/DC) by smart grid	Dr. P.K. katti
3	Mr. Mithun Aush	25-09-2012	Performance Improvement of Multilevel Inverter for interfacing with DPG to smart grid	Dr. K. Vadirajacharya
4	Mr. Manoj Patil	12-08-2013	Performance Improvement of renewable energy source for interface with smart grid	Dr. K. Vadirajacharya
5	Mr. Yogesh Mahadik	20-08-2014	Hybridization issues of storage systems in Electric vehicles	Dr. K. Vadirajacharya
6	Mr. Sachin Kambale	20-08-2014	Performance Improvement of Distributed system	Dr. K. Vadirajacharya
7	Mr. Jayant Mane	09-09-2015	One dimensional linear piecewise smooth discontinuous map-Theory and applications in switching circuits	Dr. K. Vadirajacharya

## 13 . Industry Institute Interaction:

### 13.1 MoU Signed by the department (if any) :

An MoU is signed between M/S CEAT India Ltd and Electrical Engg dept under the leadership of Prof. P. K. Katti for enhancing skill training and certification in electrical engg and industrial automation to the employees of M/S CEAT India Ltd

### 13.2 Industry Projects by the students:

Name	Title of the Project	Name of the Company
Malaye Dipti, Dange Kalpesh, Barbate Tejas, Narwade Sanket	Design and development of permanent magnet induction generator for renewable energy applications.	BARC, Mumbai

Saurabh Sawant Vishal Kshirsagar Akshay More Rushikesh Bhalke	Arresting of hazardous load electrically in EOT crane in event of brake failure	M/s Sai Ram Industries, Mumbai.
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#### 14 . Industrial Visits :

An industrial visit to DITAP -V. Kasara was organised on 20 March 2018 for Third year B.Tech. Electrical Engg. students. Miss Harshada Kalyankar coordinated this activity.

#### 15. Conferences /Workshops / Trainings / Academic Awareness activities conducted under TEQIP-II: Nil

#### 16. Expert Talks by Alumni :

Sr. No.	Name of the Topic	Name of the Alumni	Participants
1.	Harvesting Solar Energy through roof tops	Swapnil	First and second year B.Tech. Electrical Engg students
2.	Smart meters	Mr. Sudhakar Vide	All B.Tech. Electrical Engg. students
3.	GATE preparation	Mr. Bhushan Mahajan	Final year B.Tech. Electrical Engg. students
4	Share Market	Mr. Revan Mahajan	Final year B.Tech. Electrical Engg students

#### 17 . Workshops attended by Faculty members , Research Scholars and PG Students :

Sr.No.	Title	Date	No. of participants
1	One day work shop on Personality Development Skills for students	9-9-2017	65
2	One day work shop on Energy audit data measurement and analysis for students	7- 4- 2018	45
3	Two day work shop on PCB designing	7& 8-4- 2018	25

#### 18. Other activities Conducted by Department:

In order to enhance employability of outgoing students a one day workshop on personality development skills was organized on September 9, 2017 in association with M/s. AVK consultants Mumbai.

The workshop had seen overwhelming response in spite of holiday. Around 70 students have attended the workshop with full enthusiasm.

The workshop has started with non-verbal communication followed with resume writing and personal interview techniques by Mrs. Aarti V. Kagwade a senior HR Consultant and manpower trainer in Mumbai. As expressed by participants a healthy and interactive group discussion on team managerial skill was very innovative and interesting.

The workshop was ended with advise on human values by Mrs. Aarti and professional ethics by Prof. K. Vadirajacharya, Head Electrical Engg Department.



In brief, the workshop was very informative interactive which helped to enhance the confidence level of outgoing students for effective planning, preparation and presentation of their skills in forthcoming job fairs.

### 19. Alumni Meet:

An alumni meet was organized on 16 December, 2017 at Anandvan Guest house. Around 12 alumni have attended the meet. Miss. P. S. Padaval welcomed the delegates and participants. Prof. Vadirajacharya, Head addressed to all alumni on role of alumni in an institutional development. He urged for the active participation of all the alumni in department development. Mrs. Deepika Shet and Mr. Ilash Ali shared their feelings on alumni meet and expressed to strengthen the association and contribute to the department development in coming days. Prof. M.F. A. R. Satarkar distributed mementoes to alumni. Meeting was very short and ended with sweet memories in the minds of present and distinct members.

A few snap shots of the event is enclosed.

### 20. Academic Achievements:

#### 20.1 Distinguished alumni of the Department :

Sr. No.	Name	Position	Organization
1	Mr. Sudhakar Vide	Asst Vice President	M/S Reliance Energy Ltd. Mumbai
2	Mr. Abhijit Pai	Manger	Bombay Stock Exchange
3	Miss Sadhna Kadam	Head, LT Switch gear Division	M/S. Siemens India Ltd Mumbai
4	Mr. Praveen Danger	Assistant engineer	GenCo Uran
5	Mr. Santosh .H. Kawere	Executive Engineer	HVDC Padhage
6	Mr. Vinaya Kagwade	Entrepreneur	Mumbai
7	Mr. Rahul Mahajan	Entrepreneur	Mumbai
8	Mr. Girish Mane	Electrical Contractor	Mumbai
9	Miss Maroofa Rawat	Asst Engineer	Water Sewage Board Mumbai

#### 20.2 Major Students' Achievements :

Sr.No.	Name	Gate Marks
1	Bhushan Mahajan	28
2	Swapnil Mehatar	42

### 21. Departmental Students' Association

Sr. No.	Name	Designation
1	Core Committee EESA 1.Bhushan Mahajan 2.Revan Mahajan 3. Nikhil Mahatukade 4.Lokesh Bhoite 5.Mithesh Pedhavi 6.Kajal Mankar 7.Sanket Suryavanshi	President CR Vice-president Secretary Treasurer Member Member Member Member

	8.Tanuja Mane	Member
	9.Tejas Ganyarpawar	Member
	10.Govind Haibate	Member
	11.Ankita Gaurkar	Member
		Member (LR)

## 22. Technical Events by Students' Association :

Report on Foundation week celebration 1-5 August 2017

As per the instructions from the AICTE the department has organized one week foundation programme for incoming first year students of Electrical engineering.

On day-1 An introduction to all the incoming first year students of Electrical engineering were given their introduction along with their brief aim on engineering course. All the faculty and staff members gave their introduction.

Head of department Prof. K. Vadirajacharya, gave introduction of the department including facilities available, laboratories, brief achievements and important alumnus of the department.

To inspire budding engineers on engineering education, Prof. B.B. Singh, Head, Mathematics department had given his an expert advice on "Role of engineers in Society"

During post lunch session all the new students were taken to different amenities in the campus by their senior friends.

There were brain storming hands on experience with engineering modules and engineering solutions on societal problems which were very much interactive and informative.

On last day Hon'le Vice Chancellor was kind enough to address fresher's on role and need of engineers in Society.

Prof. A.P. Shesh Head English Department has addressed the students on Communication skill analysis.

Overall the feedback report analysis marks an impression of needful awareness on the objective of the course, amenities available and utilization for a successful engineering career at the end of the course.

## 23. Departmental strengths, Weaknesses, Opportunities and Challenges:

### Major Strengths of the Department:

- Dedicated staff / faculty
- In campus accommodation
- Liberalized policy for quality up gradation.
- Government organization
- Well equipped labs for UG, PG as well Research Scholars.

### Weaknesses:

- Very poor faculty & staff strength
- Lack of adequate space for laboratory
- Very poor commutation and communication facilities.
- Non availability of most common amenities like medical, school , recreation and township facilities
- No proper/stable leadership

### Opportunities:

- Larger opportunities for getting exposure in different administrative activities.
- Leading/ Premier Technical institute of state.
- Challenges:
- Retention ratio of faculty and staff
- Poor quality of education leading poor intake.

■ ■ ■

## Department of Electronics & Telecommunication Engineering



**Dr. S. L. Nalbalwar**

Associate Professor & Head

The department of Electronics and Telecommunication Engineering was established in the year 1995 initially with B. Tech. programme with intake of 60 students. In 2001, M. Tech. programme in Electronics & Telecommunication Engineering with an intake of 18 students was introduced. From academic year 2008-2009, intake of B. Tech. has been increased to 120 students. The department has started Ph.D. programme from the academic year 2003, presently 19 research scholars are working in the research area of Signal Processing, Computer Network and Microwave Communication. Department is also offering fellowship to M. Tech. and Ph.D. students under TEQIP project.

The curriculum designed is a perfect blend of Electronics, Communication and Computing Technologies. The focus of the department is to produce graduates & post graduates with strong fundamentals in Electronics and Communication domain.

The department has received handful amount of funding from AICTE, UGC, TEQIP and State Government for various research projects. The department has state of the art laboratories to cater for curricular requirements as well as projects and research.

The faculty members are having strong background of research in the current issues of the discipline. The budding graduates from this discipline have very good job opportunities in VLSI Technologies, Embedded Systems, Signal Processing, Radio Frequency (RF) Communication, Mobile communication and in Software Engineering. Many of our students placed in industries like Infosys, TCS, Cognizant, Persistent, Siemens, Huawei, Reliance Communication, Prayas Software Ltd, JSW ISPAT, RCF, Videocon, ONGC, BHEL, BEL, GE, L & T, Sasken, MBT, Texas, Accenture, Mahagenco, Motorola, CapGemini, Flextronix, NVIDIA, Patney Computers, Reliance Jio, Hexaware, Tataelxsi, BSE, City bank, etc. and got admitted for higher education (M. Tech. / Ph. D. programme) in institute of high repute such as IIMs, IITs and NITs.

Good number of students of this department compete in the competitive examinations like GATE, CAT, TOFEL, and GRE. Many students go abroad to perceive higher studies. As an essential part of the academic schedule, the students have to undergo industrial training at the end of second and third year during summer in industries of repute around us. To get an industrial exposure the department also arranges Industrial Visits to reputed industries in electronics, communication and computing area. There is an overwhelming participation of students in conferences, seminars, workshops, paper publications, annual sports. The department regularly organizes workshops, training, seminars, expert lectures and conference in the emerging areas of electronics and communication engineering.

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## 2. Courses offered:

Sr. No.	Course	Intake	Year of Establishment
1.	UG (B. Tech.)	120	1995
2.	PG (M. Tech.)	18	2001
3.	Ph.D.	25 research scholars registered	2003

## 3. Students' Statistical Information for the Academic Year 2017-2018

### 3.1 a) B. Tech. in E&TC

		UG			
Year (2017-2018)		I	II	III	IV
Open	M	35	23	39	35
	F	10	21	09	18
	T	45	44	48	53
SC	M	17	10	19	18
	F	4	8	05	04
	T	21	18	24	22
ST	M	01	01	09	03
	F	01	00	03	02
	T	02	01	12	05
OBC	M	29	18	32	28
	F	12	19	20	22
	T	39	37	52	50
VJNT	M	08	10	10	10
	F	05	06	07	06
	T	13	16	17	16
SBC	M	01	06	02	03
	F	03	01	02	01
	T	04	07	04	04
J&K	M	00	00	00	01
	F	00	00	01	00
	T	00	00	01	01
Total	M	89	73	98	95
	F	35	56	65	60
	T	124	129	163	155

**b) M. Tech. in E&TC Engineering**

Year(2017-2018)		PG	
		I	II
Open	M	0	5
	F	2	5
	T	2	10
SC	M	1	1
	F	3	0
	T	4	1
ST	M	0	0
	F	0	0
	T	0	0
OBC	M	02	03
	F	02	0
	T	4	03
VJNT	M	01	01
	F	01	00
	T	02	01
SBC	M	0	0
	F	0	0
	T	0	0
J&K	M	0	0
	F	0	0
	T	0	0
Total	M	5	10
	F	7	5
	T	12	15

**c) Ph.D. in E&TC Engineering (After M. Tech./M.E.)**

Sr. No	Year	Open			SC			OBC			SBC			Total		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1.	2017-2018	08	01	07	-	01	01	01	-	01	0	0	0	09	02	11
	2016-2017	02	02	04	02	00	02	-	-	-	1	0	1	06	02	08
	2015-2016	02	02	04	02	00	02	-	-	-	1	0	1	06	02	08
	2014-2015	02	01	03	02	-	02	01	-	01	-	-	-	05	01	06
	2013-2014	01	01	02	-	-	-	-	-	-	-	-	-	01	01	02
	2012-2013	01	-	01	01	-	01	-	-	-	-	-	-	02	-	02

**d) Details of the students results for 2017-2018**

<b>Entry years</b>	<b>IInd Year</b>	<b>IIIRD Year</b>	<b>IVth Year</b>
No. of students admitted	130	164	140
Appeared for the final year examination	130	164	140
Passed with Distinction	27	40	27
Passed with First Class	10	47	77
Passed with Second Class	00	08	24
Passed with Pass Class	00	--	01
Failed Students	93	69	09

**3.2. Department Faculty Members:**

<b>Sr. No.</b>	<b>Faculty Name</b>	<b>Designation</b>	<b>Date of Joining</b>	<b>Academic Qualification</b>	<b>Specialization</b>	<b>Teaching Experience (Years)</b>
1	Dr. S. B. Deosarkar	Professor	01/01/1990	M.E., Ph. D	Microwave Engineering	28
2	Dr. S.L. Nalbalwar	Associate Professor & Head	30/08/1996	M.E., Ph. D (IIT D)	Signal Matched Filter Bank	27
3	Mr. S. V. Khobragade	Assistant Professor	25/08/1998	M.E. Ph. D. (Ongoing)	Microstrip Antenna	19
4	Dr. A. B. Nandgaonkar	Assistant Professor	24/09/1998	M.E Ph. D	Microstrip Antenna	25
5	Mr. N. S. Jadhav	Assistant Professor	31/07/2004	M. Tech. ( E & TC)	VLSI Design	14
6	Dr. B. R. Iyer	Assistant Professor	06/08/2007	M.Tech. MBA Ph.D. (IITR)	RF Comm.	12
7	Mr. Kunal Kamble	Assistant Professor	03/07/2017	M.Tech. (E&TC)	Microcontroller	04
8	Mr. Aniket Jangam	Assistant Professor	03/07/2017	M.Tech. (E&TC)	Microwave Comm .	04
9	Mr. Sumeet V. Isai	Assistant Professor	03/07/2017	M.Tech. (E&TC)	Microwave Comm	02
10	Mr. Ramesh V. Bandgar	Assistant Professor	03/07/2017	M.Tech. (E&TC)	Signal Processing	03

11	Ms. Sampada Thorat	Assistant Professor	03/07/2017	M.E. (E&TC)	VLSI, embedded system	03
12	Ms. Megha Kamble	Assistant Professor	03/07/2017	M.Tech. (E&TC)	Signal Processing	05
13	Ms. Swati Pawar	Assistant Professor	03/07/2017	M.E. (E&TC)	Signal Processing	02
14	Mrs. Jyoti Kalgi	Assistant Professor	03/07/2017	M.E (E&TC)	Digital Electronics	05
15	Mr. Roshan Bonde	Assistant Professor	03/07/2017	M.E. (E&TC)	Image Processing	05
16	Mr. Sudhanshu Tayade	Assistant Professor	03/07/2017	M.E.(COMM.)	Communication	02
17	Mr. Suraj Kulkarni	Assistant Professor	28/07/2017	M.E. (E&TC)	Signal Processing	1.5
18	Mr. Swapnesh Shinde	Assistant Professor	03/07/2017	M.Tech. (E&TC)	Signal Processing	03

#### 4.1 Members on Advisory Board of E & TC Department:

To provide time to time guidance and monitor the activities for the development of the department, Advisory Board for E & TC department is formed. Following accomplished members from reputed industry and academicians from institute of repute are appointed by the Hon. Vice-Chancellor on this Board. The Advisory Council/Board is entrusted with responsibility of conducting academic audit of department, suggesting dynamic curriculum and providing input for research activities.

Sr. No.	Name	Designation
1	Lt. Cdr( Retd) Ravindra Kale	Sr. Program Manager, Tata Communication Ltd., Mumbai.
2	Dr. Munir Sayyad	General Manager and Head of Reliance JIO Quality Assurance Lab, Mumbai
3	Suresh Lok	Senior Vice-President Consulting Innovation and Evaluation for New Age Services at International Innovation, Incubation and Training Center, Navi Mumbai
4	Santosh B. Gadewar	DGM – SAP IT Business Solutions, Larsen & Toubro Limited, EAIC, Powai, Mumbai– 400 072
5	Dr. V.M. Gadre	Professor, Electrical Engineering, IIT Bombay
6	Dr. R.R. Manthalkar	Professor, Department of E & TC, SGGSI & T Nanded, MS
7	Dr. S.G. Bhirud	Professor, E & TC VJTI Mumbai

## 4.2 RC Meeting

The Research Committee represents the research interests and activities of Department. It aims to foster, design, and execute high quality multidisciplinary research in Department. Plan of action includes initiation, facilitation, integration, and support of research projects conducted by members, sections or research groups of Department. The Research Committee provides a mechanism for these research groups to interact within Department, with external collaborating individuals and groups. The Research Committee is the responsible body for managing this interaction. During the academic year we have conducted two RC meetings to see the current status of research in the department. Minutes of latest RC meeting is attached in annexure D.

## 5. List of major equipment and other facilities:

Department has state of the art research equipments and software in the area of Signal & Image Processing, Embedded Systems, Biomedical Electronics and Antenna & Microwave Engineering. These equipment include DSP starter kits, development boards, daughter cards to capture / process the images & video signals in real time mode, Spectrum analyzer, DSOs, RF signal Generator, Dual Channel arbitrary wave form function Generator, Microwave Communication Trainer, Synthesized Receiver, Fiber optics setup and various biomedical instruments, etc. The software related to above research areas include Cadence, IE3D, EMI Test, EM CAD, MATLAB, Proteus VSM, Quantic SI and Micro-wind.

Sr. No.	Name of Instrument	Qty	Total cost
1	Cadence EDA Tools	01	15,82,500
2	Compact Optical test Platform (OTDR) with SM 1310/1550 nm Make JDSU MTS - 6000	01	3,99,000
3	LAN Trainer with LAN Simulation Software Hardware Scientech -5002A	01	2,47,500
4	MCS -03 microwave communication training system	01	2,08,620
5	UHF Antenna trainer & modeling system 50-860MHz	01	1,99,175
6	HP Compaq Tablet PC ,TC 1100,1.1GHz/512/60GB/26.4Cm,TFT/ CDR/RWW	01	1,20,034
7	Software :- IE3D for windows NT/95 power pack (MM 060)	01	3,60,000
8	Software :- FIDELITY for windows 95 TN (fD060)	01	3,30,000
9	Softwares :- MD SPICE for windows NT (SP 060)	01	1,65,000
10	EMI-Test Software	01	6,58,000
11	EM CAD Software	01	1,24,000
12	Proteus VSM software	01	4,51,000
13	Quantic SI (1 user license)	01	7,49,000
14	MICROWIND Package Includes DS CH3 (10 User)	01	5,50,000
15	Proteus PCB software (01 user)	01 user	1,56,000
16	R & S Make RF Signal Generator , 3 GHz. Model No:- SM – 300	01	4,21,500



17	R & S Make Dual Channel Arbitrary wave form function Generator, Model No:- AM – 300	01	4,28,125
18	Synthesized Receiver with RF Source	01	1,44,000
19	DSP development board with provision for daughter cards, DSP kits, various daughter cards, related software	01	10,00,000
20	AMITECH make 2.4 GHz Satellite Communication Lab with Spectrum Analyzer, Model: STC 24	01	2, 07,000
21	AMITECH make, Microwave Antenna Training system	01	2, 07,000
22	YOKOGOVA digital scope 500 MHz band width, 4 Channel, sample rate -5G Samples/sec	01	6, 86, 662
23	FPGA Lab Trainer, Custom Board Implementation of FPGA Design, Universal Development platform for FPGA	01	1396500
24	HFSS software	01	5,77,500
25	Embedded System	01	9,40,495
26	Simtel CD and Pen drive 5 user License	21 items	5,00,000

**Conferences/Workshops/Trainings/Academic Awareness activities conducted:**

Sr. No.	Name of the Course	Duration	Name of the Coordinators/ Speakers	Participants
1	Session for E-Cell (Atal Incubation Centre)	July 21, 2017	Dr. S. L. Nalbalwar	B. Tech. students
2	Expert talk on Job Opportunities in Defense Services	July 29, 2017	Lieutenant Commander Ravindra Kale	B. Tech. and M. Tech. students
3	Induction programme for First Year B. Tech.	July 31-August 05, 2017	Dr. B. R. Iyer	All first year students
4	Talk by Industry Expert on Corporate Training at BSNL	August 09, 2017	Dr. S. L. Nalbalwar	B. Tech. students
5	Guest Lecture by SEED InfoTech	Sept. 07, 2017	Neha Momin, Head, SEED InfoTech, Pune	B. Tech. students
6	Guest lecture on Fellowships and PBL	October 09, 2017	Dr. S. S. Inamdar, Director, CTIF, India and Managing Trustee /Secretary, Vishwaniketan Institute of Management Entrepreneurship and Engineering Technology	B. Tech. and M. Tech. students
7	Expert talk on Wavelet Transform & Multirate DSP	November 06, 2017	Dr. M. S. Sutaone, COEP	Faculty and M. Tech. students

8	Expert talk on Embedded System Testing	November 06, 2017	Dheeraj Dhondalkar, EtaServe Software solutions Pvt. Limited, Bangalore	Faculty and M. Tech. students
9	Expert talk on Matlab in DSP	November 07, 2017	Dr. Hemprasad Y. Patil, Assistant Professor, R. H. Sapat College of Engineering, Nashik	Faculty and M. Tech. students
10	Field visit to Reliance Jio (for faculty)	November 11, 2017	Dr. S. L. Nalbalwar	Faculty and M. Tech. students
11	Expert talk on Auditory Signal Processing using Multi-resolution Approach	November 13, 2017	Dr. Abhijeet Karmarkar Senior Principal Scientist, CSIR-CEERI	Faculty and M. Tech. students
12	Expert talk on Under Water Signal Processing	November 14, 2017	Dr. Arnab Das, Director of Maritime Research Centre, Indian Maritime Foundation, Pune	Faculty and M. Tech. students
13	Expert talk on Signal Representation using Orthogonal Transform	November 15, 2017	Dr. R. S. Holambe, SGGSIET, Nanded	Faculty and M. Tech. students
14	Expert talk on Contextual Understanding of Biomedical Signal Processing	November 16, 2017	Dr. Sanjeeva Kubakaddi, Founder of ITIE Knowledge Solutions, Bangalore	Faculty and M. Tech. students
15	Expert talk on Recent development in Satellite Communication	December 27, 2017	Dr. Rahul Waghmare, Scientist, ISRO, Bangalore	Faculty and M. Tech. students
16	Expert talk on Product based Learning	December 27, 2017	Mr. Kapil Kasetwar, Industry Expert	Faculty and M. Tech. students
17	Session for UCEL (Previously known as E-Cell) Guidance by Hon'ble Vice Chancellor	January 19, 2018	Prof. S. V. Khobragade	B. Tech. students
18	International Conference (ICASP 2018)	January 26-27, 2018	Dr. B. R. Iyer	Participants from all over nation
19	Role of ITU in Spectrum Management of Satellite and Terrestrial Services	January 26, 2018	Prof. Ashok Chandra Ministry of Comm.& IT, GOI	Participants from all over nation

20	Integration of Cloud Computing & WSN in the perspective of IoT	January 26, 2018	Dr. S. C. Sharma IIT Roorkee	Participants from all over nation
21	Convergence of Artificial Intelligence, Big Data, and High Performance Computing	January 27, 2018	Prof. V. C. Bhavsar University of New Brunswick, Canada	Participants from all over nation
22	Multiband & Multi-Functional RF Integrated Circuits & Systems	January 27, 2018	Dr. N. P. Pathak RFIC Lab, IIT Roorkee	Participants from all over nation
23	Alumni Meet	January 27, 2018	Prof. S. V. Khobragade	40 alumni, faculty, B. Tech. and M. Tech. students
24	Science Day Exhibition	February 28, 2018	Prof. S. V. Khobragade	30 school students

#### Expert talks by Alumni

Sr. No.	Name of the Topic	Name of Alumni	Participants
	Expert lecture on Civil Services	Nitish Pathode, Assistant Commissioner (Custom and Central Excise), Department of Revenue, Ministry of Finance, Government of India All India Rank 723 in 2015 UPSC	B. Tech. students
	Expectations of industry from fresh graduates	Paresh Mhamunkar, Engineer-Controls, Vanderlande Industries Software Pvt. Ltd	B. Tech. students
	Need of higher studies, soft skills in corporate world	Nilesh Sarwate, CEO, IEIBS AKADEMIA, a MBA solutions organization	B. Tech. students
	MATLAB in DSP	Dr. Hemprasad Patil, Assistant Professor, R.H. Sapat College of Engineering, Nashik	M.Tech. students

#### Workshops attended by Faculty members, Research scholars and PG students:

Sr. No.	Title	Date	No. of Participants
1	AICTE-sponsored Two-week FDP on Recent Trends in Signal Representation: A Multirate Approach, DBATU	06/11/2017 – 17/11/2017	30

2	RUSA sponsored FDP on Cyber Security, organized by Mumbai University	12/03/2018 – 22/03/2018	01
3	TEQIP-III sponsored FDP on Data Science and R-Programming, COEP	18/12/2017 – 22/12/2017	02
4	Higher Education Summit & HR organized by ELETS at Pune on 21st April, 2018	21st April, 2018	01

### **Academic Awareness activities conducted**

Induction program: All India Council of Technical Education (AICTE) has asked all the institutes to greet every new student with an “Induction Programme” before they can embark on any study of science and engineering. Induction Programme for first year B. Tech. students was organized by Department of Electronics and Tele-Communication Engineering. The programme was conducted from 02nd to 05th Aug, 2017. A strong focus was there on building confidence and boosting creativity through disciplines Physical activity, taking up some Creative arts, Literary activity encouraged in Indian languages, fostering greater human interaction and class bonding with small group discussions with faculty. Each day’s program encompassed a mixture of different types of activities: talks, panel discussions, presentations; hands-on activities and group work. It was largely organized and managed by Telecommunication and Electronics Engineering Students Association (TEESA) and student volunteers. Most sessions were interactive – students were encouraged to express their views and participate actively.

MoU with ITIE Knowledge Solutions, Bangalore has been signed on 15/11/2017. This MoU help to strengthen the scientific exchange & cooperation to be of mutual value. This would help the students and faculty to update the knowledge in their respective field of interest. The main objective is to promote academic and technical knowledge, projects and educational exchange between these two organizations through collaborative research, exchange of academic and technical staff, visit of student and research fellows.

MoU for Entrepreneurship and Start-up Support with Millionminds Ecosystem, Mumbai has been signed on 13/03/2018. Primary objective of this is to help students with a chance to penetrate into the Startup ecosystem from the beginning of their careers. Millionminds under the patronage of Startup India (A Govt. of India Initiative), launched The Startup League wherein students can send in their ideas, and meet the business incubators, Startup founders and possible investors to fuel their Startup dream. It is driven by the motive of inspiring students to be creative, begin their own business model and ultimately lead to job creation in the country, which further sketches an outline for collective development of the society we live in.

MoU with Maritime Research Centre, Indian Maritime Foundation, Pune has been signed on 01/12/2017. This MoU would help the students and faculty to update the knowledge in their respective field of interest. The main objective is to promote academic and technical knowledge, projects and educational exchange between these two organizations through collaborative research, exchange of academic and technical staff, visit of student and research fellows.

MoU between NIELIT and DBATU: Memorandum of Understanding (MoU) between National Institute of Electronics & Information Technology (NIELIT), an Autonomous Scientific Society under Ministry of Electronics & Information Technology, Government of India, and Dr. Babasaheb Ambedkar Technological University (DBATU), Lonere is signed on 15th June, 2018. The NIELIT has agreed to provide training programmes ranging from 6 weeks to 6 months duration to students of DBATU and its affiliated colleges. This MoU will provide us an opportunity to meet industrial

requirement and also provides exposure to acquire the required state-of-the-art skills. It also helps in placing our students in industries. The NIELIT is also agreed to extend discount of 10% against the rates mentioned on the website of ministry of skill development NSQF guidelines.

MoU between BIOTRONICS and DBATU: Memorandum of Agreement (MOA) between BIOTRONICS EQUIPMENTS PVT LTD (BEPL), Thane-400602 and Dr. Babasaheb Ambedkar Technological University, Lonere has signed on 15th June 2018.. BEPL has agreed to sponsor two Ph.D students under research fellowship scheme. Certainly, this MoA will help to start joint research activity between industry and University in the area of Healthcare Technology. Department agreed to the terms and conditions mentioned in the MoA and recommended for signing of the said MoA.

AICTE-sponsored Faculty Development Programme on Recent Trends in Signal Representation: A Multirate Approach was organized from 06 November to 17 November 2017 which was fully sponsored by AICTE Delhi. FDP Co-coordinator was Dr. S. L. Nalbalwar. 50 participants from all over the nation participated in FDP. The amount of Rs. 6,74,000 was sanctioned by AICTE for the conducting this programme.

Third International Conference on Computing, Communication and Signal Processing (ICCASP-2018) is a flag ship conference, in the area of Electronics and Computer Communication, being organized by the Dr. Babasaheb Ambedkar Technological University during January 26th-27th, 2018 at Lonere, Raigad (MS), India. The aim was to bring together the academicians, scientists, engineers and research students in areas of engineering and technology, and to provide an international forum for the dissemination of original research, new ideas and practical developments experience. Like second conference, this conference had the focus on the frontier topics in the field of Computer, Electrical, and Electronics Engineering.

ICCASP-2018 was organized to address various issues to promote the creation of intelligent solution in future. The theme of this conference was to motivate the researchers to adopt the outcome for implementation. The conference provided an exceptional platform to the researchers to meet, discuss the practical solutions, scientific results and methods in solving intriguing problems with people who are actively involved in these emerging fields.

All accepted, registered and presented papers were published in AISC Series of Springer (Visit), indexed in ISI Proceedings, EI-Compendex, DBLP, SCOPUS, Google Scholar and SpringerLink.

#### **Keynote speakers:**

**Prof. Ashok Chandra**, Adviser to the Govt. of India (Former), Ministry of Communications and IT

**Topic:** Role of ITU in Spectrum Management of Satellite and Terrestrial Services

**Dr. Virendrakumar C. Bhavsar**, Honorary Research Professor and Professor Emeritus, Faculty of Computer Science, University of New Brunswick, Fredericton, New Brunswick, Canada

**Topic:** Convergence of Artificial Intelligence, Big Data, and High Performance Computing

#### **Invited Talks:**

**Dr. S. C. Sharma**, Professor, Indian Institute of Technology, Roorkee

**Topic:** Integration of Cloud Computing & WSN in the perspective of IoT

**Dr. N. P. Pathak**, RFIC Labs, Indian Institute of Technology, Roorkee

**Topic:** Multiband & Multi-Functional RF Integrated Circuits & Systems

**Papers were invited in the following tracks:**

- Signal Processing & Image Processing
- RF & Microwave
- Evolutionary Computing
- Ubiquitous Computing & Networking
- Distributed Computing & Cloud Computing
- Software Engineering & Information Systems
- Green Computing & Internet Of Things
- Hardware Design & Communication

The conference adopts Double Blind Review Process. Each paper was reviewed by minimum of 3 reviewers who were subject experts.

Total 103 papers were presented, out of which eight papers were presented through Skype Presentation.

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 content of the curriculum for most of the subjects are taken from NPTEL pool.

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.

Industrial Training and Industry Sponsored projects: Each student undergoes an industrial training during summer vacation at the end of 2nd year B. Tech. for 2-weeks and 3rd 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. About 30 UG students have completed their final year projects in BSNL and Reliance JIO.

Technical Project related to Community Services: Student undertake projects related to community services. Through such projects, they get exposure to real life problems of the community. This gives them an opportunity to seek solutions to such problems. By taking social responsibility in account, 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 portal for Smart India Hackathon'18.

Smart India Hackathon'18 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.

Open Book Examination: Department started open book examination for some of the B.Tech. / M.Tech. courses. Purpose 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.

Cynosure 2018: Cynosure'18 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. EXTC department arranged four events in the technical fest as: Motustron, Battleship

Alumni Meet: An alumni meet was organized by department on 27 January 2018. 40 alumni from different batches attended the meet. 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 interaction session was organized with alumni so that current students 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.

Farewell: Departmental farewell was organized by TEESA on 27th April 2018 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.

#### **8. Academic Achievements of faculty: (Awards received, lectures delivered, etc.)**

##### **Dr. S. L. Nalbalwar**

Appointed as TEQIP Mentor and Performance Auditor by NPIU for the following institutes

S.No.	Mentoring Assignment	Performance Auditing Assignment
1	Govt. Engineering College, Banswara	Institute of Engineering & Technology, Bundelkhand University, Kanpur Road, Jhansi, Uttar Pradesh
2	Birla Vishwakarma Mahavidyalaya, Vallabh Vidyanagar, Gujarat	NIT Kurukshetra

- Member of Board of Studies ADCET, Ashta, Sangali from 15/07/2016.
- Published book on Basic Electronics in 2017.
- Mentored team for SMART INDIA HACKATHON 2018
- Member of Governing body for Orchid College of Engineering, Solapur
- He is also member on Programme Committee of ICEGOV2017 (10th International Conference on Theory and Practice of Electronic Governance) by Ministry of Electronics & Information Technology, Government of India, India.

##### **Mr. S. V. Khobragade**

Appointed as District Licensing Officer of MHT CET 2018 for Raigad district for and successfully conducted the same.

**Mr. Sumeet V. Isai**

Mentored a team DBATU – Extrema for SMART INDIA HACKATHON 2017 at Guntur, Hyderabad

Following faculty members have cleared the NPTEL online courses in the last academic year. The details are given in the following table:

Sr. No.	Name of the faculty member	NPTEL online course of IIT	Grade obtained
1	Snehal Gaikwad	Networks and Systems	59%
		Principles of Signals and System	87%
2	Pallavi Ingale	Networks and Systems	69%
		Principles of Signals and System	63%
3	Megha Kamble	Networks and Systems	65%
4	Sampada Thorat	Embedded System Design	65%
		VLSI Physical Design	54%
5	Jyoti Rani	Basic Electronics	52%

**Citation index of faculty members and impact factor**

Sr. No.	Name of the Faculty	Citation index	Impact factor
1	Dr. S. L. Nalbalwar	152 (for 77 papers) h-index:7	2.07 (for 39 papers)
2	Prof. S.V. Khobragade	14 (for 32 papers) h-index:2	1.67 (for 13 papers)
3	Dr. A.B. Nandgaonkar	--	2.28 (for 6 papers)

Faculty members of the department have published their research contributions in reputed international journals and conferences. More than 25 papers were published by the faculty in the last academic year (selected papers are given under Annexure-A)

**Major Students' Achievements:**

A. Paper publication by the students: Students publish their research papers regularly in national/ international conferences and journals. About 20 papers have been published by the students in the current academic year. (Annexure-A)

**C. List of students qualified the GATE 2018 Examination**

Sr. No.	Name of Students	Marks (Out of 100)
1	Manoj Kokane	41.67
2	Hitesh Narkhede	34.33
3	Ankush Chavan	33
4	Akshay Biradar	29.33
5	Sahil Thakare	28
6	Ravindra Kashid	27.52
7	Pooja Batawale	26.67
8	Pranav Girwalkar	26.66



9	Sandeep Bavkar	25.67
10	Prasad Dutande	22.67
11	Megha Kamble	17

D. GRE: One student from final year B. Tech. – Sai Datar scored 298 out of 340 in GRE

E. Co-curricular Activities:

University Sports

Throw ball	Shubham Chincholkar Nagnath Phopse Sanket Birajdar Akshay Bhusare Akshay Chavan Mangesh deshमुख Sandeep Satpute Mandar Kulkarni Pratik Ambhore Akshay Jadhav Ashish Bhusari Shreenath Khandalade	Gold
Football	Nidaan Gaddpawar Shubham Kendre Pruthviraj Walse Madhav Lalit Akshay More Parth Akre Akshay Vaidya Shantanu Kurapati Swayam Dhondge Roshan Waghmare Prajwal Nandeshwar Ashish Junghare Abhilash Bhandekar Rahul Misal Anket Gajbhiye Swarup Nachankar	Gold
Basketball	Akshay Chavan Nagnath Phopse Pratik Ambhore Akshay Bhusare Shubham Chincholkar Amit Narote Utkarsh Kore Mangesh Deshmukh Sangam Potkule Sanket Birajdar Mandar Kulkarni Akshay Jadhav	Gold

Handball	Nagnath Phopse Sandeep Satpute Ashish Bhusari Akshay Vaidya Roshan Waghmare Amit Narote Pratik Ambhore Shailesh Fajge Akshay Bhusare Shreenath Khandalade Karan Kadam Mayur Rangari	Gold
Carom	Pratik Ambhore Chetan Zade Akshay Chavan Akshay Jadhav	Silver
Futsal	Nidaan Gaddpawar Aksahy Vaidya Swayam Dhondge Roshan Waghmare Parth Akre Akshay More Prithviraj Walse Madhav Lalit Shubham Kendre	Silver
100*4 Relay	Chetan Mhatre Madhav Lalit Omkar Ghosalkar	Gold
Kabbadi	Adinath Govilkar Ashish Bhusari Pradip Gadekar Utkarsh Kore Akshay More Parth Akre Omkar Ghosalkar Rahul Misal	Gold
Chess	Shankar Salunke	Gold

### Abhiyanta Vasant 2018

One-Act	Vijay Jamdar & Group	Gold
Best Director (One-Act)	Vijay Jamdar	
Elocution English	Uma Gauda	Gold
Hindi Debate	Sourabh singh & Neeraj shukla	Silver
Marathi Debate	Vijay Jamdar & Pralhad Pawar	Gold
Solo Singing	Aniket Shingade	Gold

Dance: Solo, Duet, & Group	Shubhangi Nirbhavane	Gold
Fine Arts : Rangoli	Rukmini Salwe & Gauri phutane	Gold

## List of Publications

### International Conference:

- Mohini N. Sheth, Dr. Sanjay L. Nalbalwar, Dr. Anil B. Nandgaonkar, "Identification of snake type from image", International conference on Electrical & Electronics Engineering(ICEEE 2018), 22 April 2018, Pune
- Shrutika Ghosalkar, Dr. Sanjay L. Nalbalwar, Dr. N. S. Jadhav, "Smart Helmet: for driver safety", International conference on Electrical & Electronics Engineering(ICEEE 2018), 10th June 2018, Pune.
- Yuvraj V. Parkale, Sanjay L. Nalbalwar (2018), "Investigation on Daubechies Wavelet Based Compressed Sensing Matrices for ECG Compression, Paper Accepted in Springer-Advances in Intelligent Systems and Computing (Springer-AISC) (Proceedings published by Springer)
- Pratima Nirmal, Dr. A.B. Nandgaonkar and Dr. S.L. Nalbalwar, "A compact slited MIMO antenna with high isolation for WLAN application", 2017 International Conference on Circuit ,Power and Computing Technologies (ICCPCT), April 2017,  
<https://scholar.google.com/scholar?oi=bibs&cluster=14710834716748941644&btnI=1&hl=en>
- S.V. Khobragade, S.L. Nalbalwar and A.B. Nandgaonkar, "A 3-D symmetrical Fractal Tree Antenna using Chemical Decomposition Technique", Published in International Conference on Communication and Signal Processing held at Dr. BATU Lonere during, Dec 26-27, 2017
- Ashvini Pudke, S.L. Nalbalwar, "LabVIEW based coal mine monitoring and alert system with data acquisition", International Conference Intelligent Computing and Control System 2017, June 2017, <https://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=8241057>
- Bhide, A.B. Nandgaonkar and S.L. Nalbalwar, "Dual frequency high gain union shaped Microstrip Patch Antenna ", Published in International Conference on Communication and Signal Processing held at Dr. BATU Lonere during, Dec 26-27, 2017
- Kotade, A.B. Nandgaonkar and S.L. Nalbalwar, "Cyclic Redundancy Check: Novel Approach for low computational complexity and analysis ", Published in International Conference on Communication and Signal Processing held at Dr. BATU Lonere during, Dec 26-27, 2017
- Y. Parkale, and S.L. Nalbalwar, "Investigation on 1-D and 2-D Signal Sparsity using the gini index, L-1-Norm and L2-Norm for the best Sparsity Basis selection", Published in International Conference on Communication and Signal Processing held at Dr. BATU Lonere during, Dec 26-27, 2017
- S. Kulkarni, D.S. Bormane and S.L. Nalbalwar, "Stabilization of Jittery Videos usin Feature Point Matching Technique", Published in International Conference on Communication and Signal Processing held at Dr. BATU Lonere during, Dec 26-27, 2017
- P. Wagh and S.L. Nalbalwar, "A Review on Automated Safety System", Published in International Conference on Communication and Signal Processing held at Dr. BATU Lonere during, Dec 26-27, 2017
- M. Bhagat and S.L. Nalbalwar, "Wireless Transfer of Solar Power for charging Mobile Devices in a Vehicle", Published in International Conference on Communication and Signal Processing held at Dr. BATU Lonere during, Dec 26-27, 2017

- N. Joshi, K. Shet and S.L. Nalbalwar, “Fall detection for elderly people: A Review”, Published in International Conference on Communication and Signal Processing held at Dr. BATU Lonere during, Dec 26-27, 2017

#### **International Journal Publications:**

- Pallavi Ingale and Dr. S.L. Nalbalwar, “Singing voice separation using mono-channel mask”, International Journal of Speech Technology, Springer US, pp. 1-18, 2018
- S.M.Kulkarni, D.S.Bormane and S.L.Nalbalwar, “Video Stabilization Using Feature Point Matching”, IOP Journal of Physics: 787 (2017) 012017 doi:10.1088/1742-6596/787/1/012017 indexed by Ei Compendex, SCOPUS, Inspec, Conference Proceedings Citation Index – Science (CPCI-S)(Thomson Reuters, Web of Science), NASA Astrophysics Data System, and other databases.
- Pratima C. Nirmal, Anil Nandgaonkar, Sanjay Nalbalwar and Rajiv K. Gupta, “Compact MIMO Antenna with Improved Isolation for 3G, 4G, Wi-Fi, Bluetooth and UWB Applications” , Progress in Electromagnetics Research C, Vol. 76, 87–98, 2017
- M.P. Bhagat and Dr. S. L. Nalbalwar, “Wireless Power Transfer to charge mobile devices in automobile vehicles by using solar energy”, IJEMR, Vol-7, issue-2, March-April, 2017.
- Ketaki Shet, Sanjay Khobragade, ‘Real time abandoned object detection and addressing using IoT’ IJCER, Volume – 07, May 2017
- Rohit D. Gawade and S. L. Nalbalwar, “Mean Territorial Energy Based Clustering Protocol for Randomly Deployed Wireless Sensor Networks” Advances in Internet of Things, 2017, 7, 87-96, <https://doi.org/10.4236/ait.2017.73006>
- Pallavi Ingale and Dr. S.L. Nalbalwar, “Detection of Speaker identities from co-channel speech signal,” WSEAS Transactions on Signal Processing, ISSN/E-ISSN 1790-5052/2224-3488, Volume 14, 2018, Art. 66, pp 43-49
- Pavan Paikrao and Dr. S.L. Nalbalwar, “Analysis Modification synthesis based Optimized Modulation Spectral Subtraction for speech, enhancement” International Journal of Circuits, Systems and Signal Processing ISSN: 1998-4464, Vol. 11, 2017pp. 343-352
- S.V. Khobragade, Dr. S.L. Nalbalwar, Dr. A.B. Nandgaonkar “Fusion Execution of NaCl on Tree-Shaped MSA,” International Journal of Antennas and Propagation Volume 2018, Article ID 4965627, pp 1-6, <https://doi.org/10.1155/2018/4965627>
- Pratima C. Nirmal, Anil Nandgaonkar and Sanjay Nalbalwar “Mutual Coupling reduction between H Shaped Compact MIMO Antenna for WLAN Application” , International Journal of Wireless and Microwave Technologies, Vol 7, pp.46-57, Nov. 2017

#### **List of Research Scholars Registered:**

Following candidates presented their annual progress seminars before the RC. RC assessed and evaluated their presentations and remarks given by RC are as follows:

<b>Sr. No.</b>	<b>Name of the Candidate</b>	<b>Registration Number &amp; Date</b>	<b>Broad area of research</b>	<b>Remark</b>
1	Pavan Paikrao	RS 20120303 24/09/2012	Developing Optimized Signal Processing Techniques for Improving the perception of Hearing Impaired	Needs to improve presentation w.r.t language of presentation in ppt as well as publications in future. Recommended for submission of synopsis subjected to condition of expected improvements.
2	Pallavi Ingale	RS 20130301 13/08/2013	An Information Extraction Approach to Acoustic Signal Processing: Analysis, Segregation and Detection	Expedite the work. Improve publications as per requirements in standard journals
3	Bhide Girish Govind	RS20140301 20/8/2014	Analysis, Simulation and Design of MSA using suitable Computational EM Method	Expedite the work. Improve. Improve publications in journals.
4	Khobragade Sanjay Vivekanand	RS20140302 21/8/2014	Some studies on Fractal Tree MSA for Multiband Application	Improve publications as per requirements and publish in good referred journals. Complete remaining work and communicate it to journals.
5	Kotade Amol Bhaskar	RS20140303 19/8/2014	Analysis of PAPR reduction in OFDM based system and system performance improvement	Expedite the work. Improve. Improve publications in journals.
6	Nirmal Pratima Chabbilal	RS20140304 20/8/2014	Minimizing Mutual Coupling in MIMO Antenna	Presentation needs improvements in ppt Recommended for submission of Synopsis.
7	Shinde Ashok Naganath	RS20140306 21/8/2014	Compressed Sensing for Bio-signals	Expedite the work. Improve. Improve understanding. Use statistical inferencing guarantee of results.
8	Bavkar Sandeep Sarjerao	RS20150301 10/09/2015	Human Brain Distinctiveness Analysis based on EEG	Need to specify problem definition and improve clarity. Work with creation of database for Indian subjects. Improve understanding related to applications of theory

				and methods for selection of features and methods of optimization.
9	Jagtap Sagar Satyawar	RS20150302 10/09/2015	Some Studies on Smart Antenna for future Wireless Communication	The overall research progress is unsatisfactory and hence the researcher should expedite the progress in the suggested direction.
10	Oak Pratik Vinayak	RS20150307 09/09/2015	Analysis and Detection of Cervix Cancer: An Image Processing Approach	Improvement in understanding of the subject and methods and their appropriateness. Why a particular method is applied and gives better results etc. Very small progress made and need to expedite the work. Study and apply the statistical inferencing.
11	Kadge Sushma Shankar	RS20150303 11/09/2015	Analysis and Classification of Retinal Images	Expedite the work. Improve understanding as regards to methods/problems and why to use a particular method is to be justified.
12	Munde Mahesh Madanrao	RS20150306 09/09/2015	Impact Analysis of effects of RF on Human Health	Expedite the work. Improve. Improve publications in journals.
13	Khadase Rahul Babarao	RS20150304 10/09/2015	Design of Implantable Antenna as a Sensor for Continuous Glucose Monitoring System	Expedite the work. Improve. Improve publications in journals.
14	Uday Prakash Mithapelli	RS20150305 11/09/2015	Analysis and Classification under water signals	The overall research progress is unsatisfactory and hence the researcher should expedite the progress in the suggested direction.

■ ■ ■

## Department of Information Technology



**Dr. S.M. Jadhav**

Associate Professor & Head

### Message from Head of the Department

Welcome to the Department of Information Technology. It's my great pleasure to present the annual report of the Department of Information Technology for the year 2017-18.

It gives me immense pleasure to lead the Department of Information Technology. As a part of State Technological University, our department is continuously trying to achieve departmental mission synchronized with University mission. I congratulate the team of faculty members and the students for their brilliant and original efforts. In last year, one of our faculty members completed his Ph.D. We are strengthening our departmental infrastructure and relationship with the help of industry persons.

It helps in teaching-learning process. I wish all the Students and Faculty a great academic career.

**Dr. Shivajirao Jadhav**  
(Head, IT Department)

### 1. Vision and Mission Statements of the Department

#### Vision

Impart highest quality, technology-based education, in the most cost-effective manner, to facilitate the University mission as it applies to the management, teaching, learning, and community service.

#### Mission

Provide effective technology support for audio/visual, computer, multimedia, voice, video, and web-based applications to fulfill the need of students and staff. Promote and facilitate the effective integration of technology into the basic mission of the University through planning, programming, training, consulting, and other support activities. Develop, enhance, and manage the University enterprise networks to provide high speed, transparent and highly functional connectivity among all information resources. Develop and maintain highly effective, reliable, secure, and innovative information systems to support instructional, administrative and research activities. Facilitate the collection, storage, security and integrity of electronic data while ensuring appropriate access, innovative applications.

### 2. About the Department

The department of Information Technology was established in the year 2001 with B. Tech. programme having intake of 60 students under the umbrella of department of Computer Engineering. The B.Tech. programme in Information Technology was shifted to the newly created department in 2004. The first research scholar for Ph.D. programme enrolled in the department in 2015. Department has seven regular faculty, three laboratory supporting staff- Laboratory Assistant (Technical), Laboratory Assistant and Laboratory Attendant. All the faculty members have completed their M.E. /M.Tech. One faculty has

completed Ph.D. and two faculty members are pursuing their Ph.D.s. The Department has set tradition of achievements in sports, cultural activities, extracurricular activities, competitive examinations like GATE, MBA-CET etc. and campus placements.

### 3. Programme Educational Objectives (PEOs) & Programme Outcomes (POs)

#### Programme Educational Objectives (PEOs)

The programme educational objectives for the B.Tech. programme in Information Technology describes accomplishments that graduates are expected to attain within the four years of graduation. Graduates will be able to apply their expertise to contemporary problem solving, be engaged professionally, and have continued to learn and adapt, and have contributed to their organizations through leadership and teamwork. More specifically, the objectives are:

#### Objective Objectives Identifier

PEO1	To enable graduates gain strong skills for employment in multidisciplinary domains driven by IT
PEO2	To enable graduates to pursue higher education and research To enable graduates to develop entrepreneurship and leadership skills
PEO3	To enable graduates to develop entrepreneurship and leadership skills
PEO4	To enable graduates to contribute to the society in accordance with highest standards of ethics
PEO5	To develop breakthrough solutions enabling transformations in a rapidly changing IT world

#### Programme Outcomes (POs)

The graduates of this programme will be able to demonstrate:

#### Outcome Outcomes Identifier

PO1	An Understanding of IT architecture, software and hardware concepts, functionalities and applications
PO2	An Ability to design, develop and test computer programs involving various algorithms, methodology and programming languages
PO3	Competency of business domains and functional processes that employ IT systems and applications
PO4	Practical use of communication protocols and their applications in the field of internet and world wide web
PO5	Sound understanding of fundamentals of computer as the central enabling platform for information management in 21st century
PO6	An Ability to develop, integrate, maintain and innovate software applications deployed in various multi-disciplinary domains
PO7	Thought leadership to design and implement practical solutions for global industry needs.
PO8	An Acumen to embrace and adopt futuristic IT technological developments
PO9	Sound knowledge of entrepreneurship traits to succeed
PO10	Adoption of practices that are ethical ensuring transparency and accountability
PO11	Capability to provide solutions that are socially empowering and environment friendly
PO12	Effective communication and collaboration techniques with stakeholders to achieve best results



#### 4. Overview of Academic Programme:

Academic Programme	Duration	Intake
B. Tech. in Information Technology	Four Years	60

#### 4.1 UG Students Statistical Information

Year	OPEN			SC			ST			OBC			VJ/NT			SBC			TOTAL		
			T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
First			24			10			02			17			07			02	40	22	62
Second			19			09			02			24			07			03	35	30	65
Third			31			18			03			30			07			01	63	29	92
Four			24			10			03			27			07			00	40	33	73

#### 5. Faculty and Staff

##### 5.1 Regular Faculty



**Dr. Jadhav Shivajirao Manikrao**

B. E. (CSE), S. G. G. S. Institute of Engineering & Technology, Nanded  
M. E. (CE), V.J.T.I Matunga, Mumbai  
Ph.D., Dr. B.A.T.U., Lonere  
Honors and Award: Received UGC's Teacher Fellowship award under FIP to complete Ph.D. Study

Research Interests:

- Soft Computing and Machine Learning, Hybrid Neural Networks
- Biomedical Signal Analysis

25 years of Experience



**Prof. Kadam Vinod Jagannath**

B.E.(I.T.) Shivaji University, Kolhapur  
M.Tech. (CE), Dr. B.A.T.U., Lonere.  
Ph.D.(Pursuing), Dr. B.A.T.U., Lonere

Research Interests:

- Data Mining
- Machine Learning

15 years of Experience



**Dr. Sutar Sanjay Raghunath**

B. E. (CE), Walchand College of Engineering, Sangli,  
M. Tech. (CE), Dr. B.A.T.U., Lonere.  
Ph. D., S. G. G. S. Institute of Engineering & Technology, Nanded

Research Interests:

- Scheduling
- Evolutionary Algorithms

22 years of Experience



**Prof. Babbulgaonkar Arun Ramrao**

B. E. (CSE), Dr. B. A. Marathwada University-Aurangabad  
M. Tech. (CE), Dr. B.A.T.U., Lonere.  
Ph. D. (Pursuing) Walchand College of Engineering, Sangli.

Research Interests:

- Natural Language processing
- Compiler Construction

15 years of Experience



**Prof. Bharad Sonali Vasudeorao**

B. E. (IT), Dr. B. A. Marathwada University-Aurangabad  
M. Tech. (CE), Dr. B.A.T.U., Lonere

Research Interests:

- Natural Language processing

13 years of Experience



**Prof. Barphe Sapana Shivaji**

B.E.(I.T.), Annasaheb Dange College of Engineering and Technology, Ashta -Sangli  
M.Tech.(C.E.), Dr. B.A.T.U., Lonere

Research Interests:

- Software Engineering
- Software Testing

13 years of Experience

**Prof. Hivre Sadhana Ranojirao**

B. E. (IT), Terana Public Charitable  
Trusts COE, Osmanabad, Dr.  
Babasaheb Ambedkar Marathwada  
University-Aurangabad.  
M. Tech. (CE) Dr. B.A.T.U., Lonere

Research Interests:

- Software Engineering

13 years of Experience

**5.2 Ad-hoc Faculty****Mr. Katkar Atish R**

B. Tech. (Comp), Dr. B.A.T.U.,  
Lonere

M. Tech. (CSE) NIT, Goa.

Research Interests:

Machine Learning

06 Months of Experience

**Ms. Jadhav Pranita Pradip**

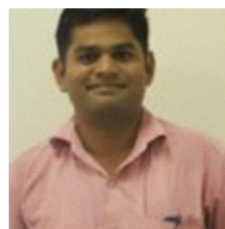
B. Tech. (Comp), Dr. B.A.T.U.,  
Lonere

M. Tech. (CSE), Dr. B.A.T.U.,  
Lonere

Research Interests:

- Information Security

01 Years of Experience

**Mr. Yadav Samir Srihari**

M. Tech. (CSE), Dr. B.A.T.U., Lonere

Ph. D. (Pursuing), Dr. B.A.T.U.,  
Lonere

Research Interests:

- Soft Computing

03 Years of Experience

**Staff Profile****Mr. Rode Vikas Vitthal**

Designation:- Laboratory Assistant

Qualification:- HSC

**Mr. Apekshit Kantilal Patil**

Designation:- Laboratory Assistant

Qualification:- Diploma in  
Mechanical Engineering

**Ms. Swati Ganpat Tembe**

Designation:- Lab Assistant

Qualification:- BCA

**Mr. Ravindra Barku Hatkar**

Designation:- Laboratory Attendant

**6. Additional Responsibilities to the Faculty****Dr. Jadhav Shivajirao Manikrao**

1. Head, Department of Information Technology
2. Convener, EduSat (AICTE Setup)
3. Member, Academic Council, Dr. B.A.T.U. Lonere
4. Chairman, Board of Studies, Department of Information Technology
5. TEQIP MIS (Team Member)
6. Coordinator, Oracle Workforce Development Programme of Oracle University

7. Coordinator, Training to University Student, Faculty and Staff on Free and Open Source Software (FOSS)
8. Coordinator, Microsoft Usage Audit
9. Coordinator, Software Development through student's academic projects for University Use

**Prof. Sutar Sanjay Raghunath**

1. Coordinator, RailTel Internet Facility
2. Coordinator, TEQIP Institutional Reforms Committee
3. Member, Board of Studies, Department of Information Technology
4. Coordinator, Choice Based Elective Allotment
5. Chairman, Department Procurement committee

**Prof. Kadam Vinod Jagannath**

1. Coordinator, DTE Admission Reporting Center 3033
2. Coordinator, DTE Facilitation Center 3033
3. University (Institute level) admission coordinator (First year B.Tech. / Direct Second B.Tech. / First Year M.Tech.)
4. Member, TEQIP Institute Industry Interaction Committee
5. Member, Board of Studies, Department of Information Technology

**Prof. Babhulgaonkar Arun Ramrao:**

Deputed For PhD under QIP

**Prof. Bharad Sonali Vasudeorao**

1. Departmental Meeting Secretary
2. Departmental timetable coordinator
3. Chairman and member of various departmental committees
4. Remedial coaching coordinator
5. Member of cultural committee at University Level
6. ISO coordinator
7. Marshal for PG and Ph.D programme at University convocation

**Prof. Barphe Sapana Shivaji**

1. Member of cultural committee at University Level
2. Member of Women Grievance cell at University Level
3. Marshal for UG programme at University convocation
4. Departmental TPCS Coordinator
5. Departmental Industrial Training Coordinator
6. Chairman and member of various departmental committees
7. Sub-liaisoning Officer, MHCET Examination, Maharashtra State.

**Prof. Hivre Sadhana Ranojirao**

1. Rector (Hostel Malayagiri)
2. Cynosure Technical Event Committee, Member
3. Annual Report Committee, Member
4. University Alumni Database Cell, Member
5. University Diary Committee, Member
6. Departmental Seminar committee, Chairman

## 7. Advisory Board

### 7.1 Advisory Board

Sr. No.	Name
1	Dr J. V Aghav
2	Dr. G. Sivakumar, IITB
3	Ms. Preeta Deshmukh
4	Mr. Rajesh Gandhi, Global Project Manager, Philips Health Tech., Pune.
5	Mr. Ramchandra Manthalkar
6	Mr. Samir Rane, Rolta India Pvt. Ltd, Mumbai
7	Mr. Sham Dhage, IBM, Pune
8	Dr. B B Meshram, VJTI, Mumbai

## 8 . International Journals :

S.R.Sutar and R.S.Bichkar, "High School Timetabling using Tabu Search and Partial Feasibility Preserving Genetic Algorithm," International Journal of Advances in Engineering and Technology, Vol. 10, No. 3, pp. 412-428, June, 2017

S.R.Sutar and R.S.Bichkar, "Parallel Genetic Algorithm for High School Timetabling," International Journal of Computer Applications, Vol. 170, No. 5, pp. 1-5, July, 2017

Vinod J. Kadam and Shivajirao M. Jadhav, "Feature Ensemble Learning Based on Sparse Autoencoders for Diagnosis of Parkinson's Disease, Computing, Communication and Signal Processing, Advances in Intelligent Systems and Computing" 810, Springer. <https://doi.org/10.1007/978>

## 9. Laboratory

### 9.1 Major Instruments in Laboratory :

Sr. No.	Name of Instrument	Qty.	Total cost
1	HP 8300 SFF17-3770/04/500/SLED Desktop (DGS&D)	44 nos.	23,97,780/-
2	Multimedia Projector with wireless connectivity between PC & Projector	02 nos.	82,508/-
3	D Link DAP-1360 WIRELESS Access Point (Black)	01 no.	1990/-

### 9.2 Laboratory Expenditure

Sr. No.	Name	Qty.	Total Cost
1	Multi-media projector with wireless connectivity between PC & Projector Model No. PJWX2240 with WPS dongle Resolution: 1280 x 800 W XGA, ANSI Lumen: 3000	02	82508/-
2	D Link DAP-1360 Wireless Access Point (Black) - 01 no.	01 no.	1990/-
3	7040 SFF Optiplex Dell, Intel Core I7-6700 Processor, 4GB DDR4, 1TB HDD, Ubuntu Linux 14.04 SP1, Dell USB keyboard & Mouse, 19.5" Monitor	20 no.	8,98,300/-

## 10. Projects

### 10.1 UG Community Projects

Sr. No.	Roll No	Name	Project Title
1	20140748	SONJE SAURABH SANJAY	Seminar Allotment
2	20150788	SHINDE SURAJ SANJAY	
3	20150773	BHOSALE LAXMAN NARAYAN	
4	20130755	SHINDE YADNYA SHISHUPAL	e-QA Portal
5	20140710	GAWAND AKSHATA SANTOSH	
6	20140723	KHATATE MANASI MANOHAR	Result Analysis
7	20140762	SAWANT HARSHADA NARESH	
8	20140749	SUTAR RUJUTA AVINASH	
9	20140759	KHIRE ABHIJEET HARIHAR	Daily Expense Mangement System
10	20140760	MAHADIK SHWETA SANJAY	
11	20130756	SOLANKE MADHAV V.	
12	20140714	GUPTA NEELAM	College Chatbot
13	20140716	JADHAV UNNATI RAVINDRANATH	
14	20140715	HUME SHWETA KAILAS	
15	20140743	RAUT VAIBHAVI JALINDAR	Type Master
16	20130731	MALODE ANKUSH	
17	20140712	GHUGE PRITI ARUN	Tourism Management
18	20140713	GUNGE POONAM RAJENDRA	
19	20140718	KASLE ANKITA PRALHAD	
20	20150777	JANGAM VISHAKHA VINOD	Mutillevel Marketing
21	20150778	KHADE MADHURI BABU	
22	20150780	MOHITE ASHWINI VITTHAL	
23	20140730	MHATRE PRATIKSHA PUNDALIK	Project Guide allotment System
24	20140725	KULKARNI KETAN SANJAY	
25	20140758	KARKARE SUSMITA ANANT	Maharashtra Tourism
26	20140747	SHID PRADNYA KASHIRAM	
27	20140746	SAPKAL AJAY RAJENDRA	
28	20150774	DESHPANDE BHAGYASHREE K.	Virtual classroom
29	20150781	MUDGAL PRIYA DATTA	
30	20150775	DODAKE SATISH VISHWANATH	
31	20150779	MAHADIK RASIKA NITIN	Hostel Allotment
32	20150784	NAPHADE TEJASWINI ANIL	
33	20150787	SARWADE DIPTI JAGANNATH	
34	20150772	BHAWARE POOJA JAYRAM	Smart RationCard

35	20150786	PATIL VAISHALI ANANT	System
36	20150782	MUGALIKAR SUMANGAL B.	
37	20150789	VADAVALE KOMAL VASANT	Student Section Web Portal
38	20150783	NAGAJE POOJA MAHADEV	
39	20150776	JADHAV GAYTRI TUKARAM	Hospital Management System
40	20140701	SYED VAJEEHUDDIN ADID SYED JAWEED ALI	
41	20140711	GAWANDE VIVEK VIJAYRAO	
42	20140724	KOLTE ANKITA	Hostel Management System
43	20140719	KATHANE PRATIK MOHANRAO	
44	20140736	PATHADE RAVIKIRAN HARI	
45	20140717	JUMADE SAMIR ANIL	Real Estate Management System
46	20140732	MOGHE SAGAR PRASAD	
47	20100741	MEHTA AKSHAY	
48	20150785	PANAVKAR SURAJ SHIVAJI	Students Feedback Management System
49	20140739	PAWAR SUNIL GANGADHAR	
50	20150771	AWATE ABHIJEET DILIPRAO	
51	20140720	KAVATHE DIPAK JAYRAM	School Tutorial System
52	20140703	BHOSLE VIJAY BALLALESHWAR GOPALRAO	
53	20140722	KHARAT VISHAL NARAYANRAO	
54	20140755	ZAMBRE SAGAR BHASKARRAO	Elective Allotment System
55	20140726	KULKARNI NINAD AMAR	
56	20140740	PAWASHE KEDAR ANKUSH	
57	20140727	KULKARNI SHIVANI JAGDISH	News Portal
58	20130726	KAMBLE VINAYAK VASANT	
59	20140757	GAWADE PRATIK SHRIKANT	e-Library
60	20140738	PATIL PRATIK DNYANESHWAR	
61	20140741	RAJE AMEYA PRAMOD	
62	20140729	MADGAONKAR SAGAR ANANT	Campus Recruitment
63	20140761	VIKRANT PANDITA	
64	20140753	WALKE AMAN VIJAY	Event Management
65	20130767	DALVI SUYASH MAHENDRA	
66	20140731	MHETRE PRAJAKTA SIDHESHVAR	Doctor Finder
67	20140745	SALVI PRANAV PRAFULLA	
68	20110763	TIWARI RAJNISH	Query Based Search engine
69	20140752	UDBALE SURAJ SUBHASH	
70	20120703	KAMBALE CHAITANYA	Query Based Search engine
71	20140709	GAJBHIYE PRITAM RASHTRAPAL	
72	20140737	PATHANIA ANKUR SINGH	Query Based Search engine

73	20140756	BANTE ATUL NARENDRA	
74	20140754	WALTHARE ROHIT DULICHAND	Student Information System

## 11. Doctoral Programme

### 11.1 List of Ph.D. Students

Sr. No.	Name	Registration Number and Date	Broad area of research	Research Guide
1	Mr. Samir Shrihari Yadav	RRS20151101 12 Sept. 2015	Medical diagnosis using soft computing techniques	Dr. S. M. Jadhav
2	Prof. V. J. Kadam	RS20161101	Soft Computing	Dr. S. M. Jadhav
3	Pankaj Kasar	RS20161102	Soft Computing	Dr. S. M. Jadhav
4	Prof. Maahi Khemchandani	RS20161103	Soft Computing	Dr. S. M. Jadhav

## 12. Industry Institute Interaction

### 12.1 Industry Projects by the students :

Sr. No.	Name	Title of the Project	Name of the Company
1	Pooja Nagaje	Online Election Campaign Management System	SNP, Pune
2	Komal Vadavale		
3	Gaytri Jadhav		
4	Pooja Jayram Bhaware		
5	Sumangal Mugalikar		
6	Vaishali Anant Patil		

## 13. Conferences/Workshops/Trainings /Academic Awareness activities conducted under TEQIP-II

S.No.	Name of the course	Duration	Name of the Coordinator	Eminent Speakers
1	Workshop on recent trends in web technologies	26/04/2018, one day	Prof. S. V. Bharad	Milind Rahangdale
2	Awareness workshop on Digital Technologies	26/04/2018, One day	Prof. S. V. Bharad	Harold Fernandis

## 14. Expert Talks by Alumni :

S.No.	Name of the Topic	Name of the Alumni	Participants
1.	Expert talk on Startups and entrepreneurship	Mr. Sunil Chavan	Second year students

### 15. Workshops attended by Faculty members, Research Scholars and PG Students

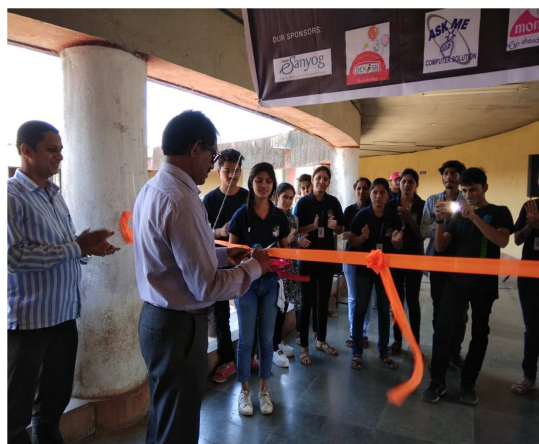
Sr. No.	Title	Date	No. of Participants
1	Adaptation of Product Design engineer – Mechanical Courseware	15th June 2017	01
2	Machine learning tools for Engineers	12th -21st June 2017	01
3	Pedagogy for online and blended teaching-learning process	14th September to 12th October, 2017.	02
4	Foundation programme in ICT for Education	3rd August to 7th September ,2017	02
5	Recent Trends in Signal Representation: A Multirate Approach,DBATU, Lonere	6th – 17th November, 2017,	04
6	Feature ensemble learning based on sparse autoencoders for diagnosis of parkinsons disease, DBATU, Lonere	26th – 27th January 2018	02
7	Outcome Based Education, DBATU, Lonere	23th - 28th June 2018	04
8	Natural Language processing , SVNIT Surat	24th – 28th January 2018	01

### 16. Other Activities Conducted by Department

#### 16.1 Technical Event

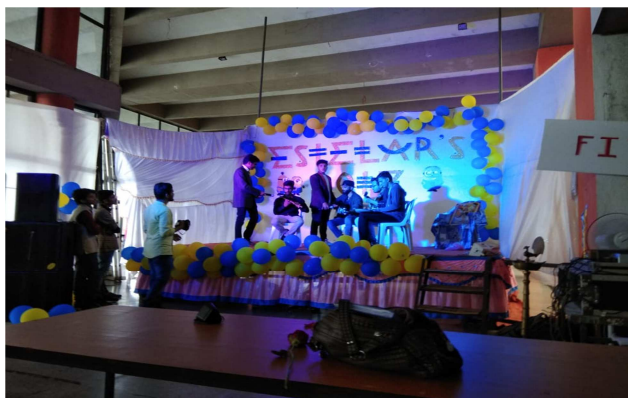
Cynosure'17 is the technical festival arranged by Dr. Babasaheb Ambedkar Technological University. Information Technology department arranged two events in the technical fest as: QuizzoRelay, Brain-IT,

#### Cynosure-2K18





## 16.2 First Year Induction Programme



## 16.3 Freshers' Party Function to First Year Students



## 16.4 Final year Project Submission



## 16.5 Science Day Programme



## 17. Academic Achievements

### 17.1 Faculty Achievements

Prof. S. R. Sutar completed Ph.D. from SGGS, Nanded.

### 17.2 Distinguished alumni of the Department :

1. Mr. Nitin Patil, Founder and CEO of SNP software Pvt. Ltd., Mumbai
2. Mr. Sunil Chavhan, Chief Executive Officer at Teentrum FashTech Private Limited, Pune
3. Swapnil Dabhade, Founder of The Horizon Technology, Mumbai
4. Sunil Kekan, qualified UPSC Examination
5. Changrakant Machi
6. Devendra Choudhary, Working in Indian Navy
7. Kiran Bari
8. Sachin Nagare
9. Shardha Patil
10. Manasi Gawade

### 17.3 Major Student's Achievements:

GATE-2017 Examination Qualified Students:2

Sr.No.	Name	GATE Marks
1	Pranav Salavi	85
2	Sagar Moghe	35

### 17.4 Awards won by Students:

Sr. No.	Name	Awards
1	Pooja Patil	Poetry in in Utkarsh 2018
2	Neha Jadhav	Singing in Utkarsh 2018
<b>University Sports</b>		
3	Football (Boys)	Gold
4	Volleyball (Boys)	Silver
5	Football (Girls)	Silver
6	Volleyball (Girls)	Silver
<b>Cynosure 2k16</b>		
7	Akshay Ganesh	First Prize-Brain-IT
<b>Annual Social Gathering 2017</b>		
8	Prabhudas Dhawali	Runner Up in Debate
9	Manasi Musale	Runner Up in Debate

## 18. Departmental Students Association (Fraternity of Information Technology)

FIT Committee for the Academic Year 2016-2017

Sr.No	Name	Designation	Responsibility
1	Kedar Pawase	President	Yearly students activity planning ,control and execution
	Prajakta Mhetre		
2	Rasika Mahadik	Cultural Activity	Coordination and planning of cultural activities for student
3	Pratik Patil	Sport Activity	Coordination and planning of sports activities
4	Ankur Pathania	Technical Activity	Coordination and planning of technical activities
5	Sagar Madgaonkar	Literature Activity	Coordination and planning of literature activities
6	Ankush Malode	Event Manager	Management of the various events

#### **19. Technical Events by Students' Association :**

FIT Conducted "Tech FIT" Technical event for Information Technology students. 120 Students participated in this event.

Mr. Vinay Khairnar (1st Winner) and Mr. Sourabh Bhosale (2nd Winner) were winner in this competition.

#### **20. Departmental Strengths, Weaknesses, Opportunities and Challenges**

##### **Major Strengths:**

Young and experienced faculty members  
Dedicated staff and faculty  
Campus wide networking  
Adequate infrastructure

##### **Weaknesses:**

Lack of Ph. D. qualified faculty  
Shortage of faculty  
Higher faculty positions are vacant

##### **Opportunities:**

Starting PG courses  
Starting finishing schools  
Establishment of Departmental library  
Training for New Technology awareness  
Consultancy like cyber crime detection  
Enrollment of faculty for Higher studies

##### **Challenges:**

Curriculum development as per industrial needs  
Dynamic nature of IT field  
Training of faculty  
Research facilities



# Department of Mechanical Engineering



**Dr. M. Sadaiah**

Associate Professor & Head

## 1. Message from the Head of Department:

“The future belongs to those who prepare for it today.”

It gives me immense pleasure to present the annual report of the Department of Mechanical Engineering for the year 2017-18. It is a matter of great pride that the Department has made consistent progress, year on year, in academic and co-curricular activities. The level of education offered by this Department is up-to-date and appropriate to the needs of the industry and profession.

Overall development of the individual is the goal of education and we all have to ensure that there is no stone left unturned to equip the student of today for the challenges of life. The Department, through state-of-the-art laboratories and conducive environment, facilitates learning and development of students. We provide our students opportunities to engage in experiments, design work, project work, industrial training, professional society activities and team work to enhance the learning process. Each of our faculty members is engaged in meaningful research and innovation by involving not only Ph.D./M. Tech students but also B. Tech. students.

Our mission is to prepare our students to apply basic and advanced engineering knowledge and skills to the design, analysis and research of engineering systems; to prepare them to compete successfully in today's job market and for lifelong learning. In addition to good teachers, we also provide our students with an innovative and engaging curriculum. The holistic approach of the department stimulates innovation among students by inspiring fresh ideas with different perceptiveness, creative thinking and strong conviction to achieve true success. I take this opportunity to thank teaching as well as non-teaching staff and students, who are rendering their wholehearted support and co-operation to make the department a centre of excellence. I extend my best wishes to all the students in their chosen career path.

**Dr. Sadaiah Mudigonda**

Head,

Department of Mechanical Engineering

## 2. Vision and Mission Statements for Department:

### Vision:

The vision of the department is to achieve excellence in teaching, learning, research and transfer of technology and overall development of students

### Mission:

Imparting quality education, looking after holistic development of students and conducting need based research and extension.

### 3. About the Department:

Established in the year 1992, the Department of Mechanical Engineering offers various academic programs, like B. Tech. (Mechanical Engineering), M. Tech. (Manufacturing Engineering), M. Tech. (Thermal & Fluids Engineering) and Ph.D. The department takes pride in its highly qualified and motivated faculty members most of whom are PhDs from IITs. The alumni of the Department have made a mark in industry and profession. Over the years, the department has maintained good academic and research culture. As a result, the faculty members in the department have published more than 600 papers in peer-reviewed international journals and conferences so far. Further, some of the laboratories have developed innovative products which are being patented for commercial usage. The Department has strong linkages with institutes like IIT Bombay and BARC. In addition, the Department has also conducted several continuing education programs (CEPs) and STTPs for the benefit of faculty and industry personnel.

### 4. Program Educational Objectives (PEOs) & Program Outcomes (Pos)

#### Program Educational Objectives

- PEO1 Graduates should excel in engineering positions in industry and other organizations that emphasize design and implementation of engineering systems and devices.
- PEO2 Graduates should excel in best post-graduate engineering institutes, reaching advanced degrees in engineering and related discipline.
- PEO3 Within several years from graduation, alumni should have established a successful career in an engineering-related multidisciplinary field, leading or participating effectively in interdisciplinary engineering projects, as well as continuously adapting to changing technologies.
- PEO4 Graduates are expected to continue personal development through professional study and self-learning.
- PEO5 Graduates are expected to be good citizens and cultured human beings, with full appreciation of the importance of professional, ethical and societal responsibilities.

#### Program Outcomes (Pos)

- PO1 Apply knowledge of mathematics, science and engineering to analyze, design and evaluate mechanical components and systems using state -of-the-art IT tools.
- PO2 Analyze problems of mechanical engineering including thermal, manufacturing and industrial systems to formulate design requirements.
- PO3 Design, implement, and evaluate mechanical systems and processes considering public health, safety, cultural, societal and environmental issues.
- PO4 Design and conduct experiments using domain knowledge and analyze data to arrive at valid conclusions.
- PO5 Apply current techniques, skills, knowledge and computer based methods & tools to develop mechanical systems.
- PO6 Analyze the local and global impact of modern technologies on individual organizations, society and culture.
- PO7 Apply knowledge of contemporary issues to investigate and solve problems with a concern for sustainability and eco-friendly environment.
- PO8 Exhibit responsibility in professional, ethical, legal, security and social issues.
- PO9 Function effectively in teams, in diverse and multidisciplinary areas to accomplish common goals.
- PO10 Communicate effectively in diverse groups and exhibit leadership qualities.
- PO11 Apply management principles to manage projects in multidisciplinary environment.
- PO12 Pursue life-long learning as a means to enhance knowledge and skills.

## 5. Overview of Academic Programs:

Academic Program		Duration	Intake
B. Tech	Mechanical Engineering	Four Year	60
M. Tech	Manufacturing Engineering	Two Years	18
M. Tech	Thermal Engineering	Two Years	18
Ph. D.	Mechanical Engineering	NA	NA

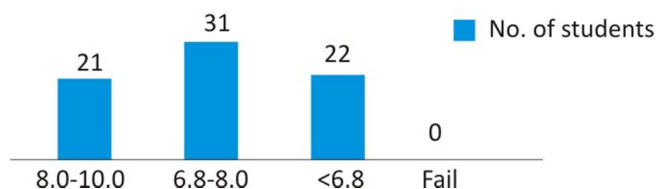
### 5.1 UG Students Statistical Information

Year	Open			SC			ST			OBC			VJNT			SBC			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
First	14	3	17	7	2	9	3	2	5	17	4	21	8	3	11	1	0	1	50	14	64
Second	14	6	20	6	3	9	1	0	1	16	6	22	5	1	6	1	0	1	41	19	59
Third	28	7	35	7	3	10	3	1	4	21	5	26	8	2	10	2	2	4	69	20	89
Four	18	7	25	7	3	10	5	0	5	21	8	29	5	3	8	2	0	2		21	79

### 5.2 Result Analysis:

B. Tech Pass Out Data (CGPA)	
Pointer	No. of Students
8.0-10.0	21
6.8-8	31
<6.8	22
Fail	00
Total	74

#### Result Analysis Final Year B.Tech.



### 5.3 Campus Placements:

Following students from the department have got campus placement during academic year 2017-18.

Sr. No.	Reg. No.	Name of Student	Name of Company	Salary
1	20150180	Palak Sadhwani	Sudarshan Chemicals, Roha.	4 LPA
2	20140160	Vijay Wayal	Lakshmi Organics Industries LTD., Mahad.	2.4 LPA
3	20140153	Isamoddin Shaikh	Lakshmi Organics Industries LTD., Mahad.	2.4 LPA



## 6. Faculty and Staff:



Dr. M. Sadaiah  
Associate Professor and Head of Department  
B. Tech (Mechanical Engg.)  
M.E. (Production Engg.)  
Ph.D. (Manufacturing Engg.)



Dr. M. S. Tandale  
Professor  
B.E. (Mechanical Engg.)  
M.Tech. (Mechanical Engg.)  
Ph.D. (Mechanical Engg.)



Dr. V.G. Sargade  
Professor  
B. Tech. (Mechanical Engg.)  
M. Tech. (Mechanical Engg.)  
Ph. D. (Mechanical Engg.)



Dr. R. P. Kate  
Associate Professor  
B. E. (Mechanical Engg.)  
M. Tech. (Energy Systems Engg.)  
Ph.D. (Mechanical Engg.)



Dr. N. Agrawal  
Associate Professor  
B. E. (Mechanical Engg.)  
M. Tech. (Ref. & AC, Mechanical Engg.)  
Ph.D. (Mechanical Engg.)



Dr. R. S. Pawade  
Associate Professor  
B. E. (Mechanical Engg.)  
M. E. (Machine Tool Engg.)  
Ph.D. (Mechanical Engg.)



Dr. H. N. Warhatkar  
Associate Professor  
B. E. (Mechanical Engg.)  
M. Tech. (Mechanical Engg.)  
Ph. D. (Mechanical Engg.)



Dr. B. F. Jogi  
Associate Professor  
B.E. (Mechanical Engg.)  
M. Tech. (Manufacturing Technology)  
Ph.D. (Nano Materials)



Dr. H. S. Joshi  
Assistant Professor  
B.E. Production Engg.  
M.E. Mechanical-CAD/CAM  
Ph.D. Mechanical Engg.



Prof. G. S. Warkhade  
Assistant Professor  
B.Tech. (Mechanical Engg.)  
M.Tech. (Thermal and Fluids Engg.)  
Ph. D. (Synopsis submitted) (Mechanical Engg.)



Dr. D. B. Waghmare  
Assistant Professor  
B. E. (Mechanical Engg.)  
M. E. (Mechanical - Production Engg.)  
Ph. D. (Mechanical Engg.)



Prof. S. R. Dhale  
Assistant Professor  
B. E. (Mechanical Engg.)  
M. E. (Design Engg.)  
Ph.D. Ongoing  
(Manufacturing Engg.)



Prof. A. J. Chapekar  
Adjunct Faculty  
B. E. (Mechanical Engg.)  
M. Tech (Thermal Engg.)  
MBA (Marketing)

#### Contractual Faculty



Mr. Ajay Chavan  
Assistant Professor  
M. Tech (Manufacturing Engg.)



Mr. Shrikant Thorat  
Assistant Professor  
M. Tech (Manufacturing Engg.)



Mr. Shirish Kadam  
Assistant Professor  
M. Tech (Manufacturing Engg.)



Mr. Bhushan Nikam  
Assistant Professor  
M. Tech (Manufacturing Engg.)



Mr. P D Agwane  
Post: Assistant Professor  
M. Tech (Manufacturing Engg.)



Mr. N K Nagothkar  
Assistant Professor  
M. Tech (Manufacturing Engg.)

#### Technical Supporting Staff



Mr. Amrut Budha Choudhari  
Lab Technician  
SSC, NCTVT (Chemical),  
B.A.  
Experience: 26 years.  
In dept.: 8 years



Mr. S. G. Lad  
Lab Technician  
B.Sc. (Chemistry)  
Experience: 23years.  
In dept.: 8 years



Manisha Umesh Sakate  
Lab Assistant  
B.Sc.  
Experience: 7.6 years  
In dept.: 1.5 years



## **7. Additional Responsibilities to the Faculty:**

### **Dr. M. Sadaiah**

Head, Mechanical Engineering Department  
Associate Coordinator TEQIP-II

### **Dr. M.S. Tandale**

Coordinator QEEE

### **Dr. V.G. Sargade**

Member, BoS for Mechanical Engg.  
Member, Library Committee  
Member of Academic Audit Committee of SPFU

### **Dr. N. Agarwal**

Training and Placement Officer  
Coordinator, Industry-Institute Interaction Cell, TEQIP-II  
Faculty Advisor, M. Tech Program in Thermal and Fluids Engineering  
Faculty Advisor, ISHRAE Chapter

### **Dr. R. S. Pawade**

Nodal Officer, TEQIP II Procurement Cell  
Coordinator, UGC Cell  
In-charge, Security Section  
Workshop Superintendent  
In-charge, Seating Arrangement University Examinations  
In-charge, Minibus Transport

### **Dr. H. N. Warhatkar**

NSS Coordinator

### **Dr. B.F. Jogi**

Rector, Sahyagiri Hostel

### **Dr. H.S. Joshi**

Coordinator, Technical Event Committee  
Chairman, University Alumni Cell

### **Dr. D. B. Waghmare**

Assistant Rector, Sahyagiri Hostel  
Subject Chairman for B. Tech (EG) and M. Tech (AJT and PCT)

### **Prof. S. R. Dhale**

Assistant Rector, Sahyagiri Hostel

### **Prof. A J Chapekar**

BoS member for M. Tech.

## **8. Advisory Board and BoS:**

### **Advisory Board:**

Prof. N.V. Sahasrabudhe  
Dr. S. M. Mane  
Prof. Vijay Nyayadhish  
Shri A. B. Joshi  
Shri. Bhupesh Mall

## **9. Faculty Research and publications:**

### **9.1 Research publications:**

#### **9.1.1 National Conference: Nil**

#### **9.1.2 International Conference**

- Deepakkumar H Patil, Shrikant B Thorat, Rohit A Khake, and Mudigonda Sadaiah, Comparative Study of FeCl<sub>3</sub> and CuCl<sub>2</sub> on Geometrical Features Using Photochemical Machining of Monel 400, 19th CIRP Conference on Electro Physical and Chemical Machining, 23-27 April 2018, Bilbao, Spain, Procedia CIRP 68 (2018) 144-149.
- Shrikant Thorat, Rupesh Dugad and Mudigonda Sadaiah, Design, Analysis and Manufacturing of Bare metal Coronary Stent using PCM, Processings of 10th International Conference on Precision, Meso, Micro and Nano Engineering (COPEN 10) December 07-09, 2017, IIT Madras, Chennai-600036, India, pp. 129-132.
- N. V. Patil, H. N. Warhatkar, 'An experimental investigation in temperature during bone drilling: A comparative study', Proceeding of 10th international conference on Precision, Meso, Micro and Nano Engineering (COPEN 10), December 6-9, 2017. Indian Institute of Technology, Madras. pp 181-184.
- Kishor Mane, N. Agrawal, Abhijeet Date, Some Investigations of External Shading Devices on Thermal and Day lighting Performance of a Building, 6th Int. conference on Advances in Energy Research ICAER 2017, 12 – 14 Dec 2017, IIT Bombay, Springer Proceedings.
- Mayur Brahmkar, N. Agrawal, Abhijit Date, Performance analysis of windows with Integration of daylight and artificial light: A case study, ATSMDE 2017 VJTI Mumbai, 21-22 Dec, 2017.

### 9.2.3. International Journals:

- Nitin D. Misal, Atul R. Saraf, and Mudigonda Sadaiah (2017), Experimental Investigation of Surface Topography in Photochemical Machining of Inconel718, Materials and Manufacturing Processes, <http://dx.doi.org/10.1080/10426914.2017.1317786>, Taylor and Francis, Impact factor: 1.67
- Deepak kumar H. Patil and Mudigonda Sadaiah (2017), Investigation on effect of grain orientation on surface roughness and depth of etch in chemical etching, Materials and Manufacturing Processes, <http://dx.doi.org/10.1080/10426914.2017.1291953>, Taylor and Francis, Impact factor: 1.67
- Nitin D. Misal and Mudigonda Sadaiah (2017), Investigation on Surface Roughness of Inconel 718 in Photochemical Machining" Advances in Materials Science and Engineering, Vol. 2017, Article ID 3247873, 9 pages, 2017, doi:10.1155/2017/3247873. Impact factor: 1.01
- Ganesh Kadam, Raju S. Pawade, Surface integrity and sustainability assessment in high-speed machining of Inconel 718 – An eco-friendly green approach, Journal of Cleaner Production, Elsevier, Vol. 147, 2017, pp. 273-283.
- Ganesh Kadam, Raju S. Pawade, Water Vapour as Eco friendly Cutting fluid- Parametric Explorations in HSM of Inconel 718, Journal of Materials Science and Surface Engineering, Vol. 5, (7), 2017, pp. 679-684.
- Nilay N Khobragade, Ankur V Bansod, Karan V Giradkar, Awanikumar P Patil, Ketan A Jagtap, Raju Pawade and Abhijeet Moon, Effect of Concentration and Surface Roughness on Corrosion Behavior of Co-Cr-Mo Alloy in Hyaluronic Acid, Materials Research Express, IoP Science Journal, 8 January 2018 • © 2018 IOP Publishing Ltd, UK, Impact Factor 1.06
- Sagar Sakharkar, Raju Pawade, P. K. Brahmkar, Effect of Cutting Environment on Turning Performance of Austempered Ductile Iron (ADI), CIRP Journal of Manufacturing Science and Technology, Elsevier, May 2018.
- Bhagwan F. Jogi and Rushikesh Shinde, Some Studies on Preparation and Mechanical Characterization of Poly-aryl-ether-ketone (PAEK)/MWNT Polymer, Procedia Manufacturing, 20, (2018) pp. 79-84, ISSN 2351-9789, DOI: 10.1016/j.promfg.2018.02.011.
- Madhuri Chaudhari, Bhagwan F. Jogi and R.S. Pawade, Comparative Study of Part Characteristics Built Using Additive Manufacturing (FDM), Procedia Manufacturing, 20 (2018) pp.73-78, ISSN 2351-9789, DOI: 10.1016/j.promfg.2018.02.010.
- Ganesh Lohar and Bhagwan F. Jogi, Influence of Carbon Black (CB) on Mechanical Behaviour and Microscopic Analysis of Poly-propylene (PP)/ Acrylonitrile-butadiene- styrene (ABS) Nanocomposites, Procedia Manufacturing, 20 (2018) pp. 85-90, ISSN 2351-9789, DOI: 10.1016/j.promfg.2018.02.012.
- Bhagwan F. Jogi, A. S. Awale, S. R. Nirantar, H. S. Bhusare, Metal Inert Gas (MIG) Welding Process Optimization using Teaching-Learning Based Optimization (TLBO) Algorithm, Materials Today: Proceedings Journal, 5 (2018) pp. 7086–7095, © 2017 Elsevier Ltd., ISSN 2214-7853, UGC approved Journal No: 49021
- Rinul M. Dhajekar, Bhagwan F. Jogi and Shripad R. Nirantar, Preparation and Characterization of PAEK based Polymer Nanocomposites in the presence of MMT Clay as Nanofiller to study Tensile

and Impact properties, Materials Today: Proceedings 5 (2018) 6848–6854, © 2017 Elsevier Ltd., ISSN 2214-7853, UGC approved Journal No: 49021.

- V. L. Bhanavase and B. F. Jogi, Parametric Study of Friction and Wear for Polyether Ether Ketone (Peek) Composite under Dry Sliding Condition, International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), Volume: 5 Issue: 6, pp. 1141 – 1147, ISSN: 2321-8169, June 2017, <http://www.ijritcc.org/browse/iciime-2017/iciime-2017-track/108>, (Special Issue), Scientific Journal Impact Factor: 5.837, IC Value 5.75, UGC Approved Journal.
- Ganesh S. Warkhade, A. Veeresh Babu, Impact of supercharging and compression ratio on combustion and emission characteristics in a single cylinder DIC engine, (Accepted for presentation and publication in 'International Conference on Power and Energy Applications (ICPEA 2018)--Ei Compendex, Scopus and CPCI' will be held during 7th to 9th April 2018, Hong Kong, China).
- Ganesh S. Warkhade, A. Veeresh Babu, Subhash C. Bose P., Effect of compression ratio on combustion, performance and emission characteristics of linseed biodiesel fueled compression ignition engine, International conference on Energy, Environment and Economics, held on 11-13 December 2017 at Heriot-Watt University, Edinburgh, UK.
- Sahu Anjan, Agrawal N, Nanda P. A parametric study of transcritical CO2 simple cooling cycle and combined power cycle, Int. J Low Carbon Technology, In press
- Pravin Jadhav, Agrawal N. Study of Homogenous Two Phase Flow through Helically Coiled Capillary Tube, Advance Science, Engineering and Medicine, 2018, 10, 1-5.
- Pravin Jadhav, Agrawal N. A comparative study of straight and spiral adiabatic capillary tube, Int. J. of Ambient Energy (T&F), 2018, H index 18 (in press).
- Desai Sandip, Pawade R.S, Warhatkar H. N., Effect of high speed dry machining in surface integrity and biodegradability of Mg-Ca 1.0 Biodegradable alloy ' Materials Today: Proceedings, Elsevier publication, Vol.4, Issue 6 (2017), pp 6718-627.

## 11. Laboratory:

### 11.2 Major Instruments in Laboratory:

Sr. No.	Name of Instrument	Qty.	Total Cost
1	CNC TRAINER LATHE with Supporting Software, Training Manuals	01	4,79,476.69/-
2	CNC MILL TRAINER MT- 200 with Supporting Software & Training Manuals	01	4,62,272.36/-
3	A.C. 1.5 Tonnes Videocon,	03	77,000/-
4	CAD / CAM Table, Size: H 30" X L 96" X W 24", 6 Drawer with Lock	10	92,936/-
5	Computer system	06	1,92,000/-
6	HP Compaq system	05	1,75,000/-
7	Liebet make Online UPS	01	77,480/-
8	HP Compaq Presario Computer System SR1530	05	1,92,500/-
9	HP Compaq Presario Computer System SR1530	05	1,92,500/-
10	Desktop HP DX 7200 Processor Computer System	15	6,52,500/-
11	Desktop HP DX 7200 Processor Computer System	05	217500/-
12	Desktop HP DX 7200 Processor Computer System	10	4,18,270/-
13	Computer Application Software ( Autodesk Inventor Professional 2008 Education Network Copy ) ( Sr. No. 346-8911-0604, 0998, 1255,1592,1889,2186,2483,0703,1790,1493,1097,1394,1691,1988, 2285,2582,0802,1196,2087,2384 )	20	6,34,400/-
14	Computer Application Software ( Autodesk Inventor Professional 2008 Education)	20	90,000/-
15	Online UPS System of KVA Capacity	01	2,27,595/-
16	Laptop DELL Vostro 1510 ( Sr. No. 68GL2BS, D8GL2BS, 26HN2BS,68GL2BS, B8GL2BS, 78GL2BS, CIDN2BS, 58GL2BS,	11	4,34,500/-

	88GL2BS, 98GL2BS, 48GL2BS )		
17	HP/8300 (Item No.33) Desktop computer with preloaded operating system Microsoft windows 8	20	7,56,000/-
18	HP/830 (Item No..33)Desktop Computer with Prebated operating System	15	
19	i) Carbon Dioxide 2 kg	01	19,096.87/-
	ii) Foam Mechanical	01	
	iii) Water	01	
20	Drawing Desk Frame	110	55,249/-
21	Drawing Stool	180	52,189/-
22	G.I.Pipe 2350 mm dia	8mtr	68,888/-
23	Fluid Mechanics Test Bench	02	2,95,510/-
24	SAJ make Eddy curent dynamometer	01	1,12,760/-
25	Constant temprecher oil bath with ms powder stand	01	68,000/-
26	Metzer - m Trinolar Research metallurgical microscope	01	1,24,110/-
27	Microhardness Tester Shimadzu make	01	1,602300 yan
28	Measuring microscope	01	404468 yan
29	Automatic Specimen mounting press Bain mount	01	1,18,390/-
30	Slip Gauge Accessories	1 set	1,58,207/-
31	Digital Venturis 466 as Nodes	04	3,62,660/-
32	2KVA CVT Elect.	01	95,250/-
33	Rank Tailor Hobson Surface Roughness Testing Instrument Surtronic 3+(Battery Operated Printer)	01	1,90,179/-
34	Gear Roling Tester	01	96,286/-
35	Baker Dot Matrix 24 column print Module "PM" suitable for ED1/EC10	01	10,400/-
36	Monochromatic Light Source	01	52,312/-
37	Refrigeration Test Rig	01	75,240/-
38	Pyrometer	01	1,44,000/-
39	Universal Testing Machine	01	1,50,000/-
40	Pyranometer	01	1,84,653/-
41	Vibration Laboratory	01	86,130/-
42	Cam Analysis Apparatus	01	37,125/-
43	Journal Bearing Apparatus	01	66,037/-
44	Coriolis Acceleration Apparatus	01	79,531/-
45	Lab View Software	01	1,41,614/-
46	CRIO-9025	01	3,15,188/-
47	CRIO-9118	01	2,94,228/-
48	NI 9234	01	2,43,661/-
49	NI 92194	01	72,181/-
50	12" Industrial Panel	01	72,181/-
51	PS-2 Power supply for field point	01	1,68,074/-
52	CDAR 9174 Compact	01	83,250/-
53	Stat graphics centurion professional xv -01 box with CD and Manual	02	62,450/-

54	Metallurgical sample saw	01	1,23,750/-
55	Wear and Friction monitor	01	3,93,750/-
56	Refrigeration test ring	01	84645/-
57	Fluid mechanics test bench 02	01	2,95,510/-
58	Signal cylinder Two stroke petrol engine test ring.	01	87,912/-
59	Fluid mechanics test bench 01	01	1,85,364/-
60	Heat transfer in Forced Convection	01	59,061/-
61	Wire Electrical Discharge Machine- ECOCUT- Electronica	01	2509000/-
62	Constant temperature oil bath with ms powder stand	01	68000/-
63	Inverter 600 VA luminous make	01	10940/-
64	Electromagnetic Flow Meter	01	23388/-
65	Magnetic dial stand	01	6750/-
66	Monochromatic Light Source	01	45562/-
67	Mounting Arrangement	01	6325/-
68	Erichsen cupping tester	01	41468/-
69	CNC Simulators for offline programming (HASS USA Make, Model: CSMD)	06	999000/-
70	High Speed Camera	01	2298339/-
71	Mini smart classroom	01	178925/-

### 11.3 Laboratory Expenditure:

Sr. No.	Name of the Laboratory	Total cost of Laboratory
1	Refrigeration and Air Conditioning Lab	1,92,972/-
2	Fluid Mechanics and Fluid Machinery Lab	5,31,089/-
4	Renewable Energy Lab	2,56,584/-
5	I.C. Engine	8,28,242/-
6	Thermal Engineering Lab	7,75,634/-
7	Material Science / Engineering Metallurgy Lab	6,68,608/-
8	Material Testing Lab (SOM)	1,85,528/-
9	Photochemical Machining Lab (PCM)	1,14,850/-
10	Theory of Machines And Machine Dynamics Lab/ Engineering Mechanics Lab	20,22,758/-
12	Metrology and Quality Control Lab	18,94,045/-
13	CAD / CAM Lab	18,92,204/-
14	Center for Advanced Machining Technology (CAMT)	13382127/-

## 12. Projects:

### 12.1 Major UG Projects:

S.N.	Project Topic	Name of the Students	Name of the Faculty
1	Effect of Edge Radius on Machining of DSS	Mayureshwar Rathod Himanshu Dhurve Gaurav Nikam Vijay Wayal	Dr. M. Sadaiah

2	Stent manufacturing by using PCM technique	Sandip Manjare, Narayan Bongane, Shrikant Thorat, Shilu Sahu	Dr. M. Sadaiah
3	Development & Characterization of new coating for cutting tools	Nipun Borji Shivam Yadav Amit Adkine	Dr. R S Pawade
4	Design & Fabrication of Flare Fitting mechanism for Teflon pipes	Isamoddin Shaikh Varad Kunsavalikar Khalid Patel JayeshPatil	
5	Design and automation of Hydro Testing fixture for DUFLON industry	Vishal Mahashabde Ronit Bhise Rohit Sankpal Akshay Chaudhary	
6	Design and development of two high cold rolling mill	Aishwarya Pharande, Shubhangi Borkar, Shivkanya Gaikwad, Pragati Ghan	Dr. D B Waghmare
7	Automation of PTFE handling for mould filling operation	Mrunal Alatkhar, Ashish Gavit, Sagar Paithane, Utkarsh Palatkar	

### 12.3 PG Projects:

S.N.	Project Name	Name of the Student	Name of the Faculty
1	Fabrication of Bare Metal Stent using Photochemical Machining	Mr Rupesh S. Dugad (MT2015405)	Dr. M Sadaiah
2	Some Investigations on Orthogonal Turning of SAF 2205 and SAF 2507 Duplex Stainless Steel using PVD Coated Carbide Inserts	Mr. Haresh S. Mahala (MT2015408)	
3	Some Investigations on Surface Roughness and Residual Stresses in End Milling of SAF 2205 Duplex Stainless Steel	Ms Smita V. Bhandare (MT2015401)	
4	Macro Rod Array Fabrication Using Powder-Mixed REDM	Bhushan Nikam	Dr. R S Pawade
5	Turning of Austempered Ductile Iron Using Nano Fluid: A Comparative Study	Abhishek Patil	
6	On-Process Surface Roughness Prediction Using Wavelet Transform In CNC Turning	Jyotsna Bhole	
7	Thermal Aspects In Ultra Precision Diamond Turning	Nandakumar Nagotkar	
8	Preparation and characterization of PEEK based Polymer nanocomposites	Rushikesh Shinde MT2015414	Dr B F Jogi
9	Comparative study of part characteristics built using additive manufacturing (FDM)	Madhuri Chaudhari MT2015403	

### 13. Doctoral Program:

#### 13.1 List of Ph. D Students:

Sr. No	Name of Candidate	Registration Number	Broad Area of Research	Research Guide
1	Thorat Shrikant B.	RS20140115	Some investigations in photochemical machining of cobalt chromium alloy.	Dr. M. Sadaiah
2	Kadam Shirish V.	RS20140117	Some investigations on machinability of SAF2205 and SAF2507 duplex steel in end milling.	Dr. M. Sadaiah
3	Sonawane Gaurav D.	RS20140114	Machinability studies of difficult to cut materials using coated tools with advanced coating materials & techniques.	Dr. V.G.Sargade
4	Chavan Ajay A.	RS20120109	Hard turning using coated carbide tools.	Dr. V.G.Sargade
5	Nipnikar Suresh R.	RS20120112	Machinability Studies of Ti6Al4VELI in Dry and Minimum Quantity Lubrication (MQL) Environment.	Dr. V.G.Sargade
6	Malvade Niket V.	RS20140112	Surface integrity analysis and modelling in machining of Biomedical Magnesium alloy.	Dr. Raju S. Pawade
7	Shinde Babasaheb D.	RS20140113	Machinability assessment of low electrical conductivity ceramics by using WEDM.	Dr. Raju S. Pawade
8	Khadtare Avinash N.	RS20140108	Experimental investigation and modelling in microdrilling of TBC Inconel 718 superalloy.	Dr. Raju S. Pawade
9	Jagtap Ketan A	RS20120104	Investigation on Machined Surface Integrity in CNC Turning of Biocompatible Co-Cr-Mo Alloy	Dr. Raju S. Pawade
10	Madavi Kishor R.	RS20140110	Optimization of welding process parameters.	Dr. B.F. Jogi
11	Lohar Ganesh S.	RS20140109	Structure property relationship studies on polymer nano-composite.	Dr. B.F. Jogi
12	Bhanavase Vishvajit L.	RS20140106	Study of tribological behaviour of polymer composite.	Dr. B.F. Jogi
13	Nirantar Shripad R.	RS20150103	Preparation and Characterization of Polymer based nano composite.	Dr. B.F. Jogi
14	Varier Ranjith S.	RS20150104	Study of machining behaviour of polymer based composite.	Dr. B.F. Jogi
15	Bhise Vishal Y.	RS20150101	Sustainable manufacturing: An Eco-intelligent design of product system	Dr. B.F. Jogi
16	Patil Omprakash S.	RS20120117	Transcritical CO <sub>2</sub> Heat Pump System: Cycle Modification and	

			Optimization	Dr. N. Agrawal
17	Jadhav Pravin L.	RS20120115	CO2 Transcritical System: Studies on Capillary Tube	Dr. N. Agrawal
18	Vinod C Todkari	RS20120118	Investigations on various types of Hydraulic Jump	Dr. R. P.Kate
19	Gujar R.A.	RS20140101	Some investigations in Biomechanical properties of Lower Extremity Bones	Dr. H. N. Warhatkar
20	Pansare S. R.	RS20140102	Some studies on Effect of Crack in Beam/Shaft	Dr. H. N. Warhatkar
21	Patil S.R.	RS20140104	Some studies on investigation into Torsional Vibration Control Using Smart Dynamic Damper	Dr. H. N. Warhatkar
21	Wargante, S.R.	RS20140105	Some studies in Dynamic Analysis of Bones	Dr. H. N. Warhatkar
22	Kadhane Somnath Hanumant	RS20120106	Some investigation into mechanical behaviour of soft biological tissues	Dr. H. N. Warhatkar
23	Maresh Pol	RS20160101	Topic yet to be decided	Dr. H. S. Joshi

#### 14. Industry Institute Interaction:

Sr. No.	Name of the Faculty	Name of Industry and Interaction for
1	Prof. A J Chapekar	Two professional contacts, one each from Manufacturing and Automotive industries engaged as BoS members Generated lead for an industrial project for E&TC department on dual power supply system Generated lead for an industrial project on Stress Analysis for Axial Fan Blade Failure to Mechanical Engineering Department Won two interdisciplinary consulting industrial projects from Oil & Gas industry at University level MNGL campus interviews scheduled for BATU UG students through professional contacts

#### Industry Projects by the students

Sr. No.	Name of the Faculty	Name of the students	Name of Industry
1	Dr. R S Pawade	Isamoddin Shaikh, Varad Kunsavalikar, Khalid Patel Jayesh Patil, Vishal Mahashabde Ronit Bhise, Rohit Sankalp Akshay Chaudhari	DuFlon Industries Private Limited
2	Dr. D. B. Waghmare	Mrunal Alatkhar, Ashish Gavit, Sagar Paithane, Utkarsh Palatkar	DuFlon Industries Private Limited
3	Prof. A J Chapekar	Bhingare Sadhana	Rakhoh Industries, Pune
4	Prof. A J Chapekar	Ruiker Aaditya	Hamon Shriram Cottrell Ltd., Mumbai
5	Prof. A J Chapekar	Kamble Arun, Kshirsagar Rohit	National Chemical Laboratory, Pune



**15. Industrial Visits:**

Sr. No.	Name of the Industry/Organization visited	Dates of Visit	Class of Students & No of Students Visited
1	Reliance data center at Ghansoli, Navi Mumbai, Aditya Ruika	22 -Jan-2018	M. Tech. TFE
2	Freudenberg Filtration Technologies India Pvt. Ltd. At Sanaswadi, Pune	19-Mar-2018	M. Tech. TFE

**16. Conferences /Workshops / Trainings / Academic Awareness activities conducted under TEQIP-II: Nil****17. Expert Talks by Alumni:**

Mr. Prabhat Jha during interaction session

**18. Workshops attended by Faculty members, Research Scholars and PG Students:**

S.N.	Title	Date	No. of participants
1	Effective methods of teaching the course on 'Internal combustion engines and alternate power sources for automobile'.	June 19-24, 2017	Prof. G S Warkhade
2	Thermal management of electronics	October 30 – November 3, 2017	
3	Nanotechnology opportunities and challenges in engineering materials and manufacturing	5-10 March 2018	Dr. D B Waghmare
4	Advanced computational tools in engineering and technology	19-23 March 2018	
5	Mechatronics and industrial automation	26-30 March 2018	
6	Emerging Application of Solidworks in Engineering R & D	17-21 April 2018	
7	Fundamentals & applications of Experimental and Computational Fluid Dynamics (CFD) at College of Engineering, Karad.	5-Mar-2018 to 9-Mar-2018	M Tech TFE student

**Other activities Conducted by Department:**



**Project exhibition during Engineer's Day celebration 2018**



**Students felicitating Faculty Members during Fresher's Party**



**Fresher's Party 2017**



**Smart Classroom Coaching**

## Alumni Meet:



## 22. Academic Achievements:

### 22.1 Faculty Achievements:

Dr. Dhanraj B. Waghmare completed his Ph. D. degree from the Department of Mechanical Engineering of Indian Institute of Technology (IIT), Kharagpur (West Bengal).

Dr. H. N. Warhatkar got “Appreciation Certificate Award” as NSS Coordinator from Government of Maharashtra.

Following list shows the statistics of citation index and impact factor for the papers published,

S.N.	Name of the Faculty	Citation Index	Impact Factor
1	Dr. M Sadaiah	Total citations = 128	2.27
2	Dr. N Agrawal	Total citations = 200	
3	Dr. R S Pawade	Total citations = 648 h index = 8 i10 index = 7	5.0
4	Dr. R P Kate	Total citations = 81	
5	Dr. H N Warhatkar	Total citations = 04	
6	Dr. B F Jogi	Total citations = 98	
7	Dr. H S Joshi	Total citations = 03	

### 22.2 Distinguished Alumni of the Department:

Dr. Shivkumar Iyer, Asstt Professor, Rowan University, USA

Dr. Prashant Waghmare, PhD McMaster, Asstt Professor

Vinay Mhatre, General Manager, Supreme Petrochemicals

Sandip Jadhav: CEO, CC Tech Pune

Sachin Oka, Officer in Indian Army

Sagar Bedmutha, Entrepreneur, Pune

Nagesh Belure: Entrepreneur, Nayantara Enterprises, Pune

Harshal Sonavane: PhD IIT Bombay

A. Shendage: PhD IIT Bombay

Pramod Salunkhe: PhD IIT Bombay

Santosh Bopche: PhD IIT Bombay

Krishna Reddy: PhD IIT Madras

Achyut Bhure, All India GATE Topper, Asstt Professor, SCOE Pune

Dr. Vikas Sargade, Professor, Dr. BATU



### **22.3 Major Students' Achievements:**

Varadrajan J. Kunsavalikar and Himanshu C. Dhurve got 4th position in AQUEST arranged by ISHRAE Mumbai. It was held at Rajiv Gandhi Institute of Technology, Andheri on 21 December 2017.

Winners for SAE Quiz League 2017-18 - Shilu Sahu and Sandip Manjare

Dbatu Team secured overall 28th All India Rank in Enduro Student India-2017 which was held at Coimbatore

### **23. Departmental Students Association**

#### **SAE Working Committee**

Senior Faculty Advisor: Dr. Raju S Pawade

Additional Faculty Advisor: Dr. Hemant Warhatkar

Student Chairperson: Shivam P. Yadav

Student Vice-Chairperson: Utkarsh A. Palatkar

Student Secretary: Isamoddin S. Shaikh

Student Treasurer: Shantanu M. Patil

Student Reception Chair: Adarshkumar B. Singh

Student Program Chair: Parasmita P. Biswas

Student Publicity Chair: Shubham B. Ukey

Student Membership Chair: Vitthal B. Gadekar

#### **ISHRAE Working Committee**

Faculty Advisor: Dr. N Agrawal

President: Saurabh Aher

Secretary: Khushboo Chaudhari

Treasurer: Saurav Sankhe

Active Member: Snehal Warake

Active Member: Saurabh Makode

Active Member: Dheeraj Shukla

Active Member: Minal Kokale

Active Member: Nupoor Mirgane

Active Member: Mandar Patil

Active Member: Aditya Waghmare

Active Member: Komal Mali

Active Member: Tushar Chavan

### **24. Technical Events by Students' Association:**



ISHRAE JOB JUNCTION



ISHRAE JOB JUNCTION



JAMBOREE included a series of events, Technical Paper Presentation (TPP), Mock Interview, Spell Bee, Quiz competition and also a few non technical events like Tech-Click, Poster making, T-shirt design, etc.



Mock Placement – Aptitude Test



Mock Placement – Interview



SQL TEST - A quiz competition arranged by SAEINDIA collegiate club, DBATU, Lonere

## **25. Departmental strengths, Weaknesses, Opportunities and Challenges:**

### **Major Strengths of the Department:**

Highly qualified, committed and stable faculty  
Strong linkages with IIT-B, BARC and ICT Mumbai  
Liberal faculty development policy and attitude  
Residential campus  
UGC grants under 12(B)  
Good research culture & work culture  
Autonomy & academic freedom

### **Weaknesses:**

No grant for M. Tech. Programs: No faculty positions for M. Tech. programs  
Location disadvantages:  
Non-availability of mechanical engineering industry in the vicinity  
Placement  
Attracting visiting faculty  
Infrastructure: Lab space on the ground floor

### **Opportunities:**

Demand for researchers and innovators due to knowledge-driven economies:  
Enhancing M. Tech. programs particularly in inter-disciplinary areas, starting dual degree programs  
Enhancing Ph.D. programs  
To become a QIP Centre for M. Tech. & Ph.D. programs  
Enhancing sponsored research, consultancy, CEPs for academia and industry  
Technical services to rural community by developing appropriate technologies  
Public-private partnerships

### **Challenges:**

Retention of faculty  
Attracting talented students  
Competition from foreign universities and private universities  
Competition from countries like China, Philippines, etc



# Department of Petrochemical Engineering



**Prof. Vasant P. Jawanjal**  
Head & Associate Professor

## 1. Message from Head of the Department

It gives me immense pleasure in presenting the annual report for academic year 2017-18. I feel proud to state that department was involved intensely in the holistic development of its student community in the last year like previous twenty five years. This is reflected in our students performing excellently in different walks of life be it industry, research, academia, management or entrepreneurship.

Department considers academic activity as the one of prime most importance but at the same time students are encouraged to participate and excel in extracurricular activities. Petrochemical Engineering Students Association (PESA), a student body, provides them an ideal platform for this. To tackle the increasing competition in the engineering field, department take conscious efforts by organizing workshops, guest lectures, industrial visits throughout the year.

The department will continue to support and encourage all the students for their overall development in the field of Chemical Engineering and prepares them to face challenges at global level in years to come.

Prof. V. P. Jawanjal  
Head

## 2. Vision and Mission Statements of the Department

### Vision

The Department of Petrochemical Engineering aims to be ranked amongst the best departments in India for its teaching, research, creativity and innovation.

### Mission

To provide high quality education to enable our graduates to identify and achieve their goals.

## 3. About the Department

Department of Petrochemical Engineering holds the unique distinction of being the first department established in this university with the intake capacity of 30 students in 1989. Department has good infrastructure facilities, well equipped laboratories, advanced software and a blend of experienced and young dynamic faculty. Department have organized different workshops at national level on topics like Energy conservation, Plant Utilities and Steam Engineering in the last three years. From the academic year 2008-2009 the intake capacity of students for the department have been increased to 60 from 30. Over the years department faculty have received grants for different projects from AICTE, UGC and TEQIP. Department students are performing excellently in different fields like Industry, Academia, Research and Management all these years.

## 4. Programme Educational Objective and Programme Outcomes

### Programme Educational Objective

Objective      Objective  
Identifier

PEO1	To provide a solid foundation in mathematical, scientific and engineering fundamentals required to solve engineering problems
PEO2	To impart rigorous training to students with good scientific and engineering breadth in core subjects so as to analyze , design and apply knowledge for development of novel products and create solutions for the real life problems
PEO3	To prepare students to excel in technical fields in order to pursue postgraduate programs or to succeed in industry/technical profession, R&D institutions through global and new emerging areas in chemical engineering
PEO4	To develop an ability to understand problems from other disciplines of science and engineering and provide solution by use of his professional skills.
PEO5	To impart skills necessary, as a professional, for adapting rapid changes taking place in the chemical and allied industries as well as getting ready for unconventional industries like software industry
PEO6	To provide environment of knowledge and sense of responsibility towards ethical issues arising due to development of new technologies in the society on large scale

### Programme Outcomes

Outcomes Identifier	Outcome
PO1	The graduates will possess the fundamental knowledge of Mathematics, Physics, Chemistry , Chemical and Petrochemical Engineering
PO2	The graduates will demonstrate an ability to identify, apply , analyze and solve Chemical Engineering problems .
PO3	The graduates will have an ability to develop and design process or operation for synthesis of a product within the realistic constraints
PO4	The graduates will have an ability to use modern engineering tools for analyzing and optimizing different processes and operations
PO5	The graduates will have broad understanding of the impact of Chemical and Petrochemical Engineering field in economic, environmental and social context and also will be aware of the contemporary issues
PO6	The graduates will possess the knowledge of advanced and emerging topics in the fields of Chemical , Petrochemical and Energy engineering
PO7	The graduates will possess communication skills necessary to communicate engineering ideas. The skill set include verbal, written and listening skills.
PO8	The graduates will demonstrate the ability to work and collaborate in heterogeneous teams.
PO9	The graduates will demonstrate the awareness of professional and ethical responsibilities
PO10	The graduates will develop self confidence and ability for lifelong learning

## 5.0 Overview of Academic Programme

### Academic Programs

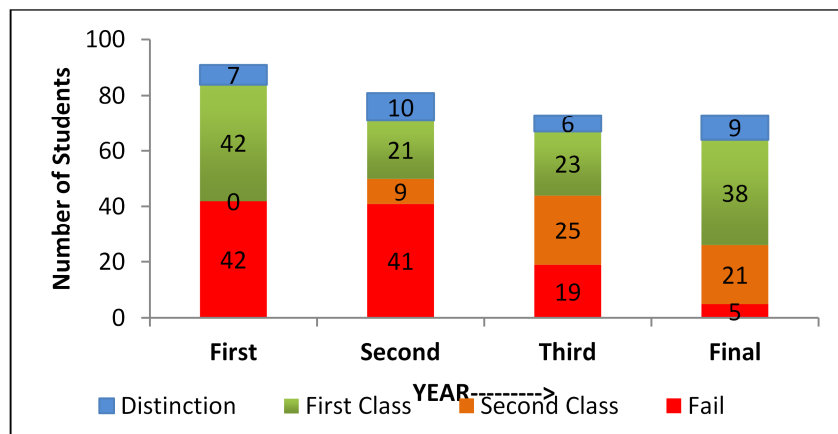
Academic Programme	Name of Programme	Duration	Intake
Bachelor of Technology (B. Tech.)	Petrochemical Engineering	Four Years	60



## UG Students Statistical Information

YEAR	OPEN			SC			ST			OBC			VJNT			SBC			JK			NT-1			TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
First	15	2	17	8	2	10	1	0	1	20	3	23	6	0	6	3	0	3	0	0	0	0	0	0	53	7	60
Second	20	6	26	5	2	7	0	0	0	17	5	22	5	0	5	1	0	1	0	0	0	1	0	1	49	13	62
Third	21	4	25	11	6	17	3	0	3	22	8	30	7	0	7	0	0	0	2	0	2	0	0	0	66	18	84
Fourth	18	6	24	6	3	9	0	0	0	16	1	17	2	9	3	0	3	0	0	0	0	0	0	0	50	21	71

## Result Analysis



## Placement

Placement Statistics	
2017-18	09

## Details of Students Placed in the Year 2017-2018:

Sr. No.	Name of the Student	Organization
01	Mr. Ravindra Singh Girase	Laxmi Organics Industries Limited
02	Ms. Reeya Patil	Prop Technotype Pvt. Limited
03	Mr. Hitesh Patil	Krishna Enterprises
04	Mr. Akshay Bhalerao	Sanika Chemicals Mahad
05	Mr. Rahul Katke	Deepak Novachem, Chiplun
06	Mr. Revansiddh Jawlekar	Supreme Petrochemicals Nagothane
07	Mr. Omprakash Suthar	Deepak Novachem, Chiplun
08	Mr. Shinde Pranesh	Supreme Petrochemicals Nagothane
09	Mr. Arban Surbha	Sanika Chemicals Mahad

## 6.0 Faculty and Staff



Mr. Vasant P. Jawanjal  
Associate Prof. & Head  
M. Tech. (Petrochemical  
Technology)



Mrs. S.S. Metkar  
Assistant Professor  
M. Tech. (Chemical  
Engineering)



Dr. Mrs. S.M. Mhatre  
Assistant Professor  
M. Tech. (Chemical  
Engineering)



Mr. Ramansingh  
Thakur  
Assistant Professor  
M. Tech. (Chemical  
Engineering)



Mr. Arun Sontakke  
Assistant Professor  
M. Tech. (Chemical  
Engineering)



Mr. Saudagar  
Dongre  
Assistant Professor  
M. Tech. (Chemical  
Engineering)



Ms. Shital Sakpal  
Assistant Professor  
M. Tech. (Chemical  
Engineering)



Mr. Ashitosh  
Darekar  
Assistant Professor  
M. Tech. (Chemical  
Engineering)



Ms. Sanghamitra Purnekar  
Assistant Professor  
M. E. (Chemical  
Engineering)



Mrs. Priyanka Ware  
Lab Assistant  
B. Sc. Chemistry



Ms. Lochana Patil  
Lab Assistant  
Diploma (Chemical  
Engineering)



Mrs. Megana Palkar  
Lab Assistant  
Diploma (Chemical  
Engineering)

## 7.0 Advisory Board

Sr.No.	Name	Desination	Organization/Industry
01	Shri. Mahesh Purohit	General Manager	Aquapharma Ltd .Mahad
02	Shri. Suyog Sheth	Site Manager	Akzo Nobel India Ltd.Mahad
03	Shri.Parag Karambele	Manager -Technical	Excel Industries Ltd. Roha
04	Prof. Virendra Rathod	Professor	I.C.T. Mumbai
05	Dr. Amol Kulkarni	Scientist	N.C.L. Pune

## 8.0 Laboratory

### 1. Petroleum and Petroleum Products Testing Laboratory:



This laboratory is equipped with all basic testing equipment required for conducting the prescribed tests for petroleum and petroleum products. All the tests are conducted as per the ASTM standards and students are given rigorous training by involving them actively with due precautions.

### 2. Petrochemical Synthesis and Petroleum assay Laboratory

This laboratory is mainly used for dealing with synthesis part of petrochemicals. Laboratory has all the necessary equipment and facilities like different types of glass reactors and autoclave for conducting high pressure reactions. This laboratory have setups like True Boiling Point (TBP) apparatus, different test engines rigs like Diesel and Petrol Engines, split bed reactors etc.



### 4. Analytical Laboratory

This laboratory is equipped with modern and sophisticated instruments like GC, HPLC, UV-spectrophotometer, Trace metal analyzer, Ion chromatograph and Rheometer. Department has invested Rs. 50 lac for this laboratory and is mainly used by Final year B.Tech. students, M. Tech. students and Research scholars for their research work. In addition, department shares all the Chemical Engineering laboratories in cooperation with Chemical Engineering Department.



#### 5. Computer Laboratory

Department provides excellent computational facilities with the help of this laboratory. Laboratory has in all 15 computers with licensed software available for use.

This laboratory is used for conducting practical of subjects like Numerical Methods and Computer Programming and others.

#### 9. List of major equipment and other facilities:

Sr. No.	Name of Major Equipment/Facility	Cost (>Rs. 1,00,000/-)
01	Gas Chromatograph	8.5 lakh
02	UV Spectrophotometer	3.1 lakh
03	Trace Metal Analyzer	5.8 Lakh
04	Ion Chromatograph	8.5 Lakh
05	High Performance Liquid Chromatography	1.25 lakh
06	Rheometer	17 lakh
07	Surface Area Analyser (BET )	3.00 lakh
08	Autoclave (High Pressure Reactor )	1.5 lakh
09	Particle Size Analyzer	5.0 Lakh

#### 10. Projects:

##### Major Project Topics List Year – 2017-2018

Sr. No.	Roll No.	Name Of Student	Project Title
1	20150581	Patil Sanyukta	Biodiesel synthesis from algae
	20150584	Shinde Namrata	
	20150585	Shinde Pranesh	
2	20140501	Adsul Vishal Ramesh	Energy for future from petro crops: A renewable resource
	20140518	Jawalekar Revansiddh	
	20140510	Ghorpade Viraj Rajesh	
	20140562	Gadsing Akash Abhiman	
3	20150578	Konje Sujan	Removal of phenol from wastewater by using natural adsorbent
	20150572	Bhandarkar Salman	
	20150573	Bhalerao Akshay	
4	20140542	Rane Sachin Vilas	Removal of free fatty acids from waste cooking oil by adsorption
	20140543	Saraf Chinmay Pramod	
	20140522	Kashetti Shrutika Vijay	
5	20140512	Giram Datta D.	A comparative study of catalytic and non-catalytic pyrolysis of polyethylene
	20140513	Girase Ravindra Singh	
	20140535	Patil Mayur Deoraoji	

6	20140504	Bhandarkar Shubham N.	A design and analysis of absorption refrigeration system using different ionic liquid pairs
	20140505	Bhole Dipak Gajanan	
7	20150582	Poilkar Ruchita	Design of multieffect evaporator for distillary spent wash
	20140563	Barbatkar Pranjali U.	
8	20140516	Jadhao Rushikesh R.	Minimization of toluene losses from evaporator and optimization of energy used in PAC plant
	20140547	Shinde Namrata B.	
	20140549	Yadav Divya Sunil	
9	20140538	Pawar Kailas Bhimrao	Synthesis of biodiesel from waste cooking oil
	20140524	Kolhe Ram Babasaheb	
10	20140534	Patil Hitesh Manohar	Intensification of liquid emulsion membrane for removal of palladium and precious metal
	20140528	Mhatre Gauri Vinayak	
	20140536	Patil Reeya Gautam	
11	20140526	Malusare Pawan D.	Synthesis of superabsorbent by using microwave irradiation
	20140509	Dudka Nikhil Avinash	
	20140519	Juwatkar Raj Jeevan	
12	20140530	More Bhima Yallappa	Extraction of lignocellulose
	20140525	Magar Tanaji Yallappa	
13	20150588	Yadav Aniket	Development of true boiling point data and simulation of atmospheric crude distillation column using Aspen plus
	20150583	Shewale Payal	
	20150586	Omprakash Sutar	
14	20140548	Tichkule Leena Rajendra	An efficient removal of disperse dye from waste water using zeolites synthesized by using cenospheres
	20140545	Shegokar Aaditi Anil	
	20140550	Bobde Chaitali Mahendra	
15	20150576	Rahul Katke	Artificial photosynthesis
16	20140546	Shimpi Dipak Dattatraya	Experimental study of waste tyre processing and TPO blending
	20140556	Katkamwar Shubham N.	
	20140529	Mishra Shivam Awadhesh	
17	20150580	More Sanket	Biogas production from cow dung by addition of kaoline
	20150575	Dongre Swapnil	
	20150571	Ambonkar Saurabh	
18	20150577	Khaire Akshay	Experimental investigation on effects of ethanol blending on gasoline fuel
	20130542	Pawar Satish Shantaram	
	20130503	Arban Saurabh Subhash	
19	20150574	Chitake Chaitanya	Removal of chloride from aqueous media by using natural adsorbent
	20150579	Malusare Akshay	
	20130539	Patil Shubham	
20	20140531	Moulvi Namira Siddik	Oxidative products from glycerol
	20140532	Mudhe Mahesh A.	



	20140503	Baig Mohd Uzer M.	
21	20140506	Bhosale Shivani Suresh	Simulation and analysis of production of acetonitrile in Aspen plus
	20140502	Aswale Samruddhi A.	
	20140511	Ghuge Asmita	
23	20150589	Yede Apurva	Design of gasifier for municipal solid waste and energy generation
	20140539	Phadatare Dhanashri S.	
23	20140540	Rajput Kunal Zumbarsing	Investigation and optimization of anti-solvent (with ultrasonication) crystallization process
	20140537	Patil Sanjeet Sanjay	
	20140551	Yash Jayant Chaudhari	
24	20140560	Pathade Himonshu N.	Production of oxalic acid
25	20140521	Karlekar Shubham	To study the role of CaO in manufacturing of sugar
	20140515	Hirak Pratik Pradeep	
26	2013561	Konje Suraj	Experimental study of re-refining of used lubricating oil
	20140574	Dhilpe Smita Sanjay	
	20150587	Vrushali Tayade	

## 11. Industry Institute Interaction

### 11.1 Industrial Visits



All third year B.Tech. students participated in a one day Industrial Visit to ONGC Uran in two groups, each of 35 students, from 1st November, 2017 and second group on 2nd November, 2017 respectively. Faculty Prof. Saudagar Dongare, Prof. Ramansingh Thakur, Prof. Shital Sakpal, Mr. Kailas Sontakke.

Industrial visit of First year B.Tech. students was arranged to Common Effluent Treatment Plant, Mahad MIDC on 3rd November, 2017. Prof. Arun Sontakke and Prof. Ashitosh Darekar coordinated the entire activity.





### 12.1 Guest Lectures Conducted

- Guest lecture was arranged on “Risk Assessment” by Mr. Shridhar (retired from SHELL) from 01/09/2017 to 04/09/2017 for third and final B.Tech. students of Petrochemical and Chemical Engineering. Coordinator of the lecture was Prof. S. B. Dongare.
- Guest lecture was arranged on “Green Technology” by Dr. Gunjan Deshmukh from ICT Mumbai on 17/02/2018 for third and final B.Tech. students of Petrochemical and Chemical Engineering. Coordinator of the lecture was Prof. A. D. Darekar.
- Guest lecture was arranged on “Nanotechnology” by Mr. Arun Nikam from NCL Pune on 21/02/2018 for third and final B.Tech. students of Petrochemical and Chemical Engineering. Coordinator of the lecture is Prof. R. V. Thakur.
- Guest lecture was arranged on “Green Technology” by Mrs. Nalini Suryawanshi from NCL Pune on 21/02/2018 for third and final B.Tech. students of Petrochemical and Chemical Engineering. Coordinator of the lecture was Prof. A. D. Darekar.
- Guest lecture was arranged on Motivational session on “Eureka Moment” by Mr. Sham Kumbhar from Pune on 07/04/2018 for Third and Final year B. Tech. students of Petrochemical and Chemical Engineering. Coordinator of the lecture was Prof. V. P. Jawanjal.

## 12.2 Workshop / Training Conducted by Department

- One month DWSIM training programme was organized by department with Coordination of Spoken Tutorial Team, IIT Bombay from 6th February 2018 to 5th March 2018. Co – Ordinator of workshop is Prof. Saudagar Dongare.

Total Student Registered:

B.Tech. Petrochemical	-	18
M.Tech. Chemical	-	06
B.Tech. Chemical	-	06

## 13.0 Workshop attended by faculty, Staff and Students of Department:

### 13.1 Departmental Faculty Activities:

- Prof. V. P. Jawanjale attended Reliance Industries (RIL) sponsored and DBATU supported Center of Chemical Process Safety (CCPS) faculty workshop on September 2017, AIChE the Global Home of Chemical Engineers Certificate of “Professional Development Hours”.
- Dr. S. M. Mhatre attended fifteen days FDP on AICTE approval “Pedagogy for online and Blended Teaching Learning process” IIT Bombay online course from 14th September 2017.
- Dr. S. M. Mhatre attended fifteen days FDP on AICTE approval “Foundation Programme in ICT of Education” IIT Bombay online course from 25th July 2017.
- Prof. Saudagar Dongare attended twenty days “Induction Training Programme” at IIT Bombay from 28th November to 20th December 2017.
- Prof. Arun Sontakke attended six months S.T.T.P on, “Education Leadership” conducted by NPTEL during July to December 2017 online course.
- Prof. Arun Sontakke attended six months S.T.T.P on, “Introduction to Psychology” conducted by NPTEL during July to December 2017 online course.
- Prof. Ms. Sheetal Sakpal and Prof. Ms. Sanghamitra Purnekar attended two days on “Pedagogic Techniques” From 20th to 21st January 2018 Faculty Development Programme at IIT Hyderabad.

### 13.2 Departmental Staff Activities:

- Mrs. Priyanka N. Ware attended two months Training Programme on, “Basic Electrician” at Vanvasi Ashram Shala Nijampur Road - Mangaon from 1st September to 3rd November 2017.
- Mr. Kailas P. Sontakke attended two months Training Programme on, “Basic Electrician” at Vanvasi Ashram Shala Nijampur Road - Mangaon from 1st September to 3rd November 2017.

### Student Activities:

- Mr. Rajesh Mahale attended Three months NPTEL online course on “Communication Skills – Developing Soft Skills and Personality” from July to September 2017.
- Mr. Chinmay Saraf Participated in Youth Conference.
- 1st prize under UG category at Recent Advances in “Chemical Science and Technology (RACSTE)” at NMU Jalgaon. Conference is held on 30th and 31st January 2017.
- Mr. Rushikesh Jadhav, Ms. Namrata Shinde, Mr. Nikhil Dudka, Ms. Divya Yadav, Ms. Shrutika Kashetti, Mr. Viraj Ghorpade attended “Solvay India” Conference.
- Ms. Rashmi Charde, Mr. Rushikesh Jadhav, Ms. Pranjali Barbatkar, Ms. Namrata Shinde attended Two days National Conference “Prakalp – 2017” at MIT Alandi from 8th to 9th September 2017.
- Mr. Datta Giram, Mr. Ravindrasingh Girase, Mr. Rushikesh Jadhav, Ms. Divya Yadav, Ms. Namrata Shinde, Ms. Chaitali Bobade attended National Conference “SCHEMCON - 2017” at NIT Rourkela from 7th – 8th October 2017.

## 14.0 Other Activities Conducted by Department

- PESA organized Technical Events Poster Presentation and Chess Competition on Engineers Day 15th September 2017 Co-Ordinator of this event Prof. Saudagar Dongare.
- A Thalassemia Screening Camp is organized for 2nd year student by National Service Scheme headed on Prof. Saudagar Dongare all 2nd year students for Blood Testing at University on 18th September 2017.



- Department organized on the occasion of Vijayadashmi (DASARA) Durga Pooja and Laboratory Pooja in Petroleum Testing Lab. All faculty and staff members and students were present for the same.
- Department organized Fresher's Welcome Function in Auditorium Hall, IOPE on 20th October 2017 Co-Ordinator of this event Prof. Saudagar Dongare.
- Department organized Birth Anniversary of Late Indira Gandhi in DBATU on 19th November 2017. All faculty and staff members were invited for this programme. Mr. B. S. Panavkar organized the event.
- Department had organised "Constitution Day – 2017" in the University Conference Hall on 27th November 2017 at 11:00 pm. All faculty, Staff members and students of the University was invited. Co-ordinators of this event were Mr. Kailas Sontakke and Mr. B. S. Panavkar.
- Department organized small Alumni meet for 1994 passout student in the Edusat room on 30th December 2017. Final year students interacted with all the alumnies. Co-ordinator of this event was Prof. Saudagar Dongare.
- 2nd year students organized technical event "Fest – Techno" on 19th, 20th and 24th January 2018. This is open to all the University. Co-ordinator of this event was Prof. Saudagar Dongare.
- Department organized Global Alumni Meet 2018 in IOPE Auditorium on 24th February 2018 at 10:00 am. 1st to final year students interacted with all the alumnies. Co-ordinator of this event was Prof. Ramansingh Thakur.



**B.Tech. (Petrochemical Engineering) Last year batch group photo**

## 15.0 Academic Achievements

### 15.1 Distinguished Alumni of the Department

Sr. No.	Name of Alumini	Designation and Company
1	Mr. Siddhartha Desai	Entrepreneur, Option Engineering Pvt. Limited, Jogeshwari Mumbai
2	Mr. Durgesh Karande	Asst. Vice President, Polaris Financial Technology Ltd.
3	Mr. Amit Agvekar	Manger –Projects, Cognizant Technology Solutions India Pvt. Ltd. Pune
4	Mr. Manish Garg	Sr. Project Engineer- Manglore Refinery and Petrochemicals Ltd.
5	Mr. Ravindra Bhosale	Manger-Project, Embio Limited MahadRaigad

6	Mr. Suyog Shet	Site Manager- Akzo Nobel Chemicals (India) Ltd. MahadRaigad
7	Dr. Shrish Sonawane	Associate Professor, National Institute of Technology – Warangal (A.P.)
8	Mr. Makarand Kurkure	Project Leader- Larson and Toubro Infotech Ltd, Powai Mumbai
9	Dr. Sharad Sonnatkke	Associate Professor Department of Chemical Engineering, ICT-Matunga Mumbai
10	Mr.Laxmikant Powale	Lead IP Professional, GE India Technology Centre Pvt. Ltd Bangalore
11	Mr.Ajit Pawar	Sr.Manager-Process & Tech. ARMACO Consultant Pvt. Ltd.Mumbai

### 15.3 Students' Achievements

- Mr. Rushikesh Jadhav, Final year B. Tech. student, First prize under UG category at Recent Advances in Chemical Science and Technology (RACSTE) at NMU Jalgaon. Conference was held of 30th and 31st January 2017.
- Mr. Revansidha Jawlekar, Final year B. Tech. student, is awarded as Best Volunteer as state level NSS.



- Mr. Rushikesh Jadhav, final year B.Tech. students, was the recipient of POSCO TJ Park Foundation Scholarship for Academic Excellence during the year 2016 - 17.
- 3rd year student of Mr. Anup E. Jawale were declared as a recipient for Shree Brihad Bhartiya Samaj Scholarship, Mumbai.
- Final year student of Mr. Omprakash L. Suthar were declared as a recipient for Shree Brihid Bhartiya Samaj Scholarship, Mumbai.
- Final year student of Mr. Pranesh D. Shinde were declared as a recipient for Shree Brihid Bhartiya Samaj Scholarship, Mumbai.
- 2nd year student of Mr. Sachin S. Mudegol were declared as a recipient for Shree Brihid Bhartiya Samaj Scholarship, Mumbai.
- 2nd year student of Mr. Shankar G. Malusare were declared as a recipient for Shree Brihid Bhartiya Samaj Scholarship, Mumbai.

### 16.0 Petrochemical Engineering Students Association

#### PESA Council 2017-18

President:

Mr. Ravindrasingh Girase

Cultural Secretary (Boy's Representative)

Mr.Rahul Katake

Cultural Secretary (Girl's Representative)

Ms. Divya Yadav

Sports (Boy's Representative)

Mr. Bhima More

Sports (Girl's Representative)

Ms. Chaitali Bobade

Literature Secretary (Boy's Representative)

Mr. Sagar Chaudhari

Literature Secretary (Girl's Representative)

Ms. Akshata Ghosalkar

Treasurer

Mr. Chinmay Saraf

Petrochemical Engineering Students Association published PESA Magazine 2017 in Farewell Party function on 28 April 2017

## 16. Extracurricular Activities

Freshers 2K17



Farewell 2K18



**Engineers Day  
Celebration**



## 17. Students' Other Activities

### ABHIYANTA VASANT 2K18 Participants and Winners

Group No	Name	Year	Events
1	Akshaya Mane Shruti Gajbhiye Sayali Tekade	Final Year	Group Dance Winner (Gold Medal)
2	Parag Teppalwar Kaustubh Amodkar	Final Year	Stage Setup and Decoration
3	Chinmay Saraf	Third Year	Poetry Runner up (Silver Medal)
4	Rahul Katke	Third Year	One Act, Skit, & Anchoring
5	Ravina Wankhede	Second Year	Skit & Anchoring
6	Ankita Homroy Sushil Gaikwad Nikhilesh Bhalerao Omshree Kolge Vishal Rathod Mayank Ukey	First Year	Group Dance

Participation in University Sports by Petrochemical Engineering Students:

Outdoor Sports

Kho-Kho Boys (Silver)

Football Boys (Semi final)

Futsal Girls (Silver)

Indoor Sports

Table Tennis Girls (Gold)

Badminton Girls (Silver)



**CYNOSURE 2K18**



## **18. Department Strength, Weakness, Opportunities and Threats**

### **Major Strengths:**

- Dedicated and motivated faculty members.
- The curriculum design is a perfect blend of core chemical engineering content along with extension to the area of petroleum sector in depth.
- Curriculum is designed to take care of changing scenario in terms of techno-economic as well as social changes. For this software based courses, inclusion of industrial training and interdisciplinary interaction are encouraged.
- The department regularly gets handful amount of funding from AICTE, UGC, and State Government by way of various research or other projects.
- Guidance and support from Alumni.

### **Weaknesses:**

- Maintenance of equipment and analytical instruments is a big challenge. Lack of expertise at local level in addition to unavailability of spares adds to sudden disruption .
- Lack of permanent and adequate space for laboratory and class room
- Faculty shortage

### **Opportunities:**

- The University is surrounded by industrial belt (Specially Chemical Industries and petrochemical Complexes)
- Every year many of our students get placement in reputed industries like Infosys, Cognizant, and many chemical industries but still there is a scope for full utilization of nearby industrial environment for betterment of student community.
- Conducive environment for Collaborations and Availability of Industrial Expertise

### **Challenges:**

Getting qualified faculty members and improving their retention period.

Attracting good CET score students for UG programme.

### **Future plans of the department:**

To create, preserve and disseminate technical knowledge.

To create an intellectually stimulating environment for research, scholarship, creativity, innovation and professional activity.

To foster relationship with other leading institutes of learning and research, alumni and industries in order to contribute to National and International development.

To promote competitive merit and excellence as the sole guiding criterion in overall development of students Strive for centre of excellence in the field of Chemical and Petrochemical Engineering.

■ ■ ■

## Department of Chemistry



**Dr. H. A. Mujawar**  
**Associate Professor & Head**

### Message from the Head of Department:

It is my great pleasure to bring this Annual report for the year 2016-17. I wish to share my views in this regard. The highlight of this report is the development of Curriculum for First year B.Tech. in the subject of Engineering Chemistry. In this curriculum, the tutorial have been added for getting better understanding of the subject in depth and student will get opportunity to access e-learning sources. Student will take this opportunity. An attempt has been made to design the syllabus in the subject of Advanced Engineering Chemistry for the second year B.Tech. students. Department will offer this subject as elective from Academic year 2017-18. Department has actively conducted Science Day celebration. The students within and around schools participated / visited this Science Exhibition. That will be helpful for motivation of students so that students will attracts towards Science and Technology.

### 1 . Vision and Mission Statements for Department:

#### Vision :

**Mission:** To impart the basic and advanced knowledge of Chemistry and their applications to various fields of Engineering and technology.

**2. About the Department:** Department of Chemistry was established in the year 1989 with B.Tech. programs in various fields of Engineering and Technology. Laboratory is well equipped with state-of-art analytical equipments such as Chemical Oxygen Demand, Dissolved Oxygen setup, Gas Chromatography, UV- Visible Spectrophotometer, Photo reactor etc. Department is having four experienced and dedicated faculty members. Their contribution towards academic and other activities for the department add beneficial values. Department is engaged in research by offering Ph.D. programs in Chemistry since 2003. Department has published good numbers of research papers in the area of Photocatalyst, Environmental Chemistry, Solid State Chemistry, Phytochemistry etc.

### 3. Programme Educational Objectives (PEOs)

Programme Educational Objectives (PEOs) - NA

Programme Outcomes (POs) - NA

### 4 . Overview of Academic Programs:

Academic programme	Duration	Intake
Engineering Chemistry B.Tech. First year	Sem- I and II of 2016-17	540+

#### 4.1 Result Analysis:

Results in the Subject of Engineering Chemistry (Sem- I and II) for all the courses of Engineering and Technology has been analyzed and found excellent.

## 5. Faculty and Staff:

### Faculty



Dr. H. A. Mujawar  
Head of the Department  
Associate Professor  
Ph. D. (Chemistry)  
Member of BOS (Basic Sciences and Humanities)  
Member of Academic council  
Member of Research Committee  
Co-ordinators / members of various events of University  
Research areas:  
Environmental Chemistry ,  
Solid State Chemistry



Dr. P. B. Lokhande  
Associate Professor  
Ph. D. (Chemistry)  
Member of BOS (Basic Sciences and Humanities)  
Member of Academic council  
Member of Research Committee  
Co-ordinators / members of various events of University  
Research areas:  
Environmental Chemistry ,  
Solid State Chemistry

### Contract Faculty



Miss. A. S. Isane  
Assistant Professor  
M Sc. (Organic Chemistry)  
Mumbai University  
3 Years of Experience



Miss. S. K. Palekar  
Assistant Professor  
M Sc. (Organic Chemistry) Mumbai University  
3 Years of Experience

### Staff



Mrs. C.D. Sutar  
Lab-Assistant  
B Sc. (Chemistry)  
Since February 2009



Mr. C. H. Nage  
Lab-Assistant  
B Sc. (Chemistry - 2016)  
Since July 2017



Mr. U.K. Chavan  
Peon

## Research Scholar



Miss. M. M. Bhagat  
Research Scholar (RS  
20140901)  
M Sc. (Nagpur  
University)  
Research Area:  
Photocatalysis



Miss. S. S. Salvi  
Research Scholar (RS  
20150901)  
M Sc. (Mumbai  
University)  
Research Area:  
Photocatalysis



Mr. Abhijit Dinde  
Research Scholar (RS  
20140902)  
M.Sc. (Mumbai  
University)  
Research Area:  
Phytochemistry



Mr. P. B. Nagore  
Research Scholar (RS  
20170910)  
Research Area:  
Phytochemistry

## 6. Additional Responsibilities to the Faculty:

1. Dr. H. A. Mujawar :
  - a. Member Academic Council
  - b. Member Executive Council
  - c. Chairman, Board of Sports
2. Dr. P. B. Lokhande : Associate Dean of Sports

## Advisory Board:

Sr.No.	Name	Designation
1	Dr.H.A.Mujawar	Associate Professor and Head
2	Dr.P.B.Lokhande	Associate Professor
3	Dr.M.H.Pendse	Associate Professor and Head, Walchand College of Engineering, Sangli (External)
4	Dr.B.B.Singh	Associate Professor (External)

## 7. Faculty Research and publications:

### Research Publications:

1) Sneha S. Salvi, Dr. P. B. Lokhande, Dr. H. A. Mujawar, “ Effect of Cd, Ni Doping on Photocatalytic Activity of Zinc Oxide, Synthesized by Citrate Gel Method”, International Journal of Research in Advent Technology, Vol. 5, No. 11, November 2017, E-ISSN: 2321-9637.

2) Mr. Abhijit V. Dinde, Dr. P. B. Lokhande, Dr. H. A. Mujawar, “Essential Oil Extraction, Characterization and Antimicrobial Study of Blumea Lacera D. C. from Konkan Region”

Journal of Pharmacy Research Vol. 12 (1), ISSN: 0974-6943

3) Madhuri M. Bhagat, P. B. Lokhande, H.A. Mujawar, “Effect of Tin and Strontium Doping on the Photocatalytic Activity of Zinc Sulphide Nanoparticles for the Photocatalytic Degradation of Resorcinol under Solar and Ultra-Violet Light”, Journal of Nanosciences: Current Research, Vol. 3, Issue 2. 1000122, ISSN: 2572-0813. Doi. 10.4172/2572-0813.1000122.



4) Madhuri M. Bhagat, P. B. Lokhande, H.A. Mujawar, “ Photocatalytic degradation of Carcinogenic Rhodamine 6G dye by Sr and Sn doped Cadmium Sulphide nanoparticle, International Journal of Research Publications in Engineering and Technology, Vol. 3, Issue. 6, June 2017, ISSN: 2454-7875.

## 9 . Laboratory

### 9.1 Major Instruments in Laboratory:

Sr.No.	Name of Instrument	Qty.	Total cost
1	Gas Chromatography	1	5,70,000/-
2	UV Photoreactor	1	1,00,000/-

### 10. Laboratory Expenditure:

Sr.No.	Name of the laboratories	Total cost Laboratories
1	Engineering Chemistry Laboratory - I	2,50,000 (year 2017-18)
2	Engineering Chemistry Laboratory - II	2,50,000 (year 2017-18)
<b>Total cost</b>		<b>5,00,000/-</b>

### 11. Doctoral Programme :

#### 11.1 List of Ph.D Students:

Sr.No.	Name of the Candidate	Registration Number & Date	Broad area of Research	Research Guide
1	Miss.M.M.Bhagat	RS 20140901 August 2014	Photocatalysis	Dr.P.B.Lokhande
2	Mr. Abhijit Dinde	Rs 20140902 August 2014	Phytochemistry	Dr.P.B.Lokhande
3	Miss.S. S. Salvi	RS 20150901 Sept 2015	Photocatalysis	Dr.P.B.Lokhande
4	Mr. P. B. Nagore	RS20170901 Jan. 2018	Phytochemistry	Dr.P.B.Lokhande

### 16. Conferences /Workshops / Trainings / Academic Awareness activities conducted under TEQIP-II : Nil

S.N.	Name of the course	Duration	Name of the Coordinator	Eminent Speakers
1	Faculty Induction Programme	1 day	Dr. A. W. Kiwalekar	Dr. H. A. Mujawar
2	Science Day Celebration	1 day	Dr. L. N. Singh	Dr. H. A. Mujawar Dr. P. B. Lokhande

### 17. Other activities Conducted by Department:

- i) Science Day Exhibition
- ii) Orientation / Guidance activity for the First Year B.Tech. newly admitted students.

### 18. Academic Achievements:

Designed Curriculum of First Year B.Tech.in the subject of Engineering Chemistry and Advanced Engineering Chemistry for the second year B.Tech. Students of all the branches of Engineering and Technology as an Elective subject. The same curriculum will be implemented for all Affiliated Colleges of this University.

Active involvementfor the Academic and development of research activity of the University by the way of member of Research Programme Committee, Board of Studies, Academic Council and Executive Council.

## 19. Faculty Achievements:

Citation index of faculty member and impact factor are as follows:

Sr. No.	Name of the Faculty	Citation index	Impact factor
1	Dr. H.A.Mujawar	98, h-index 7	1.2 to 4.5
2	Dr. P.B.Lokhande	35, h-index 4	1.2 to 4.5

## 20. Departmental strengths, Weaknesses, Opportunities and Challenges:

**Major Strengths of the Department:** Laboratory is well equipped with state-of-art analytical equipment's such as Chemical Oxygen Demand, Dissolved Oxygen setup, Gas Chromatography, UV-Visible Spectrophotometer, Photo reactor etc. At present laboratory is having sufficient space for the performing Academic and Research activities.

**Weaknesses:** As per UGC / AICTE we have to maintain student teacher ratio, therefore department is having shortage of teaching faculty. We need to require three more faculty members for smooth functioning of academic and research activity.

**Opportunities:** There are numerous opportunities for us to interact with industries and CSIR / DST research laboratories to carry out joint minor/ major research projects however it is very difficult due to above mentioned weaknesses.

**Challenges:** As this University is now become State Technological University, many of the Engineering and Technological Colleges / Institute across the State of Maharashtra going to affiliate in next Academic Year. The newly designed syllabus will be implemented to them therefore it will be a big challenge for us to interact and cooperate with the faculty members of Affiliated Colleges for smooth functioning of their academic activities.

■ ■ ■

## Department of English



**Dr. A. P. Shesh**  
**Assistant Professor & Head**

### Message from Head of Department:

It gives me immense pleasure to present the Annual Report of the Department for the Academic Year 2015-2016. The main objective of the Department is to enhance the linguistic abilities of the students of engineering to cater the needs of the industry. The department has a well-equipped Language Laboratory which is continuously upgraded considering the need of the time. The faculty members from the department also guide the students to prepare tests like GRE and TOEFL. The department focuses on the overall development of the students in order to make them good human beings in future so that they would be aware about their duties towards the society and the nation. The department has taken initiative to establish a students' forum En'ggoy group that conducts different activities for the students of engineering. Students and faculty members from the engineering departments are also involved in this group.

**- Dr. A. P. Shesh**

**Vision:** To impart the linguistic proficiency to the students of engineering and technology in order to make them world leaders.

**Mission:** The Department aims to develop the students as the industry professionals with discipline and skills required to play the role of a good citizen. It also aims to establish links with other institutions and industry for the enhancement of knowledge skills.

### 1. About the Department:

The Department is established in the year 1989. The Department is committed to transform the scene of education in the area of English language. The staff members are also trying to implement different teaching-learning strategies for the actual experiences. It is also the endeavour of the Department to contribute the world of research due to which the department would be a major player in the world of education.

Since the inception department is involved in curricular and extra-curricular activities at the University. The Department of English offers courses entitled 'Communication Skills' for First Year students and 'Basic Course in Human Rights'. The Department has established a Language Laboratory in the academic year 2005-2006 to set a very good example of teaching learning through the use of technology. It is observed that the learners are encouraged for acquisition of linguistic skills in a better way through the use of Language Laboratory in addition to the classroom instructions.

### 2. Programme Educational Objectives (PEOs):

- Give students understanding and knowledge of English language.
- To provide the students with sophisticated writing skills useful in academics as well as the outer world.
- Provide opportunities to explore identity, values, manners and ethics.
- Provide them exposure to four language learning skills Listening, Speaking, Reading and Writing.

### 3. Programme Outcomes (POs):

- The students will enhance their linguistic skills.
- The students will have better ability to listen, speak, read and writing.
- The learners will develop the ability to write different pieces of academic writing.
- The learner will develop interpersonal skills.
- The learners will present themselves as good members of the society.
- The learners will develop themselves as a self-confident and able candidate.

### 4. Faculty Profile:



**Dr. A. P. Shesh**  
Assistant Professor &  
Head,  
M. A. (English), Ph. D.



**Mr. S. Y. Kolekar**  
Assistant Professor  
(Contract Basis)  
  
M. A. (English, NET 03  
times)



**Mr. R. L. Dhanpalwar**  
Assistant Professor  
(Contract Basis)  
M.A. (English), M.Phil.,  
SET, Pursuing Ph.D.

## **5. Additional responsibilities to the Faculty:**

### **Contribution to Academic or University Level Bodies:**

- Dr. A. P. Shesh is the member of the Academic Council of Dr. B. A. T. U. Lonere.
- Dr. A. P. Shesh is working as the member of Internal Quality Assurance Cell (IQAC) of Dr. B. A. T. U., Lonere
- Dr. A. P. Shesh is working as the Convenor of the Annual Report Committee of Dr. B. A. T. U., Lonere.
- Dr. A. P. Shesh is working as the Chairman of Board of Studies for English & Humanities at Dr. B. A. T. U., Lonere.
- Dr. A. P. Shesh is working as the Chairman of Research Committee in Humanities at Dr. B. A. T. U., Lonere.
- Dr. A. P. Shesh is nominated as the member of Examination Panel and Paper Setter at Rajarambapu Institute of Technology, Sakharale, Islampur since AY 2005-2006.
- Prof. S. U. Kolekar is working as Trainer for Mahindra Pride Classroom which is an initiative by Mahindra & Mahindra.

### **6. Paper(s) Presented:**

- Dr. A. P. Shesh, 'Gerald Vizenor's Dead Voices: A Reflection of Tradition, Myths and Liberation in Native American World' at International Conference on Fourth World Literature & Culture at Pune
- Dr. A. P. Shesh, 'Rituals in Cogewea', New Trends in Humanities, Gender and Cultural Studies at N. G. Acharya & D. K. Marathe College of Arts, Science & Commerce Chembur, Mumbai.
- R. L. Dhanpalwar, Expression of 'Otherness' in Dalit Literature in the One Day International Conference on Confronting New Times: Human Nature, Culture and Literature organised by Career Spirit Education LLP, Santacruz, Mumbai (MS) on 8th January 2018. (ISSN: 2320-4494)

### **7. Papers Published:**

- Sushma Deshpande, Dr. A.P. Shesh, Dr. B.R. Iyer, 'English Language Adoptability in Engineering Graduates: A Case Study', Proceedings of ICCASP-2018, Springer
- Dr. A. P. Shesh, "Use of Trickster in Gerald Vizenor's Fiction" published in Labyrinth: The International Literary Journal of Postmodernism" Vol. 4 No. 4

### **8. Expert Lectures delivered:**

- Delivered expert lecture on Stress Management and Presentation Skills at Saraswati College of Engineering, Kharghar, Navi Mumbai.
- Delivered expert lectures at the training programmes for the lab technicians and class-IV employees at Dr. Babasaheb Ambedkar Technological University, Lonere.
- Delivered expert lecture on 'Postmodernism' at Mahatma Gandhi Mahavidyalaya, Ahmedpur Dist. Latur for UG and PG students
- Delivered a lecture on Challenges in Learning English at FDP at Dr. B. A. T. U., Lonere.
- Conducted a workshop for NCC Cadets to prepare them for the examinations like CDS, SSC.

### **9. Memberships of Literary Organization/Forums:**

- Life member of **Indian Association for American Studies**
- Life member of **MELUS-MELOW India**

## 10. Doctoral Programmes:

### List of Ph. D. Students:

Sr. No.	Name of the Candidate	Registration Number & Date	Broad area of Research	Research Guide
1	Ms. S. S. Deshpande	RS 20161201	Pedagogy in ELT	Dr. A. P. Shesh

### 11. Plan of Action:

- More interactive teaching and internal assessment.
- To undertake research in English Literature and ELT.
- To introduce training in different foreign languages which would be useful for the students for employment.



## Department of Mathematics



**Dr. B. B. Singh**  
Associate Professor and Head

### Message from the Head of Department:

यथाशिखामयूराणांनागणांमनियोजथा  
तथावेद-वेदांगमगणितंमूहीनंसंस्थितं ॥

(As the peacock is superior to all the birds because of crest on its head; as the king cobra is superior to all the snakes because of its bead, so is mathematics which acquires a foremost place amongst all the Vedas and Shastras.)

Mathematics is not a book confined within a cover and bound between brazen clasps, whose contents it needs only patience to ransack; it is not a mine, whose treasures may take a long to reduce into possession, but which fill only a limited number of veins and lodes; it is not a soil, whose fertility can be exhausted by the yield of successive harvests; it is not a continent or an ocean, whose area can be mapped out and its contour defined; it is limitless as that space which it finds too narrow for its aspirations; its possibilities are as infinite as the worlds which are forever crowding in and multiplying upon the astronomer's gaze; it is as incapable of being restricted within assigned boundaries or being reduced to definitions of permanent validity, as the consciousness of life, which seems to slumber in each monad, in every atom of matter, in each leaf and bud cell, and is forever ready to burst forth into new forms of vegetable and animal existence.

The syllabi of Mathematics to be taught at UG level have been framed keeping the afore-mentioned philosophy into view. In addition to teaching UG classes, the Department of Mathematics is also actively

involved in the conduct of Ph.D. programmes, especially in Applied Mathematics e.g. Fluid Mechanics, Computational Fluid Dynamics, Heat transfer.

In the light of the above message, I think the curriculum of Mathematics adapted in our University will pave the way for our students to face the challenges of Engineering Sciences in years to come.

Dr. B. B. Singh  
Head, Department of Mathematics

### **1. Vision and Mission Statements for Department:**

#### **Vision**

The Department of Mathematics strives to be recognized for excellence among academic institutions in India and abroad through the depth of its teaching and research, and to be locally relevant through its role in the development of the community it serves. The Department wishes to focus on providing a comprehensive curriculum at undergraduate, postgraduate and Ph.D. programmes, relevant to research and career opportunities in India and abroad.

#### **Mission**

To promote teaching, research and mathematical understanding of students, and to inculcate in a student a deep sense of analysis of all fundamental principles, concepts and practices in the specialized areas of sciences, engineering and technology.

### **2. About the Department:**

The Department of Mathematics came into existence in the year 1989. The Department is mainly devoted at present to impart education of Mathematics at UG level. That is why, it has taken all the various aspects into consideration while framing the course structure of Mathematics subjects at UG/Doctoral level to suit the requirements of today's Scientists, Engineers and Applied Mathematicians. To meet the end, the subjects like Engineering Mathematics I, II and III have been introduced at UG level of engineering education of our University. In this way, the first objective of the Department while framing the syllabi has been to make available much of post-calculus Mathematics needed and used by scientists and engineers, in a setting that is helpful to both engineering students and faculty. The second objective has been to establish the acquaintance of the students with various computational techniques required by scientists and engineers in order to solve the problems pertaining to physical, social, economics and biological sciences.

### **3. Programme Educational Objectives (PEOs) & Programme Outcomes (POs)**

#### **Programme Educational Objectives (PEOs)**

- To prepare students to excel in technical fields in order to pursue postgraduate in Engineering and Sciences programs or to succeed in industry/technical profession, R&D institutions through global and new emerging areas in Mathematics
- To provide students with a solid foundation in mathematical fundamentals required to solve engineering problems
- To train students with good mathematical breadth in core subjects so as to comprehend and simulate to cater changing needs of society, analyze, design, and create novel products and solutions for the real life problems
- To provide students with conducive academic environment, awareness of excellence and the life-long learning in mathematical concepts needed for successful professional career.

#### **Programme Outcomes (POs)**

The graduates will possess the knowledge of differential equations, vector calculus, complex variable, matrix theory, probability theory, partial differentiation, infinite series, Fourier series, Fourier transforms, Laplace transforms, Integral equations, Mean value theorems, etc.

#### 4. Overview of Academic Programs:

Academic programme	Duration
Ph.D.	Minimum 3 years

#### 5. Faculty and Staff:

Sr. No.	Faculty	Designation	Qualification	Area of Specialization
1.	Dr. B. B. Singh	Associate Professor	M.Sc., Ph.D. (BHU)	Fluid Mechanics
2.	Dr. V. J. Bansod	Associate Professor	M.Sc., Ph.D. (IIT Kanpur)	Computational Fluid Dynamics
3.	Mr. Ravindra Sonawane	Assistant Professor (Contract basis)	M.Sc.	Applied Mathematics
4.	Mr. Ajay Tanaji Pawar	Assistant Professor (Contract basis)	M.Sc.	Applied Mathematics
5.	Ms. Trupti Vhare	Lecturer (Contract basis)	B.Tech. in Electronic and Telecommunication Engineering	----
6.	Ms. Samruddi Gunjal	Lecturer (Contract basis)	B.Tech. in Chemical Engineering	----

#### 6. Additional Responsibilities to the Faculty:

Sr. No.	Name	Responsibility
1.	Dr. B. B. Singh	1. Head, Department of Mathematics 2. Chairman, Board of Studies in Mathematics 3. Chairman, Research Committee, Department of Mathematics 4. Member, Academic Council 5. Member, Internal Quality Assurance Cell 6. Member, Board of Examination 7. Co-ordinator of the Committee entrusted with the responsibility of the preparation of the Transfer Policy of the Employees of the University and Institute of Petrochemical Engineering (IoPE)
2.	Dr. V. J. Bansod	1. Member, Board of Studies in Mathematics 2. Member, Research Committee, Department of Mathematics

#### 7. Faculty Research Project:

A research proposal entitled “Numerical and Analytical Investigation of the Falkner-Skan Equations Governing the Laminar Boundary Layer Flows of Fluids” has been submitted to **Science and Engineering Research Board** under the scheme Mathematical Research Impact Centric Support (MATRICS).

#### 8. Research publications:

- Nasreen Bano and B. B. Singh, An integral treatment for coupled heat and mass transfer by natural convection from a radiating vertical thin needle in a porous medium, International Communications in Heat and Mass Transfer, 84(2017) 41-48. ISSN 0735-1933
- C. N. Guled and B. B. Singh, Mixed convection boundary layer flow over a semi-infinite vertical surface implanted in a permeable medium, Special Topics & Reviews in Porous Media: An International Journal, 8(1)(2017) 73-90. ISSN 2151-4798

- (iii) S. R. Sayyed, B. B. Singh and Nasreen Bano, Radiative MHD Stagnation-Point Flow with Heat Transfer Past a Permeable Stretching/Shrinking Sheet in a Porous Medium, Diffusion Foundation, 11(2017) 110-128. ISSN: 2296-3642
- (iv) S. R. Sayyed, B. B. Singh and Nasreen Bano, An Integral Treatment for Dissipative Boundary Layer Flow along a Radiating Vertical Surface by Natural Convection in a Porous Medium, Diffusion Foundation, 11(2017) 191-207. ISSN: 2296-3642
- (v) I. M. Chandarki and B. B. Singh, On the convex and concave solutions of a steady MHD Boundary Layer Equations, Review of Research, 6(3)(2017) 1-9. ISSN 2249-894X
- (vi) I. M. Chandarki and B. B. Singh, Asymptotic behavior of solutions of MHD flow equations with heat and mass transfer due to a point sink", International Journal of Current Engineering and Scientific Research, Vol. 4(11) (2017), pp. 78-84 (ISSN 2393-8374).
- (vii) S. R. Sayyed, B. B. Singh and Nasreen Bano, Analytical solution of MHD slip flow past a constant wedge within a porous medium using DTM-Padé, Applied Mathematics and Computation, 321 (2018) 472-482. ISSN: 0096-3003
- (viii) Nasreen Bano, B. B. Singh and S. R. Sayyed, Homotopy analysis for MHD Hiemenz flow in a porous medium with thermal radiation, velocity and thermal slips effects, Frontiers in Heat and Mass Transfer, 10(2018) 14(1-9). ISSN: 2151-8629
- (ix) Nasreen Bano, O. D. Makinde, B. B. Singh and S. R. Sayyed, Radiation Effect on Heat and Mass Transfer by Natural Convection from a Horizontal Surface Embedded in a Porous Medium, Diffusion Foundation, 1(2018) 140-157. ISSN: 2296-3642

#### **9. International/National Conference Proceedings:**

- (i) M. Chandarki and B. B. Singh, "On Pade approximants series solutions of MHD flow equations with heat and mass transfer due to a point sink", Conference Proceedings of 'International Conference on Stochastic Processes and Algebraic Structure – From Theory Towards Applications', held at the Malardalen University and Stockholm University, Sweden during October 4-6, 2017.
- (ii) Nasreen Bano, B. B. Singh and S. R. Sayyed, "MHD slips flow and heat transfer of a radiating viscous fluid over a radially stretching sheet", Proceeding of the '44th National Conference on Fluid Mechanics and Fluid Power', held at Amrita University, Amritapuri Campus, Kollam, Kerala, India during December 14-16, 2017.
- (iii) S. R. Sayyed, B. B. Singh and Nasreen Bano, "Dissipative effect on heat and mass transfer by natural convection over a radiating needle in a porous medium", Proceeding of the 'International Conference: Numerical Heat Transfer and Fluid Flow' held at NIT, Waragal, India during January 19-21, 2018.
- (iv) S. R. Sayyed, B. B. Singh and Nasreen Bano, "MHD stagnation-point dissipative flow in a porous medium with Joule heating and second-order slip", 'Proceeding of the "International Conference on Computing, Communication and Signal Processing' held at Dr. Babasaheb Ambedkar Technological University, Lonere during January 26-27, 2018.
- (v) Nasreen Bano, B. B. Singh and S. R. Sayyed, "MHD flow with heat and mass transfer over a radiating cone due to a point sink in presence of partial and solutal slips", 'Proceeding of the "International Conference on Computing, Communication and Signal Processing' held at Dr. Babasaheb Ambedkar Technological University, Lonere during January 26-27, 2018.

#### **10. International Journals:**

- (i) Nasreen Bano and B. B. Singh, An integral treatment for coupled heat and mass transfer by natural convection from a radiating vertical thin needle in a porous medium, International Communications in Heat and Mass Transfer, 84(2017) 41-48. ISSN 0735-1933
- (ii) C. N. Guled and B. B. Singh, Mixed convection boundary layer flow over a semi-infinite vertical surface implanted in a permeable medium, Special Topics & Reviews in Porous Media: An International Journal, 8(1)(2017) 73-90. ISSN 2151-4798
- (iii) S. R. Sayyed, B. B. Singh and Nasreen Bano, Radiative MHD Stagnation-Point Flow with Heat Transfer Past a Permeable Stretching/Shrinking Sheet in a Porous Medium, Diffusion Foundation, 11(2017) 110-128. ISSN: 2296-3642



- (iv) S. R. Sayyed, B. B. Singh and Nasreen Bano, An Integral Treatment for Dissipative Boundary Layer Flow along a Radiating Vertical Surface by Natural Convection in a Porous Medium, Diffusion Foundation, 11(2017) 191-207. ISSN: 2296-3642
- (v) I. M. Chandarki and B. B. Singh, On the convex and concave solutions of a steady MHD Boundary Layer Equations, Review of Research, 6(3)(2017) 1-9. ISSN 2249-894X
- (vi) I. M. Chandarki and B. B. Singh, Asymptotic behavior of solutions of MHD flow equations with heat and mass transfer due to a point sink”, International Journal of Current Engineering and Scientific Research, Vol. 4(11) (2017), pp. 78-84 (ISSN 2393-8374).
- (vii) S. R. Sayyed, B. B. Singh and Nasreen Bano, Analytical solution of MHD slip flow past a constant wedge within a porous medium using DTM-Padé, Applied Mathematics and Computation, 321 (2018) 472-482. ISSN: 0096-3003
- (viii) Nasreen Bano, B. B. Singh and S. R. Sayyed, Homotopy analysis for MHD Hiemenz flow in a porous medium with thermal radiation, velocity and thermal slips effects, Frontiers in Heat and Mass Transfer, 10(2018) 14(1-9). ISSN: 2151-8629
- (ix) Nasreen Bano, O. D. Makinde, B. B. Singh and S. R. Sayyed, Radiation Effect on Heat and Mass Transfer by Natural Convection from a Horizontal Surface Embedded in a Porous Medium, Diffusion Foundation, 1(2018) 140-157. ISSN: 2296-3642

## 11. Doctoral Programme :

### 11.1 List of Ph.D Students:

S. No.	Name of the Candidate	Registration Number & Date	Broad area of Research	Research Guide
1	Ms. Shaikh Nasreen Bano Muslim	RS20151001 & 11/09/2015	Boundary Layer Theory	Dr. B. B. Singh
2	Mr. Sayyed Shoeb Rashid	RS20161001 03/02/2017	Boundary Layer Theory	Dr. B. B. Singh

## 12. Academic Achievements:

### 12.1 Faculty Achievements:

Citation index of faculty member and impact factor are as follows:

S.N	Name of the Faculty	Citation	Impact factor
1	Dr. B. B. Singh	251	1.5
2	Dr. V. J. Bansod	----	----

## 13. Departmental strengths , Weaknesses , Opportunities and Challenges :

### Major Strengths of the Department:

- All the faculty members of the Department are holding the Doctoral qualifications.

### Weaknesses:

- Unavailability of adequate number of regular teaching positions in the Department.

### Opportunities:

- Starting of a five year integrated M.Sc. programme in Mathematics.

### Challenges:

- Maintenance of the quality of teaching at UG level.

■ ■ ■

# Department of Physics



**Dr. L.N. Singh**  
Associate Professor and Head

## 1. Message from Head of Department

It gives me immense pleasure to present the Annual Report of my Department. History of mankind is history of science and history of science is history of physics. Over the course of history other sciences branched off from Physics to become science in their own right.

All modern Engineering and technology is rooted in the laws of Physics as Engineers and Scientists apply the laws and discoveries of Physics to develop practical devices like automobiles, computers, electricity generators, electronics devices, nuclear reactors, bridges, tunnels and space shuttles. Hence Physics is basis for all technological developments. None of the fronts, social, human, environmental or economic can be thought of as far as development is concerned without Physics.

The Department runs a PhD programme in the area of Ferrites, Garnets and CMR nano materials. The Department also runs a course on Engineering Physics which is a part of B.Tech Programme in all branches at the first year level at present. The Department has set up nanoscience laboratory. Seminars are regularly organised to enhance the latest knowledge of the research field.

Dr. L.N. Singh  
Head, Department of Physics

## 2. Vision and Mission Statements for Department

### Vision

To promote excellence in teaching, research and scientific understanding among Engineering students.

### Mission

To inculcate in the students a deep understanding in Science and Scientific principles in order to develop strong basis for acquiring technical knowledge and skill.

## 3. About the Department

The Department of Physics was established in the year 1989 to offer a foundation in Physics to provide all basic and scientific knowledge to the various disciplines of undergraduate, post graduate students of Engineering and Technology. The department has started Ph.D programme from the academic year 2004. Department is also offering fellowship Ph.D. students under TEQIP project.

The curriculum designed is a perfect blend of Physics. The focus of the department is to produce graduates & PhD with strong fundamentals in Physics and Applied Physics. The department has state of the art laboratories to cater for curricular requirements as well as research.

The faculty members are having strong background of research in the current issues of the discipline. The Department has Solid state Physics, Spectroscopic and Nanoscience Lab and collaboration with IIT Bombay and Mumbai University. Five students have completed their PhD in the field of CMR materials, Nano Ferrites, Carbon nano tubes and fuel cells. Three students are working in Nano Ferrites, Garnets and CMR Materials. One faculty Dr. L.N.Singh of the Department has made visits to USA, Italy, Germany, Singapore, Japan, Malaysia, France, Switzerland,, U.K. Belgium, Austria, Australia and New Zealand. He has also invited as visiting faculty by Gombe state University Nigeria. One of the PhD student has got Post Doc fellowship from Italy.

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#### 4. Faculty and Staff

##### Faculty



Dr. L.N.Singh  
Associate Professor  
and Head  
M. Sc. - Banaras  
Hindu,  
University Varanasi,  
India.  
Ph.D. IIT Bombay  
25 Years of  
Experience



Dr. S. G. Dahotre  
Associate professor  
M.Sc - A' Nagar  
College, A' Nagar  
Ph.D. Dr.BATU  
Lonere  
20 Years of  
Experience

##### Ad-hoc Faculty



Mr. A.R. Bhalekar  
Assistant Professor  
M. Sc. - Pune  
University  
5 Years of Experience



Mr. U.V. Shinde  
Assistant Professor  
M. Sc. - Pune  
University  
3 Years of Experience

#### 5. Additional Responsibilities to the Faculty

##### Dr. L.N.Singh

- Member of Executive Council
  - Member of Academic Council
  - Chairman of Board of Studies in Physics
  - IQAC Director
  - Chairman of Science day celebration
  - Mentoring of first year students
  - Member for the promotion of non teaching staff
  - Sanskaran adhikari (Version officer)
-

**Dr. S.G. Dahotre**

- Co-ordinator, Health Care Centre
- Member of Anti-ragging Committee
- Co-ordinator Women Day Celebration
- Sr. Supervisor for examination
- Anchoring Co-ordinator for the different activities in University
- Co-ordinator of Science day celebration

**6. Advisory Board**

To providing time to time guidance and monitor the activities for the development of the department, Advisory Board for Physics department is formed. Following are the accomplished members from reputed industry and academic institute. The Advisory Council/Board is entrusted with responsibility of conducting academic audit of department, suggesting dynamic curriculum and providing input for research activities.

Sr. No	Name	Designation
1	Professor S. S. Major	Department of Physics, IIT Bombay
2	Professor Ajit Kulkarni	Department of Metallurgy and Material Science
3	Professor M. Aslam	Department of Physics, IIT Bombay
4	Dr. M. A. Madare	Associate Professor and Head Department of Physics, IMJ College, Mumbai University.
5	Professor C. S. Garde	Department of Engineering and Applied Sciences, Vishwakarma Institute of Information Technology, Savitribai Phule Pune University.

**7. Faculty Research and Publications****A) Papers published in international Journals (Impact Factor – 2-3)**

1. Aluminium substituted Yttrium Iron Garnet Nanoparticles, A.R. Bhalekar, **L.N. Singh**, IJSER, Volume 9(6), 284-288(2018)
2. EPR study of Nickel Doped Mn-Zn Ferrite Nanoparticles, F.A. Ahmed, **L.N. Singh**, IJSRSET, Volume 5(4):65-68 (2018)
3. FTIR studies of Ni Substituted Mn-Zn Ferrite Nanoparticles, F.A. Ahmed, **L.N. Singh**, IJSRSET, Volume 4(8):413-417 (2018)
4. Effect of Ni substitution on structure and magnetic properties of Mn-Zn ferrite nanoparticles, F.A. Ahmed, **L.N. Singh**, Journal of Materials Science and Surface Engineering, 6(4): 825-830(2018)

**B) Papers published in Proceeding of National Conference**

1. National conference on “Advance Analytical Tools For Material Characterization( AATMC-2018)”, Birla College of Arts, Science and Commerce College , Kalyan, 28<sup>th</sup> Feb 2018.  
Paper presented a paper entitled, ‘EPR study of Nickel Doped Mn-Zn Ferrite Nanoparticles’, F.A. Ahmed, **L.N. Singh**.
2. National conference on “Advance Analytical Tools For Material Characterization” Birla College of Arts, Science and Commerce college , Kalyan, 28<sup>th</sup> Feb, 2018.  
Paper presented a paper entitled, Study of Structure, Magnetic and Electrical properties of Al substituted M type Calcium nano Hexaferrite, S.G.Dahotre, V.S.Shinde, **L.N.Singh**.

## 9. Laboratory

### Major Instruments in Laboratory

Sr. No.	Name of the Instrument	Qty	Total price
1	Vacuum oven 800°C	01	25250
2	Furnace 1000°C	01	14280
3	Furnace 1400°C	01	74500
4	Hot Plate	01	4135
5	Magnetic stirrer	01	1605
6	Agate mortar pestles	01	7220
7	Alumina boats	01	4950
8	Crucibles	01	1500
9	Hall effect set up	02	110800
10	OG.M. Counter set up	02	52000
11	1He-Ne Laser	02	22000
12	e/m Magnetron set up	01	24400
13	Resistivity by using Four probe set up	02	20600
14	Diode kit	04	19200
15	Transistor kit	04	20800
16	Newton's Rings set up	02	10200
17	Polarimeter	02	20000
18	Band gap measurement kit	02	16400

### 10. Doctoral Programme

The Department is conducting a PhD programme in the following research areas

- ❖ Nanostructured Materials
- ❖ Nanostructures Ferrites, Garnet Materials
- ❖ Nanostructured CMR Materials.
- ❖ Carbon Nano Tubes

### List of Ph.D. Students

Sr. No.	Name of student	Title of thesis	Status
1	Mr.F.A.Ahmed	Study of nickel based Nanoferrites.	ongoing
2	Mr. A.R. Bhalekar	Study of substituted YIG at nano level	ongoing
3	Mr.V.S.Shinde	Study of Structure, Magnetic and Electrical properties of Al substituted M type Calcium nano Hexaferrite	ongoing

### Other activities Conducted by Department Science Day Celebration – Feb 2018





## 11. Departmental Strengths, Weaknesses, Opportunities and Challenges

### Strengths of the Department

- ❖ Highly dedicated and motivated faculty members.
- ❖ The curriculum design is a perfect blend of Physics for all Engineering branches.
- ❖ Research publications by faculty members.
- ❖ Well equipped labs for UG and Research Scholars.

### Weaknesses

- ❖ Departmental maintenance, etc: Most of the minor problems related to maintenance & installation are handled in the department itself. These problems are solved with the help of laboratory assistant and Department students. For major problem such as repairing of PC motherboards, trainer kits, UPS controller, test and measurements equipments Department does not have maintenance & repair facility. Some of the equipments and PCs are obsolete hence are required to be replaced by new equipments.
- ❖ Lack of adequate space for UG and Ph.D. Lab
- ❖ Faculty shortage: Presently faculty strength of the Department is two (01+01). As per the norm, faculty strength of the Department should be equal to 6. However, Department activities are carried out by appointing faculty on contract basis and also by appointing teaching assistants.

### Opportunities

- ❖ To start the MSc / MTech programme in Physics and Material Science.
- ❖ To start the school of Material Science.
- ❖ To start B.Tech in Engineering Physics.

### Challenges

- ❖ Managing all Departmental activities with the help of available faculty members.
- ❖ Recruitment of qualified faculty members having Ph.D. qualifications
- ❖ Attracting good students for Ph.D. programmes.

# Library

## 1. Introduction:

The Library plays an important role in supporting the academic program of the University. It is an integral part of the educational process in the University Campus. It is established immediately after the establishment of the University in 1989. The Library helps the teachers, students, researcher to explore updated and latest information related to their field of interest. It also helps them to get information through different media that can be useful for them for writing their research paper, dissertation thesis etc. The existing Library occupies spacious area about 21000 sq. feet. The Library has rich collection of 95000 books. The Library is having open access. The Library collection includes Textbooks, Reference books, Handbooks, Encyclopedias, Back volume of periodicals. Collected works of Dr. Babasaheb Ambedkar, Mahatma Gandhi and other important personalities are also available in Library, Light reading magazine, Novels and Story books in Hindi, Marathi, English literature etc are also available. The Library functions between 8.30 AM to 6.30 PM on all working days. The Library hours are extended during the time of semester and final examinations. Apart from the books, Library subscribe Indian and foreign journals/Periodicals and Newspaper. The entire Library book collection is classified according to the DDC. (Dewey decimal classification) The Library is partially computerized with the help of LIBMAN (Library Software). The circulation transaction, Barcode generation, No dues certificates, Reminder etc. work is carried out with the help of this software. The total investment on the Library since its inception is around Rs. Six Crore.

## 2. Library Committee:

The function of the Library committee is to administer, to organize to maintain and support the University Library, so that it can facilitate the Library development plan.

### Library Committee

Sr. No.	Name	Qualification	Position
01	Professor V. G. Gaikar	Vice-Chancellor	Chairman
02	Not appointed	Three Heads of University schools nominated by the Vice-Chancellor	Members
03	Dr. M. A. Dabhade Dr. S. L. Nalbalwar Prof. V. P. Jawanjale	Three Heads of departments, nominated by the Vice-Chancellor	Members
04	Dr. R. P. Kate	Two teachers, to be nominated by the Executive Council	Members
05	Dr. S. S. Bhamare	Registrar	Member
06	Dr. S. P. Vaidya	Librarian	Secretary

## LIBRARY SERVICES

User Orientation: User orientation is an important and regular activity of the Library to educate the user about the various resources and services of the library. Orientation program organized every year for new students.

**Circulation:**

Circulation section is the gateway between users and documents so it plays a major role to any Library and Information System. DBATU Central Library Circulation Section performs issue, renewal, return of books using Lib-Man software. Apart from these basic task many other jobs like membership registration, issue no-dues certificate, overdue fine collection, book reservation, Borrower Reminder, etc. and all kind of queries by the users are being performed by this section.

**Reference Service:** The Library maintains a separate Reference section. The books of these sections are to be consulted in the Library. However, keeping in view the necessity of the Teaching Faculty these books may be allowed to issue for short period of time. Important encyclopedias, Handbooks, Data books, Dictionaries, and other costly documents are available in this section. Special reading facilities (Cubical) for Research Students and Teachers are provided in the library.

**Web OPAC on Local LAN (Library OPAC):** Library has own OPAC this can be operated within the campus premises by click in <http://dbatulibrary/webopac>. Besides listing all the books and Journals available in the library, it allows the facility like reservation, Fine calculations, status of particular Books, particular Students. It is searchable by Author, Title, Acc. No. and several other fields.

**Automation of Library Service:** Library is partially automated with the help of LIBMAN software developed by Masters Computer. All the work related to issue and return has been computerized. Most of the books are barcode Automation is partially done. All the issue and return transactions of the Library and Book Bank are completely computerized

**Book Bank:** The Book Bank consists of prescribed textbooks for undergraduate courses. Text books recommended by the concerned faculty members for different courses are kept in the book bank section. These textbooks can be loaned out for the semester to all the students as per the schedule announce by the library at the beginning of the semester. The borrowers have to pay 15% of the total cost of the books, as a rental charges per semester, which is not refundable. The University Library has strong book bank collection, which caters the need of all undergraduate students. Books from the Book-Bank will be issued at the beginning of the each semester. Students have to return the books at the end of the semester. Total number of books available in the book bank section is 46,422.

**Book Bank: (SC/ST) Collection:**

Library also runs book bank (SC/ST Collection) scheme sponsored by the Govt. of Maharashtra, for economically weaker sections of the society and the reserve category Students. Selected books will be made available to the students belonging to SC/ST community for a semester. The issue of the books from this collection will be at the beginning of every semester. Books are to be returned at the end of the semester. This facility is provided to the SC/ST student free of cost. Total number of books available in the book bank section is 7108.

**Internet Services:** University Library is provided internet facility to all its users for searching online journals and document. Library has separate computer section around 20 computers are made available with internet connectivity for students for accessing online journals.

**UGC INFONET Service:**

Library is part of UGC-INFONET program of UGC, now called as e-shodhsindhu. Based on the agreement signed with INFLIBNET centre, Ahmadabad. The Library received following e-resources through the e-consortia of INFLIBNET.

Web Site : [www.inflibnet.ac.in](http://www.inflibnet.ac.in)



Sr. No.	Resource Name	Resource URL
1	AMERICAL CHEMICAL SOCIETY	<a href="http://pubs.acs.org/">http://pubs.acs.org/</a>
2	CAMBRIDGE UNIVERSITY PRESS	<a href="http://journals.cambridge.org/">http://journals.cambridge.org/</a>
3	ECONOMIC and POLITICAL WEEKLY	<a href="http://epw.in">http://epw.in</a>
4	ISID	<a href="http://isid.org.in">http://isid.org.in</a>
5	JCCC	<a href="http://jgateplus.com/">http://jgateplus.com/</a>
6	SPRINGER LINK	<a href="http://link.springer.com">http://link.springer.com</a>
7	TAYLOR and FRANCIS	<a href="http://www.tandfonline.com">http://www.tandfonline.com</a>
8	WILEY-BLACKWELL	

#### Property Counter :

Members are advised to keep their personal belongings including handbags, hats, printed materials, umbrellas, etc. in the property counter which is at the left side of the entrance. Personal belongings kept in the property counter has to be taken on the same day itself and if it is kept beyond one day, the staff of library will not held responsible for the belongings.

#### Library Services: Loan Criteria / Borrowing Entitlements for Staff / Students

Any registered member can borrow the book/s from the library as per their entitlements. Books on the loan with members can recall at any time before the due date if required urgently in the library. Failure to respond promptly may lead to suspension of Library Facility.

The entitlements in terms of number of books that can be borrowed by them are as follows:

Sr. No	Users Type	No. of Library Books Issue Per User	Books Duration	After Books Duration (Fine)
01	Teaching Staff	15	180 Days	-
02	Non Teaching Staff	05	30 Days	
03	Ad-hoc Teaching Staff	05	60 Days	
04	Ph. D. Students	07	15 Days	Per Day Per Book One Rs.
05	M. Tech. Students	07	15 Days	
06	B. Tech. Students	05	15 Days	
07	Diploma Students	-	-	

#### DBATU Library Membership :

DBATU Faculty, Students and Staff are bonafied members. As soon as you get admission visit the Library you have to make some formality like apply online Library registration for library membership. Library membership is free to all students.

For online library registration click on

<http://dbatulibrary/opac> or <http://172.16.5.238/opac-RegistrationLogin>

#### Issue / Return Procedure :

- While Issuing Books :  
Quickly glance the book form any damage.  
Enter details into Issue Database  
Issue books using Libman software  
Handover the books to the user.
- While Receiving the Books :  
Quickly glance the book form any damage.  
Check due Dates and any claim for necessary action.  
Cancel the entries from user account in Libman software  
Return books  
Send them to stack for shelving
- Documents that can and cannot be Borrowed :  
Books that can be Borrowed :  
Books from the lending section be borrowed.  
CD ROMS, DVDs can be borrowed for a period of one day.  
Reference books are issued only to the faculty and equivalent staff for one day
- Books that cannot be borrowed :  
Journals Bound Volumes, Loose issues of journals and the latest available issue of the magazines are be referred within library premises and are not available for issuing out.  
Dissertations / Thesis submitted by DBATU Students are not issue able.

#### Renewals / Reservations and Over Due/Fines :

Books can be renewed for another same term if there is no demand on them. The renewal must be made on or before the due date

There will be a overdue charge Rs.1/- per day per book.

How do I claim a book that is already borrowed by another member ?

Off-line – visit the library and give details of the book at the Circulation Counter.

On-line – Go to the library home page (<http://dbatulibrary/webopac>), you can claim for required books which are issued to other by simply clicking on “Reserve This Item”. System will ask you to input your Enter Borrower Ticket No.: . After authentication, you will be directed to Book Claim page with a box. Please select the Accession Number of the book to be claimed and click "Reserved item(s) For Me"

- Loss or Mutilation of Documents by Students :

Library materials are to be handled with care.

If a book is lost or mutilated beyond usable condition, then the book has to be replaced with the same or latest edition of the book. (Students /Staff can make the replacement against the lost book with new brand latest edition of that book with prior permission from the Librarian.)

**Theft / Misuse of Library Resources:**

The theft or abuse of Library resources like books, Journals issues, Thesis and Dissertations will be viewed very seriously.

Each case will be examined to ascertain its genuineness and the matter will be reported to the Library Committee / Registrar for further action.

**How / Where do I pay Library Dues?**

All types of Library payment (Book Bank, Cost of lost books, Library dues etc) will be accepted through online State bank of India only. Library will not accept any cash.

(For online Payment please visit :<http://www.onlinesbi.com> - Select State Bank Collect)

**Library Profile**

Built up Area Of Library	:	25000 Sq. Ft.
Carpet Area Of Library	:	21250 Sq. Ft.
Number Of Library Staff	:	05
Number Of Library Staff With Degree In Library Management	:	02
Timing		
During Working Day	:	8.30am To 6.30pm
Weekend	:	Holiday
Vacation	:	No Vacation
Number Of Seats In Reading Space	:	300
Total Number Of Register Users	:	4285
Number Of Users		
(Reading Space) Per Day	:	350
Software Use	:	Lib-Man (Use From Jun 2011)
Library Books	:	39607
Book-Bank Books	:	46422
Book-Bank Iope	:	3813
Sc/St Collection	:	6457
St Collection	:	651
Total Number Of Books	:	96950
Number Of Books Title	:	

Category	No. Of Title	No. Of Copies
Book Bank	1942	57289
Circulation	17892	32988
Reference	5004	6673
Total	24838	96950

Total Number of Reference Books	:	6673
Total Number Of Periodical	:	
International Periodicals	:	17
National Periodicals	:	15
Other Magazine	:	57
Online E-Journals	:	Ugc Infonet
(8 E-Resource)		

Online E-Books	:	Nil
Bound Volume	:	3605
Audio And Video Cassetts	:	481
Video Dvd's	:	27 Titles
Phd Thesis	:	47
M.Tech Dissertation	:	832
Chemical Abstracts	:	1017
Total No Of News Paper	:	19

### Library Committee

The function of the Library committee is to administer, to organize to maintain and support the University Library, so that it can facilitate the Library development plant.

The executive council of the Dr. Babasaheb Ambedkar Technological University in its 14th meeting held on 4th August 2018 has approved formation of the following Library Committee.

Library Committee ( As per Section 78(2) of the University Act) :

1	Hon. Vice –Chancellor	Chairman
2	Three Heads of the University Department nominated by Hon.Vice-Chancellor	
	1. Dr. Y.S. MAHAJAN	Member
	2. Dr. S.M.PORE	Member
	3. Dr. V.P. JAWANJAL	Member
3	Two teachers nominated by Executive Council	
	1. Dr. S.R.SUTAR	Member
	2. Dr. R.S.PAWADE	Member
4	The Registrar	Member
5	The Librarian	Secretary

### STAFF INFORMATION



Shri. Srikant Prabhakar  
Vaidya  
Librarian  
M. Lib. and I. Sc.,  
M. Phil. (Lib.),  
PGDLAN



Shri. Ajay Raghunath  
Palkar  
M. Lib. and I.Sc  
Asst. Librarian



Shri. Sridhar Ganpat  
Nakashe  
Certificate Course  
Asst. Librarian



Shri. Tukaram G.  
Hambir  
10 Pass  
Clerk-cum-Typist



Shri. Sanjeev Rajaram  
Masal  
9th Pass  
Peon

- **Services at the Library**

Web Opac

Books, Journals, Dissertations, Thesis Searching,

Book Claim,

New User Library Registration,

Self Book Renew,

New Arrival Detail,

Issue Book And Overdue Detail

Xerox Facility Provided throughout Sourcing

Book-Bank

Internet / Wi-Fi

E-Journals

Inter-Library Loan

Online Renewal/Reissue of Books

Library website :<http://dbatulibrary/opac> or <http://172.16.5.238/opac>

**List of Periodicals (International Periodicals / Indian Periodicals)**

<b>International Periodical</b>					
<b>Sr. No.</b>	<b>Name of Periodical</b>	<b>Qty.</b>	<b>Sr. No.</b>	<b>Name of Periodical</b>	<b>Qty.</b>
1	ACM Computing Surveys	1	10	National Geographic Magazine	1
2	ACM Trans on Software Engg. and Methodology	1	11	Offshore	1
3	ACI Structural Engineering	1	12	Oil and Gas Journal	1
4	ACI Concrete International	1	13	Scientific American	1
5	American Scientist	1	14	Popular Science US	1
6	Chemical Engineering Progress	1	15	Popular Mechanics	1
7	Civil Engineering	1	16	Journal of Light Construction	1
8	Hydrocarbon Processing	1	17	Time	1
9	Mechanical Engineering	1			
<b>National Periodicals</b>					
<b>Sr.No.</b>	<b>Name of Periodical</b>	<b>Qty.</b>	<b>Sr.No.</b>	<b>Name of Periodical</b>	<b>Qty.</b>
1	MIT Technology Review	1	9	ACE Update Magazine	1
2	Construction Technology	1	10	OEM Update Magazine	1
3	Construction World	1	11	India Power	1
4	Construction Week	1	12	Electrical India	1
5	Journal of Structural Engineering	1	13	Chemical Engineering World	1

6	Indian Highway	1	14	Lighting India	1
7	B2B Purchase Magazine	1	15	Cooling India	1
8	EPR Electrical and Power Review	1			
<b>Other Magazine</b>					
<b>Sr.No.</b>	<b>Name of Magazine</b>	<b>Qty.</b>	<b>Sr. No.</b>	<b>Name of Magazine</b>	<b>Qty.</b>
1	All Indian Management	1	30	My Mobile	1
2	Auto Component India	1	31	Open Source For You	1
3	Autocar India	1	32	Outlook	4
4	Business India	2	33	Overdrive	1
5	Business Today	3	34	PC Quest	1
6	Business World	1	35	Physics for You	1
7	Bulletin Unique Academy	1	36	Popular Science - India	1
8	Chanakya Mandal	1	37	Pratiyogita Darpan	1
9	Chemistry Today	1	38	Pratiyogita Kiran	1
10	Chronicle	1	39	Reader Digest	1
11	Competition Refresher	1	40	Saptahik Sakal	2
12	Competition Success Review	1	41	Science Refresher	1
13	Competition Wizard	1	42	Science Reporter	1
14	Digit	1	43	Spardha Pariksha	1
15	Economic Times Magazine	4	44	Tell Me Why	1
16	Economic Times Wealth	4	45	The Carvan	1
17	Electronics For You	1	46	The Week	4
18	Employment News	8	47	Top Gear	1
19	Engineering Success Review	1	48	Udyojak	1
20	Express Computer	1	49	Yojana (Marathi)	1
21	Frontline	2	50	Sport Star	3
22	General Knowledge / G. K.	1	51	CAR India	1
23	India Forbes	4	52	Outlook Traveller	1
24	India Today	3	53	CV Commercial Vehicle	1
25	Inside Outside	1	54	Motoring World	1
26	Kurukshetra	1	55	What Hi Fi ?	1
27	Lokprabha	1	56	Electronics Bazar	1
28	Lokrajya	1	57	Lonely Planet	1
29	Mathematics Today	1			
<b>List of Newspaper</b>					
<b>Sr.No.</b>	<b>News Paper List</b>	<b>Medium</b>	<b>Sr.No.</b>	<b>News Paper List</b>	<b>Medium</b>
1	Economic Times	English	11	Sagar	Marathi
2	Indian Express	English	12	Sakal (Mumbai)	Marathi
3	Lokmat	Marathi	13	Samana	Marathi
4	Loksatta	Marathi	14	Samrat	Marathi
5	Maharashtra Times	Marathi	15	The Inquilab (Urdu Paper)	Urdu
6	Mid – Day	English	16	Times of India	English
7	Navbharat	Hindi	17	The Financial Express	English
8	Navbharat Times NBT	Hindi	18	Economic Times Magazine (Weekly)	English
9	Pudhari	Marathi	19	Economic Times Wealth (Weekly)	English
10	Raigad Times	Marathi			

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## **Innovation, Incubation and Enterprise (i2E) Centre at Dr. Babasaheb Ambedkar Technological University**

The plan aims to establish the **i2E** Centre through support from the State Government to leverage the talent and aspirations of engineering graduates of the University for Opportunity Creation and wealth generation while meeting the immediate and future needs of the society and industry alike.

In view of this, proposal was sent to MSInS, Skill Development and Entrepreneurship Department, Government of Maharashtra. This Department has issued letter of Intent on 3<sup>rd</sup> October, 2018, to University for establishing i2E Centre and University is expected to get a grant of Rs.5 crore for the same.

The mission of the **i2E** Centre is to encourage and support establishment and growth of technology-based start-ups. By fulfilling this mission, the Centre shall contribute to job creation, improve employability of graduates, enhance economic health of the region and meet the demands of the society and industry across the entire State through the Regional Centres and Sub-Centres of the University.

The **i2E** Centre will provide an ecosystem to start-ups of enterprising students and immediate alumni of the University and affiliated colleges. The i2E Centre shall provide working space at flexible lease, common office and Maker's laboratory facilities, business guidance, mentoring, and other technical resources in a network mode at the Main Centre of the University.

The **i2E** Centre shall host approximately six to ten clients at a time in a new 5,000 square feet well equipped facility that would include a mix of office and lab space & necessary infrastructure for prototype building & legal support. The facility, owned by the University and State of Maharashtra, is being built at the Main Centre of the University and shall be operational within one year

The **i2E** Centre shall be an autonomous Section 8 Company at the Main Centre of the University. The premises will be owned by the University but leased to the Centre on rental basis. The University has appointed Board of Directors and an Executive Committee.

### **Board of Directors of the Centre**

<b>Sr. No.</b>	<b>Name</b>	<b>Organization</b>	<b>Designation on the board</b>
1	Shri. Milind Kamble	DICCI Chairman	Chairman
2	Dr. Vivek Vadke	ExTech Process Engineering Ltd.	Director
3	Mr. Tarun Malkani	Angel Investor	Director
4	Shri Maninder Singh	MCCIA, Mumbai	Director
5	Shri. Arvind Krishnaswamy	BPCL, Mumbai	Director
6	Shri. Pritam Datta	Sr. Director, Capegemini, Pune	Director
7	Dr. S.L. Nalbalwar	Dr BATU	I/C Director and CEO of Centre

The Directors of the Board are experts in technology, management and finance, who share the vision for the Centre and are willing to provide expertise that will contribute to the ability of the Centre to fulfil its mission.

The Board shall monitor and evaluate the performance of the Centre in terms of the impact of start-ups incubated by the Center. The Registrar and Finance Officer of the University shall be permanent invitees on the Board.

### **Executive Committee of the Centre**

<b>Sr. No.</b>	<b>Name</b>	<b>Designation on the board</b>
1	Dr. Sanjay L. Nalbalwar, Head, Department of E & TC Engg.	I/c CEO
2	Dr. Sachin M. Pore Head, Department of Civil Engg.	I/c Incubation Manager
3	Dr. Arvind W. Kiwalekar Head, Department Computer Engg.	Member
4	Dr. K. Vadirajacharya Head, Department Electrical Engg.	Member

5	Dr. Shivajirao M. Jadhav Head, Department Information Technology	Member
6	Dr. Brijesh Iyer Assistant Professor of E & TC Engineering	Member
7	Dr. Raju S. Pawade, Workshop Incharge & Associate Professor of Mech Engg.	Member Secretary

The Centre has an Executive Committee appointed by the University. The Dean-R&D and Industry Relations of the University shall be the ex-officio member of the Committee. The Committee shall provide support to the Start-ups for job creation, and economic health enhancement of the region.

Interns at the Dr. BATU and other colleges affiliated to the University will provide a talented, affordable work pool to support the Centre and special projects on an ad-hoc or on-going basis. The Centre will establish a process that provides the entrepreneurs with the means to identify, screen, and recruit interns.

The **i2E** centre has in receipt of Start-up proposals from University Departments and various affiliated institutions of the University. The details are as follows:

Sr. No.	Name of Startup	Website URL	Sector	Testimonials (if any)	Remarks for Current Status
1	JANGS Technologies, Ichalkaranji	<a href="http://jangs.co.in">http://jangs.co.in</a>	IT and Miscellaneous	Letter of Intent is submitted	Machine Control, Image Analysis software, and ERP solutions Design of Machine Tools, Automation Fixtures, etc. Consulting in Manufacturing Processes. Received Most Prestigious State level award named "Young Achiever Award", selected from Maharashtra and Goa state, for his innovative and Indigenous work in the field of Foundry technology, Food processing systems and Intelligent Software.
2	Energy Auditing & Power Quality Assessment, Mahad	--	Energy	Letter of Intent is submitted	Expertise is available and extended similar services as curriculum based activities. Now it is to explore professionalism in this area.
3	Kaizaen Systems Pvt Ltd	<a href="http://www.kaizaen.com">www.kaizaen.com</a>	IT and Energy	Letter of Intent is submitted	Developing products on various IT platforms including web and android application Recently incorporated.



4	Online Grievance Redressal system	<a href="http://grievance.dbatu.ac.in">grievance.dbatu.ac.in</a>	Governance	Letter of Intent is submitted	Website under development. It can be customized and scaled to fulfill the needs of any academic institute as well as any establishment.
5	Online Alumni Data Collection system	<a href="http://alumni.dbatu.ac.in">alumni.dbatu.ac.in</a>	IT	Letter of Intent is submitted	System is live and modification is under progress. It can be customized and scaled to fulfill the needs of any academic institute.
6	Dooth Pvt Ltd, Pune	--	e-commerce	Letter of Intent is submitted	In this start-up all the retailers are tied up with company to get the benefits to society around the University.
7	Wireless Charger	<a href="http://wc.dbatu.ac.in">wc.dbatu.ac.in</a>	Energy	Letter of Intent is submitted	Developing wireless charger for charging of mobile, electric vehicle and other charging devices.
8	LGPS HYBRID ENERGY PVT LTD	<a href="http://www.lgpsenegry.com">www.lgpsenegry.com</a>	Design and installation	Letter of Intent is submitted	Will help for design and installation
9	MAXSUS INDIA PVT LTD	<a href="http://www.mssussolar.com">www.mssussolar.com</a>	Energy	Letter of Intent is submitted	Robotic Solar Panel dry Cleaner System
10	Solar Vehicle	<a href="http://sv.dbatu.ac.in">sv.dbatu.ac.in</a>	Energy	Letter of Intent is submitted	Developing Solar Vehicle for 3 Passenger. Product is ready and yet to commercialized

The Centre will work with GoM's Start-up initiative to provide student entrepreneurs with access to a range of business-related topics useful to any start-up including financial, legal, organizational, marketing, insurance, etc, depending on demand and needs. Seminars emphasizing topics of special interest in emerging technology businesses will be conducted on a regular basis.

The i2E centre has organised

1. Hon. Vice-Chancellor delivered expert talk on Incubation and Entrepreneurship to members of UCELL group having about 30 members formed for Start-up activities.
2. Expert talk on "Incubation, Innovation and Entrepreneurship" was delivered by Shri K.S. Patil, Founder, Nashik Engineering Cluster (NEC) on 16<sup>th</sup> October, 2018. Explained the formation of company for start-up, role incubator, possibilities of joint activities with BATU.
3. Expert talk on "Role of Technology on social Entrepreneurship" on 29<sup>th</sup> October 2018.

The Technology is a driving force for society as well as business and, by enabling entrepreneurs using the power of technology, i2E contributing positively to human progress.

During this Expert talk following some points were covered:

- Understanding of how social entrepreneurship and digital technology are combining and shaping each other in new, and sometimes profound, ways.
- Exploring how emerging technologies are enabling a new generation of social innovations in the delivery of education, agriculture, democracy, and so on.
- Design a blueprint for their own social innovation and recruit others to their cause

Along with this session, two competitions were carried out for the students

- 1) Debate competitions
- 2) Article writing Contest

There were 8 participants for the Debate competition and 7 participants for Article writing Contest and total 40 students were present for the talk.



**Tribal Development Centre (TDC), Dr. Babasaheb Ambedkar Technological University  
And  
ITDP Ghodegaon, Pune**

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**Tribal Development Centre (TDC)  
Dr. Babasaheb Ambedkar Technological University**

- MoU was signed by the DBATU and the Tribal Development Department, Government of Maharashtra on 5/6/2017 at Sahyadri Guest House, Mumbai for spreading science and community services.



Mumbai and at Mantralaya, Mumbai



MoU signed at Sahyadri Guest House,

- As per the MoU between ITDP, Ghodegaon and DBATU signed on 03/04/2018 at Mantralaya, Mumbai for 'Startup India' activity, the inauguration of the Tribal Development Centre link to DBATU website and 'Startup Tribal' logo and activity were performed at Pune in presence of Pune Guardian Minister Hon. Girish Bapat on 25/06/2018.



Tribal Development Centre WebLink  
Inauguration



Startup Tribal Inauguration

- Under the active leadership and vision of Mr. Ayush Prasad (IAS) a team visited DBATU on 03/07/2018 to finalize the term and conditions of the startup activity at DBATU.

- To prepare a Business model and prototypes of the creative ideas from the tribal youth a two special 'Awareness Startup' training workshops were organized at DBATU, Lonere during 24 to 26 Oct. 2018 and 13 to 15 Dec, 2018 at DBATU, Lonere.



Scrutiny Committee



First Awareness workshop on Startup

- TDC, DBATU becomes the knowledge partner for MahaSona Night Soil Manure project and design of Night Soil Manure dryer is given to the PO Ghodegaon.



Inaguration of MahaSona Manure



- Government of Maharashtra sanctioned INR 16,00,000/- to DBATU and PO Ghodegaon during 2018-2019 for 'Startup Tribal' activity.
- Nagaland Governor team visited DBATU on 15 August, 2018 for possibilities of Nagaland Tribal Activity.



Visit of Nagaland Coordination Team

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## **DBATU NCC UNIT REPORT 2017-18**

NCC Unit of Dr. Babasaheb Ambedkar Technological University had performed many social and cultural activities/events organized by them this year. Presently cadets of our platoon are giving their best in many activities. Cadets had performed and participated in the activities reported here under the supervision of Captain Milind Bhagat Sir.

### **Discipline Committee**

DR. BATU NCC UNIT had played important role in traffic and crowd management in birth anniversary of great warrior Chhatrapati Shivaji Maharaj at various locations.

### **Firing Competition**

On 4<sup>th</sup> March 2017, the DBATU NCC UNIT had organized a firing competition in Campus of our University. Total 70 cadets were participated in the competition with an enthusiasm. Everyone learnt different positions of firing from the respective seniors present. Cadets were taught to load a rifle and fire it on the target. At the end of Competition winners were awarded.

### **Raigad Trekking**

On 12<sup>th</sup> March 2017, DBATU NCC UNIT had organized an adventure trekking to the Raigad Fort, Capital of Chhatrapati Shivaji Maharaj Kingdom. Trek was started from our University up to the Raigad Fort. Cadets climbed on the various hills of Sahyadri Ranges to carve out their way to Raigad Fort. The total distance covered in this trekking was approximately 18 kms. Cadets learned the way to adjust themselves with Natural resources and completed the Trek successfully.

### **Digitalization Drive**

DR. BATU NCC UNIT had organized Digitalization Drive to spread awareness about digitalized India. cadets gave information to people of Mangarul village about digital payment system, online shops. Cadets also cleared doubts of people about Internet banking transactions, new rules and regulations of banks.

### **Maharashtra Day celebration**

On 1<sup>st</sup> May 2017, DBATU NCC UNIT celebrated Maharashtra day. Hon. Vice Chancellor of our University Dr. Vilas Gaikar Sir hosted the National Flag in the morning ceremony. Later on, Chief Guest addressed the crowd with a motivational talk. The ending ceremony was carried out by a tree plantation programme in the IOPE campus

### **Yoga day celebration**

As per the guidelines of the government of India, Our University celebrated International Yoga Day on 21<sup>st</sup> June 2017 on behalf of DBATU NCC Unit. Hon. Vice Chancellor Dr. Vilas Gaikar Sir as well as some teaching and non-teaching staff of our university performed Yoga actively. Several speeches were given by the guest on the importance of Yoga for our health and hygiene.

### **Tree plantation programme**

Maharashtra government declared to plant 2 crore trees for the welfare of the environment. So DBATU NCC UNIT conducted tree plantation program in university campus on 1<sup>st</sup> July 2017. Chief guest of this program was Hon. Vice Chancellor Dr. Vilas Gaikar sir. Near about 600 plants had been planted. Students as well as teaching -non-teaching staff of university participated in this program.

### **Kargil Vijay Diwas**

Every year our unit celebrates victory of our armed force on 26<sup>th</sup> July, on the occasion of Kargil Vijay Diwas DR. BATU NCC UNIT had arranged speech competition on different topics related to Indian army and its victorious wars. Also, cadets showed different formations of drill.

### **Kalsubai Trek**

DR. BATU NCC UNIT had successfully climbed 1646 m kalsubai peak of Western Ghats in collaboration with “BATU PEREGRANITES”, It was awesome experience of adventure to climb one of the top most peak of Maharashtra.

### **Independence Day**

Our cadets participated in the Independence Day Parade on 15<sup>th</sup> august 2017. Vice Chancellor of our University Dr. Vilas Gaikar Sir graced the occasion as Chief Guest and mastered the ceremony.

### **Mangarul cleaning**

Our NCC UNIT played important role in cleanliness of Mangarul village, every month cadets serve their best to clean overall village and put in values of Swachh Bharat.

### **Swachhta Pakhawada**

As per Guidelines from 6 MAH BATALLION NCC UNIT, DBATU NCC UNIT had organized 15 days cleaning campaign in our university areas under the name Swachhta Pakhwada. Our Cadets cleaned various areas of our university campus effectively. Also, cadets spreaded awareness about Swachh Bharat through seminars, rally's, poster presentations.

### **Traffic duty**

DR. BATU NCC UNIT played important role in traffic management on the occasion of Ganesh Chaturthi, Chhatrapati Shivaji Maharaj Jayanti, Dr. Babasaheb Ambedkar Jayanti. Also, our cadets managed crowds and traffic during different festivals.

### **Blood Donation**

On 5<sup>th</sup> March 2017 and 21<sup>st</sup> August 2017, 27 Cadets willingly participated in the blood donation campaign arranged at Mangaon under the programme of Maha-raktadaan Shibir.

### **Houses Competitions**

Like the Indian Military Academy, the Officers Training Academy our NCC UNIT is not exception in Interhouse Competitions. Houses are Raigad House, Panhalgad House, Sinhgad House, Pratapgad House. We had arranged different competitions, these are Speech competition, Debates, cross-country 5 kms, football, Relays, Essays, Poster making. Pratapgad was the overall winner of competitions.

### **Run for Unity Marathon**

On 31<sup>st</sup> October, we had arranged “RUN FOR UNITY” on the occasion of birth anniversary of Iron man of India Sardar Vallabhbhai Patel. Cross country was consisted of different obstacles in a way. After the cross country cadets participated in speech competition.

### **Tribute to 26/11 Martyrs**

On 26<sup>th</sup> November 2017 our unit gave tribute to martyrs by lighting up candles with the Oath to make ourselves to serve our best to Nation at every walk of life.

### **Survey**

Our cadets had surveyed in 4 villages near Raigad Fort regarding water crisis, Its management, population, remedies on problems. It includes villages like Sutarwadi, Undarewadi. Our unit will deploy solar water pump and purifiers in these villages in collaboration with Rotary Club of Goregaon.

### **Convocation 2018**

On 12<sup>th</sup> January 2018, Dr. Babasaheb Ambedkar Technological University had arranged its 22<sup>nd</sup> Convocation. Honorable Chief Guest, Director of IIT Bombay Dr. Devang Khakhar along with other dignitaries were present on the occasion. Chief Guests were welcomed by the Guard of Honour.

## **Mangrul Trek/ Firing**

On the occasion “Indian Army Day” our NCC UNIT had arranged Trekking to Mangarul Hill. Our 90 cadets had enjoyed trek with shooting competition and winners, Cadet Rutuja Mapari and Cadet Anup Kore were awarded at the end of trekking.

## **ACHIEVEMENTS**

- Last year, 21 cadets of our NCC Unit cleared C Certificate Examination successfully. Out of these 9 cadets got Alpha Grade in C Certificate. These are Senior Under Officer Sunil Narwade, Junior Under Officer Sachin Londhe, Company Quarter Master Seargent Swapnil Jambhulkar, Company Seargent Major Nikhil Badole, Company Seargent Major Naresh Murkute, Cadet Atul Singh, Cadet Anerao Sandip, Cadet Devakate Lakshman, Cadet Vaibhav Mali.
- From our unit, Junior Under Officer Kishor Baban Veer got selected for Indian Military Academy Attachment Camp held at Dehradun, first in group dance, first in Charlie group drill competition, successfully cleared physical proficiency test of army standard, came in first enclosure of 5k cross-country.
- In Annual Training Camp held at Dahisar, four cadets of our unit, Lance Corporal Omkar Gaikwad, Lance Corporal Amey Jadhav, Cadet Navanath Khindkar, Cadet Paresh Chaudhary got selected for Thal Sena Camp
- From our unit total 6 cadets got selected for National Integration Camp. In NIC held at NIT Silchar, Company Seargent Major Vinay Khairnar and Seargent Vishal Tekale represented Maharashtra from our unit, Company Seargent Major Vinay Khairnar was Maharashtra Directorate senior and Seargent Vishal Tekale won Silver Medal in Debate Competition, they both won silver medal in group dance, they were second in National Integration Awareness Presentation, Company Seargent Major Harshad Sutar and Corporal Saurabh Khandebharad got selected for National Integration Camp held at Mehar, Madhya Pradesh, Our Corporal Saurabh Khandebharad won silver Medal in debate Competition. Corporal Nitesh Gothe and Cadet Suraj Lomate got selected for camp held at Tezpur, Assam.
- From our unit three cadets, Senior Under Officer Ajay Chavan, Junior Under Officer Shubham Katre, Company Seargent Major Samarjeet Jadhav got selected for All India Trekking Camp held at Belgaum, Karnataka.
- Combined Annual Training Camp held at Colaba, our 33 cadets performed in different activities and achieved medals. Our Lance Corporal Omkar Gaikwad won gold medal in singing and rewarded as Best Cadet by gold medal, In Tent Pitching our three cadets, Lance Corporal Prathmesh Patil, Lance Corporal Omkar Gaikwad and Cadet Navnath Khindkar won gold medals. In quiz competition our Cadet Rakesh Bondave won gold medal. In dance competition Cadet Pratik Ambhore won Silver Medal, Our Seargent Sujay Borle served as Guard of Honour. Our Junior Under Officer Kishor Baban Veer was the Senior of all Battalions (Senior Division), Company Quarter Master Seargent Nishant Yadav was Senior of 6 Maharashtra Battalion (Senior Division), Seargent Sujay Borle was Senior of 6 Maharashtra Battalion (Junior Division).

## **5 MAH BATTALION**

Women's College SNDT Churchgate, Mumbai

- Opportunities don't come knocking our door we have to create them for ourselves. As it is rightly said every cloud has a silver lining similarly it was possible to bring solution to the one of the most difficult situations and that was bringing vacancies for girl cadets in our University but because of true passion of our girl cadets and the ultimate support of ANO Major Neela Thakkar it was possible to do so for the first time in the history of Dr. Babasaheb Ambedkar Technological University. The enrolled cadets are –  
Junior Under Officer Rutuja Rawle, Company Seargent Major Akshada Gawali, Seargent Shrutika Telange, Corporal Rani Sase, Corporal Mrunalini Gaikwad, Lance Corporal Vinita Jawake, Lance Corporal Kadambari Vitkar, Lance Corporal Shraavya Rao, Cadet Pratibha Kumari, Cadet Prajakta Mhetre, Cadet Trupti Bandgar, Cadet Ruya Kapdekar, Cadet Rupa Potdar, Cadet Nandini Shirke.
- The true talent can never be hidden and similarly such talent of our hard working cadets was recognized by Combined Annual Training Camp and the best achievements are
  - Guard of Honour – Lcpl. Kadambari Vitkar
  - Cat Camp Senior – Juo. Rutuja Rawle

- Cat Company Senior – Csm Akshada Gawali
- Cat Camp Pilot Medal – Cpl. Shraavya Rao  
Cpl. Mrunalini Gaikwad
- Mess Comander – Cdt. Ruya Sakharkar

The best achievement is piloting done by Cadet Yogita Patil and Cadet Ankita Bagal in 21<sup>st</sup> Convocation of our University.



### National Service Scheme

NSS unit of Dr. Babasaheb Ambedkar Technological University, as usual, this year also has conducted many social and cultural activities/events, such as pulse polio immunization, disaster management, health related camps (303 volunteers actively participated), blood donation (211 volunteers actively participated, whereas 277 were expected), tree plantation (200 volunteers actively participated, whereas 865 were expected), cleanliness campaign (in urban area), elimination of plastic use, awareness campaign about malaria, dengue, swine flu, etc. At the same time, certain domains of work have been adopted as part of the NSS program; the adoption includes: railway station, bus stand, religious places, statues of great personalities, pools, etc.

Cleanliness campaign in rural area includes creation and maintaining of Devrai and Vanrai; conservation of historical places like forts, tourist places, etc; maintaining the water supply resources; cleanliness in primary schools, regular health check-up, caring of cattle, etc; to inspire people or the production of compost, management of used water; to maintain good condition of the adopted roads, to reduce the number of accidents on the road, etc.

Along with aforementioned events, the NSS unit of this university has successfully followed the Swachhha Bharat Abhiyan proposed by the Central Government of India. As a part of this program, health card holders' survey has been made, health checkup reports were made of each of the 3000 families in the adopted villages, searching the malnourished children they were made part of the mainstream society, many of the government schemes related to health were campaigned, awareness camps about women's issues were organised, the people have been made aware about cancer, campaign for Yoga also was organised, a number of farmers have been consoled and diverted from the thoughts of suicide, many of the campaigns were organised to increase the ratio of crop production, to maintain health and increase their productivity awareness program was held.

#### **Other Special Camps conducted by the NSS unit of this University:**

(Total participants: 154, Boy Volunteers: 84, Girl Volunteers: 70)

Tree plantation during April to May 2018.

Campaigns with PAANI Foundation.

Leadership skills development program.





Inauguration of Blood Donation Camp b  
Dr. Brahmarkar



Tree Plantation by Hon'ble Vice-Chancellor  
Dr. V.G. Gaikar



Tree plantation by students



Cleanliness drive in Lonere Village

■ ■ ■

# Institute of Petrochemical Engineering

## Message from the Principal



It gives me pleasure to present annual report of the Institute for the year 2017-2018. Institute conducts eight diploma programs and one advanced diploma in water quality management. (ADWQM) Enrollment for these courses have been 100% except for diploma in polymer and plastics engineering. All academic activities have been conducted as per the academic calendar. Apart from academic activities soft skill training programs were organized for 40 to 50 hours duration per semester for all the first, second and third year students. The soft skill training program is supported by M/s. Mahindra CIE as per the MoU. Every department organizes at least one visit to industry and expert lectures from the industry person. Sharing experience from alumnus is now a regular activity in most of the departments and response of alumni is very good. This is truly enhancing the students' confidence as their seniors share their hands on experience. Placement of final year students is satisfactory. All departments have students association actively organizing various departmental events and parent meets. This helps in improving managerial skills, soft skills and in turn overall development of students. Response in parent meet is very good and parents' feedback is quite good. The result of final year students is very good. Students of chemical engineering have secured admission to B Tech. at LIT Nagpur while students of Computer, IT, electronics and telecommunication and instrumentation Engineering are securing admission for graduation after diploma at COEP Pune, VJTI, PICT Pune and other reputed institutes in Maharashtra. All the staff members are sincerely working for the development of the institution. Teachers are regularly attending training programs organized by NITTTR Bhopal, Pune (extension centre), NITTTR Chandigarh, NITTTR Kolkata and Dr. BATU Lonere. This helps them to upgrade in their field of interest. Four staff members have registered for PhD at Dr. BATU Lonere and one staff member is selected at NITTTR Chandigarh under QIP (poly) scheme of AICTE New Delhi. Two staff members are completing their M Tech study at Dr. BATU. The Institute extends its services to the society through a scheme of "Community Developments through Polytechnic" sponsored by MHRD, New Delhi by educating the dropouts and empowering them with technical skills in the field of electrician, welding, computer, AUTOCAD, tailoring etc.

I take this opportunity to thanks the management of University for helping us in improving the quality of diploma education.

## VISION

To transform the institute into a seat of learning and contemplation so as to provide comprehensive technical education at Diploma and Post Diploma level and create world class technicians oriented towards lifelong learning.

## MISSION

We in this institute commit ourselves to realize our vision through continuous quality improvement of faculty and staff adopting a vibrant curriculum and scientific delivery and a culture of transforming appropriate technologies to rural areas and the underprivileged people.

## Office Staff



Ankush Shantaram  
More  
Office  
Superintendent



Anil Dinkar Pawar  
Accountant



Anil Laxman  
Goregaonkar  
Senior Clerk



Mrs. Mugdha  
Mangesh Gharat  
Senior Clerk



Mr. Sanjay  
Prabhakar  
Ghosalkar  
Senior Clerk



Mrs. Snehalata  
Milind Langi  
Junior Clerk



Sandeep Devendra  
Nivate  
Typist & Clerk



Mr. Sadanand Arjun  
Patil  
Typist & Clerk



Mrs. Sangita  
Harendra Palkar  
Typist & Clerk



Ms. Shilpa Vijay  
Jadhav  
Typist & Clerk



Mr.Suryakant  
Munjaji Harkal  
Clerk



Mr.Chandrakant  
Mahadeo Kamble  
Store Clerk



Mr.Mangesh  
Ghosalkar  
Assistant Librarian

Following is the details about enrollment, result, placement, industrial visits, expert talk and other various activities organized in the institute in 2017-18

#### Department wise enrollment of students during 2017-18

Discipline	First year	Second year	Third year
Chemical Engg	66	62	57
Computer Engg	59	57	56
Electrical Engg	66	73	59
Electronics and Telecommunication Engg	57	53	58
Instrumentation Engg	56	67	66
Information Technology	29	50	54
Petrochemical Engg.	53	60	62
Polymer and Plastics Engg	01	13	42

#### Result Analysis in Percentage

Discipline	First year	Second year	Third year
Chemical Engg	60	80.6	91
Computer Engg	52	70	84
Electrical Engg	66	78	86
Electronics and Telecommunication Engg	40	83	84
Instrumentation Engg	50	74	88
Information Technology	52	88	86
Petrochemical Engg.	51	93	96
Polymer and Plastics Engg	50	60	67

## Placement Details

Placement Statistics				
Sr No	Name of Company		Names of Students Selected	Package per annum
<b>Chemical Engineering</b>				
1	Dipak Fertilizer Taloja, Raigad	04	Sahil Thakur Rohit Mandavkar Vivek Mohite Vinod Machutare	Rs 1.5 lakh
2	M/s Arshiya Fiwaz Panvel	01	Aniket Gavand	Rs 1.4 lakhs
3	M/s. Sandoz Ltd Mahad	01	Prashant More	Rs. 1.6 lakh
3	M/s. Zuari Agrochem. Ltd, Goa	01	Akshay Sakpal	Rs 1.86 lakh
4	Pidilite Industries Mahad	01	Sudesh Bait	Rs 1.65 lakh
5	Dow Chemical, Lote Parshuram Chiplun	01	Bhosale Prasad S.	Rs.1.6 lakh
<b>Water Quality Management</b>				
1	PBS Water Tech company, Mumbai	03	Vivek Chitalkar Nishant Kasbe Vinesh Ratate	Rs 1.6 lacs
2	Aguapuro Equipments Pvt. Ltd, Mumbai	06	Priyanka Rajshirke Sonali Ubhare Pravin Mahato Uroosa Kondvilkar Tejas Deore Vaibhav Gaikwad	Rs 1.8 lacs
3	Praj Hipurity pvt ltd, Mumbai	06	Shushant Shinde Yash Kapdekar Shubham Lokhande Roshan Shildhankar Vaibhavi Athavankar Giridhar Bhamare	Rs 2 lacs
4	Clear Water pvt ltd	06	Hemant Somade Prathamesh Raut Sanket Shinde Ashish Bhadavkar Neha Dabde Kishor Bhalekar	Rs 1.6 lacs
5	Pepsico Pvt Ltd, Roha	04	Mahesh Kohli Shivprasad Shingare Snehal Karjekar Neha Mande	Rs 1.2 lacs
6	Ion Exchange ltd	07	Nishant Bhoite Pranay Chavan Rishikesh Kharade Tejas Korpe Prachit Salvi Sanjiv Merukar Roshan Tembe	Rs 1.8 lacs
7	Asian Paints Ltd Taloja	01	Prashant Suryavanshi	Rs.4 .5 lakh

<b>Computer Engineering</b>				
1	SEED Infotech, Pune	01	Roshan Sawant	Rs. 1.44 lakh
<b>Electrical Engineering</b>				
1	L & T, Mumbai as a Junior Trainee	01	Gavaskar Sagar R.	Rs. 2.58 lakh
2	Deepak Fertilizers Taloja	01	Dhamane Nikhil D.	Rs. 2.2 lakh
3	E-Mark batteries, MIDC- Mahad	02	Jangam Pranay Pravin Sutar Prashant	Rs. 1.2 lakh
4	Ask Electrical Panvel	01	Mahadik Kalpesh	Rs. 1.8 lakh
5	Ageis Logistik Chembur	01	Tekalkar Shubham	Rs. 1.5 lakh
<b>Electronics and Telecommunication Engg</b>				
1	Sterlite Pvt.Ltd., Aurangabad	05	Patil Shailesh Ganesh Thakur V. Kashinath Bhostekar Snket A Kondalkar Pinkal P Shinde Pratik	Rs.1.2 lakh
2	SEED Infotech, Pune	01	Ketan Jaikar	Rs. 1.44lakh
<b>Instrumentation Engg</b>				
1	M/s. Lupin Ltd.	01	Dipesh Thale	Rs.1.8lakh
2	M/s. Deepak Fertilizers	01	Nikhil Nare	Rs.1.8 Lakh
3	M/s. Vinati Organics	01	Prathamesh Sutar	Rs. 1.44 lakh
<b>Information Technology</b>				
1	SEED Infotech PVT Ltd, Mumbai	01	Sohel Boat	Rs. 1.44 lakh
<b>Petrochemical Engineering</b>				
1	Deepak Fertilizers, Taloja	01	Pranit Patil	Rs. 1.8 lakh
2	Supreme Petrochemicals	01	Ajinkya Raorane	Rs. 1.8 lakh
<b>Polymer and Plastics Engineering</b>				
1	Indian Oxide & chemical Pvt. Ltd., Pune,	02	Omkar Dilip Phasalkar Mr. Abhishek Chinchgharkar	Rs. 1.5 lakh
2	Dow Chemical International Pvt. Ltd., Lote Parshruram, khed	05	Mr.Shahid L. Natuskar Mr.Alankar K. Parte Mr.Dipesh Dilip Arban Mr.Paresh Mangesh Adit Miss.Snehal C. Jaitpa	Rs.1.7 lakh
3	ASB Polymer, Mumbai,	04	Mr. Aniket Dhanawade Mr. Diptesh Mahadik Mr. Roshan J Patil Mr S S Shinde	Rs.1.5 lakh



## Expert Talk

S.N.	Name of the Topic	Name of the Expert	Participants
1.	Industrial Safety	Mr. Sumit Jadhav Jr. Executive-Deepak Fertilizer Ltd.	200
2	IT Industry Insight (6th January, 2018)	Mr. Ashish Bhide(Pall Corporation, Pune), Mr. Tushar Deogharkar(IBM Ltd., Pune) and Mr. Vijay Pande(GS Lab, Pune)	120 students T.Y. Computer and SY Computer Students
3	Opportunities for Electrical Engineers in the present scenario	Mr. Ramesh Patange, Sadara Chemicals, Soudi Arabia	Third Year electrical engg students
4	PCB Designing and fabrication workshop	Mr. Prathmesh Pawar	Third year & Second year electrical engg students
5	Energy Isolation	Mr. Santosh Mhatre	
6	Solar Power Systems	Alumnus Mr. Nitin Shinde, Executive Manager, Enrich Energy Pvt. Ltd., Pune	Students of EXTC
7	Industrial Electronics Components	Prof.Sanjay Choudhary, Electronics Study Center Nashik.	EXTC and Instru engg students
8	Energy Conservation	Mr. Pramod Daspute, Certified Energy Auditor	Electrical Engg students
9	Programme on Industrial Motivational Campaign	Mr. Dharmsevlan & Shri. Shailendra Singh	Electrical Engg students
10	Arduino Programming	Mr. Huzair Deshmkh, Sr. Service Engineer, Honeywell Ltd, UAE	3rd year Instrumentation engineering students
11	Industrial Automation	Mr. Nilesh Manchekar, Sr. Project Engineer, Sarla Technologies, New Mumbai	3rd and 2nd year Instrumentation engineering students
12	Project planning	Mr. Chilaya Panshikar, Versa Controls, Pune	3rd year Instru engineering students
13	Project Development	Mr.Vicky Pawar	TY IT students
14	Management skills	Mr Humanshu Meshram	TY IT students

### Industrial visits of students

Sr.No	Industry/Organization Visited	Participants
1	INOX Renewable Ltd. Kolhapur	Third year electrical engineering
2	1. Shalco Industries 2. Emark Energisers Pvt. Ltd 3. Time Techno- Plast Pvt Ltd. Mahad	Second Year electrical engineering
3	JNPT, Uran	Third year electrical engineering
4	Hindustan Waste Treatment Pvt. Ltd, Saligao Seminary, Goa.	Third year electrical engineering
5	Kisan veer Satara Sakhar Kharkhana, Bhuinj Dist- Satara.	Third Year Instrumentation
6	Industrial Visit Privi Organics Mahad	Third Year Petrochemical Deptt students and faculty
7	Institute of Satellite Telecomm (ISTC), Pune on 19/01/218 for third year students	EXTC Department

### Achievements & Activities Organized

Alumni Meet: An alumni meet was organized by Chemical Engg department on 25 March 2017. Around 20 alumni from different batches attended the event. They shared their experience as well as guided students.. An interaction session was organized with alumni so that students get the proper guidance for the various opportunities after diploma.

Final year Students of chemical Engg Swapnil Sabane and Ashruba Patil of Chemical Engineering team participated in Institute paper presentation competition presenting on “Fuel cell and Electric conservation” won silver prize.

World Water Day: On world Water day “Water quiz competition” was organized by student of chemical engg.

Energy Conservation Week: Electrical Engineering department celebrated Energy Conservation Week in which eight students participated in street play on energy conservation in 5 villages namely Mahad, Poladpur, Kachale, Chapgaon, Lahore

Polymer and Plastics Engineering department organized training program on CAD using CREO in collaboration with CIPET Aurangabad. Twenty present students and two pass-out students participated in this training programme and successfully completed it as per CIPET norms.

Pranali Laxman Patil, 9.8 CGPA, Rank First in State merit list for Direct Second year Engineering Admissions 2018-19 and admitted in College of Engineering, Pune.

Master Dipesh Sinha, 9.4 CGPA, Rank First in State merit list (Instrumentation Engineering) for Direct Second year Engineering Admissions 2018-19 and admitted in College of Engineering, Pune

Dr. B. C. Kharbas, lecturer in Electrical Engineering is selected by MPSC as head of department at government polytechnic Ahmednagar.

Dr.M. A. Dabhade, Delivered convocation address at Doshi Vakil Senior college Goregaon



### **Computer Engineering Department organized following activities**

Institute level event “Texplorer 2K18” was organized by the department on 6th and 7th April, 2018.

Yoga Training Session of one day was organized on 3rd April 2018 for the second year students. Ms. Rajani Nijwante, T.Y. B. Tech. Electrical Engg was a trainer for the session. On the occasion, Dr. Manjusha Nalbalwar, Physician at of DBATU Medical Facilitation Center gave health tips and guidance maintaining the good health. Ms. Manisha Shinde, Lab Asst (Tech) took special efforts for the successful organization of the event.

Engineer’s day was Celebrated on 15th September 2017 in the fond memory of Bharat Ratna Sir Mokshgundam Visvesvaraya. Poster Presentation activity was performed by the students on this occasion.

Parents Meet on 10th November 2017 and 7th April 2018.

### **Workshops Organized by Computer Engineering Department**

<b>Sr.No.</b>	<b>Name of the course</b>	<b>Duration</b>	<b>Eminent Speakers</b>
1	PHP Workshop	28-29th Sept 2017	Mr. Atul Singh Anvira Edustation, Mumbai
2	Seminar on “Cashless India”	13th October 2017	Students of TY Computer Engg.
3	Project Design Workshop	1st -5th January 2018	Mr. Ashish Bhide, Mr. Vijay Pande, Mr. Tushar Teogharkar
4	IoT and Big Data	20th January 2018	Mr. Prasad Mahamuni, Mr. Prasad Gosavi and Mr. Ashish Sule, IAAA-Upgrade Skills, Pune
5	Workshop on “Android Application Development”	15-16th February 2018	Ms. Sayali Yewale Foslipy Consultants Pvt Ltd, Navi Mumbai

### **Instrumentation engineering Department conducted following activities**

#### **Two Days Technical Symposium – “Idea 2k17” on account of Engineer’s day**

Department of Instrumentation Engineering and Students Association of Instrumentation Engineering organized its First Technical Fest IDEA2K17 on 14th September 2017 as a part of Engineer’s Day Celebration. Various technical events such as Technical Quiz, Paper & Poster presentation, Treasure Hunt have been organized by the SAIE in Idea 2K17.

#### **Two Days workshop on MATLAB and PROTEUS**

Department of Instrumentation Engineering, Institute of Petrochemical Engineering and Maharshi Parshuram College of Engineering, Velneswar jointly organized a Two days’ workshop on MATLAB & PROTEUS during the period 28-29 September 2017. About 110 final year students of Instrumentation, EXTC, Electrical Engineering and IT department were participated in this workshop.

Industrial Motivation Campaign organized by MSME – Development Institute, Mumbai (Ministry of MSME, Govt. of India) - 12th October 2017

Institute of Petrochemical Engineering, Lonere organized an Industrial Motivation Campaign on 12th October 2017 in association with MSME- Development Institute, Mumbai (Ministry of MSME, Govt. of India). The objective of the programme was to motivate prospective entrepreneurs by giving in-puts on topics related to self-employment.

#### **Parents Meet – 12th October, 2017**

The Department of Instrumentation Engineering organized the parent's meet of Second and Third Year Diploma Instrumentation Engineering Students on November 12, 2017.

Alumni Meet : Global Alumni Meet-2017 on 5th March 2017

#### **Department of Information Technology Conducted following activities**

Two days workshop on Python Programming was organised for third year students, Mr.Ganesh Bhosale the CEO of 'Dwij IT solutions' was invited as resource person for the workshop.

Organized department cleaning and tree plantation programme in campus on the occasion of Mahatma Gandhi Jayanti on 2nd October 2017.

Induction programme was organised for First Year newly admitted students on 3rd Sept 2018.

Organized Workshop on Project Development by Department alumni Mr.Vicky Pawar, System Analyst Evolent Health Pvt Ltd Pune on 14th May 2018.

Institute website successfully designed & developed by Mr.Sahil Mhatre student of third year.

Institute Online Grievance System developed by Mr.Sahil Mhatre, Mr.Harshad Kadam & Mr.Omkar Parte students of third year.

#### **Technical Events by Students' Association of IT department**

Organized department level Code Master the programming competition.

Organized departmental level logo Quiz & handwriting Competition.

Organized department level debate competition.

Organized department level technical quiz contest.

Department of Electronics and Telecomm. Engg. Conducted following activities

Dr.D.G.Jadhav delivered expert talk on "Embedded Systems" for third year students on 15/09/2018.

Dr.D.G.Jadhav, Prof.A.M.Kulkarni, Prof.H.H.Patil & Prof.A.J.Naik conducted two days' workshop on "Embedded Systems" for third year students during 21-22 September, 2018.

Prof.L.D.Narote and Prof.S.A.Dawale conducted one day workshop for second year students on "Modern learning Tools & Resources" on 07/10/2017.

#### **Distinguished Alumni of the institute**

Chemical Engg	Dr. Manik Devsarkar at VIT Pune Dr.Sachin Kadu (Working at BARC, Tarapur) Mr. Ramakant Patil (Assistant Technique at ONGC) Mr. Satish Raut (Sr. Executive, SandowsPvt Ltd) Mr. Milind Patil (GET at JSW, Mumbai)
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Water Quality Management	<p>Mr. Amit Patil ( Project Engineer at Wipro, Mumbai)</p> <p>Mr. Vinay Gurav (Director, Mane Group Limited)</p> <p>Mr. Amit Salagare( HSC Manager, Aczonobel)</p> <p>Mr. Prashant Deshmukh( Chief Manager, Praz Ltd, Pune)</p> <p>Mr. Kishor Patil( CEO at Palak Aqua Services Ltd)</p>
Computer Engg Department	<p>Mrs. Pallavi Mohite – Chowdhary (Technical Head, IBM Pune)</p> <p>Mr. Shirish Jaiswal (Team Leader, Infosys Pune)</p> <p>Mr. Prashant Thakur (Principle Infrastructure Engineer, Mphasis Ltd, Pune)</p> <p>Mr. Asim Karel (Software Developer, Snowwhite Software Pvt. Ltd)</p> <p>Mr. Ashutosh Sanap (Software Developer, Oracle Pvt. Ltd)</p> <p>Mr. Ashish Bhide, Global SSD Lead, PAL Corporation, Pune</p> <p>Mr. Vijay Pande - Project Lead, Great Software Laboratory Ltd, Pune</p> <p>Mr. Tushar Deogharkar – IT Specialist, IBM India Pvt Ltd, Pune</p>
Electrical Engineering	<p>Ramesh Patange,</p> <p>Mr. Abhijeet Pathak Alstom Power, New Delhi</p>
Instrumentation	<p>1. Mr.Hemant Wagulde(2010 Batch):Working in Qatar,Polymer Industrial company</p> <p>2. Mr. Navjot Waghmare (2007 Batch): Working as a Consulting Engineer in Germany</p> <p>3. Mr. Vishal Thombare (2002 Batch):Woring as a Project Manager(Pecific Central Teknik Pte) Singapore</p> <p>4.Mr. Chilaya Panshikar(2000 Batch): Working as Project Manager (Versa controls Pune)</p> <p>5. Mr. Huzair Deshmukh (2007: Working as Sr. Service Engineer (Honywell Automation UAE)</p> <p>6. Mr. Amey Kathe (2002 Batch): Sr. Engineer, Honeywell, Mumbai</p>
Information Technology	<p>1.Mr.Vicky Pawar Senior software engineer Valence Health Solution India Pvt.Ltd.</p> <p>2. Mr.Ganesh Umasare, Automation Engineer., Tieto Software Technologies Pvt.Ltd</p> <p>3. Mr.Ajay Chavan Co-Founder &amp; COO, Teentrum Flash Tech. Pvt.Ltd.</p> <p>4. Mr.Ganesh Khedkar, Associate Software Engineer, Rave Technology</p> <p>5. Mr.Sandeep Pawar, Software Engineer, Wipro Technologies</p>
Petrochemical Engg	<p>1.Pankaj Gaikwad, Manager Dipak Nitrate</p> <p>2.Satyendra Joshi, Research Executive Praj Industry</p> <p>3. Pradeep Jadhav, Deputy Manager Production.Saudi Arabia</p> <p>4. Mr.Santosh Morya, Senior Executive Kopran</p> <p>5. Mr.Santosh Sapkal, Executive Enviro And Health Safety Astec Life Sciences</p>

### **Workshops attended by Faculty and staff members:**

- Prof M A Dabhade, Principal attended two weeks training programme on Australia-India Vocational Education Leadership Training (VELT) programme organized by AICTE, New Delhi in December 2016 and March 2017
- Prof R S Kulkarni attended one week STTP on Effective communication in Technical teaching at SP College of Engineering , Mumbai from 2/1/2017 to 9/1/2017
- Prof Y Y Karkare attended two week STTP on MATLAB (Learning by doing) at College of Engineering Karad.
- Mrs. V A Salagare attended workshop on Adopting Change for Worklife Balance at Lonavala from 10 March to 12 March 2017.
- One week STTP on “Academic Reforms and NBA Accreditation” attended by Prof. S.N. Nannaware at G.P. Sakoli during 15-19th January 2018
- “Foundation Programme in ICT for Education” – AICTE approved FDP (Two week) organized by IIT Mumbai – attended by Prof. G.S. Mahamunkar and Prof S R Jadhav during 3rd August to 7th September 2017
- “Pedagogy for online and blended teaching learning process” AICTE approved FDP (Two week) organized by IIT Mumbai – attended by Prof. S.R. Jadhav during 14/09/2017 to 12/10/2017
- “Machine learning tools and application for engineers” by S.R.Jadhav during 12/06/2017 to 21/06/2017
- UKIERI International phase 3 training programme held at Chennai, Bhubaneswar, Jaipur and Mumbai by Dr D S Karanjkar during August, Oct.2017, Jan. 2018
- Recent trends in Signal Representation: A multi-rate Approach at D.B.A.T.U., Lonere by Dr. D. S. Karanjkar , S. G. Karad S. S. Swami during 6 to 14 Nov 2017
- Industrial Automation at KBP college of Engg., Satara. S. G. Hingmire 5 to 9 Dec 2017
- “Foundation Programme in ICT for Education (FDP101x)” by Mr.S.M.Gaikwad during 03 August to 07 September 2017.
- Pedagogy for Online and Blended Teaching-Learning Process (FDP201x) by Mr.S.M.Gaikwad during 14 September to 12 October 2017
- Elements of learner centric MOOC'S by Mr.A.M.Kulkarni during 03/05/18 to 23/05/18.
- Microcontroller and Embedded Systems by Mr.H.H.Patil during 25-29 September, 2017.
- Recent Trends in Signal Representation: A Multirate Approach attended by Dr.D.G.Jadhav, Mr.H.H.Patil, Mr.S.M.Gaikwad& Mr.A.J.Naik at Dr.BATU Lonere during 06-17 November, 2017.
- VLSI and embedded system design by Mr.A.M.Kulkarni during 30 oct.-03 Nov. 2017.
- Internetworking Techniques and Framework for Next Generation Smart Environments by Mr.A.M.Kulkarni during 11th December to 24th December, 2017.
- TOT For placement officers by Mr.L.D.Narote during 18/9/17 to 22/9/17.
- Organising students center activity by Mr.L.D.Narote during 15/1/18 to 19/1/18

## Activity Photographs





### Technical Event Code Master (15th Sept 2017)



### Two days' workshop on Python Programming.



## Affiliated Colleges

<b>Principal's Details Region Wise</b>				
<b>Kolhapur Region</b>				
<b>Sr. No</b>	<b>Institute Name</b>	<b>Name of the Principal</b>	<b>E-Mail</b>	<b>Contact Number</b>
1	Ashokrao Mane Institute of Pharmaceutical Sciences and Research.	Dr. V.C. Yeligar	yveerendra27@gmail.com	9975019279/ 02329-204499
2	Ashokrao Mane Group of Institution Faculty of Engineering & Management Studies (MBA)	Dr.Ravi Lingamallarirao Kottur	ravimkottur@rediffmail.com	8806289792/ 0230-2407740
3	Sharad Institute of Technology College of Engineering	Dr. Sanjay Annaso Khot	sakhot.2000@gmail.com	7350542020/ 02322-253016
4	Sanjeevan Engineering & Technology Institute	Dr. Gopal Vashant Mulgund	principal@seti.edu.in	9146999500/ 0231-2686600
5	Sanjay Bhokare Group of Institutes – Miraj	Dr.A. C. Bhagali	director@sbgimiraj.org	8380013900/ 8380080111/ 0233-2212989
6	Nanasaheb Mahadik College of Engineering, Peth	Dr. J. A. Tamboli	nmcoep@gmail.com	9561828291/ 02342-252100
7	Adarsh Institute of Technology & Research Centre	Dr. V. K.Navik	aitrc@agiv.edu.in	8888807110
8	Padmbhushan Vasantraodada Patil Institute of Technology – Budhagaon.	Dr.SatishChandra vashudeo Joshi	degreeprincipal@gmail.com	9975586453/ 0233-2366245/ 2302484
9	Late Narayandas Bhawandas Chhabada Institute of Engineering and Technology	Dr.Narendra G. Narve	principallnbc@gmail.com	9766587841

10	Karmaveer Bhaurao Patil College of Engineering – Satara	Dr. Patil Vikram S	principal@kbpcoes.edu.in	8600106350/ 02162-230636
11	Dnyanshree Institute of Engineering & Technology. Sajjangadd Road	Dr. A.D. Jadhav	ajay_jadhav@rediffmail.com	8600009009/10
12	Arvind Gavali College of Engineering	Dr. Vilas Arjun Pharande	vilaspharande@gmail.com	8806661739/ 02162200100
13	Gourishankar Educational & Charitable Trusts Satara College of Engg & Management Limb-Satara	Dr.Mrs. Kulkarni Rutujaa Pradyumna	shilpa.samak@gmail.com scoem_sat@yahoo.com	9822602102 7038052285
14	Yashoda Technical Campus, Satara Faculty of Engineering	Dr. Aniruddha B. Mahatme	assodirector_engg@yes.edu.in	7066230401/ 02162-271239
15	Abhinav Education Society's College of Engineering & Technology. (Degree)	Dr.Milind Suresh Pradhan	abhinavengineering@yahoo.com	8888861748/ 8888819937
16	Gourishankar Educational Society's Satara College of Pharmacy,Satara	Dr. Aloorkar Nagesh Hanmantrao	mhaloorkar@gmail.com	02162-275164
17	Gourishankar Institute of Pharmaceutical Education and Research, Limb, Satara	Dr. Adhikrao Vyankatrao Yadav	avyadav03@rediffmail.com giper_limb@rediffmail.com	9890601832/ 02162-268759
18	Yashoda Technical Campus, Satara Faculty of B - Pharmacy	Dr. VivekKumar K. Redasani	pricipalpharma_yc@yes.edu.in	9822027806/ 02162-27138
19	Yashoda Technical Campus, Satara Faculty of M - Pharmacy	Dr. VivekKumar K. Redasani	pricipalpharma_yc@yes.edu.in	9822027806/ 02162-27138
20	Meruling Shikshan Sanstha's College of Pharmacy – Medha	Mr.Phadtare Ganesh R	copm515@rediffmail.com	8652858595



21	Phaltan Education Society's College of Engineering Phaltan	Dr. M.K. Phadatare	mphadatare2005@yahoo.co.in	9422341210
22	Shree SantKarupa Shikshan Sanstha Shree SantKarupa Institute of Engineering & Technology	Dr. Swanand B. Kulkarni	principal@sietghogaon.org	9545809666
<b>Solapur Region</b>				
23	Shanti Education Society's, A. G. Patil Institute of Technology.	Dr. Sunil Aadgonda Patil	principal@agpit.edu.in	9730160904/ 0217-2343099
24	K. S. G. B. S.'s, Bharat Ratna Indira Gandhi College of Engineering	Dr. Sachin Mahadev Gadekar	sachin.gadekar@gmail.com	8411011118
25	Pradnya Niketan Education Society, (Nagesh Karjagi Orchid college of Engg.)	Dr. J. B.Dafedar	principal@orchidengg.ac.in	9552529228/ (0217)-2500020/21
26	Fabtech Technical Campus, College of Engineering & Research	Dr. Vageesha Salanki Mathada	vageesha_sm@yahoo.com	8408889871/ 8600246450/ 02187-223000
27	Shikshan & Krushi Vikas Pratisthan, Medshingi's Sahyadri College of Pharmacy	Mr.Patil M S	sahyadrisangola@gmail.com	9604757946 9336277777 02187202030
28	Vidya Vikas Pratisthan, V.V.P Institute of Engineering & Technology	S.N. Kulkarni	vvpiet@rediffmail.com	9822356199
29	Shriram Shikshan Sanstha's, Shriram Institute of Engineering & Technology Centre	Dr. Deshmukh Pradip Kundlik	dr.deshmukhpk@gmail.com	9158297773/ 02185-274222
30	Bhagwant Education & Research Charitable Trust's, Bhagwant Institute of Technology	Dr. Deshmane A. K	anil31dec@gmail.com	02184-220031

<b>Aurangabad Regional Centre</b>				
31	People's Education Society's, P.E.S. College of Engineering.	Dr. Abhijeet Pandharinath Wadekar	principal@pescoe.ac.in	0240-2403001/ 2351506
32	MSP Mandal's, Deogiri Institute of Engineering & Management Studies	Dr. Ulhas Dattaray Shiurkar	shiurkar@gmail.com	90110780272/ 0240-2367567/ 2337302
33	Shreeyash Prathisthan's, Shreeyash College of Engineering & Technology.	Dr. R. S. Pawar	principal@sycet.org	9049989805/ 0240-6608702
34	Mahatma Gandhi Mission, Jawaharlal Nehru Engineering College.	Dr. Harirang H.Shinde	principal@jnec.ac.in	9657715342
35	Chhatrapati's Shahu Maharaj Shikshan Sansthan's	Dr. Ulhas Bhanudas Shinde	drshindeulhas@gmail.com	9422201795/90111 91795/0240- 6646370
36	Bhartiya Gramin Punarrachana Sanstha, Karmyogi J.K.Jadhav Institute Engg.&Technology	Mr. Shambhanath Gajaanan Kaalekar	appoint01@gmail.com	9870121446/0240- 2472218
37	Mahatma Basaveshwar Education Society's College of Engineering.	Dr.B.I khadalebhavi	khadakbhavibi@gmail.com	02446-247262
38	Shri Tuljabhvari College of Engineering.	Dr. Namdev Devidas Pergad	ndp_15@rediffmail.com	9420476051/02471- 242016
39	G.S.Mandal,s Marathwada Institute of Technology	Dr. Nilesh Ganpatrao Patil	principal.mite@mit.asia	9028887885/0240- 237511
40	Shreeyash Prathisthan's, Shreeyash Institute of Pharmaceutical Education & Research	Ganesh G. Tapadiya	shreeyashiper@gmail.com	9823760515 0240-6608708
41	Shiva Trust Aurangabad, Rajesh Bhaiyya Tope College of Pharmacy (D.Pharm)	Dr. Khavane Karna Bhagwanrao	karnakhavne025@gmail.co m	9527816666

<b>Jalgaon Region</b>				
42	Shiva Trust Aurangabad, Pratibhatai Pawar College of B. Pharmacy	Dr. M. G. Hogade	Pratibhataipawarpharmacy@gmail.com	9325707093/02422-246209
43	P. S. G. V. Mandals, D. N. Patel College of Engineering	Dr. P. D. Patil	pdpatilco@rediffmail.com	9423517700/02565-229649/229730
44	Shripur Education Society's, R. C. Patel Institute of Technology.	Prof. Dr. J. B. Patil	principal@rcpit.ac.in	9923466699/(02563)-259600/259800/259801
45	Godavari Foundation's, Godavari College of Engineering	Dr. Vitthal Gulabrao. Arajpure	vgarajpure07@rediffmail.com	9850886555/0257-2212999/2213500
46	Hind Seva Madal's Shri Santa Gadge Baba College of Engineering & Technology	Dr. R.P Singh	rps125@rediffmail.com	9503264444/02582-224364
47	S. S. V. P. S's, Bapusaheb Shivajirao Deore College of Engineering.	Patil Hitendra Dhansing	princi.ssvps@gmail.com	9545877111
48	Khandesh College Education Society's	Prof. Nitin Narhari Matkari	matkarinn@gmail.com	9326778329/0257-2242025
49	T.M.E. Society J. T. Mahajan College of Engineering	Dr. Nandini Mukund Chaudhari	nandini111@yahoo.co.in	9823133113/02585-248179
50	Shri Vile Parle Kelavani Mandal's Institute of Pharmacy	Dr. Sameer N Goyal	sameer.goyal@svkm.ac.in iopdhule@svkm.ac.in	9552916993
51	Shri Vile Parle Kelavani Mandal's Institute of Technology, Dhule	Dr. Ajay Chandak	ajay.chandak@svkm.ac.in	9823033344
<b>Nanded Region</b>				
52	Mahatma Gandhi Mission's, College of Engineering	Dr. Geeta S. Lathkar	director@mgmcen.ac.in	02462-222999

53	Marathwada Shikshan Prasarak Mandal's Shri Shivaji Institute of Engg.& Management Studies	Prof. Anand K. Pathrikar	anand.pathrikar@gmail.com	9403688433/02452-234190
54	Mahatma Basweshwar Education Society's M.S.Bidwe Engineering College	Dr. Narendra.B Khatod	principal@msbecl.ac.in	9422472813/02382-221846/243390
55	Matoshri Pratishtan Group of Institution School of Engineering & Management	Dr. Sadhana K.Chidrawar	deanenggmpgi@gmail.com	9923151401/02462-297007/230032
56	Shri Ganesh ShikshanPrasarakMandal's, Balaghat Engineering College.	Dr. Shivpuje Nitin P	shivpujenitin@gmail.com	9921618490
57	Sandipani Technical Campus, Faculty of Engineering	Dr. Buke Mohan V	mvbuke@gmail.com	9423078955/02382-263546
<b>Pune Regional Centre</b>				
58	M.C.E. Society's, Allana College of Architecture.	Dr.Lina Debnath	linadebnath@azamcampus.org	9423040251/020-26433202/26683461
59	Vidyavardhan's Institute of Design Environment & Architecture. (IDEA)	Ar. Vijay Sohoni	vjsohoni@gmail.com director@idea.edu.in	9822055188
60	Marathwada MitraMandalM. M. Institute of Environment & Design College of Architecture.	Ar. Hemlata Budhwar	hemlatab.mmied@gmail.com	9850822500
61	Indrayani Vidya Mandir's Indrayani Institute of Pharmaceutical Education & Research	Dr. Brijendra Brajmohan Jain	principal.iiper@gmail.com	9822884203
62	K. K. Wagh College of Pharmacy.	Dr. Kishor S. Jain	principal-bpharmacy@kkwagh.edu.in	9422322070 0253-2629251
63	Matoshri Miratai Aher College of Pharmacy	Dr.Tushar T. Shella	tts.ccopr@gmail.com	8806218093 9011838373

64	Navsahyadri College of Pharmacy.	Dr.Kishor Vasant Otari	nsg.pharmacy17@gmail.com	9970060776
<b>Nagpur Regional Centre</b>				
65	Dhamangaon Education Society's College of Engineering & Management	Dr. L.P. Dhamande	lpdhamande@rediffmail.com	9822223246/07222-237335/246161
66	Jaidev Education Society's J.D. College of Engineering & Management	Dr. S. R. Chaudhari	principal@jdcoem.ac.in	9657720271/94228 02601/0712-272549
67	Shikha Mandal, - Bajaj Institute of Technology, Wardha.	Dr. Narendra Kanhe	shikshamandal@gmail.com narendra_mk@hotmail.com	98233 82851
<b>Lonere Centre</b>				
68	Sindhudurg Education Societ Shree Saraswati Institute of Pharmacy.	Kedar T.K	shreesaraswatipharmacy@gmail.com	98601356969 9371932626
69	Shanaishwar Shikshan Prasarak Mandal VP College of Pharmacy.	R.A.Herole	vpcpm2017@gmail.com , patilpankaj102@gmail.com	9764857838 9763824245
<b>Aurangabad Region</b>				
70	Jijamata Shikshan Prasarak Mandal Kamaltai College of Architecture.	Amol A. Kolhe	jspmkoanagar@gmail.com	8983533363 0241-2660016
71	Ramesh Phirodia College of Architecture	Arshad Shaikh	creative_concepts@rediffmail.com	9422222332
<b>Total Number of Colleges</b>				
Engineering & Technology				49
Pharmacy				17
Architecture				5
Total (2017-18)				71

Sr. No	Institute Name	Name of the Principal	E-Mail	Contact Number
1	Shri Pandurang Pratishthan Pandharpur Karmayogi Engineering College	Dr.S.P.Patil	kecmmailbox@rediffmail.com	9503763370
2	Kai. Damodhar Yeole Bahuuddeshiya Sevabhavi Santha's Yashodeep College of Pharmacy	Dr Hiral Majmudar	yashodeebparmacy@gmail.com	7888018282
3	Hi-tech Institute of Technology, Aurangabad	Dr. Siddharth K. Undirwade	principal@hitechengg.edu.in (2) siddharthundirwade@gmail.com	7773940032 (Wh. app), 9404522522
4	Dattakala Shikshan Sanstha's Institute Of Pharmaceutical Science & Research(For Girls)	Dr.Amol kulkarni	dkcom.edu@rediffmail.com	7776002929 9423231961
5	Jaywant College of Engineering & Management, K.M.Gad , Tal: Walwa Dist: Sangli	Dr. Udaysinh S. Sutar	us_sutar@yahoo.com/ principaljcem@gmail.com	9820748323 / 9604047046
6	Samarth Institute of Pharmacy	Dr. Aher Vaibhav D	samarthiop@gmail.com / avd9312@gmail.com	9673486424, 9112855281
7	Dnyanvilas College of Pharmacy	Dr. Pramod L. Ingale	ingalepramod@rediffmail.com and principaldvcop@gmail.com	9822493075
8	Ahinsa Institute of Pharmacy	Dr. Jyotiram Sawale	ahinsaph@gmail.com	Contact-02566-241304 Mob-7774064927
9	Terna College of Engineering	Dr. N. S. Biradar	principal.coeo@yahoo.com coe@ternatrust.org	9011457424(O), 9164085395 (R)
10	BALLARPUR INSTITUTE OF TECHNOLOGY	Dr.M.BASAVARAJ	drmbraja@gmail.com	9503449171/772007 9166
11	Shri Gulabrao Deokar College of Pharmacy	Shri. Nitinchandra V. Patil	principalsgdcopjalgaon@gmail.com	9422778181 & 9422773499

	Jalgaon			
12	AAEMF'S DELIGHT COLLEGE OF PHARMACY	DR SHAIKH ALLABAKSHA MAHBOOB	amaanshaikh.shaikh@gmail.com	7720010654, 9371564550, 7350009727
13	Nutan College of Engineering	Dr.Lalitkumar Wadhwa	wadhwalalitkumar@gmail.com	9975273889
14	Swami Vivekanand Sanstha's Institute of Pharmacy	Prof. Nikam Manohar Baburao	principalsvsiop2006@gmail.com	9422262982
15	Shivganga Charitable Trust, Sangli's Vishveshwarya Technical Campus, Faculty of Degree & Diploma Engineering	Director	shivgangavtc@gmail.com	9822877407
16	Late Bhagirathi Pathrikar college of Pharmacy	Dr Gajanan S Sanap	fourh29@rediffmail.com, fourh29@gmail.com	9822750111, 9930297070

### Major Events at the Affiliated Colleges

Shanti Education Society's A. G. Patil Institute of Technology, Solapur

Sr. No.	Name of the Principal with contact details	Major Achievement/s (Academic)	Major Achievement/s (Extra-curricular)	Major Achievement/s (Research & Development)	Number of Students admitted for First year Engg. (Male/Female)		
					Year	Male	Female
1	Dr. Sunil A. Patil (Mobile No : 9730160904) (principal@agpit.edu.in)	First Year Result 2017-18 :-92.10%	Academic Year 2017-18 (for First Year Engg.)	.....	2017-18	20	18
			1. General Aptitude Test				
			2.Eloquution Competition				
			3.Science Day celebration				
			Industrial Visit				
			Academic Year 2018-19	Startup India 2 Projects form	2018-19	31	58

			(for First Year Engg.)	Final Year – Mechanical Engg. Students (Solapur University, Solapur)			
			1.Three week Induction Program				
			2.Mini Project Exhibition				
			3.Industrial Visit				



Photographs with Caption for the events and achievements: Academic Year 2017-18 (for First Year Engg.)



Academic Year 2018-19 (for First Year Engg.)



First Year students writing Aptitude Test



Prof. Gadwal S.B. guiding students at Elocution Competition



Snapshots of Induction Program :



Universal Human Value Session by Prof. R.B.Kulkarni

**Bajaj Institute of Technology Arvi Road, Pipri, Wardha.**

<b>Sr. No</b>	<b>Name of principal with contact details</b>	<b>Major Achievements (Academic)</b>	<b>Major Achievements (Extra-curricular)</b>	<b>Major Achievements (Research &amp; Development)</b>	<b>No. of Students Admitted(Male/Female)</b>
1	Dr. Narendra Kanhe Mob:-9823382851 Email:- bit@shikshamandal.org, narendra_mk@hotmail.com	200 students of first year completed three weeks Internship at Bajaj Auto Ltd. Valuj, Aurangabad	(1) 6 girls and 4 boys were selected in DBATU Basketball teams to represent it in Inter University Sports Festival. (2) 5 Students of first year attended workshop at VNIT, Nagpur. (3) 4 students participated in hackathon workshop at pune. (4) 3 Civil Engg. students received Best Innovative Project Award in Techfest at DMIETR, Wardha.	(1) Dr. Rashmi Pandhre, Assistant Professor in Electrical Engg. got sanction of research project grant from Director of science and Technology (DST) amounting to rupees 34.4 lakhs. (2) Dr. Narendra Kanhe, Principal was invited by Farmers Ethanol LLC, USA, for Ethanol Manufacturing and Anaerobic digestion technology feasibility study for India.	2018 - 19 First Year Total = 252 Male students = 166 Female students =86 Direct Second Year Admissions Total = 72 Male students = 48 Female students = 24

**NES' Navsahyadri Institute of Pharmacy Naigaon (Nasarapur) Pune -412213**

Sr. No.	Name of the Principal with contact details	Major Achievement/s (Academic)	Major Achievement/s (Extra-curricular)	Major Achievement/s (Research & Development)	Number of Students admitted (Male/Female)
1	Dr. K. V. Otari (Ph. No.9970060776)	<p>Guest Lecture on Potentiometry by Mr. Kale</p> <p>---</p> <p>Guest Lecture on Potentiometry by Dr. Anwar Shaikh</p> <p>---</p> <p>Medicinal Garden Plant Visit</p> <p>.....</p> <p>Hospital Visit at Narayan Dham</p> <p>.....</p> <p>Industrial visit at Aurvediya Arkshala, Satara</p> <p>.....</p> <p>MHT-CET Counseling Session</p> <p>.....</p> <p>Guest Lecture on Environmental Science by Dr. Sunita Gaikwad</p> <p>.....</p> <p>Guest Lecture on Stereochemistry by Dr. Anwar Shaikh</p>	<p>Health Check up Camp at College</p> <p>Mehandi Competition</p> <p>Shiv Jayanthi</p>	Nil	

**Marathwada Mitra Mandal's Institute of Environment and Design's College of Architecture,  
S. No. 35, Plot No. 5/6, Vadgaon Shinde Road, Lohegaon, Pune - 411047.(B.Arch.)**

Sr. No.	Name of the Principal with contact details	Major Achievement/s (Academic)	Major Achievement/s (Extra-curricular)	Number of Students admitted (Male/Female)
1	Ar. Hemlata V. Budhwar 9850822500	<p>1. Orientation Week</p> <p>2. Guest Lecture</p> <p>3. Workshops</p> <p>4. Site Visit</p>	<p>1. Aarambh - Cultural Event</p> <p>2. Campus Livability</p>	<p>First Year 2018-19</p> <p>Male - 24</p> <p>Female - 16</p> <p>Second Year 2018-19</p> <p>Male - 22</p> <p>Female - 16</p> <p>Total</p> <p>Male - 46</p> <p>Female - 32</p>

**Samarth Rural Educational Institute's Smarth Institute of Pharmacy,**  
A/P-Belhe, On Kalyan Nagar Highway, Tal.Junnar, Dist.Pune-412410.

Sr. No.	Name of the Principal with contact details	Major Achievement/s (Academic)	Major Achievement/s (Extra-curricular)	Major Achievement/s (Research & Development)	Number of Students admitted (Male/Female)
1	Dr. Aher Vaibhav Dagaji Contact No. 9673486424  8329559957	NA	NA	Research Article Accepted:01 International conference:03 Video presentation: 01 (Waiting for Certificate) Abstract accepted:02	Total strength: 100 Male-42 Female-58

**Sandipani Technical Campus Kolpa, Nanded Rod, Latur 413512**

Sr. No.	Name of the Principal with contact details	Major Achievement/s (Academic)	Major Achievement/s (Extra-curricular)	Major Achievement/s (Research & Development)	Number of Students admitted (Male/Female)
1	Dr.Mohan V. Buke  Sandipani Technical Campus, Nanded Road, Kolpa, Latur-413512 (MS)  Mob. No.- 09423078955	Result -95%	1.Conducted Induction Training Program	Nil	Male-12  Female-4

**Yashodeep institute of pharmacy, Aurangabad**

Sr. No.	Name of the Principal with contact details	Major Achievement/s (Academic)	Major Achievement/s (Extra-curricular)	Major Achievement/s (Research & Development)	Number of Students admitted (Male/Female)
1)	Dr.H.F.Majmudar Yashodeep institute of pharmacy, Aurangabad 2567 (8369192354)/ (8275820206)/ (7888018282)	Dr.R.B.Navale Dr.U.A.Devkate	1)Pharmacy logo making competition (documents attached)	4th price:- In poster presentation competition at shreeyash institute of pharmaceutical Education & reserach, Aurangabad.	52 male and 23 female
			2)Swatchata abhiyan :- at Gandheli village Photographs and certificate by surpanch attached		

			3)National pharmacy week celebration:- at Laygaon (musical street pathnatya darshan) Photographs and certificate by surpanch attached		
			4)Industrial visit:- at Adora pharma MIDC Waluj, Aurangabad. Photographs and certificate attached.		

**Shreeyash College of Engineering and Technology,Aurangabad.**

Sr. No.	Name of the Principal with contact details	Major Achievement/s (Academic)Students achievement in Dr.BATU Exam 2017-18	Major Achievement/s (Extra-curricular)	Major Achievement/s (Research & Development)	Number of Students admitted (Male/Female)
1	Dr. Ramkisan Pawar Mob:9049989805	1.Jogas Vaishnavi-8.82	1. Sessions on Yoga , Pranayam and Meditation.		Number of Students admitted :-70
		2.Jagtap Ankita-8.8	2. Felicitation of Toppers ( 2017-18 Batch) to motivate the present batch.		Male: 49
		3.Padam Pallavi-8.72	3.Demonstration of Plantation of seeds through Drone		Female: 21
		4.Kumthekar Manali-8.68	4. Visit To SRPF (Special Reserved Police Force)Camp		
		5.Motagamwala Taha-8.56	5.Expert Talk On Gender sensitization by Dr. Swati Shiradkar		
		6.Gawande Pradip-8.44	6. Teacher's Day Celebration		
		7.Tandale Harish-8.32	7. Poster Presentation Competition		
		8.Pawal Pratiksha-8.22	8.Water Treatment and Management Systems -Talk by Dr.P.S. Bhalge		

		9.Uttarwar Janhavi-8.2	9.Participation in ICT arranged by Dr. BATU in JNEC Campus in Aurangabad in Kabaddi		
		10.Pagare Diksha-8.1	10. Trekking on Satara Hills behind College Campus		
		11.Ghaywat Nilesh-8.06			

**MGM'S College of Engineering, Nanded (2127)**

Sr. No.	Name of the Principal with contact details	Major Achievement/s (Academic)	Major Achievement/s (Extra-curricular)	Major Achievement/s (Research & Development)	Number of Students admitted (Male/Female)
1	Dr.Mrs.G.S.Lathkar (Director) Mo.No.9850455553	Result 85.52% (Passed with ATKT)	Nil	Nil	237 (Male Students) / 136 (Female Students)

## Convocations & Result Analysis

The 21st Convocation of the University held on 12th January, 2018. The Chief Guest for this Convocation was Dr. Devang Khakkar, Director, Insian Institute of Technology, Bombay. The Vice-Chancellor presented the report of the academic and R & D activities at the University during this convocation.

### Examination Department

#### On-Screen Evaluation System:

The University started with on-Screen Evaluation system wherein the identity of the student is masked and the marks would be directly stored to the online database it is useful to collect the marks of a student in a database. Even it can provide the photocopy of the assessed answerbooks quickly whenever needed.

#### Examination System of the University:

The University is an autonomous organization established by the act of Maharashtra Government and it conducts examinations according to the provisions made in the University act, its rules and regulations. The University has adopted the semester system of examinations.

#### Unitization of Syllabus:

The course contents of each subject have been divided into 6 Units. The Units 1 & 2 are covered before the first periodic test. The Units 3 & 4 are covered after the 1st test but before 2nd test. Units 5 & 6 are covered after 2nd test but before the start of preparation leave for end semester examination. The end semester examination is based on all the six units.

#### Credit System:

The University has adopted credits based system. As per this system, the student has to complete prescribed credits within a stipulated time limit. The evaluation of the students 'performance is done by giving 'letter grade' to each subject. The overall performance is evaluated by calculating cumulative grade point average (CGPA).

#### Continuous Evaluation:

The assessment of the performance of the students is carried out on a continuous basis. It is based on the Mid-Semester Examination and two continuous assessments (CA1 and CA2) i.e. first Continuous Assessment is conducted before the Mid-Semester Examination and the second is conducted after the Mid-Semester Examination.

#### Examination Results:

The results of end semester examination are declared within 45 days after the last paper.

#### Remedial Teaching:

The University provides the facility of remedial teaching to weaker students. In this scheme, the identification of the failed students requiring special guidance in each theory subject is done immediately after the declaration of the semester examination results. Then special coaching classes are conducted for the students in respect of those topics of the subjects which are important either from the examination view point or difficult to be understood by them conceptually.

#### Complete Transparency:

There is complete transparency in the examination system. After each test examination, the student is shown his/her answer books. He/She can discuss with the teacher about the marks given and the discrepancy, if any, is rectified immediately. A facility of re-assessment of semester examination answer



books is available for all students. Re-examination of failed students is taken at the end of following semester.

**Dr. Babasaheb Ambedkar Gold Medal Winners :**

**M.Tech. Courses**

Chemical Engineering	Palande Siddhesh Vijay
Computer Engineering	Aher Kavita Chandrabhan
Electronics & Telecomm.Engg.	Joshi Nirmala Bhimprasad
Manufacturing Engineering	Nagothkar Nandakumar Ganesh
Power Systems Engineering	Patil Nandkumar Kakasaheb
Thermal & Fluids Engineering	Date Abhijit Madhav

**B.Tech. Courses**

Chemical Engineering	Bhongade Mayur Manoj
Civil Engineering	Patade Samiksha Shripad
Computer Engineering	Mishra Mahesh Shardaprasad
Electrical Engineering	Jogalekar Aditya Nitin
Electronics & Telecomm.Engg.	Kokane Manoj Bhausasheb
Information Technology	Chaudhary Charu
Information Technology	Kadiri Rukayya
Mechanical Engineering	Pandurkar Pritam Parag
Petrochemical Engineering	Walve Noopur

**Diploma Courses**

Chemical Engineering	Malore Rohan Ramesh
Computer Engineering	Tahwildar Saquib Abdul Rahim
Electrical Engineering	Mane Alkesh Bhimrao
Electronics & Telecomm.Engg.	Wakankar Adwait Kiran
Information Technology	Bhokare Tejaswi Tanaji
Instrumentation Engineering	Gangrekar Yakub Mubin
Petrochemical Engineering	Khan Samit Sajjad

**Advanced Diploma in Water Quality Management**

Patne Mangesh Mahaling

## Analysis of the Results

### Result Statistics for Summer Semester 2018

The result statistics for summer semester examinations is as follows:

#### For B. Tech.

Total Students appeared: 9201

Passed with CGPA (All subjects cleared): 34.09%\*

Promoted (including ATKTs): 80.83% \*

#### Subject-wise Results

Subject Code	MATH 201	HS 202	ME 202	PHY 203	CHE 203	ME2 04	EE 204	CV 205	EXE 205	CHE 206	ID 206
FF	4593	468	2110	1783	1127	793	1998	772	1628	672	2031
EX	7	1	0	0	0	48	2	0	0	0	0
AA	84	3	7	17	19	73	8	17	6	10	8
AB	275	84	64	110	120	272	89	140	29	131	53
BB	589	492	223	354	370	492	290	390	163	389	192
BC	1168	939	754	675	694	697	615	878	596	828	592
CC	2485	1153	1337	1206	1054	862	1493	1142	2073	1193	1619
CD	0	613	0	542	336	533	0	502	0	529	0
DD	0	438	0	1	355	465	0	431	0	456	0
DE	0	316	0	0	420	453	0	410	0	480	0
EE	0	181	0	0	0	0	0	0	0	0	0
TOTAL	9201	4688	4495	4688	4495	4688	4495	4682	4495	4688	4495
	50.08%	90.02%	53.06%	61.97%	74.93%	83.08%	55.55%	83.51%	63.78%	85.67%	54.82%

Subject Code	HS202L	ME202L	PHY203L	CHE203L	ME204L	EE204L	CV205L	EXE205L	WS200L	ID206L
FF	167	153	159	138	168	125	146	136	134	141
EX	645	534	983	698	994	684	735	820	905	630
AA	585	519	508	456	300	306	317	481	385	450
AB	883	838	739	856	796	878	883	838	908	849
BB	792	749	631	696	750	858	866	742	806	702
BC	621	685	781	741	718	788	891	593	837	796
CC	434	421	484	442	414	384	448	324	403	387
CD	291	333	204	227	250	193	207	198	160	234
DD	163	146	97	114	155	127	88	190	66	154
DE	75	103	104	43	95	89	61	84	84	90
EE	32	14	2	84	48	63	46	89	0	62
TOTAL	4688	4495	4692	4495	4688	4495	4688	4495	4688	4495
	96.44%	96.60%	96.61%	96.93%	96.42%	97.22%	96.89%	96.97%	97.14%	96.86%

**The rank holders are**

Name	Institute	CGPA
Gaikwad Vaishnavi Ramchandra	Nagesh Karajagi Orchid College of Engineering & Technology, Solapur	9.48
Ballal Supriya Bapuso	Ashokrao Mane Group of Institutions, Kolhapur	9.38
Boddhul Sonali Ganesh	Nagesh Karajagi Orchid College of Engineering & Technology, Solapur	9.32

\* All the results are prior to remedial examination

**For B. Arch.**

Total Students appeared: 138

Passed with CGPA (All subjects cleared): 63.04%

Promoted (including ATKTs): 96.38%

**Subject-wise Results**

Subjects	AR102 00001	AR102 00002	AR102 00003	AR102 00004	AR102 00005	AR102 00007S	AR102 00006S	AR102 00008S	AR102 00009S	AR102 00010S
Appearing	138	138	138	138	138	138	138	14	84	40
FF	8	10	19	6	6	1	24	0	0	0
EX	0	8	0	1	0	1	2	0	2	0
AA	1	3	1	1	2	0	2	1	0	0
AB	3	13	6	14	5	9	6	4	3	4
BB	15	8	9	23	14	23	8	3	10	3
BC	21	27	25	30	19	30	26	6	32	10
CC	34	29	38	24	33	29	31	0	12	19
CD	24	26	26	24	29	36	17	0	15	4
DD	22	13	11	13	23	8	17	0	8	0
DE	10	1	3	2	7	1	4	0	1	0
EE	0	0	0	0	0	0	1	0	1	0
PASS	130	128	119	132	132	137	114	14	84	40
% Passing	94.20%	92.75%	86.23%	95.65%	95.65%	99.28%	82.61%	100.00%	100.00%	100.00%

**The rank holders are**

Name	Institute	CGPA
Pranjal Jain	Jawaharlal Nehru Engineering College, Aurangabad	9.19
Jadhav Dipali Ramkrushna		8.92
Marlecha Saloni Sanjay		8.73

**For B. Pharm.**

Total Students appeared: 966

Passed with CGPA (All subjects cleared): 73.71%

Promoted (including ATKTs): 100%

**Subject wise results**

Subject	BP201T	BP202T	BP203T	BP204T	BP205T	BP206T	BP207P	BP208P	BP209P	BP210P
O	1	1	5	0	50	31	101	108	77	165
A	14	73	51	26	216	214	312	363	307	303
B	277	265	179	128	285	344	330	304	345	291
C	326	292	326	339	234	217	155	121	178	169
D	249	213	293	330	152	128	54	47	45	24
F	99	122	112	143	29	32	14	23	14	14
PASS	867	844	854	823	937	934	952	943	952	952
% Passing	89.75%	87.37%	88.41%	85.20%	97.00%	96.69%	98.55%	97.62%	98.55%	98.55%

**The Rank holders are**

Name	Institute	CGPA
Pisal Sayali Shahaji	Matoshri Miratai Aher College of Pharmacy, Ahemadnagar	9.19
Snehal Rajendra Kshirsagar	Indrayani Institute of Pharamaceutical Education & Research, Talegaon Dabhade, Pune	8.92
Jadhav Pratiksha Vasant	K. K. Wagh College of Pharmacy, Nashik	8.73

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## Chapter Six

### Administrative / Non-Teaching Staff

#### VC Secretariat



Shri. P. K. Pendse  
PA to Vice-Chancellor  
M. Com., LLB

#### Establishment Section:



Shri. V.S. Gaikwad  
Office Superintendent  
B.A.



Smt. S.T. Avhad  
Senior Clerk  
B.Sc.



Shri. S.A. Mahadik  
Steno-typist  
B.Com.



Shri. B.D. Batawale  
Clerk-cum-typist  
B.A.



Shri. Vivek Khargaonkar  
Jr. Clerk  
S.S.C.

## Finance and Accounts Section:



Dr. Vivek S. Sathe  
In-charge Finance Officer  
M.Tech., Ph.D.



Shri. R.S. Metkari  
Auditor  
B. Com., LLB and DLL & LW



Shri. P. B. Nawale  
Accountant  
H. S. C.



Shri. P. V. Ware  
Senior Clerk  
B. A.



Shri. N.T. Shinde  
Clerk-cum-typist  
B. A.



Shri. V.H. Tavsalkar  
Clerk-cum-typist  
B. Com.

## Store:



Shri. Ganpat Hari Kalsekar  
Store Verification officer  
B. Com.



Shri. A.R. Pawar  
Storekeeper  
B.Com.



Shri. V. P. Andhere  
Clerk-cum-Typist  
B.Com.

## Workshop Staff:



Shri. S. B. Sonawane  
Workshop Foreman  
S.S.C.  
Diploma in Mech. Engg.



Shri. P. B. Patil  
Workshop  
Instructor (Fitting)  
B.A., I.T.I., A.T.I.



Shri. C. V. Jaitpal  
Workshop Instructor  
(Sheet Metal)  
S.S.C., I.T.I., N.C.T.V.T.



Shri. A. L. Mokalkar  
Workshop Instructor  
(Welding)  
S.S.C., I.T.I., A.T.I.



Shri. M.D. Patil  
Instructor (Turner)  
S.S.C., I.T.I., N.C.T.V.T.



Shri. P. S. Shriwardhankar  
Instructor (Machinist)  
S.S.C., I.T.I., N.C.T.V.T.



Shri. M. D. Kadu  
Laboratory Attendant  
S.S.C.



Shri. R. S. Gamare  
Attendant/Hamal  
H.S.C.

## Student Section:



C. D. Tembhe  
Office Superintendent  
B.a.



V. S. Magar  
Accountant  
B.Com



R. R. Mhaprolkar  
Junior Clerk  
B.A.

## Estate Section



Shri. Vilas Sitaram Chavan  
University Engineer  
B.E (Civil)



Shri. Santosh Sankar Divekar  
Draftsman  
H.S.C.,  
Science (NCTVT) Mech.



Shri. Ramesh Mahadev Chavan  
Lab Technician  
12<sup>th</sup> Science, B.A., C.E.A (BTE)



Shri. Kishor Hiralal Pardeshi  
Electrician  
ITI/NCTVT in Electrician,  
B.Tech. in Electronics



Shri. Sandeep Madhukar Borse  
Lab Assistant  
B.Sc. (Chemistry)



Shri. Ajay Sudhakar Jadhav  
Mali  
B.A.





# विद्यापीठ गीत

बिंदू मनाचा सिंधू होईतो, करू अथक साधना  
ज्ञान रवीने तिभीर हराया विकसित हो रे मना !!

अभिभंत्रित है ज्ञान निकैतन  
इथै कराया हृदय समर्पण  
भीमड्यौतीची, सावित्रीची  
विश्वात्मक त्या मनकरुणैची  
घेऊ उरी चैतना !  
विकसित हो रे मना !

शिवतैजाने उजळै अंबर  
तरंग त्याचै इथै निरंतर  
शौर्य धैर्य अन् पराक्रमाची  
सह्यगिरीतीळ त्या माथैची  
रूजवू सद्भावना !  
विकसित हो रे मना !

सरस्वतीच्या कृपाप्रसादे,  
आयुष्याचै फूळ उमटू दे !  
कर्तृत्वाचा दीप उजळू दे !  
सत्यशिवाचै बीज बहरू दे !  
आत्मशक्तीचा सूर लाभू दे !  
देऊ रूप जीवना !  
विकसित हो रे मना !

गीत : प्रविण दवणे  
संगीत : श्रीधर फडके



