

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

Website: <http://www.dbatu.ac.in>

**Annual Report**

**Department of Information  
Technology**

**Academic Year 2017-2018**

## **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 an a part of State Technological University, our department continuously trying to achieve departmental mission synchronized with University mission. I Cogratulate the team of faculty members and the students for their brilliant and original efforts. In Last year, our one of faculty member completed his Phd. We are strengthening our departmental infrastructure and relationship with the help industry persons.

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

Dr. Shiavajirao 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. program 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 PhD and two faculty members are pursuing their PhDs. 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 program educational objectives for the B.Tech. program 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 Identifier	Objectives
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 Identifier	Outcomes
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<b>PO1</b>	An Understanding of IT architecture, software and hardware concepts, functionalities and applications
<b>PO2</b>	An Ability to design, develop and test computer programs involving various algorithms, methodology and programming languages
<b>PO3</b>	Competency of business domains and functional processes that employ IT systems and applications
<b>PO4</b>	Practical use of communication protocols and their applications in the field of internet and world wide web
<b>PO5</b>	Sound understanding of fundamentals of computer as the central enabling platform for information management in 21st century
<b>PO6</b>	An Ability to develop, integrate, maintain and innovate software applications deployed in various multi-disciplinary domains
<b>PO7</b>	Thought leadership to design and implement practical solutions for global industry needs.
<b>PO8</b>	An Acumen to embrace and adopt futuristic IT technological developments
<b>PO9</b>	Sound knowledge of entrepreneurship traits to succeed
<b>PO10</b>	Adoption of practices that are ethical ensuring transparency and accountability
<b>PO11</b>	Capability to provide solutions that are socially empowering and environment friendly
<b>PO12</b>	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	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			

## 4.2 Result Analysis:

## 4.3 Campus Placements:

Sr. No.	Name of Student	Name of Company
1	NIL	NIL

## 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



#### **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. 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



### **Prof. Babhulgaonkar 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**



## **5.3 Staff Profile**





**Mr. Rode Vikas Vitthal**

**Designation:-** Laboratory Assistant

**Qualification:-** HSC



**Mr. Apekshit Kantil 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**

### **1. 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

### **2. 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

### **3. 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

### **4. Prof. Babhulgaonkar Arun Ramrao:**

#### **Deputed For PhD under QIP**

### **5. 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

## **6. 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.

## **7. 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 and BoS**

### **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

## 7.2 Board of Studies

Sr. No.	Name	Designation
1	Dr. S. M. Jadhav Head, Department of Information Technology Dr. Babasaheb Ambedkar Technological University, Lonere- Raigad	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
6	Mr. Rajesh Gandhi, Global Project Manager, Philips Health Tech., Pune.	Member
7	Mr. Sameer Ganu, PSPL, Pune	Member
8	Prof. B. B. Meshram, VJTI, Mumbai	Member
9	Prof. S. R. Sutar Department of Information Technology Dr. Babasaheb Ambedkar Technological University, Lonere- Raigad	Co-opted Member
10	Prof. V. J. Kadam Department of Information Technology Dr. Babasaheb Ambedkar Technological University, Lonere- Raigad	Co-opted Member

## 8. Faculty Research and publications :

**Research Projects : NIL**

**9. Research Publications: NIL**

**10. National Conference :NIL**

**11 . International Journals :**

1. 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

2. 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
3. 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>

## 12. Laboratory

### 12.1 Major Instruments in Laboratory :

S.N .	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/-

### 12.2 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	82508.00
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/-

## 13. Projects

### 13.1 Major UG Projects :

Sr. No.	Project Topic
1	Social Network
2	Online Admission System
3	Emergency Alarm And Health Care Management System
4	NCC Website
5	Machine Learning
6	Tax Consultancy
7	IOT Based Lab Automation System.
8	E-Clearance
9	Implementation Of Machine Learning
10	ERP Software
11	Crime Investigation System
12	Remote Authentication Via Digital Signature
13	Farmer's Market
14	IOT Based
15	Web Designing
16	E-Affiliation
17	E-store
18	E Student Tracking
19	E-Attendance

### 13.2 UG Community Projects

Sr. No.	Community Project Name
1	Seminar Allotment
2	e-QA Portal
3	Result Analysis System
4	Daily Expense Management System
5	College Chatbot

6	Type Master
7	Tourism Management
8	Multilevel Marketing
9	Project Guide allotment
10	Maharashtra Tourism
11	Virtual classroom
12	Hostel Allotment
13	Smart Ration Card System
14	Student Section Web Portal
15	Hospital Management System
16	Hostel Management System
17	Real estate management
18	Students Feedback Management System
19	School Tutorial System
20	Elective Allotment System
21	News Portal
22	e-Library system
23	Campus Recruitment
24	Event Management
25	Doctor Finder
26	Query Based Search engine
27	Student Information System

## 14. Doctoral Programme

## 14.1 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

## 15. Industry Institute Interaction

### 15.1 MoU Signed by the Department

1. Signing MoU with Red Hat is in process.

### 15.2 Industry Projects by the students :

Roll No.	Name	Title of the project	Name of the company	Stipend Paid by Company (Rs.)
1	Pooja Nagaje	Online Election Campaign Management System	SNP, Pune	NIL
2	Komal Vadavale			
3	Gaytri Jadhav			
4	Pooja Jayram Bhaware			
5	Sumangal Mugalikar			
6	Vaishali Anant Patil			

## 16. Industrial Visits:NIL

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



S.N.	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

### 18. Expert Talks by Alumni :

S.N.	Name of the Topic	Name of the Alumni	Participants
1.	Expert talk on Startups and entrepreneurship	Mr. Sunil Chavan	Second year students

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

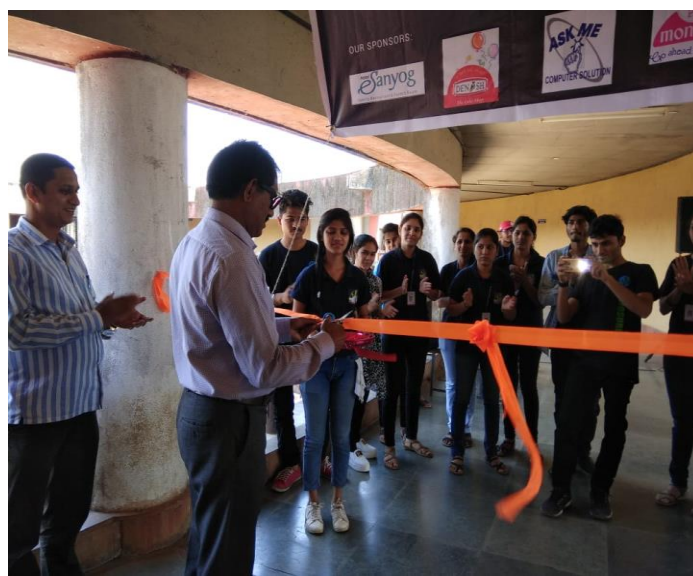
Sr. No.	Title	Date	No. of Participant
1	Adaptation of Product Design engineer – Mechanical Courseware	15 <sup>th</sup> June 2017	01
2	Machine learning tools for Engineers	12 <sup>th</sup> -21 <sup>st</sup> June 2017	01
3	Pedagogy for online and blended teaching-learning process	14 <sup>th</sup> September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

## 20. Other Activities Conducted by Department

### 20.1 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**

## **20.2 First Year Induction Programme**



## **20.3 Freshers Party Function to First Year Students**





## 20.4 Final year Project Submission



## 20.5 Science Day Programme



## **20.3 Annual Gathering**

## **21. Alumni Meet: NIL**

## **22. Academic Achievements**

### **22.1 Faculty Achievements**

- Prof. S. R. Sutar pursued PhD from SGGS, Nanded

### **22.2 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

### 22.3 Major Student's Achievements:

#### Gate-2017 Examination Qualified Students:2

S.N.	Name	Gate Marks
1	Pranav Salavi	85
2	Sagar Moghe	35

### 22.4 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	FootSal(Boys)	Gold
4	Vollybol(Boys)	Silver
5	FootSal(Girls)	Silver
6	Vollybol(Girls)	Silver
<b>Cynosure 2k16</b>		
7	Akshay Ganesh	First Prize-Brain-IT
<b>Annual Social Gathering 2017</b>		
8	Prabhudas Dhawali	Runner Up Debate
9	Manasi Musale	Runner Up Debate

## 23. 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

## 24 .Technical Events by Students' Association :

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

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

## 25. 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