



## Yearly Status Report - 2017-2018

### Part A

#### Data of the Institution

<b>1. Name of the Institution</b>		<b>UNIVERSAL COLLEGE OF ENGINEERING</b>
Name of the head of the Institution		<b>Jitendra B. Patil</b>
Designation		<b>Director</b>
Does the Institution function from own campus		<b>Yes</b>
Phone no/Alternate Phone no.		<b>0250-6962458</b>
Mobile no.		<b>9029144325</b>
Registered Email		<b>ucoe.principal@universal.edu.in</b>
Alternate Email		<b>director.ucoe@universal.edu.in</b>
Address		<b>Universal College of Engineering, Kaman Bhiwandi Road, Kaman Vasai-401208</b>
City/Town		<b>Kaman Vasai East</b>
State/UT		<b>Maharashtra</b>
Pincode		<b>401208</b>

2. Institutional Status					
Affiliated / Constituent		Affiliated			
Type of Institution		Co-education			
Location		Urban			
Financial Status		private			
Name of the IQAC co-ordinator/Director		Mr. Sudarshan Ashan			
Phone no/Alternate Phone no.		02506962458			
Mobile no.		9029652532			
Registered Email		mudra.doshi@universal.edu.in			
Alternate Email		mitali.poojary@universal.edu.in			
3. Website Address					
Web-link of the AQAR: (Previous Academic Year)		<a href="http://universalcollegeofengineering.edu.in/">http://universalcollegeofengineering.edu.in/</a>			
4. Whether Academic Calendar prepared during the year		Yes			
if yes,whether it is uploaded in the institutional website: Weblink :		<a href="https://universalcollegeofengineering.edu.in/wp-content/uploads/2020/12/Academic-Calendar-17-18Final.pdf">https://universalcollegeofengineering.edu.in/wp-content/uploads/2020/12/Academic-Calendar-17-18Final.pdf</a>			
5. Accrediation Details					
Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
1	B+	2.51	2018	02-Nov-2018	01-Nov-2023
6. Date of Establishment of IQAC			29-Jul-2016		
7. Internal Quality Assurance System					
Quality initiatives by IQAC during the year for promoting quality culture					
Item /Title of the quality initiative by IQAC	Date & Duration		Number of participants/ beneficiaries		

Participation with 4 projects in Automation India Expo 2017	09-Aug-2017 4	16
FE Bridge Course	07-Aug-2017 2	262
Student Orientation followed by Parent meet	04-Aug-2017 2	265
Organic Farming	27-Jun-2017 338	15
Tantrotsav-2017	29-Sep-2017 1	773
International Conference on Smart City and Emerging Technologies (ICSCET) in association with IEEE Bombay Section	05-Jan-2018 1	305
Participation with 5 teams in grand finale of the Smart India Hackathon 2018 (Software Edition) at different Nodal Centers	30-Mar-2018 2	34
Participation in various competitions at Various IITs (IIT Gandhinagar, IIT Bombay, IIT Hyderabad, IIT Varanasi, IIT Kharagpur, IIT Kanpur and other regional Colleges	04-Nov-2017 3	76
Product exhibition and career fair	17-Mar-2018 1	574
Robotics Klub of Universal College of Engineering in association with Computer Society of India Conducted a Two week Summer Internship on advanced course on Firebird V	18-Jun-2018 13	7
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**8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.**

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Universal College of Engineering, Electronics and	Student welfare	Vidya Vikas Education Trust	2017 365	220103

telecommunication (EXTC) department , Mr. Sandeep Dubey				
Universal College of Engineering, Information Technology department , Mrs. Yogita Mane	Student welfare	Vidya Vikas Education Trust	2017 170	1940
Universal College of Engineering, Computer Engineering department , Mrs. Vishakha Shelke	Student welfare	Vidya Vikas Education Trust	2017 186	1300
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<b>9. Whether composition of IQAC as per latest NAAC guidelines:</b>	<b>Yes</b>
Upload latest notification of formation of IQAC	<a href="#">View File</a>
<b>10. Number of IQAC meetings held during the year :</b>	<b>4</b>
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	<b>Yes</b>
Upload the minutes of meeting and action taken report	<a href="#">View File</a>
<b>11. Whether IQAC received funding from any of the funding agency to support its activities during the year?</b>	<b>No</b>

<b>12. Significant contributions made by IQAC during the current year(maximum five bullets)</b>
<p>1. <b>FIRST YEAR (FE) BRIDGE COURSE:</b> Universal College of Engineering conducted the Bridge Course on 7th and 8th August, 2017 for the new entrants, a successful endeavour to introduce the curriculum by integrating hands on activities and experiences which enabled students to understand their forthcoming engineering subjects equipped with learning new concepts and skills to be future ready engineers. Total 200 students were part of the bridge course. Day 1 included activities for the subjects like communication skills, Applied Mathematics, Applied Physics , and Applied Chemistry. Activities on basic programming, Engineering mechanics , Computer Skills and Poster Presentation were incorporated on Day 2.</p>

2. **TANTROTSAV:** The sole motto of this event is to give a platform to the students to showcase their technical skills that are grasped through academics. Also the event aims to highlight various competitions held under the banner of IIT's. It is an intracollegiate platform, for students to showcase and experiment their talent. All the curious minds of engineering were tested on 29th September 2017. Total: 773 head count of participants.

3. **INTERNATIONAL CONFERENCE ON SMART CITY EMERGING TECHNOLOGIES (ICSCET) :** 'International conference on Smart Cities and Emerging Technologies' was organized in 'Universal College of Engineering' on January 5, 2018. The objective of the conference was to harbour technological innovations and excellence by encouraging young researchers to contribute to the concept of smart city for the benefit of the overall development of the nation in terms of its infrastructure as well as other fields. 143 papers were presented in 2 sessions of the Day.

4. **PRODUCT CAREER FAIR:** The "1st Product Exhibition and Career Fair" in association with the IEEE and International Society of Automation (ISA) conducted on 17th March, 2018. The total number of Students was 574. It patronized engineering students from different domains by providing them an opportunity to present their visions, thoughts and ideas through this event for innovative development in the technical field. Reception of such an overwhelming response from the students across Mumbai University Colleges at Universal College of Engineering for conduction of "1st Product Exhibition and Career Fair" gives a clear idea that providing students with a platform to add valuable knowledge at the same time it will be a great opportunities for them to get internships and placements in renowned industries, is the need of the hour. They are urging and demanding to consider their opinions for the betterment of technology which UCoe has given heed to change is permanent and it can occur by new actions and visions, especially from the youth of today.

5. **ORGANIC FARMING:** The initiative of Organic farming started under the leadership of Mrs. Vishakha Shelke (Asst.Professor, Department of Computer Engineering) The initiative focussed and succeeded on following points: 1. To provide access to opportunity, education and equipment for farmers for efficient and sustainable growth. 2. To help farmers in the use of technology to improve productivity . 3. To support organic farming practices. 4. Offered internship to 13 First year students. 5. Internship started from 27th June 2017. 6. Students visited nearby farms in Kaman. 7. Discussed issues in traditional farming with the farmers. 8. Visited IITBombay, Organic farming unit.

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**13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year**

Plan of Action	Achivements/Outcomes
Conduct International conference to harbour technological innovations and excellence by encouraging young researchers to contribute to the concept of smart city	Successfully conducted International Conference on Smart City and Emerging Technologies (ICSCET) in association with IEEE Bombay Section on 5th January 2018.
Conduct Effective training program to	Organised Aptitude training and Cocubes

enhance employability skills of students	pre-assessment program for final year (BE) students
Industrial Visits in addition to the mandatory one in the curriculum, needs to be undertaken with a view to increase Industry-academia interaction.	Industrial visits organized by each department - 1 Field Visit to Mahatma Phule Krishi Vidyapeeth; 2. Rahuri campus and Organic Farming Unit of Agricultural University, Navsari under Organic Farming Internship; 3. MCGM water tunnel project, Powai, Andheri (Department of Civil Engineering), 4. Systech Technocraft services Pvt. Ltd (Department of Computer Engineering), Etc.
New and reasonable benchmarks to be set up with a view to provide quality enhancement and improved results.	Introduction of Professional Body, Institution of Engineering and Technology on 20th Jan 2018
Encourage students to participate in various project exhibition	1. Department of EXTC and ETRX Participated with 4 projects in Automation India Expo 2017. 2. Department of computer and IT Engineering student participated in e-Yantra Ideas competition in association with IIT Bombay, 3. Department of Civil Engineering students participated in various events at various IITs and at other regional institutes like VNPS'18-V CET National Level project Showcase, etc. 4. Mr. Vijay Jamariya, (Student, BE Civil) along with faculty Mr. Yuvraj Chavda, have done an internship to work on the project ""Structural Health Monitoring"" in association with IIT Bombay"
Conduct Skill enhancement courses under student chapter and Club of UCoE	Robotics Klub of Universal College of Engineering in association with Computer Society of India Conducted a Two week Summer Internship on advanced course on Firebird V
Conduct Social activities	1. Self Awareness and Hygiene Camp in association with Women Development Cell(WDC) was organized at "Aamchi Zilha Parishad Shala, Kaman." Three female faculty members from UCoE guided girl students of 7th ,8th and 9th Std about Sanitation hygiene and Self awareness. Yoga exercises for pain relief and concentration boosting was also taught. At the end self esteem raising and dealing with traditional belief and myths were explained and convinced scientifically."
Arrange Interaction with Stakeholders to collect feedback for improvement in facilities	All department conducted Parent Teacher Interaction meet to discuss students performance. Suggessions from Parent's feedback is considered. Parents had suggested to improve transport

	facilities , the institution considered this suggestion and changed the service provider.
Conduct Development programmes for support staff	1. Blood Thalassaemia Check was organized for staff in association with IEEE student chapter. 2. Awareness workshop on Lab Safety (Chemistry Lab) was conducted by Dept. of AS&H 3. ETRX,ETXC Lab Equipment Training was given to lab assistants. 4. Firefighting safety workshop was conducted for all staff. 5. "Stress Mangagement with Yoga" was organized by Women Development Cell(WDC) on occasion of International Yoga Day. "
Provide a platform for students to get internships and placements in renowned industries	"1st Product Exhibition and Career Fair" in association with the IEEE and International Society of Automation (ISA) conducted on 17th March, 2018 where 21 companies visited the UCOE campus and provided internship opportunities to students
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<b>14. Whether AQAR was placed before statutory body ?</b>	<b>Yes</b>
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Name of Statutory Body	Meeting Date
<b>Governing Body</b>	<b>20-Oct-2018</b>

<b>15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?</b>	<b>Yes</b>
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Date of Visit	<b>28-Apr-2018</b>
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<b>16. Whether institutional data submitted to AISHE:</b>	<b>Yes</b>
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Year of Submission	<b>2018</b>
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Date of Submission	<b>27-Jan-2018</b>
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<b>17. Does the Institution have Management Information System ?</b>	<b>Yes</b>
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If yes, give a brief descripton and a list of modules currently operational (maximum 500 words)	<b>Universal College of Engineering implemented effective Management Information Softwares in the Administration Section ,Exam Section, Account section, Maintenance Department</b>
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, Planning of events. Administration section extensively uses "APPLANE" software for student admission support. The various details of admitted students such as Personal details, details of parents family income, caste category, fee structures and fee receipt, scholarship details (if any) are stored in the software and shall be easily accessible by the Admin staff as and when required or demanded. It also collects generates receipt for student services like Examination fees, Transcript fees, overdue fees, bus fees. The Exam section for it's effective and smooth functioning utilizes the "VIVA" software. The software enables the storage of information related to student's exam records. The hall tickets of students for End Semester examinations (for Second year Third year) are generated using this software. The Gazette copies and marksheets are generated from the software itself. The transcripts required by the students for pursuing Higher studies are also generated from the stored result databases of the individual student. "Tally" software is used by the Accounts section for keeping records of Budget Expenses incurred in various activities, events, remunerations and financial transactions. "Zendex" software is extensively used for generating tickets through mails for maintenance purposes and is effectively managed and run by the staff at Head Office. For arranging the Intra and Inter mega events in the Campus, "Festival Management" software is promoted for handling the online registrations of the participants, collecting the registration fees, if any, and generating printing the event fees receipts which is also the entry pass for the participant on the day of event. "Conference Manager" software was used for the registration of research scholars/attendees/participants for the "International Conference on Smart City Emerging Technologies" on 5th January 2018. The communication among the reviewers and the participants was extensively done through this software. The personal details of the reviewers and participants were kept confidential among each other. The payment gateway



and registration fee receipt was done through the same portal. All softwares easily generates reports using the system. We can even do changes to the system according to our requirement of the database. With the userfriendly features, both softwares reduce the human intervention of the data and hence error is minimized and also database generated are available on a single platform.

## Part B

### CRITERION I – CURRICULAR ASPECTS

#### 1.1 – Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

Universal College of Engineering (UCoE) is recognized by AICTE, DTE & Government of Maharashtra and affiliated to University of Mumbai (UoM). The Management of UCoE makes sure that all faculty members participate in the Workshops arranged by the University (BoS) for syllabus revision and Workshops organized to study and understand the amendments. UCoE follows a structured strategy plan for effective implementation of the curriculum prescribed by the University of Mumbai for various Programs. Action Plan ? Preparation of academic calendar for Institute in accordance with the academic calendar of the UoM. ? Distribution of workload to faculty members, based on proficiency and experience in the subjects. ? Course Files / Laboratory Manuals are continuously upgraded by faculty members and the same are checked and verified by HoD and Principal from time to time. ? Installation of all the required Softwares, check for working conditions of all equipments , devices, instruments required for performing experiments are done before commencing of the semester. ? Master timetable & Class timetables are prepared and verified by the HOD of respective department and are then displayed on all conspicuous locations. ? Expert lectures by experienced faculties/Industry people are arranged to bridge the gap between academic & Industry ? Monthly analysis of the attendance is done to ensure that students at least maintain 75% as per University regulations. ? Student performances are evaluated based on Tutorials, Internal Assessment tests, Assignments and Presentations. ? Results of the Internal Assessment Tests are displayed and grievances on marking are immediately addressed. ? Remedial lectures are arranged for students who failed or scored less marks. ? Mentors take care of mentees' overall performance and guide them for the improvement and overcoming weaknesses. ? Parents meet with concerned faculties are organized to give the parents an overview of their ward's performance. ? End semester examinations are conducted, and it's assessments are done as per University norms. ? After declaration of results, result analysis of both direct and indirect analysis is done to determine the achievement of course objectives and vision and mission of the Department and Institute. ? Every student is motivated to participate in an internship program in summer vacation. ? Recruitment drives are conducted on/off campus for registered eligible students of final year. Deployment of Action Plan Before commencement of each semester, the Director and Principal conducts an Orientation program to apprise the faculty of the suggestions received from IQAC and guidelines about the execution of the action plan. Later each Head of the Department conducts a departmental level meeting to discuss the line of action in implementing the Action Plan as per the specific requirements of the

department. Bridge course is conducted for first year students before starting their curriculum in order to make the newly joined students feel comfortable and to help them to set the daily routine, create a bonding between teachers and other students, give a broader view of life and building character.

#### 1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entreprene urship	Skill Development
Hands on session on Autocad	Nil	03/02/2018	4	Employabil ity	Software Skill

### 1.2 – Academic Flexibility

#### 1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
BE	Electronics & Telecommunication	10/07/2017
BE	Electronics Engineering	10/07/2017
BE	Civil Engineering	10/07/2017
BE	Information Technology	10/07/2017
BE	Computer Engineering	10/07/2017
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#### 1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	Second Year Computer Engineering	10/07/2017
BE	Second Year Civil Engineering	10/07/2017
BE	Second Year Information Technology	10/07/2017
BE	Second Year Electronics and Telecommunication	10/07/2017
BE	Second Year Electronics Engineering	10/07/2017

#### 1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	60	Nil

### 1.3 – Curriculum Enrichment

#### 1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
Organic Farming Skill Development Program	27/06/2017	15
CoCubes Training	10/07/2017	205

<b>Program</b>		
<b>Professional Ethics Course under IEEE</b>	<b>28/07/2017</b>	<b>10</b>
<b>eYantra lab -Firebird V</b>	<b>05/08/2017</b>	<b>40</b>
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### 1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
<b>BE</b>	<b>Computer Engineering</b>	<b>89</b>
<b>BE</b>	<b>Civil Engineering</b>	<b>186</b>
<b>BE</b>	<b>Information Technology</b>	<b>18</b>
<b>BE</b>	<b>Electronics &amp; Telecommunication</b>	<b>11</b>
<b>BE</b>	<b>Electronics Engineering</b>	<b>7</b>
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### 1.4 – Feedback System

#### 1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

#### 1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained
<p>Institute gathers online and offline feedback from all its stakeholders regularly at department level. The student's give semester-wise feedback for all courses taught to them. The general assessment of the teachers are done on a grade of 5 scale with number 5 represents excellent and 1 states poor performance. Following are the parameters for assessment: ? Syllabus coverage. ? Satisfaction about teaching methodology. ? Teacher's approachability towards students. ? Teacher's ability to teach the subject and control the class. ? Organization of lectures. ? Use of modern tools of pedagogy. ? Assessment of answer books. The Institute policy is that if a teacher gets an average grade less than 2.5, then he/she is called by the Institute authorities such as Head of Department and Principal and they are informed about his/her performance in the assigned course. They are accordingly instructed by the authorities to improve their performances and to make appropriate changes in the teaching methodology. Alumni Feedback is taken whenever Alumni Meet is organized in the Institute during the academic year. The Feedback from Alumni is drawn on evaluation of the program, level of meeting expectations, progress of Alumni in career after graduation, impact of training, motivation at Institute, Social Skills, ability to take decisions, ability to manage finances and presentation skills at the workplace. This feedback is also taken on a 5-point scale on 1 to 5 with 1 at satisfactory and level 5 on excellent level. The Employer's feedback highlights evaluation parameters of the recruited students, in the form of subject knowledge, attitude, Behavior, Regularity, Punctuality, Maturity, Motivation, Creativity, Presentation Skills and ability to get along</p>

with others. The analysis of this feedback helps the Institute in reviewing the course content and conducts various skill development training not incorporated in the syllabus. It also helps in determining overall employability of students at various levels. Parent's feedback is also taken during parent-teacher interaction sessions. The feedback from the Parents helps the Institute immensely in reorienting the administration procedures, improve the general ambiance and the skill development activities and to determine suitability of the courses for career growth of the ward etc.

## CRITERION II – TEACHING- LEARNING AND EVALUATION

### 2.1 – Student Enrolment and Profile

#### 2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BE	Information Technology	60	66	42
BE	Electronics Engineering	60	32	18
BE	Electronics and Telecommunication Engineering	60	52	36
BE	Computer Engineering	120	134	112
BE	Civil Engineering	120	72	56

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### 2.2 – Catering to Student Diversity

#### 2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2017	1591	Nil	112	Nil	112

### 2.3 – Teaching - Learning Process

#### 2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
112	112	664	26	Nil	3

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

#### 2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

Universal College of Engineering adopts a confidential mentoring system wherein the students are asked for

their technical/personal problems, suggestions, and necessary actions taken on that basis. When the students are newly admitted in the first year in the Institution, they are furnished with a mentoring form in which all the basic details of that student and also details of family members are inquired. Apart from this, details like co-curricular and extra-curricular activities are also maintained. The Institution also keeps a track of one year record regarding the student's higher studies and placements. A dedicated faculty is allocated to a group of students and the faculty has the responsibility for mentoring these students. During regular intervals, faculty and students meet and discuss the problems faced by the students in concern with the academics, personal, extra-curricular or anything related to overall development of the student. Necessary amendments are requested with the concerned Department/ faculty/ individual . All the Student information is kept strictly confidential with the mentor to encourage the students to be open and fearless to discuss and solve the problems. Once the students are promoted/admitted in the second year, a dedicated faculty from the respective department is allocated to the students and each mentor takes charge of their mentee. If a faculty(mentor) leaves/resigns from the Institution, a replacement mentor is assigned. Before the clearance of the faculty profile from the Institute, he/she has to introduce the mentees to the new mentor.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
1591	112	1 : 14

## 2.4 – Teacher Profile and Quality

### 2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
112	36	76	36	3

### 2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2017	Joel Philip Thekkekara	Assistant Professor	Microsoft Azure Research Award
2017	Yuvraj Chavda	Assistant Professor	Recognition/Appreciation from IIT Bombay and Internship Offered

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## 2.5 – Evaluation Process and Reforms

### 2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BE	346019110	8	28/05/2018	24/07/2018
BE	346019110	7	18/12/2017	07/03/2018
BE	346037610	4	08/06/2018	21/07/2018
BE	346037610	3	19/12/2017	23/01/2018
BE	346037210	8	28/05/2018	11/07/2018
BE	346037210	7	18/12/2017	23/02/2018

BE	346024610	6	05/06/2018	25/07/2018
BE	346024610	5	14/12/2017	19/01/2018
BE	346024510	4	04/06/2018	25/07/2018
BE	346024510	3	26/12/2017	19/01/2018
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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

The faculty and students are made aware of the CIE process by the Examination Cell. In this process, the syllabus represents the scheme of end semester marks along with the term test marks, term work, assignment, tutorial, oral and practical examination marks applicable to the concerned Course of the Program. Based on result analysis of the previous semester, continuous improvements in the mode of internal evaluation are suggested by the Head of Department and Principal. Classroom lectures were reoriented to discuss the possible End Semester Examination questions and the proper expected way of representing and answering the questions. After careful deliberations and discussions with the core members of the department, some new ideas have been introduced. These include conducting mock viva as a part of continuous assessment and understanding the exact reasons for lack of satisfactory student academic performances. Tutorials are dedicated to solving numerical problems (from previous University question papers) and also helping slow learners to get more attention. The evaluation of term work contains assignments, case studies, mini-project, attendance, and performance in the laboratory, as suggested in respective courses by the University of Mumbai. Students are apprised about the Educational Objectives and course outcomes expected from them during the very first lecture of the course. Our institute conducts two Internal Assessment Tests each of 20 or 15 marks as per the test scheme prescribed in the syllabus of respective courses. The average of the two test marks are evaluated and displayed for the reference of the students so that each student can gauge the self-performance level. This average of term test marks is considered in the overall grade in the Semester End Examination. For the Internal Assessment Test, papers are set keeping in mind the learning objectives and the understanding of the fundamental concept of the Course. Course Outcome versus Program Outcome attainment values are worked out to evaluate the need for further improvements. The Course Exit Survey forms are an indicator of the success of the reforms introduced and implemented and further reforms if required are implemented. The presentations of the case study, which are beyond the prescribed syllabus, are also conducted and marks are awarded as per the performance. Project dissertation marks are awarded only for final year students. The final presentation with the actual model of the project is evaluated by an internal expert and industry experienced person. All these marks are considered in the final University examination. These rules are subject to change as per the instructions from the University.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

Universal College of Engineering, an Institute affiliated with the University of Mumbai prepares its academic calendar based on the formulation of the University of Mumbai Calendar circulated in the name of the Dean, University of Mumbai. The Academic calendar is prepared by Principal, HODs, Event heads and from the Exam cell for the two Internal Assessment (IA) test dates, after incorporating the inputs from IQAC for curriculum enrichment activities. Generally, the first IA test is scheduled in the 6th week and second test in the 14th week of every semester. All the Head of the Departments, Event head, and Industrial visit co-coordinators submit their line of action for Interdepartmental activities such as organizing Guest lecture, Site visit,



STTP, workshops, etc. The same is disseminated to the students through the website and orientation programmes. The fifteenth week is considered a term-end week. This week, the compilation of term work marks is articulated based on the continuous evaluation process. Attendance is monitored after every month of every semester. Compliance related to the various components of CIE is monitored fortnightly by the departmental Course Coordinators along with HODs during department meetings. Adherence of CIE components to the academic calendar is noted by HOD and Mentor while signing the Mentor form. All activities are closely monitored and corrective actions, if any, are taken immediately. During a semester student teaching-learning process is evaluated through term work, an average of two Internal Assessment tests, Oral/Practical and End Semester Examination marks for the respective course. The academic calendar also has a prescribed slot for conduction of Oral examination in compliance with the University prescribed date slots. All the Intra/Inter-college level activities such as Vyro, Jr.Vyro, IETE paper presentation, project exhibition, Sports week, Tantrotsav, Industrial visit, expert lecture, etc. to be held in an Academic year are planned within the 15weeks of the planner to the University of Mumbai calendar.

## 2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

<https://universalcollegeofengineering.edu.in/courses-admissions/computer/objective-outcome/>

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
346019110	BE	Civil Engineering	133	127	95.49
346024510	BE	Computer Engineering	126	111	88.10
346037210	BE	Electronics and Telecommunication Technology	54	47	87.04
346037610	BE	Electronics Engineering	26	22	84.62
346024610	BE	Information Technology	68	68	100

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## 2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

<https://universalcollegeofengineering.edu.in/iqac/student-satisfaction-survey/>

## CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 – Resource Mobilization for Research

#### 3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Minor Projects	365	Vidya Vikas Education Trust	0.02	0.02
Major Projects	365	Vidya Vikas Education Trust	2.2	2.2
Minor Projects	365	Vidya Vikas Education Trust	0.01	0.01
Interdisciplinary Projects	365	Vidya Vikas Education Trust	0.28	0.28

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### 3.2 – Innovation Ecosystem

#### 3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Workshop on Computer Network and Security	Computer Engineering	18/08/2017
Workshop on PHP	Computer Engineering	24/08/2017
Workshop on Augmented Reality and Virtual Reality	Computer Engineering	31/08/2017
Workshop on IOT (Internet of Things)	Computer Engineering	12/09/2017
Seminar on Python	Computer Engineering	21/09/2017
Seminar on Interview Skills Development	Computer Engineering	04/10/2017
Seminar on Start ups	Computer Engineering	29/01/2018
Work shop on Hadoop and Map Reduce	Computer Engineering	05/02/2018
Workshop on Fruity Loop	Computer Engineering	12/02/2018
Workshop on Valve Hammer Editor	Computer Engineering	21/02/2018
Seminar on Web Technologies	Computer Engineering	05/03/2018
Workshop on Artificial Intelligence	Computer Engineering	08/03/2018
Seminar on IT Security	Computer Engineering	14/03/2018
Seminar on CMS using wordpress	Computer Engineering	26/03/2018
Workshop on Cyber Security and Digital Forensics	Computer Engineering	10/04/2018



Seminar on Quality Control of Non-destructive testing.	Civil Engineering	05/08/2017
Seminar on Opportunity in real estate construction and management	Civil Engineering	22/08/2017
Expert Lecture on Bridge Engineering	Civil Engineering	08/09/2017
Workshop on Utilisation of softwares in structural Design	Civil Engineering	19/09/2017
Seminar on On-site Quality Control for Multistoried structure	Civil Engineering	27/09/2017
Workshop on Total Station	Civil Engineering	09/10/2017
One day workshop on construction of Plastic Bitumen Roads	Civil Engineering	18/01/2018
Expert Lecture on Engineering Geology	Civil Engineering	29/01/2018
Seminar on Use of AutoCAD in Planning and design	Civil Engineering	02/02/2018
Workshop on Quantity Estimation through Takeoff tools	Civil Engineering	05/02/2018
Seminar on methods improving durability of Concrete	Civil Engineering	16/02/2018
Seminar on Utilization of Primavera in Construction Planning	Civil Engineering	12/03/2018
Workshop on designing installation of Stretch Light Ceilings	Civil Engineering	26/03/2018
Expert Lecture on Design Principles of Limit State method	Civil Engineering	29/03/2018
Expert Lecture on Microprocessor	Information Technology	18/08/2017
Alumni lecture on IOT	Information Technology	24/08/2017
Expert lecture on C# and SQL (Structural Query Language) Server	Information Technology	12/09/2017
Expert lecture on Python	Information Technology	21/09/2017
Workshop on Laravel	Information Technology	25/09/2017
Aumni lecture on Interview skills development	Information Technology	04/10/2017
Expert lecture on C-	Information Technology	19/01/2018

Programming		
Expert lecture on google cloud service	Information Technology	05/02/2018
Expert lecture on Voice controlled Robots	Information Technology	16/02/2018
Expert lecture on IOT using swift programming	Information Technology	14/03/2018
Expert lecture on Data analytics using R	Information Technology	21/03/2018
Expert lecture on Digital marketing	Information Technology	28/03/2018
Expert lecture on Lecture on HTML, CSS	Information Technology	03/04/2018
Expert lecture on Angular JavaScript	Information Technology	12/04/2018
Seminar on Web app architecture	Electronics and Telecommunication Engineering	22/08/2017
Workshop on LATEX for project report preparation	Electronics and Telecommunication Engineering	31/08/2017
Expert Lecture on Computational Electromagnetic	Electronics and Telecommunication Engineering	09/10/2017
Expert Lecture on Control System	Electronics and Telecommunication Engineering	11/10/2017
Expert Lecture on Programmable Logic Controller	Electronics and Telecommunication Engineering	12/10/2017
Expert lecture on Video Processing	Electronics and Telecommunication Engineering	23/10/2017
Lecture on Telecom Network Management	Electronics and Telecommunication Engineering	07/03/2018
Expert lecture on VLSI DESIGN	Electronics and Telecommunication Engineering	07/03/2018
Seminar on Overview of Television Engineering	Electronics and Telecommunication Engineering	22/03/2018
Expert lecture on Multistage Amplifier Design	Electronics and Telecommunication Engineering	10/04/2018
Seminar on Web app architecture	Electronics Engineering	22/08/2017
Workshop on LATEX for project report preparation	Electronics Engineering	31/08/2017

Expert Lecture on Computational Electromagnetic	Electronics Engineering	09/10/2017
Expert Lecture on Control System	Electronics Engineering	11/10/2017
Expert Lecture on Programmable Logic Controller	Electronics Engineering	12/10/2017
Expert lecture on Video Processing	Electronics Engineering	23/10/2017
Lecture on Telecom Network Management	Electronics Engineering	07/03/2018
Expert lecture on VLSI DESIGN	Electronics Engineering	07/03/2018
Seminar on Overview of Television Engineering	Electronics Engineering	22/03/2018
Expert lecture on Multistage Amplifier Design	Electronics Engineering	10/04/2018
Workshop On Laser Its Applications	Applied Science and Humanities	14/08/2017
Workshop On Application Of Triple Integration	Applied Science and Humanities	28/09/2017
Workshop On Importance Of Differential Equations In Engineering	Applied Science and Humanities	03/10/2017
Expert Lecture On Mathematics And Its Application	Applied Science and Humanities	09/10/2017
Workshop On Mathematics And Statistics Involved In Stock Exchanged	Applied Science and Humanities	10/10/2017
Expert lectures On Use Of Maths In Engineering	Applied Science and Humanities	24/10/2017
Workshop On Manufacturing Of Led	Applied Science and Humanities	11/01/2018
Workshop On Smart Material	Applied Science and Humanities	09/02/2018
Workshop On Supply Chain Management	Applied Science and Humanities	21/02/2018
Expert Lecture On Importance Of Soft-skills	Applied Science and Humanities	14/03/2018
Workshop On Importance Of Matrices In Coding Theory	Applied Science and Humanities	29/03/2018
Workshop On Waste Water Recycle And Reuse	Applied Science and Humanities	06/04/2018

3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
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Safe Disposal of Menstrual Waste	Rishikesh Lahote (B.E. Computer Engineering) Gargi Desai (B.E. Computer Engineering) Parth Jajoo (B.E. Computer Engineering)	Ministry of Drinking Water and Sanitation	08/09/2017	Student
Paper Presentation- Track IV- Advances in Network Technologies	Mr. Joel Philip, Faculty, Department of Information Technology, UCoE	2nd Internantional Conference on Data Management, Analytics Innovation (ICDMAI-2018) , IICMR, Nigdi, Pune	21/01/2018	Faculty
Smart India Hackathon 2017	Shashank Nayak ,Yagnesh Devashrayee, Bhavin Vadhiya, Akshay Kotian (BE Information Technology), Karan Botadra, Chintan Popat (TE Information Technology)	HRD Ministry, AICTE Persistent	01/04/2018	Students
National Cyber Security Seminar, Debate n Quiz Contest held at Defence Institute of Advance Technology	Jayraj Chopda (BE Information Technology) Keval Morakhia, Chintan Popat (TE Information Technology)	Computer Society of India (CSI)	15/07/2017	Student
Peltier Cooling System	Niketan Patil, Devarshi Pathak, Nikhil Mundfan, Sanket Kasar (Electronics and Teleommunication Engineering)	Automation Expo 2017	12/08/2017	Student
Bridge Builders-Designing a bridge using popsicle sticks to sustain maximum load	Ravi Kanojiya, Darshan Mange, Nayan Chavda, Dhruval Suriya (SE Civil	Elan n Vision- IIT Hyderabad	11/02/2018	Student

with minimum self weight.	Engineering)			
GreenX- Presenting innovative ideas on waste management	Sakshi Singh, Pritesh Mewada, Prathemesh Mundy, Aqib Shaikh (TE Civil Engineering)	Technex- IIT Varanasi	18/02/2018	Student
Criar- On the spot bridge designing for the mentioned problem statement using wooden stick and thread	Soham Malik, Anup Shelar, Nishant Rao, Abhishek Dhanavade, Saurabh Yele (BE Civil Engineering)	Megalith- IIT Kharagpur	11/03/2018	Student
Bridge it- To design an under arch unsymmetrical bridge using popsicle sticks to sustain maximum loading under minimum self weight	Ravi Kanojiya, Darshan Mange, Nayan Chavda, Dhruval Suriya (SE Civil Engineering)	Aakar- IIT Bombay	18/03/2018	Student
Bridge Design Challenge	Kanan Agarwal (BE Civil Engineering), Vatsal Shah, Rudra Chauhan, Yash Patil (TE Civil Engineering)	Techkriti- IIT Kanpur	18/03/2018	Student

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3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
426	Aditya Gosaliya (S.E. Computer Engineering)	Universal College of Engineering	Adioly Studios	Web Devepement	15/07/2018
426	Aditi Shah (Information Technology)	Universal college of Engineering	Shop Trendies	Business of Jewellery	17/12/2017
426	Pranav Mehta (Information Technology)	Universal college of Engineering	Web Arch	IT Services	08/06/2017
426	Mr. Tanay Makwana	Universal college of	Educonetowrk	Networking Platform	02/11/2017

	(Electronics and Telecommunication)	Engineering			
426	Mr. Mohit Arvind Motiramani (Civil Engineering)	Universal college of Engineering	M N Manufactures	Manufacturing of Paver Blocks and Cover Blocks	04/04/2017
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### 3.3 – Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
0	1	1

3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
NA	Nil

3.3.3 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
International	Civil Engineering	5	5.47
International	Computer Engineering	25	4.7
International	Electronics Engineering	1	4.5
International	Electronics and Telecommunication Engineering	1	1.67
International	Information Technology	2	4.5
International	Applied Science and Humanities	3	4.2
<a href="#">View File</a>			

3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Applied Science and Humanities	1
Information Technology	6
Electronics and Telecommunication Engineering	Nil
Electronics Engineering	1
Computer Engineering	2
Civil Engineering	11
<a href="#">View File</a>	

3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Food wastage reduction through donation	Ms. Leena Raut	International journal of recent trends in engineering research	2018	2	Universal College of Engineering	2
Detection of Phishing website using Machine learning	Ms. Hezal Lopes	International Journal Of Engineering and Technology	2018	5	Universal College of Engineering	5
DAPS: Dairy analysis and prediction system using technical indicators	Ms. Hezal Lopes	2017 Third International Conference on Sensing, Signal Processing and Security (ICSSS)	2017	2	Universal College of Engineering Universal College of Engineering	2
Smart Waste Management for Segregating Different Types of Wastes	Mr. Jigar Chauhan	2nd International Conference on Data Management, Analytics Innovation	2018	4	Universal College of Engineering	4
Machine Learning for Personality Analysis Based on Big Five Model	Mr. Joel Philip	2nd International Conference on Data Management, Analytics Innovation	2018	3	Universal College of Engineering	3

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### 3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
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Piezo Electric Roads	Mr. Sujit Tare	International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC)	2017	1	Nil	Universal College of Engineering
Preparing Contour Plan for river using Google Earth™ and QGIS Software	Ms. Mitali Poojari	International Journal Of Recent Advances in Engineering Technology (IJRAET)	2017	1	Nil	Yadavrao Tasgaonkar College of Engineering Management, Bhivpuri
Machine Learning for Personality Analysis Based on Big Five Model	Mr. Joel Philip	2nd International Conference on Data Management, Analytics Innovation (Springer, Singapore)	2018	3	3	Universal College of Engineering
Smart Waste Management for Segregating Different Types of Wastes	Mr. Jigar Chauhan	2nd International Conference on Data Management, Analytics Innovation (Springer, Singapore)	2018	4	4	Universal College of Engineering Universal College of Engineering
Augmentation of batching plant productivity without affecting the quality of concrete	Ms. Sudeshna Wawal	International Journal of Advance Research, Ideas and innovations in Technology	2017	1	Nil	Dilkap Research Institute of Engineering and Management Studies, Raigad
Runoff Modelling using SWAT hydrological model for GhatPrabha Basin	Ms. Mitali Poojari	International Journal of Advance Scientific Research and Engineering	2017	1	Nil	Yadavrao Tasgaonkar College of Engineering Management, Bhivpuri



		trends				
Scaling of Ground motions for performing incremental Dynamic Analysis of RC Framed Structures	Mr. Nilesh Gaikwad	International Journal of Advance Research, Ideas and innovations in Technology	2017	1	Nil	Flora Institute of Technology, Pune
DAPS: Dairy analysis and prediction system using technical indicators	Ms. Hezal Lopes	2017 Third International Conference on Sensing, Signal Processing and Security (ICSSS)	2017	1	2	Universal College of Engineering
Detection of Phishing website using Machine learning	Ms. Hezal Lopes	International Journal Of Engineering and Technology	2018	1	5	Universal College of Engineering Universal College of Engineering
Food wastage reduction through donation	Ms. Leena Raut	International journal of recent trends in engineering research	2018	1	2	Universal College of Engineering

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### 3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	1	Nil	Nil	31
Presented papers	20	Nil	Nil	Nil
Resource persons	1	Nil	3	8

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### 3.4 – Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Flag Hoisting by Female Faculty Member	WDC	134	348
Drama on Motherhood	WDC	71	146
Girls Marathon	WDC	23	131
Drama on Women Empowerment	WDC	137	113
Poster Presentation Competition on Theme Save Girl Child	WDC	132	304
International Women Day Celebration	WDC	39	128
Cleanliness Drive at Kaman Railway station	IEEE, UCOE	3	42
Joy of Giving at Dilkush Children Home, Gorai (ISA)	ISA, UCOE	3	48
Blood Donation Camp and Thalassaemia Check UCOE with Sarla Blood Bank	IEEE, UCOE	79	263
Tree Plantation at UCOE campus	CSI, UCOE	134	314
<a href="#">View File</a>			

3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
IIT Gandhinagar- Amalthea	Winners in Seismism	IIT	4
IIT- Bombay- Techfest	Winners in Crane- o- mania	IIT	4
IIT Hyderabad- Ealan and Vision	Winners in Bridge Builders	IIT	4
Dipex18	Winners	Walchand college of Engg. Sangli	6
Smart India Hackathon	3rd Consolation Prize and 6th rank all over India	HRD Ministry	6
IIT Kanpur-	Winners in Bridge	IIT	5

Techkriti	Design Challenge		
Highest Committed Student Branch Activist Award	Winner	Computer Society India (CSI)	1
Girl Script Summit Hackathon	Winner	Silveroak College of engineering	5
Automation Expo 2017	Young innovation award for Multiutility Power Generation project in AUTOMATION EXPO 2017 (Automation India Expo 2017 is the Asia's largest Automation exhibition held at Goregaon Exhibition Center, organized by IED communications every year. )	Automation Expo 2017	4
Automation Expo 2017	Young innovation award for Smart E-Dustbin project in AUTOMATION EXPO 2017	Automation Expo 2017	4
<a href="#">View File</a>			

3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
IEEE	IEEE, UCOE	Cleanliness Drive at Kaman Railway station	3	42
ISA	ISA, UCOE	Joy of Giving at Dilkush Children Home, Gorai (ISA)	3	48
IEEE	IEEE, UCOE	Blood Donation Camp and Thalassaemia Check UCOE with Sarla Blood Bank	79	263
CSI	CSI, UCOE	Tree Plantation at UCOE campus	134	314
WDC	UCOE	Flag Hoisting by Female Faculty Member	134	348

WDC	UCOE	Drama on Motherhood	71	146
WDC	UCOE	Session on Act for Women Rights of Indian Citizen	5	114
WDC	UCOE	Girls Marathon	23	131
WDC	UCOE	Drama on Women Empowerment	137	113
WDC	UCOE	Poster Presentation Competition on Theme Save Girl Child	132	304
<a href="#">View File</a>				

### 3.5 – Collaborations

#### 3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Survey Field Project at Khopoli (4 days per Batch)	147	Vidya Vikas Education Trust	8
One day site Visit at Bhiwandi Water Treatment Plant, Bhiwandi	150	Vidya Vikas Education Trust	1
Workshop on Python and Tesorflow in Finolex Academy of Management and Technology, Faculty exchange (Mr. Joel Philip, Information technology)	1	Vidya Vikas Education Trust	2
Judging Project competition at Vidyalankar College of Engineering, Faculty exchange (Mr. Jigar Chauhan, Information Technology)	1	Vidya Vikas Education Trust	1
Faculty Exchange, Workshop conducted on Latex in Zeal College of Engineering, Pune (Mr. Deepak Dave)	1	Vidya Vikas Education Trust	2
Seminar Conducted	1	Vidya Vikas	1

on Nanomaterial in L R. Tiwari College of Engineering (Dr. J. B. patil)		Education Trust	
Faculty Exchange, Workshop conducted by Prof. Harish Dixit from VJTI, Mumbai	62	Vidya Vikas Education Trust	1
Faculty Exchange, Workshop conducted by Prof. Manjiri Gogate from LR Tiwari college of engineering	52	Vidya Vikas Education Trust	1
One day Industrial Visit at Auto Cluster, Pune	88	Vidya Vikas Education Trust	1
One day Industrial Visit at Mahavir Spinning mill, Himachal Pradesh	81	Vidya Vikas Education Trust	1
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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Industrial Interaction	Internship	E A Technology Services LLP	19/06/2018	07/07/2018	1
Industrial Interaction	Internship	Mintellect Global	01/06/2018	15/07/2018	1
Internship	Internship	369 Microsystem	16/06/2018	16/07/2018	4
Internship	Internship	Kalpesh Infotech	14/06/2018	14/07/2018	1
Industrial Training	Internship	EMU Carshed, Virar	21/06/2018	06/07/2018	1
Industrial Interaction	Student Exchange	Universal Junior College, Goregaon.	05/08/2017	05/08/2017	58
Industrial Interaction	Faculty Exchange	Vidya vikas universal	23/09/2017	23/09/2017	1

		Junior college, Malad (Prof. Suhas Sahast rabuddhe)			
Industrial Interaction	On job Training	Industrial Visit at Oil and Natural Gas Corporation Limited, Dehradun	30/12/2017	30/12/2017	190
Industrial Interaction	On job Training	Scientific Closure of Dumping Landfill, Gorai	18/10/2017	18/10/2017	44
Industrial Interaction	Faculty Exchange	Seminar Conducted on Nanomaterial in L R. Tiwari College of Engineering (Dr. J. B. patil)	17/03/2018	17/03/2018	1
<a href="#">View File</a>					

3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Vistaar Digital, Borivali East, Mumbai	30/05/2017	Internship, Knowledge Up-gradation	2
VR Webtek Solutions, Vasai West	31/05/2017	Internship	6
Sarla Blood Bank, Vasai West, Palghar	14/07/2017	Social Cause and Medical Guidance	342
Learning Root	18/08/2017	Personal Counselling and Preplacement Training	98
Om Sai Charan Builders, Bhayander East, Thane	03/01/2018	Internship	4
Marg Infraprojects, Dahisar (East), Thane	01/03/2017	Internship	1
Denitek	01/04/2017	Internship	1

Computers, Vasai West			
MU Tech Unified Solution Private Limited, Thane	01/05/2017	Internship	1
IT Exemplar, Thane	15/05/2017	Internship	2
Kalpesh Infotech, Vasai West	15/05/2017	Internship	1
<a href="#">View File</a>			

## CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
97.3	85.92

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Existing
Laboratories	Existing
Seminar Halls	Existing
Classrooms with LCD facilities	Existing
Seminar halls with ICT facilities	Existing
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Classrooms with Wi-Fi OR LAN	Existing
<a href="#">View File</a>	

### 4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
e-granthalaya	Partially	3.0	2012

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	10589	6634804	1134	468407	11723	7103211
Reference Books	1242	588145	130	109878	1372	698023

e-Books	Nill	Nill	Nill	Nill	Nill	Nill
Journals	4	26587	16	183645	20	210232
e-Journals	3	381735	5	481392	8	863127
Digital Database	Nill	Nill	5	Nill	5	Nill
CD & Video	10	28780	Nill	Nill	10	28780
Library Automation	1	Nill	Nill	Nill	1	Nill
Weeding (hard & soft)	Nill	Nill	Nill	Nill	Nill	Nill
Others (specify)	159	300556	138	28036	297	328592
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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
00	00	00	Nill
No file uploaded.			

#### 4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/GBPS)	Others
Existing	544	20	32	0	1	7	23	32	96
Added	30	0	18	1	0	1	3	18	10
<b>Total</b>	<b>574</b>	<b>20</b>	<b>50</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>26</b>	<b>50</b>	<b>106</b>

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

50 MBPS/ GBPS
---------------

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
<b>E-Universal College of Engineering</b>	<a href="https://universalcollegeofengineering.edu.in/">https://universalcollegeofengineering.edu.in/</a>

#### 4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on	Expenditure incurred on	Assigned budget on	Expenditure incurred on
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academic facilities	maintenance of academic facilities	physical facilities	maintenance of physical facilities
18.25	15.11	145.15	135.25

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

Different committees are constituted to take care of physical and academic support facilities. All washrooms are maintained by dedicated housekeeping staff. The Head of the Department takes input from the faculties regarding the budget required for the laboratories and the proposal is given to the Principal. The head of the sports committee submits requirements for various sports materials which are sent to the head office for approval. The librarian forwards an acquisition form to all the faculties. The faculties fill it up and send it back to the librarian. The librarian sends the books required to the principal who send in turn send it to the head office for approval. A physical muster is maintained to record all minor maintenance issues. Maintenance issues include electricity issues, and minor issues related to infrastructure. Whenever there is a major maintenance issue, a mail is sent to head office regarding the issue. Whenever a mail is sent a ticket is generated with respect to the maintenance issue. Ticket is generated using dedicated software called "Zendex". The head office makes sure the issue is resolved. Whenever an issue is resolved the ticket is closed.

<https://universalcollegeofengineering.edu.in/about-us/our-campus/procedures-and-policies-for-maintaining-and-utilizing-facilities/>

## CRITERION V – STUDENT SUPPORT AND PROGRESSION

### 5.1 – Student Support

#### 5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	OBC/SC/ST/NT/EBC/Institute	317	18052959
Financial Support from Other Sources			
a) National	NA	Nil	0
b) International	NA	Nil	0
<a href="#">View File</a>			

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Organic Farming Skill Development Program	27/06/2018	15	UCOE
Remedial Coaching	16/09/2017	211	UCOE
Careere Counselling	18/08/2017	98	Learning Root
Bridge Course	07/08/2017	262	UCOE
Soft Skill Development	10/10/2017	24	Suma shreedhar and Bijal shah

Language Lab	09/08/2017	264	UCOE
Yoga and Meditation	21/06/2018	63	Yoga Trainer Mr. Ranjan Nair (AVP Sukrut Centre, Mumbai)
<a href="#">View File</a>			

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2017	CoCubes Training Program	205	205	205	112
<a href="#">View File</a>					

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
3	3	7

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
QSpider Software	98	17	KPIT Technologies Ltd	14	1
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5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
2018	1	BE ETRX	Electronics Engineering	Symbiosis institute of technology, Pune	M.Tech E&TC
2018	1	BE IT	Information Technology	Northen Illinois university	Masters in Computer Science
2018	1	BE IT	Information Technology	University of Houston Clearlake	Masters in Computer Science

2018	1	BE IT	Information Technology	National College of Ireland	MSc in Cyber security
2018	1	BE EXTC	Electronics & Telecommunication	lambton college	Master in EXTC
2018	1	BE EXTC	Electronics & Telecommunication	RMIT	Master in EXTC
2018	3	BE Computer	Computer Engineering	The University Of Texas	Masters in Computer Science
2018	4	BE Civil	Civil	NICMAR, Pune	Advanced Construction management
2018	5	BE Civil	Civil	Parul university, Vadodra, Gujarat	Mtech Structural engineering
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5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
GATE	1
GRE	4
TOFEL	5
Any Other	8
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5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Convocation Ceremony	Institute	407
Poster Presentation Competition by WDC	Institute	436
Tahuko	Institute	552
Tantrostav	Institute	773
Intra sports and cultural week	Institute	1144
National level project exhibition	National	1496
VYRO	National	2218
Jr.Vyro	State	1336
National level paper presentation	National	1850
ICSCET IEEE	International Level	305

international Conference

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### 5.3 – Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2018	National level Inter-Engineering Sports meet	National	1	Nil	997	Siddhesh Sirsekar
2018	National level Inter-Engineering Sports meet	National	1	Nil	1050	Aakash Puthanekar
2018	National level Inter-Engineering Sports meet	National	1	Nil	BH30	Omkar Mehta
2018	National level Inter-Engineering Sports meet	National	1	Nil	1325	Mohak Pillai
2018	Youth Festival University of Mumbai	National	Nil	1	880	Ayush Gujjar

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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

Universal College of Engineering has created a platform for the active participation of students in different academic committees and other activities of the Institute to make students gain in various skills like leadership, teamwork, and to inspire them to develop their skills for their professional growth. The Students Council of Universal College of Engineering is quite active and is guided by the Teaching Fraternity. They show a lot of enthusiasm in conducting activities. The Selection of members of Students' Council is as per the guidelines given by University of Mumbai. An official announcement of the Council team was made on 15th August 2017. The List of selected members is put on Notice Boards and College Website. Most of the students selected are on the basis of their overall academic performance and extracurricular activities.

In the Institute, Students' Council undertakes responsibilities in various activities/events to bring forward the views and suggestions of the students regarding their Curriculum and extraCurricular activities in the Institute. The Students' Council of Universal College of Engineering helps the students to share ideas, interests and concerns with teachers and Principal. The Students' Council often comes together to raise funds for social activities, projects

related to community development and helping the people in need. Students' Council have wholeheartedly represented themselves in various National Level events conducted by the Institute such as The Institution of Electronics and Telecommunication Engineers (IETE) National Level Technical Paper Presentation, Project Presentation, National Level Technical Fest VYRO and Tantrastav, workshops and Seminars. The responsibility of creating awareness about Anti-Ragging rules are bestowed on Students' Council. Principal along with the IQAC team conducts annual meetings regarding various academic and non-academic issues with the Students' Council and takes feedback to improve future activities in the Institute.

#### 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

The Alumni Association was inaugurated by the Director of Universal group, Prof. Aditya Lohana and Principal of Universal college of Engineering, Dr. J.B.Patil on 17th November 2016. The occasion was graced by 17 Alumni from the first graduate batch (AY 2015-16). Speaking on the occasion, the Director underlined and praised the achievements of Alumni of Universal College of Engineering in all walks and spheres of life. Universal College of Engineering had its first Alumni meet on November 18, 2017. The Institute is still in the process of registering an association. In the meeting, the graduated students expressed challenges faced by them in their project works and also gave interview tips, requirements and soft skills needed by industries. They also mentioned the importance of internships, industry academia association, etc. which would provide crucial benefits in enriching the present students at Universal College of Engineering. The performance of our first batch alumni prompted 'SportsTech' to recruit the students of our next batch (AY 2017-18). Coincidentally the campus recruitment team consisted of our own students as selectors! In short, our senior students act as a bridge between the college and industry and a total of 17 students were recruited in the year 2017-18 in 'SportsTech'. The alumnus is an asset to the Institute as their contributions and involvement has increased for overall development of Universal College of Engineering.

5.4.2 – No. of enrolled Alumni:

405

5.4.3 – Alumni contribution during the year (in Rupees) :

202500

5.4.4 – Meetings/activities organized by Alumni Association :

1. Universal College of Engineering had its first Alumni meet on November 18, 2017. 2. The performance of our first batch alumni prompted 'SportsTech' to recruit the students of our next batch (AY 2017-18). Coincidentally the campus recruitment team consisted of our own students as selectors! In short, our senior students act as a bridge between the college and industry and a total of 17 students were recruited in the year 2017-18 in 'SportsTech'. 3. Session on Interview skills development by Alumni (Chintan Popat) on 4th October 2017 4. IOT Session by Alumni (Chintan Popat) on 24th August 2017

### CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Tantrotsav – a technical event hosted by the Department of Civil Engineering to nurture the research culture, with a motive to provide students with a platform to exhibit their knowledge and innovative ideas. The Head of the Civil Engineering Department, in HOD meetings with the Principal, put forth the idea about organizing intra-collegiate tech-fest to establish a competitive culture, where students can participate and get exposure to various forms of events and competitions, right from their first year of Engineering. Tantrotsav was organized to ignite the technical intelligence of students and to improve their application of theoretical knowledge for engineering challenges. Principal approved the event and all department HODs conveyed this event in departmental meetings. Every faculty was asked to give ideas about what technical events can be planned for Tantrotsav. After taking suggestions from faculties, events were finalized. Every department coordinator was selected in a Tantrotsav Organizing team. Faculties contributed in the registration team, judging, coordination, certificate feedback team for the events. Non-teaching faculties, lab assistants provided technical support to event coordinators. Tantrotsav 2K17 provided students with the opportunity to apply technical knowledge into a real-life situation. Events like Bridge making, High Rise Structures (Chimney), Railway station Yard planning, Airport Planning and Town Planning, Web Kraft, App-a-thon, Electrica, Home Automation were the highlights of the event. A total number of 773 students participated in this event. Tantrotsav boosted the participation in various IIT competitions and technical strategies to win the events. 'International Conference on Smart Cities and Emerging Technologies (ICSCET-18)' IQAC took initiative in organizing international IEEE conference ICSCET-18 to harbor technological innovations and excellence by encouraging young researchers to contribute to the concept of the smart city. Mr. Asir Khan from the Civil Engineering Department as conveyor and Mrs. Sunita Yadav as co-conveyor from the Electronics department led the conference. They formed the core team including the Head of Department, teaching, non-teaching and administrative staff for the planning and execution of the conference. Chairperson and Co-chairperson involving faculties from each department were decided for Organizing Committee, Anti-Plagiarism Check Committee, IT Support Committee, Publicity, and Outreach team, Sponsorship Committee, Cultural Events Committee, Reception committee Registration and Kit, Accommodation and Hotel Committee, Food Committee Review Committee, Exhibition and Poster Committee, Logistics Committee, Website content management and Coordination Committee. UCoE ICTC provided Conference manager software for maintaining the record for the author, reviewer and admin. Management provided financial assistance for UCoE faculties for paper registration fee. Every faculty worked with cordial relations with committee members. The conference started on 5th January 2018, at 9.00 am. The conference was divided into 2 technical sessions and a total number of 141 papers were presented in the fields of Civil Engineering, Electronics Engineering, Electronics and Telecommunication, Computer Engineering, Mechanical Engineering and Information Technology. Eminent personalities from the respective fields were invited as session chairs for each session. As a summary, there were 11 morning Sessions, 09 afternoon Sessions, 143 presenters, 123 attendees, 21 keynote speakers and 18 guests grace the event.

6.1.2 – Does the institution have a Management Information System (MIS)?

Partial

## 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Curriculum Development	The teaching faculties of the

Institute participate in the Syllabus Orientation programs arranged by the University of Mumbai (UoM) under BoS, thereby contributing to its development, finalization and implementation of the syllabus. The Institute follows a structured strategic plan for effective implementation of the curriculum prescribed by the UoM for various programs. The Academic Calendar at the Institute level is prepared in consonance with the Academic Calendar of the UoM. As per the suggestions received from IQAC, before the commencement of the Academic Year, a Faculty Orientation program is conducted by the Campus Director /Principal to appraise the faculty members to execute the action plan according to the guidelines. Discussions are focused on Academic calendar, Time Table, Course Files, organizing Industrial Visits, Expert Lectures and other Curricular and Co-curricular activities and the role of individual faculties in implementing the action plan.

Teaching and Learning

The Institute employs different methods of Teaching-Learning with an emphasis on making the whole course student-centric. Methodologies concentrate on experiential learning, participative learning and problem-solving. Our teaching process is not restricted to a traditional chalk and board method but ranges beyond the books and impels students to think out of the box. We have implemented in our lesson plans open classrooms, Short Term Training Programs (STTPs), workshops and guest/expert lectures on various streams. These programs are conducted by eminent personalities who are leaders and specialists in their domain. Internship programs are provided right from the First Year to furnish students with hands-on practical knowledge of the real-life application of knowledge gained in the classroom. An E-Cell, a Robotics Club (e-Yantra) and Remote Learning Center have been established after entering an MOU with IIT Bombay. This helps the students to get an understanding on a comprehensive level and to think creatively. To summarize, the Institute always encourages the students to think



critically and decisively with its learning methods that are a balance of experiential learning, participative learning, and problem-solving, aimed at moulding them to be the future leaders.

**Examination and Evaluation**

Preliminary mock tests are conducted for the first-year students, before the end semester examinations, in addition to two internal assessment tests. A timely assessment of tests is done and the results are displayed on the notice boards. Term work evaluation is conducted on a regular basis. Hence, providing students with an opportunity/scope to improve his/her performance at an early stage of the semester is achieved. End semester theory and practical/oral examinations are conducted as per the University of Mumbai protocols. The Faculty members are involved in examination duties such as University level question papers setting and invigilation of theory examinations. Faculty members are also approved assessors/moderators for online as well as offline answer-book assessment work. The faculty members visit other Institutes as External Invigilators for conducting Practical/Oral Examination.

**Research and Development**

All faculty members are encouraged and provided support by the Institute to involve in Research and Development activities in their respective field. Based on the feasible research proposals, the Management encourages undertaking the project and provides finance under the welfare scheme. Institute supports innovation in teaching and learning by providing financial assistance to attend the workshops/Conferences/FDP related to research and sustainable development. To boost the research attitude in students, the Institute arranges Paper presentation and Project exhibition events. Every Department initiated various Co-Curricular and Extracurricular activities, Inter and Intra-college events at UCoE to promote Research Development. A few to mention are Tantrotsav, Solar car, International Conference on Smart City Emerging Technologies (ICSCET'18), Organic Farming.

**Library, ICT and Physical Infrastructure / Instrumentation**

The Institute follows the norms and specifications laid down by the All



India Council for Technical Education (AICTE) for creating an infrastructure that facilitates effective teaching and learning. All the classrooms are equipped with a wall-mounted projector and audio-video capability for effective student's interactive sessions. All the departments have Laboratories of adequate equipment and infrastructure which helps students in developing practical skills as Industry needs. The Institute has an instructional area of 9683 square meters, administrative area of 1040 square meters and amenities area of 855 square meters. The Institute provides R.O purified drinking water arrangements in the campus. 86 CCTV Cameras are installed on all floors for security purposes. Bandwidth speed of 50Mbps is utilised for smooth conduction of work on Online portals. The Institute Infrastructure is well planned considering outdoor and indoor activities for students. An area of 2250 square meters is dedicated to outdoor activities. Indoor games like table tennis, carrom and chess are played in Gymkhana. All of the classrooms and seminar halls are ICT-enabled. The Library is automated using an Integrated Library Management System. The library has a dedicated committee with the Principal as the Chairperson and the Librarian as Secretary and all HOD and one member of each department as members of the committee. Students' book cards and books are bar-coded for transaction purposes. The Library has an adequate number of books to cater to the student's needs. The Library has a stacking capacity of 22,000 books. Newspaper and journal stands in the library provide access to news, research and other information to students and faculty. Records of all previous years' question papers of every stream are made available to students and faculties. Faculties and students have access to NPTEL videos.

Human Resource Management

An orientation programme is conducted for all staff before the commencement of the new academic year. Professional Development Programmes are conducted every year for teaching non-teaching faculties which includes skill development programs. Financial

Assistance is provided to Faculties for attending National International Conferences and workshops. On-Duty Leaves are provided to the teachers for paper presentation and related activities. New faculties are appointed on the basis of their performance in Demo Lecture, Technical interview and Personal Interviews by a Panel consisting of respective Head of Department, Principal, Institute HR and a Management representative. Teachers are oriented about the teaching pedagogy, cultural and appraisal systems by the Principal and Head of the Department. At the end of the academic year, teachers submit the Self-Assessment Form (SAF) on the basis of which appraisals are conducted. Lecture monitoring Feedback, done by Principal HoD in the class, is communicated to the teachers by the Principal, HOD, Campus Director, HR and Group Director in Appraisals and proper guidance, if required, is provided.

Industry Interaction / Collaboration

The Institute has a practice of encouraging student's participation in Internships to experience the industry environment and help in increasing their employability skills. The Institute has started this practice since its inception of the first batch itself (A.Y. 2012-16). Universal College of Engineering (UCoE) also provides aptitude and soft skill training to the students. Other activities such as Expert Lectures, Seminars and Training Programs by Industry personnel are arranged to offer scope for Student-Industry interaction and understanding of corporate culture. New MoUs for Internship signed with companies like IT Exemplar VR Webtek Solutions, Vistaar Digital, Denitek, MU Tech Unified Solution, Kalpesh Infotech, and Om Sai Charan Builders. Industrial Visits organized by the Institute to increase Industry-academia interaction. "Product Exhibition and Career Fair in association with the IEEE and International Society of Automation (ISA) was conducted on 17th March, 2018 where 21 companies visited the UCoE campus and provided internship opportunities to students.

Admission of Students

Rules and Regulations for admission

as laid by the AICTE, DTE University of Mumbai (UoM) are strictly followed by the UCoE. The entire admission procedure has been conducted through the Centralized Admission Process (CAP). Online admission for F.E. and direct second year is strictly done on a merit basis. Government rules for reserved categories in admission are strictly maintained. Admission enquiry is registered online with contact details. Candidates who have enrolled for admission enquiry are informed over the phone about the CAP rounds. Parents/ students are advised to get their certificates verified from the nearest (Facilitation Center) FC. Students who are allotted UCoE in CAP rounds visit the college campus for further documentation and finalization of admission. Student's eligibility is verified through a document verification process. A clear and stepwise explanation of the admission procedure is given to the admission seekers.

6.2.2 – Implementation of e-governance in areas of operations:

E-governance area	Details
<p>Planning and Development</p>	<p>Festival management software is used for technical events like VYRO, Junior VYRO, IETE paper presentation and poster presentation. The Dashboard maintains complete event data such as handling the online registrations of the participants, collecting the registration fees, if any and generating and printing the event fees receipts which are also the entry pass for the participant on the day of the event. Conference manager software was used for the registration of research scholars/attendees/participants for the "International Conference on Smart City and Emerging Technologies" on 5th January 2018. The communication among the reviewers and the participants was extensively done through this software. The personal details of the reviewers and participants were kept confidential among each other. The payment gateway and registration fee receipt were done through the same portal.</p>
<p>Administration</p>	<p>The administration section extensively uses "APPLANE" software for student admission and support. The various details of admitted students</p>

such as Personal details, details of parents and family income, caste category, fee structures and fee receipt, scholarship details (if any) are stored in the software and shall be easily accessible by the Admin staff as and when required or demanded. It also collects and generates a receipt for student services like Examination fees, Transcript fees, overdue fees, bus fees. "Zendex" software is extensively used for generating tickets through mails for maintenance purposes and is effectively managed and run by the staff at Head Office.

**Finance and Accounts**

"Tally ERP" software is used by the Accounts section for keeping records of Budget and Expenses incurred in various activities, events, remunerations and financial transactions. Proper accounting practices are followed to maintain financial transactions. Tally accounting software is used to maintain expenses for STTP, FDP, and Workshops etc. The account section handles staff payroll and Income tax management. Accountants are appointed to maintain the financial records of institutes. Payment to utility bills, all types of purchases, membership fee, and sponsorship is maintained by the accounting department using APPLANE. The Institute appoints a certified Chartered Account to conduct annual financial audits.

**Student Admission and Support**

Students' Admission is implemented using APPLANE software to ease the tasks of the Students' admission process. APPLANE has the student management module, which is used for the student admission process, students' profiles with all their details. Student fees' data entry is done after admission and receipt is generated. Bus fee entry can be done using the Optional fee module. Waiver management module maintains records for Tuition Fee Waiver Scheme (TFWS) students, their free ship data. Students are offered to pay fees by various options like DD, Cheque, Credit card and Debit card. Students fill the admission form and submit it to the admin office after verification from the exam section. Student promotion module is used to promote students in the next year and generate their profile/database in the

current year.

**Examination**

The Exam section for its effective and smooth functioning utilizes the "VIVA" software. The software enables the storage of information related to the student's exam records. The hall tickets of students for End Semester examinations (for Second year Third year) are generated using this software. The Gazette copies and mark sheets are generated from the software itself. The transcripts required by the students for pursuing higher studies are also generated from the stored result databases of the individual student.

**6.3 – Faculty Empowerment Strategies**

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2017	Sudarshan Ashan	NBA workshop	Engin/eering Staff College of India (ESCI) Hyderabad	1800
2017	Yogita Mane	International Conference on Computing, Communication and Networking Technologies (ICCCNT)	IEEE, Delhi	7000
2017	Sunita Yadav	IEEE branch counselor	IEEE Bombay Section	6000
2017	Kaveri Sawant	ISA Branch Counselor	International Society of Automation	4500
2018	Sujit Tare	International Conference on Smart City and Emerging Technologies (ICSCET 2018)	IEEE Bombay Section	2500
2018	Asir Khan	Roundabout Capacity in Heterogeneous Traffic Condition: Modification of HCM Equation and Calibration	Transportation Research Board (TRB) at Washington DC	30000

2018	Jigar Chauhan	2nd International Conference of Data Management, Analytics and Innovation (ICDMAI) 2018 2nd International Conference of Data Management, Analytics and Innovation (ICDMAI) 2018	Audyogik Tantra Shikshan Sanstha's, Institute of Industrial and Computer Management and Research (IICMR), Pune	10500
2018	Joel Philip	2nd International Conference of Data Management, Analytics and Innovation (ICDMAI) 2018	Audyogik Tantra Shikshan Sanstha's, Institute of Industrial and Computer Management and Research (IICMR), Pune	10500
2018	Joel Philip	Fourth International Conference on Computing Communication Control and Automation (IC3CA), IEEE	IEEE	3000
2018	John Kenny	IIT Hyderabad Hackathon	IIT Hyderabad	2000
<a href="#">View File</a>				

6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2017	workshop on Project Building with C#.NET and SQL Server	Not Applicable	29/09/2017	29/09/2017	29	Nil
2018	Workshop on Hadoop and Map	Not Applicable	05/02/2018	05/02/2018	27	Nil

	Reduce"					
2018	A workshop on Angular JS	A workshop on Angular JS	28/03/2018	28/03/2018	34	6
2018	Expert Lecture on IOT, Internet Of Things using SWIFT Programming	Not Applicable	14/03/2018	14/03/2018	32	Nil
2018	Expert Lecture on "Waste water Recycle"	Expert Lecture on "Waste water Recycle"	06/04/2018	06/04/2018	23	6
2018	Fire-fighting workshop	Fire-fighting workshop	08/06/2018	08/06/2018	84	25
2017	Workshop on Software Project Management	Workshop on Software Project Management	07/07/2017	07/07/2017	28	6
2017	Expert lecture on "Computer network and Security".	Expert lecture on "Computer network and Security".	18/08/2017	18/08/2017	26	6
2017	Seminar on Artificial Intelligence	Not Applicable	22/08/2017	22/08/2017	21	Nil
2017	Workshop on Google Cloud source	Not Applicable	16/09/2017	16/09/2017	28	Nil
<a href="#">View File</a>						

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
FDP on Digital Very large-scale integration (VLSI) Systems	1	15/06/2018	19/06/2018	5

Design and Implementation				
Hands on training using Total Station and GPS at Vidyavardhini College of Engineering (VCET, Vasai)	2	18/02/2018	19/02/2018	2
New NAAC Guidelines and Self Study Report Writing at SIES (Nerul) College of Science Commerce	2	07/10/2017	07/10/2017	1
5 days training on Advanced Topics in Embedded Systems and Robotics by e-Yantra Lab at IIT Bombay	2	18/09/2017	22/09/2017	5
Revised Accreditation on Framework by NAAC at Prahladrai Dalmia Lions college of Commerce Economics	2	17/02/2018	17/02/2018	1
Subject Orientation program for Data Structures and Analysis	1	21/07/2017	21/07/2017	1
Preliminary meeting for 50th Youth Festival, University of Mumbai (UoM)	4	20/07/2017	20/07/2017	1
Workshop on Software Project Management	1	03/07/2017	04/07/2018	2
FDP on Linux Hands on with Security	2	06/07/2017	08/07/2017	3
International	1	07/07/2017	08/07/2017	2



Conference on Communication Systems, Computing IT Applications at SFIT, Borivali			
<a href="#">View File</a>			

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
112	112	25	25

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
<p>Sanitary Pad Vending Machine for women. In-campus Nationalized Bank and ATM facility. Pick and Drop Facility: UCoE has bus facilities from various prominent locations like Vasai, Borivali, Thane and Golden Nest. The bus facilities for staff are free of cost. Preference in admission and Concession in fees for wards of employees in Sister Institution of the Universal Group. Sponsorship / Financial Assistance for Staff for participation in Workshops, Seminar and conferences and/or presentation of national/International research papers, other Institutes' hosted FDPs for teachers. Security teams are alert throughout the premises of the Campus for secure ambience for the staff students. A Health Care Center is available in case of First-Aid medical emergency or used as a rest room in case of physical weakness. Premises under CCTV surveillance. Laptop can be issued to Non Teaching faculties from</p>	<p>Sanitary Pad Vending Machine for women. In-campus Nationalized Bank and ATM facility. Pick and Drop Facility: UCoE has bus facilities from various prominent locations like Vasai, Borivali, Thane and Golden nest. The bus facility for Non Teaching staff is free of cost. Preference in admission and Concession in fees for wards of employees in Sister Institution of the Universal Group. Security teams are alert throughout the premises of the Campus for secure ambience for the staff students. Laptop can be issued to Non Teaching faculties from Information Communication Training Centre (ICTC) for Universal Education group. A Health Care Center is available in case of First-Aid medical emergency or used as a rest room in case of physical weakness. A Gymnasium is available for use by all staff and students. College Uniform is provided to Security and Housekeeping Staff. Premises under CCTV surveillance.</p>	<p>Sanitary Pad Vending Machine for girl students. In-campus Nationalized Bank and ATM facility. Transport facility. Security teams are alert throughout the premises of the Campus for secure ambience for the staff students. Premises under CCTV surveillance. UCoE implements Government Scholarship and fee waiver scheme to eligible students. Payment of fees in instalments to economically weak students is allowed. UCoE provides financial support for students to participate in co-curricular and extracurricular activities. Pick and Drop Facility: UCoE has bus facilities from various prominent locations like Vasai, Borivali, Thane and Golden nest. Financial support provided to students to carry out research projects. Pre Placement training is given by Training and Placement Cell. Entrepreneurship opportunities available in UCoE E-cell.</p>

Information Communication Training Centre (ICTC) for Universal Education group. A gymnasium is available for use by all staff and students. Provision for maternity leave is available for female staff as per rules.

#### 6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

The accounts section of UCoE maintains finance and accounts. It strictly follows the established procedures and processes for utilization of financial resources. It also ensures transparency in financial management. Payment to utility bills, all types of purchases, membership fee, and sponsorship is maintained by the accounting department using Tally ERP accounting software. A Chartered Accountant is appointed by Management to do financial audits. They conduct an internal as well as external audit related to the Institute. Qualified accountant from the administration department handles and maintains all financial records as per the required norms.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Vidya Vikas Education Trust	1103608	IIT,SIH Particiption, ICSCET IEEE Conference, Tantrotsav 2K17
<a href="#">View File</a>		

6.4.3 – Total corpus fund generated

1103608

#### 6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Dr.Debajit Sarkar and Dr.Ajay Kambekar	Yes	Inter-Departmental
Administrative	Yes	Dr.Debajit Sarkar and Dr.Ajay Kambekar	Yes	Inter-Departmental

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

1. In the Parent-Teacher Interaction Meeting at UCoE, parents had suggested improving transport facilities with regards to Cleanliness of buses. The Institution considered this suggestion and changed the Bus service provider. 2. One more suggestion was made regarding the promotion of research activities among faculty members and students. As a result, the College decided to

encourage faculty members to take up Inter-disciplinary and research-oriented projects with students. 3. Parents extended their support for Industry collaboration such as signing MoU for internships. In the Department of Civil Engineering, Mr.Kailash Pandurang Mhatre, father of Mr. Mithilesh Mhatre (BE Civil) signed MoU for internship in their Construction company Om Sai Builder, Thane.

6.5.3 – Development programmes for support staff (at least three)

1. Workshop on Software Project Management for Computer/IT lab assistant was conducted on 07-July-2017. 2. Expert lecture on "Computer Network and Security" was organized for Computer/IT lab assistants on 18-August-2017. 3. Awareness workshop on Chemistry Lab Safety was conducted on 04-September-2017. 4. Expert Lecture on Design of Bridge was conducted for Civil Engineering department support staff on 08-September-2017. 5. Session on Act for Women Rights of Indian Citizens in association with Women Development Cell (WDC) was conducted on 05-Oct-2017. 6. The Girls Marathon was organized in association with WDC on 23-January-2018. 7. "Female problems and solution awareness" session conducted on occasion of International Women's Day Celebration on 8-March-2018 in association with WDC. 8. A workshop on Angular JS was conducted for computer/IT lab assistants on 28-March-2018. 9. Expert Lecture on "Waste water Recycle " was conducted on 06-April-2018. 10. Training of VIVA software for Exam deputed staff was conducted on 21-April-2018. 11. Electronics, Electronics Telecommunication Engineering Lab Equipment Training was given to lab assistants on 01-June-2018. 12. Workshop on "Fire fighting safety " was conducted for all staff including security staff on 08-June-2018. 13. "Stress Management with Yoga" was organized on International Yoga Day celebration on 21-June-2018.

6.5.4 – Post Accreditation initiative(s) (mention at least three)

1. Interdisciplinary projects carried out to support research and development. 2. To accelerate training and placement sessions, aptitude training and Co-Cubes pre-assessment conducted for BE students. 3. Value added courses were conducted for overall curriculum enrichment. 4. Bridge course was conducted for First year students before the commencement of their semester with a motive to bridge the gap between the pre-engineering and engineering subjects. The course also infused considerable interest for the upcoming engineering subjects. 5. The Institute organized the first Alumni meet where alumni (Batch 2012-2016) visited UCoE campus and exchanged their achievement, shared job opportunities with BE students. 6. Various Social activities like Outreach program- Joy of Giving, Self Awareness and Hygiene Camp were conducted to inculcate human values to students. 7. Cultural programs such as Drama on Women empowerment , Drama on Motherhood were organized to support gender equity. 8. Product Exhibition and Career Fair was organized to provide a platform for students to get internships and placements in renowned industries. 9. Encouraged students for Internships by signing MOUs with new companies.

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	No
c) ISO certification	No
d) NBA or any other quality audit	Yes

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
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2017	Value added course on Organic Farming Skill development	01/07/2017	01/07/2017	14/10/2017	15
2017	Student Orientation followed by Parent meet	04/08/2017	04/08/2017	05/08/2017	265
2017	JUNIOR VYRO 2K17	11/08/2017	11/08/2017	11/08/2017	1336
2017	Tantrotsav -2017	29/09/2017	29/09/2017	29/09/2017	773
2017	4th National level Technical Paper Presentation	06/10/2017	06/10/2017	06/10/2017	1850
2018	International Conference on Smart City and Emerging Technologies (ICSCET) in association with IEEE Bombay Section	05/01/2018	05/01/2018	05/01/2018	305
2018	Poster presentation Competition on Theme Save Girl Child	26/01/2018	26/01/2018	26/01/2018	436
2018	VYRO 2k18	22/02/2018	22/02/2018	23/02/2018	2218
2018	Product exhibition and career fair	17/03/2018	17/03/2018	17/03/2018	574

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## CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male

Flag Hoisting By Female Faculty Member	15/08/2017	15/08/2017	249	233
Drama on "Motherhood"	16/08/2017	16/08/2017	113	104
Self Awareness and Hygiene Camp for school girls at Kaman Z.P. School	16/09/2017	16/09/2017	60	Nil
Session on "Act for Women & Rights of Indian Citizen"	05/10/2017	05/10/2017	63	56
Girls Marathon	23/01/2018	23/01/2018	154	Nil
Drama on Women Empowerment	05/01/2018	05/01/2018	137	113
Poster Presentation Competition on Theme "Save Girl Child"	26/01/2018	26/01/2018	247	189
International Women Day Celebration	08/03/2018	08/03/2018	165	2

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources

0

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Scribes for examination	Yes	1
Any other similar facility	Yes	1
Physical facilities	Yes	Nil
Provision for lift	Yes	Nil
Ramp/Rails	Yes	Nil
Braille Software/facilities	No	Nil
Rest Rooms	Yes	Nil
Special skill development for differently abled students	Yes	1

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2017	1	1	19/06/2017	5	STTP on Emerging Trends in Smart City	Upgradation of knowledge and hands-on training on new technologies	81
2017	1	1	16/09/2017	1	Self esteem raising and Hygiene Campaign at Kaman ZP School for Girls	Health and Hygiene	60
2017	1	Nil	15/06/2017	266	Bus Facility for students faculties	Travelling	428
2017	1	1	27/06/2017	184	Organic Farming	Pest Control, Crop Selection, Farming	15
2017	1	1	27/07/2017	1	Blood Donation Camp and Thalassemia check	Health Check and Community Building	342
2017	1	1	15/08/2017	1	Tree Plantation	Air pollution in surroundings	448
2017	Nil	1	25/08/2017	1	Joy of Giving drive for Orphanages and Old ages	Community Building	51
2018	1	1	12/02/2018	1	Cleanliness Drive at Kaman	Health and Hygiene	45

					Railway station		
2017	1	1	06/10/2017	1	Fourth National Level Technical Paper Presentation	Platform for budding technocrats to showcase talent	1850
<a href="#">View File</a>							

7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
<b>Students</b>	<b>13/04/2018</b>	Code of Conduct is designed for students and is practiced from its publication date. A safe and efficient environment is promoted by imposing behavioral standards. Compliance with Laws, Rules and Regulations, Relationships, Ethical Conduct, Drug-Free, safe, clean and healthy Workplace and Consequences of Violation are the factors considered during its formation. Committees like Student Council, Student Grievance, Anti ragging cell, internal Complaint committee, Discipline Committee do monitor firmness in the Code of Conduct. In the beginning of every academic year programs based on professional ethics and refresher sessions are conducted regularly throughout the year organized by the Institute.
<b>Examination</b>	<b>07/05/2018</b>	The committee consisting of chief controller, exam controller, anti-unfair members, senior supervisors, and supporting staff is formed at the beginning of every academic year. During every examination

		<p>held in the college, this Code of conduct is displayed on the college notice boards. The Examination Committee is responsible for implementing the code among students, supervisors, understudy, university representatives, internal squad and support staff. Meetings for execution, result analysis review and exam planning like duty chart, timetable, seating and block preparation are conducted regularly. All reports, notices and minutes of meetings are maintained separately and circulated if required.</p>
Admission Process	26/05/2017	<p>The Admission Process committee comprises faculty members from the Department of Applied Science Humanities. Meetings are conducted from the month of May for allotment, planning, execution and admission analysis review, every year. The Admission Committee monitors code of conduct among all stakeholders during direct second year and first year admissions. The process lasts till October month every year. Training and refresher sessions for committee members are arranged based on University norms. Aspiring students and parents are counselled as a social outreach initiative. This is carried out on phone or in person, whichever is feasible for the student.</p>
Time table	01/06/2017	<p>Code of Conduct is designed and practiced from the date of its publication for timetable</p>



management. It is displayed on our college website and concerned notice board. The Timetable Committee monitors code among students, faculty, non teaching and support staff. The committee also monitors the proper implementation of the timetable on department level. Meetings are conducted regularly for planning, execution review and proper implementation of timetable. All reports, notices and minutes of meetings are maintained. Special sessions for the staff are arranged on Rules and Regulations, Obligations, Professional Values, Relationships, Professional Integrity, healthy Workplace and Consequences of Violation.

Internal Complaint Committee

25/05/2018

Code of Conduct is designed and practiced for handling many types of complaints on campus. This Code of Conduct is based on Compliance with Laws, Regulations, Obligations, Professional Values, Relationships, Professional Integrity, Ethical Conduct, Drug-Free, safe and healthy Workplace and Consequences of Violation. Committee is formed with all the senior faculty members handling different types of grievances. Initially Grievances in the form of written letter or by email are received by students or teaching/non-teaching staff members are handed over to respective higher authorities. Accordingly, meetings are held in presence of HOD,

		Principal and concerned parents to resolve the grievance.
IQAC	02/06/2018	<p>The Internal Quality Assurance Cell of the college comprises Principal, heads of different departments, industry nominees, management members and administrative officers. Continuous improvement in the quality of academic excellence is the main aim of this cell. The members hold at least two meetings a year and keep track of quality maintenance by the institution. Some of the quality initiatives taken are faculty orientation, student orientation, parent teacher meets, organic farming, technical fests like Vyro, etc.</p>
Attendance	25/05/2018	<p>Attendance committee is formed at the start of academics every year. One faculty from each department is deputed as respective attendance coordinator and one faculty is appointed as head of the committee.</p> <p>Role of attendance committee members is to gather information about attendance from all the departments and find the defaulters list. The committee decides the action to be taken for defaulters by conducting a meeting once every two months. The defaulters whose attendance is &lt; 75 are instructed to sign an undertaking and those, whose attendance is &lt;50, official letters would be sent to their parents.</p>
Website	25/05/2018	The Website Content Management and Social Media Marketing Committee are formed for handling

		<p>the Social Media Marketing and handling the Website content. It has been distributed in two different teams. The social media marketing team handles regular updates regarding college activities and achievements and publishes them on social media. The website content management team handles the designing of college website along with uploading the update in syllabus, publication of activities taken place during the academic year on the college website. The website committee arranges meetings every month to resolve the related issues.</p>
Library	25/05/2018	<p>College has a centralized library as well as departmental libraries. The central library is fully automated using E-granthalaya software. The library has books, technical magazines and newsletters, Journals, Newspapers covering recent trends in technology, available for reference of students and staff. Library committee is formed and given different roles and responsibilities like maintaining the record, issuing of books. The committee also looks after feedback and suggestions received from the students and the staff for updation. Library committee also maintains the records related to visits of students and staff in the library.</p>
Organic Farming	25/05/2018	<p>Code of Conduct is designed for students who learn the importance of</p>

team-work and planning while working in the farm. Committee is formed with one head which conducts meetings with organic farming committee student members monthly. Various members are assigned roles like organizing, outreach, farm maintenance, livestock maintenance, etc. Internship reports for different issues are being addressed in the meeting. Head and student members decide the budget and submit it to the administrative department for approval and issue. Student members then resolve problems with the help of administrative staff, support staff and gardeners.

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Blood Donation Camp and Thalassaemia Check	27/07/2017	27/07/2017	342
Independence Day celebration	15/08/2017	15/08/2017	482
Joy of Giving drive for Orphanages and Old ages	25/08/2017	25/08/2017	51
Engineers Day Celebration	15/09/2017	15/09/2017	842
Field visit to Mahatma Phule Krishi Vidyapeeth, Rahuri campus under Organic Farming Internship	07/10/2017	07/10/2017	19
Session on Rights of Indian Citizen and Act for women	05/10/2017	05/10/2017	119
Teacher's Day Celebration on eve of Dr. Sarvepalli Radhakrishnan Birthday	05/09/2017	05/09/2017	684
International	08/03/2018	08/03/2018	167

Women Day Celebration			
Fire Fighting Workshop	08/06/2018	08/06/2018	109
Yoga Day Celebration	21/06/2018	21/06/2018	63
<a href="#">View File</a>			

7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

1. Students staff are motivated to use Public Transport for weekly commutes. As the college location is away from metropolitan, it was decided to increase the quantum of public transport from certain locations to the campus. The students and staff members were motivated to use public transport. A dedicated personnel was appointed to take care of issuance of student concession passess applicable to the state transportation and railways. The details are maintained regularly. Buses facilities are in place from Borivali, Vasai, Thane Bhayandar to the college, where a considerable number of students take up this facility willingly on a yearly basis. A total of 428 students have opted for these services this year. College timings are aligned with the frequencies of state transport and railways that run till nearby locations.

2. Initiatives are being taken to implement technological aspects in the domain of Environment Consciousnesses. An innovative project was undertaken to redesign an automobile to convert it into a solar powered vehicle. A team of students guided and mentored by teaching and non teaching staff has worked on the project rigorously to make this eco-friendly project a success. The successful project symbolizes the green reforms that the institute is constantly proposing and does motivate the students to take part in parallel initiatives. The project was funded by the college. The vehicle is regularly maintained for its service parameters and is run for demonstrations and study purposes during technical events as well as exhibitions. Aspiring students are motivated to study the design of this vehicle and bring about suitable changes in line with the advancements in the technologies. Ahead of this, few other projects are also proposed in the same domain. Such projects are exhibited in the entrance to spread awareness among visitors and other stakeholders about these small steps taken towards Environment Consciousness.

3. Water well present in the campus is regularly cleaned and the water reservoir is maintained for clean water. Every year the cleanliness activities for the well is arranged with the help of a third party service. Generally the drive lasts for a couple of days. The care is taken that this source of water is kept in use and the sediments, if any, are removed to avoid congestion of this water body. Another available water resource is borewell. This is the main source of water that is pumped for various utilities. The same is also well maintained. A rainwater harvesting system is initiated for recharging these resources.

4. Green Infrastructure: The building of college is planned constructed in such a way that ample amount of sunlight and wind will flow-in to save the electricity. This has resulted in reduction in excess usage of electricity. Apart from this the building walls are painted uniformly in white. This helps in illuminating the classrooms and laboratories for the majority period in a day. The security officials present on every floor take care that no wastage of electricity takes place in classrooms, laboratories and corridors in absence of students and staff. These electricity monitoring avoids excess consumption and unwanted heat generation is avoided hence ensures that the cooling effect is maintained. This has definitely helped reduce carbon footprint in a passive manner.

5. As an extension of social and environmental outreach, a project named 'Solar Blinker Traffic Light' was undertaken. The blinking traffic light that is operated using Solar energy is installed on the semi-highway divider in the vicinity of the college. The project was designed, developed, fabricated and installed by a team of students and staff. The project has been in run since then and will be taken care of by the Institute. The light has been in service of the semi-highway guiding the commuters especially in the nights and foggy times. The project was funded by the college.

6. Various other steps have been taken to make the entire campus clean and green and provide an eco-friendly environment in Universal College of Engineering. Some of them are: 1. Environmental awareness amongst students is inculcated through various awareness events and tree plantation programs within the campus. The campus is maintained for greenery and this is maintained by proper curator services. 2. Organic Farming is such an initiative that has attracted considerable student strength. The team is working really well and has planned certain activities which can boost Agricultural practices with the help of Technology. Recently, an inhouse compost pit was installed as a concurrent activity for organic farming, on trial basis. 3. Waste management is started by means of its segregation in Dry and Wet waste. Specific bins are installed at prominent places in the campus for the same. Wet waste is used as a fuel for Compost Pit. 4. Organization of expert talks on aligned issues to create awareness among students and staff. A talk on 'waste water recycling' was organised for the students of first year, creating awareness among students. 5. Reuse of stationary like used papers from one side are being used wherever possible. This saves a considerable amount of papers, contributing to the greening initiatives indirectly.

## 7.2 – Best Practices

### 7.2.1 – Describe at least two institutional best practices

**Best Practice 1 Title of the Practice: Internship and Pre-placement Training.**  
**Objective of the Practice:** 1. To get students trained with the latest technical developments in the industry 2. To get the necessary skills required for their employment, innovation ability and research orientation. 3. To provide employment opportunities. 4. To get industry exposure in the overall career development of the student. 5. To encourage students for internships and value-added training programs. 6. Providing a cutting edge over other college students during the pool campus recruitment drive. 7. Provide a platform to explore work culture and opportunities in various allied domains like Cleanliness  
**The Context:** Placement is one of the most important factors that students expect while pursuing a course. Pre-Placement Training not only directs students to pick the right career but also encourages them to perform well during the hiring process. Universal College of Engineering (UCoE) in association with expert aptitude trainers from 'CoCube', has taken this initiative. UCoE has collaborated with a third party agency that uses technology to help corporate in assessing and hiring candidates from campus and beyond Institute. This initiative has helped the Institute measure and improve employability. This is to ensure that every student in any corner of UCoE gets an equal opportunity to build a career. Aptitude test series has been designed on logical, quantitative and reasoning Skills which is the first step of placement training. In addition to the domain knowledge of the Engineering profession, other skills and abilities such as communication skills, leadership, innovation, team building are required to become successful in the career, which are not directly covered in the curriculum. These series of tests and workshops helps students to recognize their talent and shortcomings. The second step of experiential learning is to undergo Internships. To enrich the practical knowledge of the students, UCoE motivates them through offered internships and industrial visits right from their first year of Engineering.



These sessions and training have helped in improving the perspective, by bridging the gap between Industry and academia. The Practice: Internship is provided to the interested candidates from the very first year of their engineering by knowing their key interest area. This IQAC initiative is taken as a part of student development and was unique as the University did not mention internship as a part of the engineering curriculum. Faculty coordinator from every department keeps track of students undergoing internships and their progress. Faculties and students are open to add to internship partners from their personal references every year. Training and Placement Cell has been actively involved in getting consent from students for placement and pre placement training programs. Students inclination towards different job profiles related to engineering such as Computer Fundamentals, Sales, Core-Research and Development, BPO, IT Services, Operations, Testing, Design and Development, Network Administration, Personality etc. are accessed in this training program. This Pre Access Score helps recruiters in shortlisting students at ease. This result is also shared with the students with proper suggestions to help them identify their proficiency in the skills required for the placements. Multiple test sessions are held with proper planning and scheduling. The cell's functioning is concurrent with all the departments and communication skills staff of the Institute. Decisions taken collectively and actions planned by these integrated departments are taking care of personal and professional development of the students. This preplacement activity does start generally in their semester VII. However, their internships get started right from their first year of Engineering. Evidence of Success: 1. Students were benefited from pre-placement training. Many students could learn about their weaknesses and areas for improvements. 2. Individuals are kept updated about their development at the end of each step. 3. This course has a positive impact on students' overall development. 4. Students were assessed on the basis of Mock interviews and group discussion sessions to understand the impact of the program. 5. Placement and Internship Record of 2017-18: Computer Engineering Internship-89 Placement Offered-55 Civil Engineering Internship-140 Placement Offered-9 Information Technology Internship-25 Placement Offered-24 Electronics Telecommunication Engineering Internship-25 Placement Offered-20 Electronics Engineering Internship-10 Placement Offered-4 Problems Encountered: 1. Managing schedule for extra industrial training/ internships for staff/ a large group of students. 2. The college has a seminar hall available for a limited batch of around 120 students. 3. Some internship programs are conducted during summer to avoid disturbing the academic schedule of the students. Students are less motivated to attend the program because of its schedule coinciding with the vacation. Best Practice 2: Title of the practice: UCOE-Robotics Klub. Objective of the practice: 1. To harness the intellectual talent to apply engineering concepts across a variety of domains to create utility based robotic applications. 2. To help students to make research in the field of Artificial Intelligence and Robotics. 3. To encourage students to apply emerging technologies to build robotic agents and exhibit them on various platforms. 4. To encourage research-oriented activities using the 'e-Yantra' laboratory that is associated with IIT-Bombay. The Context: 'Robotics Klub' initiated through the motivation of E-Yantra platform supported by IIT Bombay. The 'klub' utilizes various opportunities offered by IIT Bombay in terms of competitions and training for the development of students in the domain of Robotics. Students are mentored to participate in e-Yantra Robotics Competition (eYRC) and e-Yantra Ideas Competition (eYIC). Students are even encouraged to attend e-Yantra Symposium (eYS) at IIT Bombay. The winners of eYRC and eYIC competition are offered summer internships at IITB through the e-Yantra Summer Internship Program. Apart from IIT Bombay's competitions, students are motivated to participate at various robotic and automation related events across India by this team of 'Robotics Klub' time to time. Students are motivated to build ideas and participate in various Competitions and Project Exhibitions. The

teams participating in robotics competitions do build, practice, design and develop their projects under the guidance of 'Robotics Klub'. College highlights student's designed robots by showcasing them in 'Robotic Show' during all major events of College. The Practice: Activities of 'Robotic klub' are monitored by Faculty members having expertise in Robotics Automation from various Departments. Membership drive for 'Robotic Klub' is conducted in the beginning of the academic year and interested student members are appointed in the core committee. 'Robotics Klub' provides a platform to students to explore the world of automation. Students are trained for free in a Hands-on course of 30 hours for building, configuring and troubleshooting Robots on all working Saturdays. This course is open for all engineering branches. Students selection for this course is done through an online robotic aptitude test. The infrastructure of the 'e-Yantra' laboratory is utilized for various activities under the 'Klub'. A faculty advisor is also appointed for the laboratory. This laboratory is open for students for designing and fabricating their innovative ideas. During all major events of college 'Robotic Show' is presented by this team. This show exhibits all innovative automation related projects made by students under the guidance of this club. Active training and participation at various robotics competitions are two main trends that are followed in the 'Robotic Klub'. Conduction of a certified summer internship program on 'Firebird V Research Platform' has seen a considerable response from all branches of the Institution. This has led to conduction of more activities through this laboratory. The college supports these activities in terms of technical aspects. Financial support is extended to the innovative projects that contribute towards the overall development of the college and students. Evidence of Success: 1. Students won First Prize in Project competition at IIT Bombay-Radiance Event for designing a robot pushing the opponent robot out of the circular arena. 2. A project on Solar powered vehicle was successfully completed under 'Robotics Klub' 3. Created Internship opportunities to students in designing mega Robotic agents for College Usage. 4. Received Asia's Biggest Automation-Expo 2017 Innovation Award for four innovative Robotic Projects. 5. Designed and Deployed Solar Traffic Light Signal on Highway in front of College. 6. Awarded as Young Innovator Award at Melting Pot 2020 Innovation Summit 2017. Problems Encountered: 1. Conducting Additional Robotic classes during holidays. 2. Continuous Monitoring and Maintenance of built robots. 3. Funds for high-tech upgradation.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

<https://universalcollegeofengineering.edu.in/best-practice/>

### 7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

Universal College of Engineering (UCoE) is committed to excellence in academics and utilizing the knowledge gained, in the service of society. It also emphasizes all round development and improves their employability factor. These initiatives taken by the institute, inline with the vision, helped us in utilizing the knowledge and conducting further research in the field. 1. Preparation for Competitive Environment: Students are motivated and guided for various technical competitions like technical-festivals that are held at IITs across India, Smart India Hackathon (SIH) etc. through a specially designed technical event called Tantrotsav. The main objective behind the inception of this event is to bridge the gap between academic content and Industrial applications. This has provided a platform to the students to showcase their technical skills for solving real life problems. Selected teams of such students are mentored and supported financially and technically by the



institute to participate at various Technical Competitions. The activity has brought considerable achievements to the Institute. A team of students won 4th rank all over India out of 405 participants for their project designed for the Ministry of Drinking Water and Sanitation at 'SIH 2017'. 2. In line with preparing students to take up entrepreneurial activities, some of our students took up start-ups and their success stories are mentioned in brief as: 1. Mr. Mohit Motiramani from Civil Engineering started manufacturing of paver Blocks and Cover blocks under a start up of M N Manufactures on April 4th, 2017. 2. Mr. Pranav Mehta from Information Technology started offering IT services under a startup named 'Web Arch' and Mr. Aditya Gosaliya from S.E. Computer Engineering started his own web Development services under a startup- 'Adioly Studios' in the year 2017. 3. Ms. Aditi Shah from Information Technology started "Shop Trendies" on 17th December 2017. She has integrated technology in the field of Jewellery Business. 3. FE Orientation: It is a unique session that is held exclusively for newly admitted students and their parents, every year. The purpose behind the same is to counsel students and parents about Engineering, as a professional course. It has been such a successful and informative session with overwhelming response every year from the parents. 4. Organic farming: Despite being an Engineering Institute, students are motivated to learn beyond academics concepts aiming to get closer to the needs of farmers and innovative ways to the existing structure of cultivation through advanced technologies in the field of agriculture. The team of students is involved in multifaceted activities in developing their research aptitude for the benefit of society at large, under the internship of 'Organic Farming' initiative. 5. A great opportunity for students is created to get internships and placements in renowned industries through conduction of 'Product Exhibition and Career Fair'. 6. 'International Conference on Smart City and Emerging Technologies (ICSCET)' in association with IEEE Bombay Section was organized to harbour technological innovations and excellence by encouraging young researchers to contribute to the concept of smart city for the benefit of the overall development of the nation.

Provide the weblink of the institution

<https://universalcollegeofengineering.edu.in/institutional-distinctiveness/>

## 8.Future Plans of Actions for Next Academic Year

Following are some plans in pipeline for quality teaching-learning: 1. Setting up a research cell for all year students, right from First Year of Engineering is plan furtherance. However more attention can be drawn towards the research area by motivating students through such a cell. 2. In order to enrich the 'bridging industry-institute gap' initiative, add-on courses (paid) will be offered to the students through Expert industry resource persons. Such courses will be a choice-based selection by the students. 3. Use of open-source/ student version software will be proposed and implemented step by step in the campus. To start with, Autodesk products will be installed for the First Year and higher semester students of Civil Engineering. 4. LMS like Moodle, Google Classroom etc. will be implemented for promoting e-learning habits among students. 5. Newsletters In order to keep the campus and stakeholders updated regarding current affairs, newsletters will be published by every department on a monthly basis. 6. Planning and execution of a Bridge course for newly admitted students is in the pipeline. The objective is to bridge the gap between Higher Secondary Education and Professional course/s of Engineering. Considering Social Outreach, following are some planned initiatives: 1. To work with some government initiatives like Unnat Bharat Abhiyaan for transformational change in rural development processes. 2. Various social activities can be undertaken by forming N.S.S. unit and bring it to the mainstream by taking up multiple drives like cleanliness, street plays, anti-pollution awareness drives etc. To take care of Environment Consciousness, following are some plans: 1. The spread of Plantation drives will be taken to the

vicinity areas outside the campus twice a year on national celebrations days. The aim is to spread awareness about plantations and its good effects on human beings, among the people in the vicinity. 2. As a propagation of the concept of paperless office, through which we have developed a tradition of sharing electronic documents, activities like student feedback will be conducted using paperless mode. Existing cloud-based services will be used for the same. In order to conserve Energy: 1. We are planning to conduct a Green Audit for the college building initially. Plan is to implement the suggestions by the auditor. Then in future we'll look forward to conducting the green audit for the whole campus. 2. We are proposing design-planning and construction of a dedicated compost pit which can be utilized for recycling green waste in the form of manure.