SELF STUDY REPORT

FOR

1ˢᵗ CYCLE OF ACCREDITATION

UNIVERSAL COLLEGE OF ENGINEERING

UNIVERSAL COLLEGE OF ENGINEERING, KAMAN BHIWANDI ROAD,
KAMAN, VASAI EAST. DIST. PALGHAR
401212
www.universalcollegeofengineering.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

With its unique location just off the Western Express Highway, Universal offers a spacious and serene learning environment away from the congestion and pollution of the city at a distance of just 20 minutes from Dahisar Check-Naka. Our campus boasts of spacious classrooms, state-of-the-art presentation equipment, an expansive library, intimate tutorial rooms, courtyards, hostel facilities, the literati cafe, and above all, the serenity of the environment around. The campus is purpose-built for higher education and allows for blending of outdoor learning with intensive indoor class work.

Since its inception, the college has strived to provide its students with holistic education that is multifaceted. We emphasize on rigorous academics, innovation based learning, that also comprise of technical and non-technical activities. Hence training is imparted through additional modes, like e-cell, the Robotics club and e-yantra. Events like The National Level Paper Presentation, Project and Poster exhibition, International Conference in association with organizations like IEEE, IETE and CSI ensure maximum participation. Conducting internship programmes, seminars, STTP and workshops aim to keep students updated.

Our college, aspires to provide students with knowledge at par with international standards. Before commencement we asked ourselves – can an Engineering college really balance Engineering theory, practical skills, local knowledge with a global perspective and academic rigour with all-round development? In the answers to these questions, emerged a confluence of factors that have shaped our programme.

Vision

To be a forerunner in rendering quality technical education with a multifaceted, research oriented approach, aspiring for excellence of students in the professional and social realm which spans across wide and diverse horizon of opportunities.

Mission

1. To boost holistic development of the students with an emphasis on technical education inclining towards socially relevant research.
2. To promote a learning ambience which further enhances innovation, creativity, team spirit, rational and scientific temperament thus making them successful world citizens of present and future.
3. To yield efficient professionals with the highest level of ethics and leadership skills, well equipped to face the Industry demands.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Fully equipped Laboratories with state-of-art equipment and machinery as per prescribed academic

requirements.

- Industrial visits and in-plant training organized regularly, to expose students to real-time work environment/culture and latest trends.
- Well-equipped library with adequate number of books, National/International journals, technical magazines and E-Library facility.
- Internship for students is organized by the college since its inception.
- Encouraging students to participate in various all India level competitions and consistently winning accolades.
- Mentoring students during major competitions.
- Association with Professional bodies like IEEE, IETE, ISA, CSI to enhance technical knowhow and technological advancements. .
- Research papers published in leading journals regularly by faculty members and students of final year.
- STTP on Soft Skills and Business communication, conducted regularly.
- Preparing students for competitive exams and placements through professional consultants.
- Regularly conducting Aptitude test, Mock interviews and GD, providing guidance through Professional agencies preparing students face interviews confidently.
- Dedicated Training & Placement Cell.
- Transparency in administrative process
- BE Students encouraged to take up live real life problems as projects.
- Encouraging Students to participate in Government initiative projects, Swaattch Bharat Abhiyan, Transform Maharashtra.
- Providing technical support to nearby villages to mitigate their problems.

- Establishment of The Social Cell since 2015, to make students socially conscious. Joy of Giving, Blood Donation conducted by IETE and IEEE student chapters.
- Hosting Technical Events/Tech Fest to attract competition from other colleges and gauge our performance vis-à-vis other students.

Institutional Weakness

- Improvements required in consultancy and extension activities.
- Shortage of highly experienced PhD. Faculty to enhance research activities.
- Non availability of MoUs or collaboration with Industries and or institutes of national and international fame. .
- Research and Incubation Center.
- No autonomy in designing the syllabus or conducting examinations due to affiliation to University.

Institutional Opportunity

- Encouraging faculties to pursue doctoral research.
- Providing support to enhance faculty qualifications, international certifications.
- Regularly Conducting Faculty Development Programs, STTP
- Alumni and parent feedback to explore grey areas.
- Introducing Online certification courses
- Guidance in pursuing Higher studies in Indian as well as abroad.
- Conducting Training programs to make students Industry ready.

- Opportunity for faculty to enhance their qualification or pursue specialized courses.
- Students get the updated knowledge and tips to perform well in entrance exams from young faculty.
- More attention to individual student
- Providing scope for research work and research paper presentation for students
- Participation in different co-curricular activities
- Use of Information & Communication Technologies for flexibility in teaching-learning and content delivery system.
- Collaborations with National & International professional bodies

- Encouraging students to lead in innovation and entrepreneurship
- Encouraging faculties to constantly upgrade their knowledge in their domain.
- Publication of Institute's In-house journal, disseminating all information about activities of different departments.

Institutional Challenge

- Rapid changes in technology leading to gap in curriculum and industry requirements.
- Exploring strong placement opportunities in the core sector.
- To cope up with the frequent changes in government policies from time to time.
- Keep constant improvement and innovativeness to thwart Competition from Institutes coming up in the neighborhood region.
- Changing trends in educations and employment scenario.
- Less number of leading companies including MNCs for student internships and placement.

- Efficacious collaboration with NITs, IITs and Industries
- Versatile training systems to enhance employability.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Universal College of Engineering (UCoE) is approved by AICTE, DTE, and Government of Maharashtra. It is affiliated to the University Of Mumbai. The institution provides ample facilities for the successful implementation of curriculum and to achieve the objectives and goals as per the Vision and Mission of the institutes.

For the effective implementation of the curriculum and efficacious content delivery, a proper planning, developing, checking and analyzing process is followed. Many faculty members of the institute actively participate in the syllabus revision meetings at the University level. A feedback mechanism is adopted to solicit constructive inputs from the various stake holders, helping to enrich the curriculum and content delivery.

The student-centric methods adopted in teaching learning process, boosts the interactive, participative and experimental learning, coupled with co-curricular and extracurricular activities enhancing their all-round personality. The students deputed for summer internship program, get an opportunity to interact with industry personnel's and learn the application of their knowledge gained during college studies and also helps in

developing corporate ethics for adapting to industrial environment. Expert lectures, Workshops, Industrial Visits etc are regularly organized to enhance the learning process. Internet facility is provided to the students to help them explore and gather useful inputs for project work.

Teaching-learning and Evaluation

Faculties monitor students' progress continuously to gauge their learning levels. Slow learners are identified and remedial measures taken to improve their learning. Other students are encouraged for research oriented studies and apply knowledge in day-to-day activities. The mentor-mentee scheme is adopted to concentrate on smaller manageable batches, mentoring them for Competing at IIT and NIT's.

Experiential learning, participative learning and problem solving methodologies, NPTEL lectures help in enhancing learning experiences. Role-Play, Conceptual-Mapping, Case-Studies, Problem-Solving, Sessions for practical designing are adopted. An e-cell, Robotics Club, e-Yantra and RLC are established through IIT Bombay.

Malpractices in Examination are dealt by Unfair Means Committee and Grievances are immediately addressed. Remedial action initiated as per provisions of University rules. Examination Cell conducts IA Tests, End Semester Examinations, maintaining proper records using APPLANE software. The system is transparent, time–bound and efficient.

PO, PSO and CO's for all programs are displayed on website. Students/Parents are briefed in PTI meeting, about it giving them idea about the subject depth, difficult topics, practical aspects and applications. All departments have their Outcomes aligned with Institute Vision, Mission statements.

Faculties introduce innovative ideas/creativity in Teaching–Learning process by attending Open Source Programs', STTP and FDP. You-Tube videos, short films, PPT are played in classroom through extensive usage of A/V, multimedia creating an impact of lessons taught. Digital/Non-digital library is accessible to all.

Co-curricular activities are encouraged, helping in developing team spirit and leadership qualities.

Research, Innovations and Extension

In stimulating and upholding the research culture, the institute has developed an incubation center for research facility. This is in line with the long term view of the requirements of various academic courses. Entrepreneurship cell (E-cell) host various Workshops and Expert Sessions for aspiring Entrepreneurs and provide support through regular mentoring, consultancy, guidance and other physical resources.

Institute has served as the guiding torch to many individuals in their own ventures. Faculties and students are encouraged to publish their thesis/research work on various platforms. Since 2013 institute is organizing National level paper presentation and project exhibition at intercollegiate level, under IETE student chapter. Institute is organizing an International Conference on Smart City and Emerging Technologies (ICSCET) in association with IEEE Bombay Section, on January 05, 2018. Incentives are provided to faculties who receive national/international awards as motivation and encouragement. Institute tries to inculcate social attitude amongst students and staff members. Along with educating students and upgrading their technical skills, institute also focuses on developing the quality among the students of being a sociable, hospitable and sensitive

towards under privileged. Institute provides various linkages to students in the form of Internships and Student Exchange Program, with the different institutions/industry to upgrade their knowledge. Student chapter for IETE, ISTE, IEEE and CSI are established. Faculty coordinator guides the students to organize various educational events like paper presentation, expert lectures, field trips and social programs like adopting village, blood donations, donating food, clothes etc.

Infrastructure and Learning Resources

Our Institute strives to provide the best infrastructure and facilities in compliance with the prescribed standards to make teaching-learning more effective. The Institute has not only adhered to all the regulatory requirements but has surpassed the minimum compliance requirements. The Institute has an array of well-equipped classrooms, laboratories, tutorial rooms and seminar halls. All the facilities needed to encourage co-curricular and extra-curricular activities are made available.

There is a well-equipped library with books from all the different genres and disciplines. The library is partially automated with e-Granthalaya Library Management System, which helps in speeding the transactions and increasing efficiency. The library resources are made available to the students well in time so as to provide them all resources needed to prepare for the exams and their overall academic growth. The library issues text books and reference books and also makes available the previous year university question papers and syllabus to students. Library also provides a centralized web access section which utilizes a 32 Mbps bandwidth where students can carry out their research related work.

The institute widely uses the digital learning platforms such as NPTEL to deliver quality study materials designed by highly qualified academicians. The infrastructural facilities provided by the institute are at par with the elite institutes of the country and makes the institute as one of the leading institutes in the city which imparts quality education and all round development of students, giving them a cutting edge over other candidates in the job market.

Student Support and Progression

Orientation programme is being held for students and their parents, to familiarize them about the institutional activities, work culture, academic requirements, academic planning & execution, extra-curricular & Co-curricular activities throughout the year. All the relevant information and schedules are put up on the notice board and college website.

The institute provides Fee waiver for the needy students. It facilitates freeship and scholarship under government and non-government schemes. Training & Pre-placement activities are conducted in the institute to seek better placement. This helps in meeting the set quality objectives and to develop the professional skills in compliance with graduate attributes. Students are provided guidance, counselling and exposed to bridge courses and vocational educational training helpful in increasing their employability.

Institute has Grievance Redressal Committee for providing redressal to student's grievances. To safe guard the interest of women staff and students, the institute has Women Development Cell and Internal Complaint Committee.

The institute has a Training and Placement cell which provides guidance and assigns students to various fields

in appropriate domain. It also provides guidance on competitive exams for students willing to pursue higher education and seeing government jobs.

Currently the institute has Student's Chapter of five professional bodies (IEEE, ISTE, IETE, ISA and CSI) under which training and technical events are carried out by the faculty and student's council. The institute is in the process of registering their Alumni Association and Chapters.

Governance, Leadership and Management

The Institutes' Vision is to be a forerunner in rendering quality technical education with a multifaceted, research oriented approach, aspiring for excellence of students in the professional and social realm which spans across wide and diverse horizon of opportunities.

A strategic plan with effective guidelines was formulated. This plan is aligned with academic and administrative activities to achieve the objectives and improve quality of teaching-learning. The plan was progressively phased out to achieve the goals and objectives. Various committees formed, monitor and manage the day-to-day activities. Management encourages decentralization for growth and has granted autonomy to HOD's wherever required.

Welfare measures adopted for teaching/non-teaching staff includes Conducive work-environment, adequate security, free pick and drop, In-campus Bank/ATM facility. Faculties participate in Orientation programs, Seminars, Refresher Courses, FDP, Paper Presentations in National/International Conferences. There is full Management support in research oriented activities.

The Institute has Performance Appraisal System for teaching/non-teaching staff. HRD division focuses on maximizing employee performance with overall improvement. Proper procedure is followed in recruitment and selected staff, provided necessary training to boost their self- confidence.

The financial resources of the college are efficiently managed. Procedures and norms for purchase are strictly followed and are in line with the budgetary provisions made for the purpose. Auditing of the accounts is undertaken regularly.

Internal Quality Assurance Committee is continuously monitoring improvements in quality and helps achieve academic excellence through their concerted efforts to study, analyze and improvise every activity.

Institutional Values and Best Practices

Our college always concentrates on hygiene and cleanliness. The institute is surrounded by greenery and is adjacent to a flowing river making it nature friendly. Awareness programs are regularly conducted to inculcate the habit of protecting the environment. Initiatives like Tree Plantation, Rain Water Harvesting, Swattchata Abhiyan have been adopted. Waste Management system is in place for effective disposal of the dry and wet waste.

First year course of EVS has helped creating environmental awareness. Our college has taken initiatives keeping in mind the needs of gender equality. The college has provided girl students a separate girl's common room and decent hygienic washrooms. Institute provides equal opportunity for girl students/female staff to

come forward and take initiatives. A Sanitary Napkins vending machine has been installed for the benefit of girl students. Health camps are conducted to impart awareness amongst the girls and ladies members of the institute. Anti-ragging committee takes care of girls/boys alike. Library, Language and Communication laboratory, Computer facility with Wi-Fi connectivity,fully equipped seminar hall, hygienic canteen, sick room, doctor-on-call, playground, well-equipped gymkhana are provided. Unique initiative of Smart Agriculture has been undertaken, Land space provided and students/faculty mentors started Farming using only Organic Compost, Organic Homemade Fertilizers/Pesticides, prepared by the team.

College has shown tremendous diversity in their initiatives, encompassing every field of activity. Innovation and Best Practices have been the main reason in upgrading standards of education. Future plans include setting up a mini hydro-electric station considering the locational advantage of Kaman River.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	UNIVERSAL COLLEGE OF ENGINEERING
Address	Universal College of Engineering, Kaman Bhiwandi Road, Kaman, Vasai East. Dist. Palghar
City	Kaman Vasai East
State	Maharashtra
Pin	401212
Website	www.universalcollegeofengineering.edu.in

Contacts for Communication					
Designation	**Name**	**Telephone with STD Code**	**Mobile**	**Fax**	**Email**
Director	Jitendra B. Patil	0250-6962458	9029144325	0250-	ucoe.principal@universal.edu.in
IQAC Coordinator	Sudarshan Ashan	0251-2209861	9325030377	0250-8817844451	sudarshan.ashan@universal.edu.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	Yes
If Yes, Specify minority status	
Religious	
Linguistic	Gujarati Minority
Any Other	

Establishment Details	
Date of establishment of the college	10-05-2012

University to which the college is affiliated/ or which governs the college (if it is a constituent college)

State	University name	Document
Maharashtra	University of Mumbai	[View Document](#)

Details of UGC recognition

Under Section	Date	View Document
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	[View Document](#)	30-03-2017	12	

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**
Main campus area	Universal College of Engineering, Kaman Bhiwandi Road, Kaman, Vasai East. Dist. Palghar	Urban	4.5	14557

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	**Name of Programme/Course**	**Duration in Months**	**Entry Qualification**	**Medium of Instruction**	**Sanctioned Strength**	**No.of Students Admitted**
UG	BE,Civil Engineering	48	HSC	English	120	57
UG	BE,Information Technology	48	HSC	English	60	44
UG	BE,Computer Engineering	48	HSC	English	120	115
UG	BE,Electronics Engineering	48	HSC	English	60	18
UG	BE,Electronics And Telecommunication Engineering	48	HSC	English	60	36

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				7				28				110
Recruited	1	0	0	1	1	0	0	1	64	46	0	110
Yet to Recruit				6				27				0
Sanctioned by the Management/Society or Other Authorized Bodies				7				28				110
Recruited	1	0	0	1	1	0	0	1	64	46	0	110
Yet to Recruit				6				27				0

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				11
Recruited	8	3	0	11
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				11
Recruited	8	3	0	11
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				17
Recruited	11	6	0	17
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				17
Recruited	11	6	0	17
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	1	0	0	1	0	0	0	0	0	2
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	64	46	0	110

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	Male	Female	Others	Total
	0	0	0	0

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	1252	52	0	0	1304
	Female	278	9	0	0	287
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	5	2	3	6
	Female	0	0	2	0
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	1	13	18	10
	Female	0	2	3	2
	Others	0	0	0	0
General	Male	199	119	178	164
	Female	47	21	35	46
	Others	0	0	0	0
Others	Male	16	13	14	17
	Female	4	6	4	5
	Others	0	0	0	0
Total		272	176	257	250

3. Extended Profile

3.1 Program

Number of courses offered by the institution across all programs during the last five years

Response : 253

Number of self-financed Programs offered by college

Response : 17

Number of new programmes introduced in the college during the last five years

Response : 0

3.2 Students

Number of students year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1485	1390	914	665	314

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
119	119	119	85	85

Number of outgoing / final year students year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
381	295	1	1	1

Total number of outgoing / final year students

Response : 692

3.3 Teachers

Number of teachers year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
104	96	68	40	20

Number of full time teachers year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
104	96	68	40	20

Number of sanctioned posts year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
104	96	68	40	20

Total experience of full-time teachers

Response : 607.5

Number of full time teachers worked in the institution during the last 5 years

Response : 209

3.4 Institution

Total number of classrooms and seminar halls

Response : 30

Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
1818.43	1475.47	2473.58	1064.57	3456.69

 Number of computers

Response : 420

Unit cost of education including the salary component(INR in Lakhs)

Response : 1.86344

Unit cost of education excluding the salary component(INR in Lakhs)

Response : 1.42881

Unit cost of education including the salary component(INR in Lakhs)

Response : 1.86344

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The institution ensures effective curriculum delivery through a well planned and documented process

Response:

Universal College of Engineering is recognized by AICTE, DTE & Government of Maharashtra. It is affiliated to University of Mumbai (MU). The Institute faculty members participate in the Workshops arranged by the University (BoS) for syllabus revision thereby contributing to its development, finalization and implementation. After finalization of the new syllabus, Workshops are organized to study and understand the amendments. Our faculty members attend the same to familiarize themselves about the changes. The Institute follows structured strategy plan for effective implementation of the curriculum prescribed by the University for Various Programs.

Action Plan

• Preparation of academic calendar at Institute level in consonance with the academic calendar of the University.

• Distribution of workload to faculty members, based on core competency and experience in the subjects.

• Faculties prepare a Lesson plan for their allotted subjects keeping in mind the academic calendar.

• Continuous up-gradation of Course File / Laboratory Manual is done. Course file comprises of a copy of Vision Mission statement of the institute and Department, Program Outcomes, Syllabus Copy, Course Outcomes, Time Table, Lesson Plan, List of Experiments, Hand Written Notes/Assignments, PPT's, Previous year University Question papers with their model answers and Unit Test Papers. The same are checked and verified by HOD and Principal from time to time.

• Installation of all Software's, check for working condition of all equipment's, devices, instruments and circuit boards required for performing experiments are checked for their working condition before commencing of the semester.

• Preparation of Class time table & the Master time table are completed and verified by HOD's of all departments. It is then displayed on Department notice boards, Laboratories and other conspicuous locations.

• Arrangement of various Guest Lectures by Expert Faculty/Industrial personnel's aimed at Student-Industry interaction and first-hand information on practical application of theory.

• Evaluation of student performance is done based on Tutorials, Internal Assessment tests, Assignments and Presentations.

• Monthly analysis of the attendance is done to ensure minimum 75% as per University regulations.

• Displaying results of the Internal Assessment Test and addressing grievances on marking if any.

• Mentors take care of mentees overall performance and guide them for the improvement and overcoming weaknesses.

• Parents meet with concerned faculty is organized to give the parents an overview of their Ward's performance.

• Before availing any kind of leave, faculty makes alternate arrangement to Conduct Lecture / Practical, in his / her absence.

Deployment of Action Plan

Before commencement of each semester, Campus Director /Principal conduct 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. 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.

File Description	Document
Any additional information	[View Document](#)

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 0

1.1.2.1 **Number of certificate/diploma programs introduced year-wise during the last five years**

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Details of the certificate/Diploma programs	[View Document](#)

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 0

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Details of participation of teachers in various bodies	[View Document](#)
Any additional information	[View Document](#)

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

Response: 5.53

1.2.1.1 How many new courses are introduced within the last five years

Response: 14

File Description	Document
Details of the new courses introduced	[View Document](#)

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

1.2.2.1 Number of programs in which CBCS/ Elective course system implemented.

Response: 5

File Description	Document
Name of the programs in which CBCS is implemented	[View Document](#)

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years

Response: 0

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	[View Document](#)

1.3 Curriculum Enrichment

1.3.1 Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum

Response:

The college programs that have been conducted considering societal benefits are:

- The Social Cell was inaugurated on August 6, 2015. The inauguration commenced with 'The Joy of Giving' week. Another 'Joy of Giving' week was conducted on August 23, 2017 by the Social Cell in collaboration with International Society of Automation, UCOE Student Section.
- A workshop was conducted by NGO "Art of Living" in association with Barclays, on the occasion of International Yoga Day on June 21, 2016. It was a "Global Youth Employability Initiative" aiming to create certified skill development for faculties.
- Four groups from our institute were ranked in the Top 10 in "Transform Maharashtra" – an initiative by the Government of Maharashtra on May 1, 2017. Our students presented innovative and practical solutions to socio-economic challenges faced by Maharashtra.
- A Zumba fitness session was hosted by the Applied Science and Humanities Department on June 21, 2017. The objective of this session was to bring about Fitness awareness in our staff members and students.
- Blood Donation Camp was organized on July 27, 2017 by Sarla Blood Bank in association with IEEE Student Chapter of UCOE. 119 students and college staff members participated in this noble project. A Thalassemia detection camp was organized where 223 people were examined for the same.
- A Photography workshop in association with Cannon India was organized on July 29, 2017. Students became well versed with concepts like Bokeh, Aperture and Exposure. 46 staff and students participated in this workshop. The workshop was highly appreciated by the participants and they expressed their desire to have advanced level workshops.
- Junior Vyro Technical event specially designed for Junior College Science stream students was organized on August 11, 2017. A record number of 1336 students from 33 colleges participated in the event. Various Technical events were held such as Dump Chem, Crypto Key, Science Stupid as

well as Fun events such as Treasure Hunt, Selfie Mania, Movie Making, Glow Cricket and Touch Me Not, were a part of this event.

- Swachhathon 1.0 was organized by MyGov to find innovative ideas to take Swachhata mission to new heights. Our students came up with concept, design and fabrication of recycling of sanitary napkins which was shortlisted for the final event of Swachhathon 1.0 held on September 7-8, 2017 at New Delhi. Our team was ranked 4th amongst 405 participants from all over India in this category.
- Our college campus is surrounded by lush green flora. The college initiated an Organic Farming project involving students. Faculty members adept in farming play the role of mentors. Vegetables like gourd, ridge gourd, lady finger, cucumber, peanut, rice and tomato are cultivated. Students collect information from local farmers, YouTube videos for organic methods and experiment on the same. The team had been to Mahatma Phule Krishi Vidyapeeth (Premier Institute), Rahuri on October 7, 2017.

File Description	Document
Any Additional Information	[View Document](#)

1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years

Response: 1

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 1

File Description	Document
Details of the value-added courses imparting transferable and life skills	[View Document](#)
Brochure or any other document relating to value added courses.	[View Document](#)

1.3.3 Percentage of students undertaking field projects / internships

Response: 10.64

1.3.3.1 Number of students undertaking field projects or internships

Response: 158

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and 5)Parents for design and review of syllabus-Semester wise/ year-wise

A.Any 4 of the above

B.Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A.Any 4 of the above

File Description	Document
Any additional information	[View Document](#)

1.4.2 Feedback processes of the institution may be classified as follows:

A. Feedback collected, analysed and action taken and feedback available on website

B. Feedback collected, analysed and action has been taken

C. Feedback collected and analysed

D. Feedback collected

Response: B. Feedback collected, analysed and action has been taken

File Description	Document
Any additional information	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 0.26

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
11	5	2	0	0

File Description	Document
List of students (other states and countries)	[View Document]
Institutional data in prescribed format	[View Document]

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 67.1

2.1.2.1 Number of students admitted year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
232	243	160	253	300

2.1.2.2 Number of sanctioned seats year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
420	420	420	300	300

File Description	Document
Institutional data in prescribed format	[View Document]

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 19.87

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
22	30	20	7	26

File Description	Document
Institutional data in prescribed format	[View Document](#)

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

Our assessment is based on a comprehensive frame work that considers students with diverse learning levels. Unit tests and tutorials are conducted to examine the learning levels of students and to distinguish between slow learners and fast learners, for training to be imparted on a wider scale.

The faculty members are well qualified and easily approachable, intending to make the students comfortable with subject related doubts. Class tests and tutorials are conducted to know how well the students have understood the subjects and to track their progress. English communication and Presentation skills are given more emphasis in the academics. Students, especially from vernacular background find it difficult to express themselves clearly. Workshops and classes are conducted so that students strengthen their English communication. Peer group studies, library hours, interactive classroom teaching sessions, Course Exit and Student Teacher Survey forms to get a proper feedback of student's progress are regularly executed. Students are encouraged to participate in competitions like Smart India Hackathon, Tantrotsav, Transform Maharashtra, IIT Tech Fests, etc.

Special programs based on advanced research and practical applications of the subjects are organized for fast learners, urging the fast learners to explore beyond the syllabus. On the contrary, remedial coaching, detailing the basics of all subjects with proper revision is organized for slow learners to make them well versed with all the topics. There are short term training programs, workshops, guest lectures, seminars conducted by all the departments that are aimed at fast learners to encourage their interest, in their choice of fields, simultaneously providing them with hands-on training of the professional industry. There are remedial coaching, special recapitulation lectures and counseling for the slow learners to improve their learning levels.

The college arranges special mentors from teachers for every group of students. The mentor is concerned with establishing strong rapport with the students, aligning them with college practices and reviewing their progress on a constant basis. Parents Teachers Interaction (PTI) meetings have been conducted regularly

since 2016, so that parents are apprised of their wards progress and students get proper guidance and understanding not only in the college premises but also beyond that. The college also ensures that the parents are equally involved in their ward's education and have an assurance that their ward is not being neglected. Parents of defaulters are called on a stricter note.

2.2.2 Student - Full time teacher ratio

Response: 14.28

File Description	Document
Institutional data in prescribed format	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.07

2.2.3.1 Number of differently abled students on rolls

Response: 1

File Description	Document
List of students(differently abled)	View Document
Institutional data in prescribed format	View Document

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

The college 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 only restricted to a traditional chalk and board method but also ranges beyond the book and urges student to think out of the box. We have implemented in our lesson plans open classrooms, short term training programmes, workshops and guest lectures on various streams. These programs are conducted by eminent personalities who are leaders and specialists in their domain. Student participation in Massive Open Online Courses (MOOC) and National Programme on Technology Enhanced Learning (NPTEL) are encouraged. Internship is provided right from the First Year to equip students with hands on practical knowledge of the real life application of knowledge gained in the class room. An e-cell, a Robotics Club, E - Yantra and Remote Learning Center established after entering an MOU with IIT Bombay. This helps the students to get an understanding on a comprehensive level and to think creatively.

We aim to make our teaching highly interactive and constructive. Faculty members encourage students to ask questions, discuss and clear their concepts. English Communication is emphasized upon, so that students find it easy to grasp various concepts and are able to express their doubts and opinions. Engineering as a field crucially involves problem solving right from the base. This requires understanding the fundamentals of a situation, applying the knowledge systematically and designing a solution. Our pedagogy has a substantial blend of theoretical and practical knowledge. Creativity, scientific and innovative thinking and analysis are an integral part of problem solving. Our teaching strategies involve students in constructive learning environment in the form of guidance text book method, computer assisted learning, conceptual mapping, case studies and mini project. Besides using multimedia effectively, various classroom activities like role plays, debates, and group discussions are conducted. Students are motivated to participate in various events that are organized in the college all-round the year, imbibing qualities of team building and leadership.

To summarize, the institute always encourages the students to think critically and decisively with its learning methods that are a blend of experiential learning, participative learning and problem solving, aiming at moulding them to be the future leaders.

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 107.69

2.3.2.1 Number of teachers using ICT

Response: 112

File Description	Document
List of teachers (using ICT for teaching)	[View Document](#)
Any additional information	[View Document](#)

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 13.26

2.3.3.1 Number of mentors

Response: 112

File Description	Document
Year wise list of number of students, full time teachers and students to mentor ratio	[View Document](#)

2.3.4 Innovation and creativity in teaching-learning

Response:

Faculties have to constantly stay updated with the latest development in their field of teaching and its industrial application. University conducts Orientation Programs whenever there is a change in syllabus. Faculties are encouraged to attend Open Source Programs, Short Term Training Programs and Faculty Development Programs. Faculties develop their Course File to keep a record of their actions and track the progress. Organizing seminars, conferences, workshops, discussions and deliberations on various platforms help faculties to acquire knowledge about the current technical scenario, keeping them abreast with latest research developments of their fields. They can explore the possibility to implement the same in the lectures that are conducted.

One of the important aspects of efficient classroom teaching is LCD projectors. All laboratories and classrooms are equipped with projectors. A projector develops visual thinking and promotes better understanding of topics or experiments. It also saves instructional time of faculties which can be better used for other tasks. Also inculcation of group activities, internet facilities, presentations, ICT enabled learning, demonstration models and tutorial, act as an added advantage to the efficiency of lectures and make lectures interactive, innovative and creative. National Programme on Technology Advanced Learning (NPTEL) with an intention to create a greater impact of the taught lessons is introduced to students. Faculties develop a rapport with students by resolving their doubts and clearing concepts. Implementation of case study based teaching is implemented in the lesson plans to develop the understanding of real life problems and their systematic solutions, thus laying emphasis on critical thinking and developing problem solving skills.

Another important section is the Library. Library resources comprise of text books, reference books, research papers, conference papers, previous years' university question papers, model answer sets that are provided after the results are declared, research journals, magazines, periodicals, newspapers, etc. Digital library is also made accessible to the students, who find it very helpful. Co-curricular activities are encouraged, reducing the gap between faculties and students and also developing the student's team building and leadership qualities.

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	[View Document](#)

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 5.29

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
3	3	2	3	2

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document

2.4.3 Teaching experience per full time teacher in number of years

Response: 5.84

File Description	Document
List of Teachers including their PAN, designation,dept and experience details	View Document

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 7.62

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
4	1	0	0	0

File Description	Document
Institutional data in prescribed format	View Document

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 6.85

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
10	7	5	2	1

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	[View Document](#)

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

- The faculties and students are made aware of the CIE process which involves the idea that the syllabus represents the scheme of final end semester marks along with the term test marks, term work; case study, and assignment, tutorial, oral and practical examination marks wherever applicable.
- Based on the feedback and conclusions drawn from the previous semester results, continuous improvements in the internal evaluation are introduced.
- Earlier assignments were to be written by students based on what was gathered in classroom lectures. To improve the situation, various solutions were considered based on the students feedback received by the mentors and different suggestion by IQAC
- Class room lectures were reoriented to discuss the possible questions and the proper 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 viva as a part of continuous assessment and understanding the exact reasons for lack of satisfactory performances. Tutorials are dedicated to solving numerical problems and also helping slow learners to get more attention.
- The evaluation of term work contains journal marks, assignment marks, case studies, mini project, attendance and performance in laboratory. The evaluation pattern is as prescribed by the university.
- Our institute conducts two Internal Assessment Test's each of 20/15 marks as per the subject scheme. The average of the two tests marks, are evaluated and displayed for the reference of the students, so that each student can gauge self-performance level. This average of term tests marks are considered in the theory marks of 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, attainment values are worked out to evaluate the need for further improvements. Students are apprised about the Educational Objectives and the end of course outcomes, expected from them. 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 case study, which are beyond the prescribed syllabus, are also conducted and marks are awarded as per the performance. Project marks are awarded only for final year students.
- The final presentation with actual model of project is evaluated by 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 by the university.

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

Our Institute has a robust Internal Assessment System, centralized with a full time dedicated examination cell. The details of academic calendar are followed in planning and execution of the same. Under the internal assessment, two tests are held for each subject in all the semester's and additional tests are conducted for absentees due to medical reasons and/or sports personnel representing the institute at various levels on the scheduled dates of test. Marks obtained are regularized based on the university rules for the same. The question papers are based on similar lines as the original test paper, to be fair in marking these students. Test marks are recorded using Applane software.

For assessment, each faculty has to prepare a model answer for respective question paper. To ensure transparency, the marks are displayed on the notice board and the students are given the opportunity to glance through their assessed answer sheets and convince themselves that the marking has been fair and clear. Any discrepancies brought to the notice of the faculty members, are either clarified or immediate remedial measures are taken to rectify the same.

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

Response:

Very few students have exam related grievances and a proper mechanism has been set up to deal with any possible cases. In case a student has any doubts about his assessment, he is free to ask for a copy of the answer sheet. If in his/her opinion, there are some discrepancies, he is required to make a written application requesting revaluation and paying the requisite fees as applicable. The paper is then sent to a senior faculty for revaluation. This faculty is invariably from a different college than that of the Moderator who had visited for the subject. This ensures unbiased revaluation. In majority of the cases the grievance is resolved within seven working days. Revaluation marks are displayed on the notice board.

The entire process is handled by the Examination cell and all records are maintained with them to have a centralized control. Any relevant data required for any departmental work can be obtained from the Examination cell. Hitherto there have been no pending cases for more than the stipulated ten working days. Presently the system is found to be robust, efficient and without inordinate delays.

If any malpractice case is detected and brought to the attention of the exam authority, action is taken as prescribed in Ordinance 5050.

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

The college prepares an academic calendar of activities based on the University calendar, received from University of Mumbai. The Semester working commences on the stipulated date. Academic calendar is prepared at the institute level where first six weeks are allotted to conduct lectures and practical's followed by the first test. Then again from eighth week to thirteenth week, regular teaching learning process is continued. It is followed by second test in fourteenth week. The fifteenth week is considered as term end week. During a semester, student learning is evaluated through term work and two internal assessment tests. All assessment and evaluation is required to be completed as per the academic calendar. College level activities such as VYRO, Junior VYRO, IETE Paper Presentation and Project Exhibition, Sports Week, Tantrotsav, Industrial Visits, Expert Lectures, Practical Examinations, etc. are planned according to the Mumbai University 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 on website and communicated to teachers and students

Response:

All the students are briefed about the CO, PO and PSO of each subject by the respective faculty members during the subject orientation program. This is done with an aim to provide students with an idea about the subject depth, difficult topics, practical aspects, application, etc. in the respective semester.

For efficient access, COs of all subjects are displayed on website. CO's and PO's are maintained in academic diary and course file of each faculty. The importance of CO-PO is also explained in parent teacher meeting.

File Description	Document
COs for all courses (exemplars from Glossary)	[View Document](#)
Link for Additional Information	[View Document](#)

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

All the programs offered by our institute have developed their PEO's, PO's, and CO's. The curriculum received from the University is divided into different modules and CO as well as PO attainment is checked through direct and indirect methods of assessment.

In order to ensure achievements of CO's the Institute has implemented course file where all the information related to course is maintained by faculty members. The 'Average Method' is utilized to calculate the CO PO attainment values. Each CO for a particular course is mapped with PO of program as per following levels- Low, High, and Medium. These CO's are mapped with questions given in two

internal assessment tests. This process ensures the 50% syllabus coverage before Internal Assessment Test-1 and remaining before Internal Assessment Test 2. The average is taken for attainment of CO's. A course end survey is also conducted for all the courses. The objective of the survey is to get the input on improving knowledge skills and competency with the right attitude for life. Each CO is mapped with questions in Course Exit survey form. The CO attainment is calculated after analyzing this data.

All the above average calculations will be taken into consideration for final attainment calculations. The final calculations will be based on direct and indirect methods. The direct is Internal Assessment Test and indirect is Course End survey. The direct method is given 70% weightage and indirect has 30% weightage. The final total attainment values are calculated for CO and PO as per mapping and maintained by each faculty for suggesting positive changes.

All these surveys also help the institute to understand the attainment of graduate attributes over the four years of program.

2.6.3 Average pass percentage of Students

Response: 87.14

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 332

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 381

File Description	Document
Institutional data in prescribed format	[View Document](#)

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.24

File Description	Document
Database of all currently enrolled students	[View Document](#)

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

Response: 3.25

3.1.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
3.25	0	0	0	0

File Description	Document
List of project and grant details	[View Document](#)
e-copies of the grant award letters for research projects sponsored by non-government	[View Document](#)

3.1.2 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0

3.1.2.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 1

File Description	Document
Supporting document from Funding Agency	[View Document](#)
List of research projects and funding details	[View Document](#)

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

We believe that entrepreneurship is the key that can unlock India's latent inventive potential. It will not only push India to lead the world but also help increase the quality of life in the country. The Entrepreneurship cell (E-cell) is an activity run by faculties of Universal College of Engineering that aim at manifesting the latent entrepreneurial spirit of young students. We at E-cell host various workshops, expert speaker sessions for aspiring entrepreneur and support them by providing necessary resources such as funding, mentoring, consultancy.   A Photography workshop in association with Cannon India was organized on July 29, 2017. Students became well versed with concepts like Bokeh, Aperture and Exposure. 46 staff and students participated in this workshop. The workshop was highly appreciated by the participants and they expressed their desire to have advanced level workshops. Institute has served as the guiding torch to many individuals to start their own ventures. Our student Sagar Mistry has started his own venture Sammey.INC, It provides services like Android Development, Website Development and hosting Desktop Software and Application Development, ecommerce and SEO. Tanmay Makwana, a student from EXTC Branch has taken zeal and initiative of stepping into entrepreneurship, by developing an educational website Educonetwork. Educonetwork is an educational networking website that provides user with an integrated cloud storage (E-drive) and also has an open library that helps user get a lot of information. Dhanish Tiwari, student from EXTC branch, tried to explore his profound interest in Food Chain, Supply and Management through his venture Bhojnam Food Delivery. He is now diversifying in the core technical branch through his new venture Shekhar Electricals. College has provided work space, guidance, mentoring and consultancy to the above mentioned students.

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 73

3.2.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
30	27	16	0	0

File Description	Document
Report of the event	[View Document](#)
List of workshops/seminars during the last 5 years	[View Document](#)

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

File Description	Document
List of Awardees and Award details	[View Document](#)
Any additional information	[View Document](#)

3.3.3 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 0.29

3.3.3.1 Number of research papers in the Journals notified on UGC website during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
34	21	15	11	8

File Description	Document
List of research papers by title, author, department, name and year of publication	[View Document](#)
Any additional information	[View Document](#)

3.3.4 Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years

Response: 0.88

3.3.4.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
20	22	6	8	2

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

Institute firmly believes in humanity, and tries to impose this attitude amongst students as well as staff members. Along with educating students and upgrading their technical skills, institute also focuses on developing the quality among the students of being a social-able, hospitable, sensitive towards the under privileged. Institute along with Civil Department, took an initiative to adopt Kaman Village and develop it in phases as needed. The village was facing water scarcity issues, which was then tackled by the department by planning and designing of *Bandhara* System (minor irrigation system) for Kaman River. Also Civil Department took initiative to tackle issue of improper planning of Gram Panchayat Office, and have redesigned the office and a community centre based on the principles of planning. Institute had organized "JOY OF GIVING" event to donate food items & clothes to poor and orphan children in association with Applied Science & Humanities Department in August 03, 2015. Also, this event was organized by International Society of Automation, UCoE Student Chapter. They visited the Children's Home at Gorai on August 23, 2017, and helped the poor children with their basic needs and brought JOY on their faces. Also our student Kanan Agrawal has volunteered with 'Akanksha Foundation' for 61 hours from January 6, 2017 to January 28, 2017, at Natwar Nagar Mumbai Public School. The Akanksha Foundation is a non- profit organization with a mission to provide children from low income communities with high quality education, enabling them to maximize their potential and transform their lives. He also joined 'Prayas- An attempt', a newspaper collection drive, through which they gathered fund for supporting the educational needs for underprivileged kids. Institute also arranged Blood Donation Camp & Thalassemia check-up on September 21, 2015 and July 27, 2017.The campaign was conducted by Sarla Blood Bank (National Accredited Blood Bank by Quality Council of India). The event was highly successful with 104 students and staff members in year 2015 and 119 students and staff members donated blood and 223 persons were examined for Thalassemia in year 2017. The students have also joined hands together to form 'Hand-in-Hand Youth Foundation' and have conducted various events under the said banner to serve the underprivileged.

File Description	Document
Any additional information	View Document

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 5

3.4.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
3	2	0	0	0

File Description	Document
Number of awards for extension activities in last 5 years	View Document
Any additional information	View Document

3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 2

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	1	0	0	0

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach programs conducted with industry,community etc for the last five years	View Document

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 4.48

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
168	154	0	0	0

File Description	Document
Average percentage of students participating in extension activities with Govt. or NGO etc.	View Document
Any additional information	View Document

3.5 Collaboration

3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

Response: 143

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
54	57	22	10	0

File Description	Document
Number of Collaborative activities for research, faculty etc.	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 3

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other

universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2016-17	2015-16	2014-15	2013-14	2012-13
1	1	1	0	0

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance,other universities etc. during the last five years	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

The institute follows the norms and specifications laid down by the All India Council for Technical Education (AICTE) for creating infrastructure that facilitates effective teaching and learning. All classrooms, laboratories, tutorial rooms and seminar halls are equipped with necessary infrastructure. All the classrooms have a wall mounted projector and audio and video capability such that students can have interactive sessions. Laboratories of all the departments have adequate equipment and infrastructure which helps students in developing practical skills needed for the industry. 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 throughout the campus. CCTV Cameras are installed on all floors for security purposes. The summary of the area is mentioned as follows. Table 4.1.1 in DVV gives an overall summary of the total area under instructional, administrative and amenities available and mentions the various area requirements and the area available in the institute under the various sections.

File Description	Document
Any additional information	[View Document](#)

4.1.2 The institution has adequate facilities for sports, games (indoor, outdoor),gymnasium, yoga centre etc., and cultural activities

Response:

Our institute has adequate area for outdoor and indoor activities. An area of 2250 square meters is dedicated for the outdoor activities. Indoor games like table tennis, carroms and chess are played in a Gymkhana. Students are encouraged to play different outdoor games such as Volleyball, Cricket, Rink Football, and Kabaddi. An Annual Sports week is held where students are encouraged to compete in various indoor and outdoor activities. The institute also organizes a cultural event called "Tahuko" every year where students are encouraged to participate in various events with a blend of different cultures from different states of India. An Intra Collegiate competition is conducted annually for cultural activities like Singing, Dancing, Rangoli, Drama, Stand-up comedy where students participate enthusiastically and get a chance to find and nurture their hidden talent. An Annual Inter-Collegiate cultural fest called "Soul of Universal" is organized in the month of Jan-Feb which witnesses participation from all over the institutions of higher educations of Universal Group.

File Description	Document
Any additional information	[View Document](#)

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 30

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document
any additional information	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 43.75

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
601.24762	951.46828	1266.57811	616.91487	416.85650

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
Audited utilization statements	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

The library has a dedicated committee with Principal as the Chair Person and the Librarian as Secretary and all HOD'S and one member of each department as members of the committee. At the start of each semester, faculties are required to submit their recommendations for books for the upcoming semester. Library is divided into stacking section, reference section and digital library. Student's book cards and books are barcoded for transaction purpose. The Library has an adequate amount of books to cater to the

student's need. 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. Previous year question papers of every stream are made available to students and faculty. Faculty and students have access to NPTEL videos This institution uses e-Granthalaya, a digital agenda for Library automation and networking from National Informatics Centre, Government of India.

File Description	Document
Any additional information	[View Document](#)

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

Rare books are downloaded from Rare Books Society of India and kept as e-books. Students have access to these e-books through the laptops that are made available in the library. Our institute encourages students to appear for various competitive exams. Students in our institute take keen interest in pursuing their higher studies. Library is stacked with various books for GRE preparation. Barron's GRE is one of the leading books which is available in the library. Books for competitive exam like TOEFL are also available in the library. Students in their final year also take keen interest in pursuing government positions or pursuing higher studies through a common entrance exam i.e. GATE.GATE books for various branches like Computer Engineering, Information Technology, Electronics Engineering, Electronics and Telecommunication Engineering and Civil Engineering are made available for preparation. Students are also motivated to appear for Civil Service examinations like UPSC, MPSC, Combined Services exam, RRB. GATE question papers of previous years of all the branches are stored in PDF format for students to prepare and for ready reference. Final year project thesis of all the programs is kept as reference material for students. Students can use the library to subscribe to various NPTEL courses and access them at a speed of 32 mbps.

File Description	Document
Any additional information	[View Document](#)

4.2.3 Does the institution have the following:

1. e-journals
2. e-ShodhSindhu
3. Shodhganga Membership
4. e-books
5. Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: D. Any 1 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc.	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 11

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
4.45459	10.44146	30.40884	8.69777	1.01332

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document

4.2.5 Availability of remote access to e-resources of the library

Response: No

File Description	Document
Details of remote access to e-resources of the library	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 8.31

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 132

File Description	Document
Details of library usage by teachers and students	[View Document](#)
Any additional information	[View Document](#)

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Our institute firmly believes in providing the latest and the best. In this pursuit the Institute has always upgraded the IT facilities. Wi-Fi connection is available on every floor. The students are having access to the same. Faculty members too have access to this facility. Bandwidth has been upgraded from time to time to accommodate the increasing demand.

- Presently the institute has a total of 464 laptops which are well maintained.
- Laptops are made available to Laboratories, Administration Department, Resource Room, Examination Cell and Staff Members.
- All systems are Wi-Fi enabled and students have access to Wi-Fi facility. The institute has a premium internet bandwidth of 32 mbps.
- All laptops have the latest configuration.
- All faculty members are highly encouraged to use Power Point Presentation for delivering lectures through the use of LCD projectors.
- Every class room has a wall mounted projector and an audio video system. A majority of the faculty members now make effective use of these facilities.

File Description	Document
Any additional information	[View Document](#)

4.3.2 Student - Computer ratio

Response: 3.54

File Description	Document
Student - Computer ratio	[View Document](#)
Any additional information	[View Document](#)

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)
>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: 20-35 MBPS

File Description	Document
Details of available bandwidth of internet connection in the Institution	[View Document](#)
Any additional information	[View Document](#)

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: No

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	[View Document](#)

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 7.25

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
176.53189	150.70403	158.43322	90.97369	46.85650

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	[View Document](#)
Audited statements of accounts.	[View Document](#)

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

There are different committees constituted to take care of physical, academic and support facilities. All the washrooms are maintained by dedicated housekeeping staff. The head of the department takes input from faculties regarding the budget required for the laboratories and the proposal is given to the Principal. The library committee co-ordinates about the books required by different faculties by submitting requisition to the librarian. The head of the sports committee submits requirements for various sports materials. Civil committee (maintenance) takes care of all civic maintenance activities in the college. This committee makes sure all constructions and repairs are approved by the Principal and the Director. This committee oversees all the construction and repairs that are undertaken by the external agency. A computer maintenance committee has been constituted with Principal as the head. All necessary maintenance activities for IT infrastructure are reported to the Head- Department of Computer Engineering . Head of the Department reports the requirements for up gradation and maintenance to the Principal. The Principal forwards all required maintenance activities to ICTC, which handles it through the Head Office. Our institute has a Furniture and fixtures committee and laboratory instruments committee, headed by the Principal. Furniture and fixtures committee takes care of the maintenance of physical facilities. Instruments committee caters to the maintenance and up gradation of laboratory instruments by co-coordinating with the Head Office.

File Description	Document
Any additional information	[View Document](#)

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 10.87

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
199	160	96	58	32

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	[View Document](#)
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	[View Document](#)
Any additional information	[View Document](#)

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 1.53

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
7	6	42	6	4

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	[View Document](#)
Any additional information	[View Document](#)

5.1.3 Number of capability enhancement and development schemes –

1. For competitive examinations
2. Career counselling
3. Soft skill development
4. Remedial coaching
5. Language lab
6. Bridge courses
7. Yoga and meditation
8. Personal Counselling

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	[View Document](#)
Any additional information	[View Document](#)

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 7.17

5.1.4.1 Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
257	258	0	0	0

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	
Any additional information	

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 0.95

5.1.5.1 Number of students attending VET year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	66	0	0	0

File Description	Document
Details of the students benifitted by VET	
Any additional information	

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	
Details of student grievances including sexual harassment and ragging cases	

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 69.55

5.2.1.1 Number of outgoing students placed year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
58	96	1	1	1

File Description	Document
Details of student placement during the last five years	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 3.94

5.2.2.1 Number of outgoing students progressing to higher education

Response: 15

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 76.75

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
23	35	1	1	1

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
73	67	1	1	1

File Description	Document
Number of students qualifying in state/ national/ international level examinations during the last five years	<u>View Document</u>

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) during the last five years.

Response: 7

5.3.1.1 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-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	2	2	2	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	<u>View Document</u>
e-copies of award letters and certificates	<u>View Document</u>

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

Universal of Engineering(UCoE) 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 UCoE is quite active and is guided by the staff members. They show lots of enthusiasm in every activity conducted. In the institute, Students Council also participates in various activities to bring forward the views and suggestions of the students regarding their subjects, syllabus and other related things concerned with the students in the institute. Most of the students selected are on the basis of their overall academic performance.. The students' council of UCoE helps the students to share ideas, interests and concerns with teachers and Principal. The student council of UCoE often come together to raise funds for social activities, projects related to community development and helping the people in need. The Students Council members are very active during Tantrotsav and National Level Tech-fest like VYRO which are conducted every year. Students wholeheartedly participate to make lively and

enthusiastic for all the participants who come from various colleges to participate in it. Besides VYRO, Universal College of Engineering conducts JR.VYRO where students from junior colleges enthusiastically participate. Students Council of UCoE have wholeheartedly represented themselves in various National Level events conducted by the institute such as IETE National Level Technical Paper Presentation, Project Presentation, workshops, and Seminars.

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 3.2

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
6	4	4	1	1

File Description	Document
Report of the event	[View Document](#)
Number of sports and cultural activities / competitions organised per year	[View Document](#)

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

Universal College of Engineering had its first Alumni meet on November 18, 2017. The institute is still in the process of registering the association. The students who had passed out earlier attended the Alumni meet.

During Alumni meet, the graduated students shared the challenges faced by them in their project works, career guidance, interview techniques, placement activity, software training, usefulness of internship, industry academia interaction and other initiatives which were beneficial in enriching their knowledge. The performance of our past students, prompted 'SportsTech' to recruit the students of our next batch. 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. The alumni community of UCoE has been the most effective medium not just with the graduates but also with the present students in providing opportunities in improving their career and professionalism. The alumnus are an asset to the institute as their contributions and involvement has increased for overall development of Universal College of

Engineering.

5.4.2 Alumni contribution during the last five years(INR in Lakhs)

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: 1 Lakh - 3 Lakhs

File Description	Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 1

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	0	0	0	0

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years.	View Document
Any additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

Response:

VISION OF INSTITUTE:

To be a forerunner in rendering quality technical education with a multifaceted, research oriented approach, aspiring for excellence of students in the professional and social realm which spans across wide and diverse horizon of opportunities**.**

MISSION OF INSTITUTE:

1.   To boost holistic development of the students with an emphasis on technical education inclining towards socially relevant research.

2.   To promote a learning ambience which further enhances innovation, creativity, team spirit, rational and scientific temperament thus making them successful world citizens of present and future.

3.   To yield efficient professionals with the highest level of ethics and leadership skills, well equipped to face the Industry demands.

Nature of governance:

Governing Council of the Institute has been constituted as per the norms of All India Council of Technical Education (AICTE) & Directorate of Technical Education (DTE), Mumbai University (MU) and Government of Maharashtra which are the regulatory bodies for approving colleges in India. It's main function is to ensure that stakeholders, including students, faculties and Institutional management, as well as those from the wider society, have full confidence and trust in our institution and that all those who have governance responsibilities and accountabilities, both within and outside Institutions, carry out these effectively.

Perspective plans

Ten year plan:

Benchmarking of Universal College of Engineering (UCoE) among top 10 colleges of India

To fulfill ten years long term plan following perspective is being adopted.

1)   EDUCATIONAL: Development of faculties to meet the need of current trends in Engineering, creating interest towards research among faculties and students, encouraging students for activities that can enhance practical knowledge of the students.

2)   ADMINISTRATIVE: Digitize the entire system of governance covering the entire spectrum including HR, Finance and Feedback.

3)   INFRASTRUCTURAL: Establishing Incubation center, Paper free campus, PG center, research center, Civil Consultancy Laboratory.

6.1.2 The institution practices decentralization and participative management

Response:

The Institute does practice decentralization and Participative Management. It decentralizes the authority and provides operational autonomy at various levels.

- The Governing Body delegates all the academic and operational decisions based on policy to the College Development Committee headed by the Principal.
- The College Development Committee formulates common working procedures and entrusts the implementation with all the Heads of Department.
- The Department Heads manage the day to day activities of their respective department which includes lecture and practical monitoring. HoDs conduct meeting at department level to enhance performance of the department. The heads guide and monitor the academics as well as the technical activities conducted by the department. The requirements of the department are discussed during the meeting are then sent to the Management for approval.
- All the HoDs have also been given the autonomy to recruit new faculties for their respective department by conducting demo lectures. A team of Faculty members and Students coordinate the co-curricular and extracurricular activities in the Institute. Other units of the college like sports, arts, and library have operational autonomy under the guidance of the various Committees/Clubs/Associations. Students from various departments are actively involved in the decision-making process.
- Examination Controller has been given autonomy for proper conduct of internal assessment tests and University examinations, as per the rules laid down by the University.
- Librarian has been given the autonomy to handle library responsibilities, like availability of books, procuring requisition for new books from faculties, maintenance of record of previous University Examination question papers, syllabus copies both old and revised. Digital Retrieval System is provided to check the availability of a particular book.
- Training and Placement Officer is responsible for organizing campus drives, coordinate with nearby colleges for Pool Campus and successful placement of students in various Industries. Interested students are also sent for internships in reputed companies.
- Administrative officer handles Accounts and Administration section. The attendance of faculties is monitored on a regular basis with the help of biometric system. An attendance Register is also maintained to take care of any eventuality in Bio-metric system working.

File Description	Document
Any additional information	<u>View Document</u>

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

Strategic Plan: Strong Institute/Industry interactions build up to improve placement of the students.

The Institute has a practice of sending students for Internships to experience the industry environment and help in increasing their employability. The Institute has started this practice since the first batch itself (A.Y. 2012-16). Universal College of Engineering provides aptitude and soft skill training to the students. Other activities such as Expert Lectures, Seminars and Training Programs by Industry personnel's are arranged to offer a scope for Student–Industry interaction and understanding of the corporate culture. This is another factor which helps in improving employability factor.

Example: Corporate Oriented Training Program conducted by In Global Solution (IGS), Mumbai.

In Global Solution conducted campus selection drive on April 2, 2016. The selection process included Aptitude Test, Group Discussion and Interview. Total 66 students from CS, IT, EXTC and ETRX were selected by IGS. A special training program focused on technical learning and skill development was conducted in association with ISG from 13/06/2016 to 25/06/2016. After Training program total 12 students were selected and placed in ISG.

File Description	Document
Any additional information	<u>View Document</u>

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

The academic organizational structure of the Institute includes the following in the hierarchical order viz. Chairman, Group Director, Campus Director, HR, Principal, HODs, Faculties, Laboratory Assistants, Laboratory Attendants. The administrative section includes the TPO, Library, Accounts, Transport, Stores,

Security, and Canteen. Various statutory bodies are established in the Institute namely College Development Committee, Research Advisory Committee, Student Grievance Cell, Non-Teaching Staff Grievance Cell, Anti - Ragging Committee, Women's Development Cell, Internal Complaint Committee, Examination Committee, Unfair Means Inquiry Committee, Local Purchase Committee, Library Committee, Student's Council, Internal Quality Assurance Cell, Attendance Committee, Cultural Committee.

File Description	Document
Any additional information	View Document

6.2.3 Implementation of e-governance in areas of operation

1. **Planning and Development**
2. **Administration**
3. **Finance and Accounts**
4. **Student Admission and Support**
5. **Examination**

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: B. Any 4 of the above

File Description	Document
Screen shots of user interfaces	View Document
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

Various Statutory bodies operate at the Institute level for the overall development and welfare of the students as well as the faculties. Each committee has its own specific functions and responsibilities. All the committees hold their meetings on regular basis to discuss further action plan and to review the previously

planned events. Resolutions of different statutory bodies are successfully implemented. One such example is the event organized by Women Development Committee described below.

Sanitary Pad Vending Machine installation in ladies washroom under Women Development Cell (WDC)

A decision was taken to install Sanitary Napkins Vending Machine on the ground floor girls' washroom in the WDC meeting held on 20/07/2015. The Women Development Cell initiated the installation of the latest version of Sanitary Pad Vending Machine on the ground floor in the ladies wash room on 8th January 2016. The Principal of UCOE inaugurated and welcomed the initiative taken by the WDC by saying that such efforts would break the myths and stereotypes related to menstruation process. The machine has made sanitary napkins more affordable and readily accessible for the female students by dispensing a pad at a minimal cost. The installation of the machine has encouraged a dialogue on various issues related to menstruation and feminine hygiene. The Principal encouraged the awareness of cleanliness and hygiene to be maintained in the girl's washroom. The Program was graced by the Group Director, Prof. Aditya Lohana. He addressed the gathering and enlightened on the importance and power of a woman in the family. Later, the WDC head, Prof. Kanchan Dabre demonstrated the working and the use of the vending machine to girl students present. All the pros and cons were conveyed by staff coordinator Mrs. Prachi Malapure. Around fifty female staff members/student had attended the program. The Program ended with a vote of thanks proposed by a girl student, from the Student Council and expressed her happiness in supporting the girls and lady members for the initiative in raising their standard within the Institute.

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

The Institute provides various welfare measures for its entire teaching/non-teaching and admin staff. A few of them are listed below,

1) **Sponsorship**: Faculty members are sponsored for conferences and workshops: Faculties publishing papers in various conferences are provided with sponsorship along with an 'On Duty' leave.

2) **Campus Security**: Campus has security guards at the entrance as well as on every floor. They take care of the Laboratories and classrooms. CCTV cameras are also provided on each floor and classrooms. The work for implementation of firefighting arrangement on all floors is in its final stage.

3) **Pick and Drop Facility**: The Institute has bus facility from various prominent locations like Vasai, Borivali, Thane, and Bhayander. The bus facility for staff is free of cost.

4)   **In-Campus Bank and ATM Facility**: An extension branch of Indian Bank is available within the Campus with an ATM facility. Faculty members take advantage of the same.

5)   **Social** : Staff picnics are organized for recreational purpose and improving fellowship.

6)   Provident fund facility is provided to non-teaching staff.

7)   Gymnasium is available for use by all staff and students.

8)   Concession in fees is given to the wards of the faculty members studying in sister Institutes.

9)   Provision for maternity leave is available for female staff as per rules.

6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 5.93

6.3.2.1 Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
11	7	8	0	0

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc. during the last five years	[View Document](#)
Any additional information	[View Document](#)

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 1.6

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
2	3	2	1	0

File Description	Document
Reports of Academic Staff College or similar centers	View Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 38.26

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
88	43	20	13	0

File Description	Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	View Document

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

Yes. Our Institute follows unbiased performance based appraisal system. The main objective of the performance based appraisal system is to improve efficiency and potential of the employees. At the end of the academic year, self-appraisal form is filled up by employees, which summarizes their achievements during the full academic year. In initial years, self-appraisal form was provided to employees in the form of a hard copy, which was later digitized in the year 2016. Currently, Institute shares digital copy of self-appraisal form with employees. Respective Head of the Department, provides their feedback for teaching and non-teaching staff of their department, which is given due weightage in the final appraisal. The attendance record of the employees is also checked for regularity during the academic year. The general behavior of all the employees is observed by the Principal. Appraisal interviews are conducted department wise at the end of academic year by the Principal and Director of the Institute in presence of HR department. This appraisal interviews analyzes the data available in the appraisal form. Faculty members are encouraged to enhance their academic qualifications and to take up additional responsibilities and ensure all round development of self and thereby of the department. Principal and Campus Director

provide constructive suggestions to improve upon the limitations, if any. Based on these inputs the final appraisal is then completed.

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The accounts section of the Institute maintains accounts. Internal audit and final audit are conducted by third party duly certified by Chartered Accountant appointed by the Management. Scholarships and freeships received for students belonging to reserved category or economically weak students are audited by government regularly. The last external audit was conducted on October 17, 2017. All financial matters are handled by qualified financial professionals and books of accounts are maintained as per the required norms.

File Description	Document
Any additional information	[View Document](#)

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

Response: 5.63

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
2.93029	0.20000	2.50000	0	0

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	[View Document](#)
Any additional information	[View Document](#)

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

Being permanently unaided institute imparting professional education, the fees are finalized based on the expenses incurred by the institute and the management for meeting the specifications prescribed by AICTE, DTE, MU and Government of Maharashtra for its academics and related activities. In case of any shortfall, the management provides the necessary funds. It also takes care of any Capital or Maintenance expenses. The fund generation is principally through the tuition fee collected and also from the rent received from the Campus extension bank branch. In case of funded activities, where procurement is involved, standard purchase procedure of the Institute is followed. The fund seeker submits request to the trust through proper channel i.e. HoD and the Principal and is then sent for approval and finalization.

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

The IQAC was formed with the intention of maintaining the quality with respect to academics as well as the administration. The functions of IQAC in the institute are in line with the functions prescribed by NAAC.

Two examples of best practices institutionalized as a result of IQAC initiatives:

1) Teaching learning Process:

(a)   Faculties prepare supporting material such as Lesson plan, Laboratory manuals, question bank, assignments and tutorials in accordance with Mumbai University prescribed syllabus and academic calendars to enhance students' academic performance.

(b)   Students' technical knowledge is enhanced using NPTEL and real time videos related to topics in the syllabus during classroom lectures. Latest technologies and developments spotted in the subject journal, is shared with the students to keep them abreast of the same.

(c)   Students' are encouraged to participate in co-curricular activities like Technical paper presentation and Project Competitions so as to implement their technical knowledge to real life applications.

2) Continuous Research and Development activities for the staff:

(a)   All faculty members are encouraged and support is provided by the Institute to involve in Research and Development activities in their own field. Based on the feasible research proposals, the Management encourages undertaking the project and provides finance wherever necessary.

(b)   Faculties are encouraged to participate in Conferences and Workshops to update their knowledge. Institute sponsors the faculties for the same in the form of On Duty leave and in deserving cases the delegate fee is sponsored.

(c)   IQAC members attend lectures delivered by the in-house/external faculties and suggest improvements in their content delivery methods. Report is submitted for facilitating follow-up.

(d)   IQAC has initiated various Co-Curricular and Extra-Curricular activities and also Inter and Intra college events in the institute. A few to mention are Robotics, VYRO, STTP, Conferences, Organic Farming and many other initiatives.

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

Two examples of institutional reviews and implementation of teaching learning reforms facilitated by IQAC:

1. Quality improvement strategies adopted by the institution for Teaching and Learning:

Semester Pre-commencement Preparations-

- Lecture plans.
- Course learning Objectives and Course Outcomes.
- Lecture notes.
- Updating the library with appropriate books as suggested by the faculty.
- Modifying the laboratories to cater for the needs of revised syllabus and new technology.

Monitoring students' performance through:

- Internal Assessment Test-I and II.
- Assignments, Quiz and Seminars, Projects.
- Result analysis at the end of semester examination and suggested improvements based on it.

2)   Quality improvement strategies adopted by the institution for Examination and Evaluation:

- For the first year students, a preliminary examination is conducted at the end of semester, in addition to two internal assessment tests.
- Timely assessment of tests is done and the result is displayed on the notice boards.
- Term work evaluation is done on continuous basis. Students, after knowing the marks at the early stage of semester, get an opportunity/scope to improve his/her performance.
- Theory examination and practical/oral examinations are conducted as per Mumbai University schedule and rules.
- The Faculty contributes in the examination work like question paper setting, invigilation of theory examination. Faculty members are also approved examiners/moderators for online as well as well as offline answer-book assessment work
- They visit other colleges as Subject Expert for conducting Practical/Oral Examination.

3) Quality improvement strategies adopted by the institution for Promoting Students and

 Faculties for extracurricular activities to enhance practical knowledge

- Institute has collaboration with professional bodies like CSI, IEEE, ISTE, ISA and IETE. Students are encouraged to participate in different activities organized under these bodies.
- Students are encouraged to participate in Tech fest in other Institutions.
- Events like Tantrotsav, VYRO, IETE Paper and Project Presentation help in providing a conducive platform for improvement and preparing for major events.
- Guest lectures, Expert lectures, Workshops and Seminars are arranged for students.
- Industrial Visits are arranged.
- Institute supports faculties to attend STTP, Workshops and Seminars outside the college. Institute provides On Duty leave and sponsorship for the same.
- Regular updating of Laboratories to incorporate new softwares to meet needs of new technologies.
- PTIs were initiated and conducted after suggestions from IQAC were received and the results have been encouraging.

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 0

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
Any additional information	View Document

6.5.4 Quality assurance initiatives of the institution include:

1. **Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements**
2. **Academic Administrative Audit (AAA) and initiation of follow up action**
3. **Participation in NIRF**
4. **ISO Certification**
5. **NBA or any other quality audit**

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: D. Any 1 of the above

File Description	Document
e-copies of the accreditations and certifications	View Document
Details of Quality assurance initiatives of the institution	View Document
Any additional information	View Document

6.5.5 Incremental improvements made during the preceding five years *(in case of first cycle)* **Post accreditation quality initiatives** *(second and subsequent cycles)*

Response:

Academic Domain:

- Semester Pre-commencement preparation in prescribed formats in all departments.
- Laboratory experiments suggested by Mumbai University (MU).
- Preparation of tutorials and assignments according to syllabus that can help students to prepare for final exams and also understand the areas of application of the knowledge gained.

- Preparation of defaulter list to identify the students with less attendance.
- Regular monitoring of the syllabus coverage and attendance of students by HoDs.
- Internal Assessment-I and Internal Assessment-II paper settings (covering all Course Outcomes) such that it can help students in University exams and help attain the Course Outcomes.
- NPTEL video lectures are played for the benefit of the students in addition to the regular lectures to ensure proper understanding of difficult topics in particular subject.
- Events like Tantrotsav and VYRO are arranged with a view to provide a competitive platform and prepare students for technical competitions at National and International level.
- Industrial Visits are arranged for students to correlate theory knowledge with practical implementation.
- Parent Teachers Interactions meets are held regularly to apprise the parents about the initiatives taken by college to improve quality of education and also receiving feedbacks from the parents.

Administrative domain:

- **APPLANE**: APPLANE software is implemented since 2012-13 to ease the tasks of Students admission process, fees collection and receipt generation process.
- **Examination Software-Viva:** The Examination Cell started use of this software since A.Y. 2013-14 for maintaining examination details of the students. The software is used to maintain list of student's year wise, generate hall tickets of the students and also to generate mark-sheets after the results are declared.

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 6

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
3	1	1	1	0

File Description	Document
Report of the event	[View Document](#)
List of gender equity promotion programs organized by the institution	[View Document](#)
Any additional information	[View Document](#)

7.1.2

1.Institution shows gender sensitivity in providing facilities such as:
    1.Safety and Security
    2.Counselling
    3.Common Room

Response:

1. **Girls' Common Room:** Provisions have been made for girls to study and relax in Girls' Room. Four comfortable beds are also placed.
2. **Girls' Washroom:** Girls' washrooms are located at five different places in the college with ample supply of water and regular cleaning and up keep.
3. **Drinking Water**: Pure drinking water is supplied with water purifiers and water coolers fixed on every floor of the college.
4. **Canteen:** In canteen, a separate section is reserved for girl students during the rush hour.
5. **Sanitary Nappy Vending Machine: -** Standard quality Sanitary Pad Vending Machine is easily accessible on the ground floor washroom for girls in case of emergency.
6. **Health Camp: -** Health Camp is organized for girl students every year to determine their Blood Group, Hemoglobin, Blood Pressure and Thalassemia.
7. **Anti-Ragging Committee and Discipline committees:** - The college has Anti-Ragging and Discipline Committees to look after the matters related to ragging and in maintaining discipline.

Students in distress owing to ragging related incidents can contact these committees. No complaints have been received by the committees till date.

8. **Girl Scouts: -** This group performs band parade, gymnastics, pyramid formation and undertake social activities like Blood Donation Camp and Tree Plantation.

9. **Personal Counseling: -** College provides personal counseling for girls regarding their studies, health, family problem, defaulter attendance issues, relationship problems and any other distractions affecting their academic performance.

10. **Locker facility: -**The locker is designed with state of art facility for keeping hanging clothes, Files, Books and valuable things for all girl students on par with the boys.

11. **Woman Development Cell: -** Women Development Cell organizes various expert lectures on women empowerment and development by experts in the field to make them aware of their privileges and duties. Sexual violence and discrimination is curbed at all levels and counseling is done. All the complaints received by the cell have been sorted out effectively.

12. **Security on every floor:-**One security member is present on every floor to take care of laboratories and classrooms, robbery and mishaps on the floor during college hours.

13. **Staircase:** The College allocates a separate staircase for girls during peak time on various event days contributing to disciplined and orderly exit.

14. **Female faculty members are encouraged to accompany girl students during Industrial Visits** to provide safety and security as well as provide a mentor.

7.1.3 Alternate Energy initiatives such as:

1. **Percentage of annual power requirement of the Institution met by the renewable energy sources**

Response: 0

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

7.1.3.2 Total annual power requirement (in KWH)

Response: 145118

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	[View Document](#)

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 0

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 50791.3

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document

7.1.5 Waste Management steps including:
* **Solid waste management**
* **Liquid waste management**
* **E-waste management**

Response:

Environmental Consciousness and Sustainability

With its unique location just off the Western Express Highway, Universal College of Engineering offers a spacious & serene learning environment away from the congestion & pollution of the city at a distance of just 20 minutes from Dahisar Check Naka. The upkeep of this green cover requires huge amount of water. This water requirement is easily fulfilled by water from the Kaman River, which flows adjacent to the campus. There are a large number of full grown up trees that do not require regular maintenance and provide a good green cover.

1. Plantation

Students and staff have actively participated in tree plantation activities in the past. There is a Smart Farm (Organic Farming) in the campus where various vegetable plants are grown under the supervision and careful observation of their mentors, to develop organic growth and provide pesticide free vegetables for internal consumption. Efforts are on to monitor growth using electronic sensors and collecting soil data and other parameters of plants growth for further analysis and research.

2. Energy Conservation

The college building is oriented in such a way that all the classrooms, laboratories, and staff rooms are well ventilated and airy with sufficient daylight and natural air thereby avoiding the use of fans, tube lights and air conditioners and thus contributing to reduction in carbon emissions. The idea of installing a turbine and utilizing the flowing water of the adjacent Kaman river, to generate electricity is being explored. All the electronic devices and electrical appliances are switched off when not in use and electricity is saved.

3. Waste Management System

The land requirement for the institute is in accordance with the AICTE guidelines. Institute follows all the norms of construction prescribed by Municipal Corporation from time to time. The college building consists of G+4 structure while the remaining area is used as open area Waste Management has been given priority by installing a bio-degrading compost station within the campus where Dry Waste, Wet Waste, e-WASTE are sorted and appropriately disposed without causing any damage to the environmental eco balance. Everyone in the campus is made aware of the importance of waste management and is counseled

to follow it strictly.

Wet waste is dumped in a compost pit especially dug-up for the decomposition process. The solid waste is disposed through the Municipal Corporation's Waste collection vehicles. The e-waste is handed over to agencies involved in proper disposal of the same. A pit of size 5 X 5 X 3 feet was created to dump all canteen waste. Dry leaves were added for compost formation. Later the pit size was increased to size 5 x 5 x 4 to accommodate the waste requiring disposal.

File Description	Document
Any additional information	View Document

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Universal College of Engineering has a large rooftop area from where rainwater can be collected and harvested. The building has a roof area of 3000 sqm, collecting on an average 40,000 litres of water annually. The runoff from the terrace of the college building is channelized into storage cum recharge well located near the canteen measuring 1m in diameter and 5 m deep. All the rooftop rainwater outlets, discharge into the storm water drains at ground level and is then directed to the filter unit and finally to the storage structure. The storage cum recharge well serves both the purpose of storing water as well as recharging the aquifer or subsurface storage.

The water collected in storm water drains, first enters filtration unit and then filtered water is channelized into the storage well. The impure water along with debris is directed to an outlet to the open ground.

File Description	Document
Any additional information	View Document

7.1.7 Green Practices
* **Students, staff using**
a) **Bicycles**
b) **Public Transport**
c) **Pedestrian friendly roads**
* **Plastic-free campus**
* **Paperless office**
* **Green landscaping with trees and plants**

Response:

Various steps have been taken to make the entire campus clean and green and provide an eco-friendly

environment in Universal College of Engineering. Care is taken to ensure that carbon emissions are kept to the lowest level. Plantations, lawns have been specially developed and are maintained regularly. Environmental awareness amongst students is inculcated through various events and tree plantation programs both within and outside the campus. World Environment day and all National Festivals are celebrated by conducting these drives. This has been a regular practice since 2013. Even though the campus is located in a metropolitan city area, the greenery in the campus is well maintained by taking good care of the plants and thus adding grace to the ambience. The trees planted are selected on the basis of their medicinal, aesthetic and traditional importance in the Indian society. The Campus has been declared as a plastic free campus and any plastic waste found is disposed immediately and suitably.

The Institute is inching towards paperless office. Applane Software is used by Administration Section for students' enrollment, maintaining data and documentation of all activities. The Examination Cell uses VIVA SOFTWARE in which all the examination details are stored and can easily be retrieved whenever required.

File Description	Document
Any additional information	View Document

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 0

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. **Physical facilities**
2. **Provision for lift**
3. **Ramp / Rails**
4. **Braille Software/facilities**
5. **Rest Rooms**
6. **Scribes for examination**

7. Special skill development for differently abled students

8. Any other similar facility (Specify)

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	
Any additional information	

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 12

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
7	2	1	1	1

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	
Any additional information	

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 5

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
2	1	1	1	0

File Description	Document
Report of the event	[View Document](#)
Details of initiatives taken to engage with local community during the last five years	[View Document](#)
Any additional information	[View Document](#)

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document
Any additional information	[View Document](#)

7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description	Document
Provide URL of website that displays core values	[View Document](#)

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	[View Document](#)

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	View Document

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 10

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

1. Institution organizes National Festivals and birth / death anniversaries of the great Indian personalities.

In Universal College of Engineering National festivals like Independence Day and Republic Day are observed with great fervor as these national festivals create a wonderful patriotic feeling as the National flag is hoisted by the a honorable guest for the occasion. During these National festivals many of the staff members recite patriotic poems followed by skits performed by the students. Engineer's day is celebrated on September 15th every year to mark the birthday of Sir M Visvesvaraya. Birth anniversary of Dr. Sarvepalli Radhakrishnan is celebrated every year as Teachers day with great enthusiasm.

2. Efforts of the Institution towards inculcation of Human Values and professional ethics in students, faculty and society:

The prime concern of Universal College of Engineering is to imbibe the moral values in the minds of the students wherever they go hence the students are provided specific course especially designed by the

faculty of Communication Skills, a division of Applied Science and Humanity Department of the institute, where the students learn various Interpersonal skill, Soft skills and Business Ethics so that they gain Human Values and imbibe Professional Ethics.

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

1. The Institution Maintains Complete Transparency in its Financial, academic, administrative and auxiliary functions.

The entire college is self- financed. As Universal College of Engineering is unaided technical institute, Government of Maharashtra constitutes Shikshan Shulka Samiti to decide fee Structure of the institute. From the entire amount of fees collected through demand draft, nearly 70% of fees are utilized for the staff salary. Rest of the fees is utilized for the various departmental requirements and purchases. When the need of the department arises, the requisition is forwarded through the Principal to the Director for their approval and sanction and then sent to the purchase department for further processing.

Generally the curriculum by the University is strictly followed but certain changes are initiated each year to cater to the needs of the industry.

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

Best Practice-1

Title of the Practice: Strengthening of the faculty, Student Support and Welfare.

Objective of the Practice

- To bring out leadership qualities and technical talent of the students and faculties through Financial and Technical assistance.
- To upgrade the professional competence and achieve a 3600 development of the staff and students.

 The Context

Universal College of Engineering provides a suitable platform for students/Faculties to showcase their

intellectual skills and talent in the events organized at National and International levels. The staff and students are always motivated to participate in conferences, seminars, workshops, competitions, exhibitions, sports and various national and state level events. The management provides full support to all the participants.

Best Practice 2

Title of the Practice: Internship and Pre-placement Training.

Objective of the Practice

- To update and train students with latest technical developments in the industry.
- To acquire necessary skills for employment, innovation ability and developing aptitude towards research.
- To get industry exposure in the overall career development of the student.
- To encourage its students for internships and value added training programs.
- Provide the better employment opportunities.
- Providing a cutting edge over other college students during the pool campus recruitment drive.

The Context

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. To address this challenge, Universal College of Engineering has taken an appreciable initiative in connecting with professional trainers who have designed unique courses and test series on Innovation, Employability Skills Enhancement and Career Building focusing on Self Awareness, Professional Skills, Innovation and Communication skills.

The second step of experiential learning was internships and sponsored projects from industry.. To enrich the practical knowledge of the students, institute motivated the students offered internships & industrial visits right from their very first year of Engineering and this training, helped in improving the perspective, by bridging the gap between Industry and academia.

Best Practice 3

Title of the practice-Organizing Mega Events.

Objective of the practice-

i) To encourage students to keep themselves updated with the latest technology

ii) To help students to cater to the needs and demands of corporate world and make them   independent thinkers.

iii) To make students learn things on their own with the guidance of the faculty and experts.

The Context

Universal College of Engineering has emphasized more on practical skills. It has helped to transform campus environment through its curriculum infrastructure, laboratories, workshops and has always tried its level best to encourage the students to get hands-on experience so that they get the skill for a smooth transition between academic and professional environment. It has helped students to develop confidence level and meet the challenges of life. Universal College of Engineering has always helped to prepare the students to be good at communication by introducing special events which will help them to interact confidently and develop a better personality for their future.

File Description	Document
Any additional information	<u>View Document</u>

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

Our college lays stress on academics and utilizing the knowledge gained, in the service of society. It also emphasis on all round development and improve their employability factor. Students are given opportunity to showcase their talents at various national and international events. Students have participated in the SMART INDIA HACKATHON 2017, an initiative by the Central Government. Prototype works were invited for various areas to develop into real time applications. Teams from our college participated with faculty members as mentors. In round two they were given modification at each stage and continuously monitored for 36 hours till the final product. Eight teams from all over India were selected based on the entire process our college team was one amongst the final selected. This competition gave an insight of social problems and finding appropriate solutions to it.

Our students participated in Swachhata Hackathon, an initiative by government to find innovative ideas to take the mission to new heights. They presented their project in the presence of Ministry of Drinking Water and Sanitation. Our students ranked 4th all over India out of 405 participants. They are also encouraged to pursue the entrepreneurial desires. In line with preparing students to take up entrepreneurial activities, our student Shubham Kokul was mentored by the faculty and encouraged to develop a software application. The final product was purchased by Fr. Agnel College of Engineering and used for the Tech-fest in the game of Treasure Hunt. Another student Sagar Mistry from Third Year of Computer Engineering started a venture "SAMMEY INC". He develops android applications and web applications for various industries like e-commerce, Pollution monitoring, detecting gun reducing, and software for real life application. Students are encouraged to apply their academic knowledge in the service of society. In line with the institute; vision of producing professionals beneficial to the society, the college undertaken many initiatives. These initiatives helped us in utilizing the knowledge and conducting further research in the field. A team of students is also involved in organic farming within the campus. Students were encouraged to get closer to the needs of farmers, in developing ideas and inventions in enhancing their output. Students are also involved in drip irrigation using sensors to monitor various parameters like soil moisture and temperature effect on growth and output. The emphasis is on using only organic fertilizer and boosting the output. Future plans are on to develop hybrid seeds to enhance output and develop purely organic

fertilizers using Neem, Arni, Custard apple, cow dung and urine. Thus our students are involved in multifaceted activities in developing their research aptitude for the benefit of society at large.

File Description	Document
Link for Additional Information	View Document

5. CONCLUSION

Additional Information :

The college has a policy of holding an Faculty Development & Orientation Program before the commencement of the semester. Faculty members are apprised of their duties and responsibilities and given guidelines for smooth conduct of activities.

1. The First half witnesses a Parents-Teachers meet to make the parents aware of the activities held in the college, their relevance to academic and personality development. This helps to get an active involvement of the parents in their wards progress.
2. Junior VYRO program is conducted to spread awareness amongst potential candidates expected to choose engineering as a career.
3. During Navratri, we conduct TAHUKO, a program designed to involve students and faculty interaction, fellowship and creating awareness of the importance of Indian festivals and in projecting Indian culture and its' Unity in Diversity.
4. The hall-mark, of the Technical events is that it is designed to create a competitive spirit gauging student's performance vis-à-vis the students of nearby colleges. TANTROTSAV is conducted every year where students are made to compete in events based on lines with IIT events. This helps in instilling confidence in the students, and giving them exposure to the challenges expected ahead. This serves as an excellent preparatory platform.
5. IETE Paper and Poster presentations also instill the spirit of competition and an inclination to undertake research oriented studies.
6. IEEE conference held in the campus has been a big hit. The success has spurred IEEE Bombay Section to award us the hosting of IEEE Symposium this year.

Concluding Remarks :

Universal College of Engineering endeavours to be a forerunner in rendering quality technical education in conjunction with holistic development of the students. The institute asserts paramount importance on the infrastructural aspect in aiming to be at par with the leading institutes in the country. There are provision of ample facilities for the successful implementation of curriculum and attainment of objectives as per the Vision and Mission of the institute. Multifaceted institutional activities line up the academic year. Emphasis is laid on rigorous academics and innovation based learning education in the form of internship programmes, seminars, STTPs, guest lectures, workshops and industrial visits with an aim to keep students abreast with the latest updates in professional realm. There is provision of fee waiver for needy students, scholarship, Training and Pre-placement facility, guidance, counselling, and vocational training to develop a competitive edge in students. The Institute maintains a Grievance Redressal Committee, Anti-ragging committee, Women Development Cell and Internal Complaint Committee for safeguarding the students. Presently, the institute is graced with Student's Chapter of five professional bodies (IEEE, ISTE, IETE, ISA and CSI) for enhanced training. Encouragement is provided by the institute for research based innovation in the form of incubation centre for research facility and E-cell. For effective content delivery, diverse teaching strategies are employed. Assessment is considered sternly with individual mentoring for the students. PO, PSO and CO for all programs are developed and displayed on the Institute Website. The Institute has adopted several welfare measures for teaching and non-teaching staff.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification
1.1.2	Number of certificate/diploma program introduced during the last five years 1.1.2.1. **Number of certificate/diploma programs introduced year-wise during the last five years** Answer before DVV Verification: 	2016-17	2015-16	2014-15	2013-14	2012-13
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10	4	2	1	0 | Answer After DVV Verification : | 2016-17	2015-16	2014-15	2013-14	2012-13
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0	0	0	0	0	
1.1.3	Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years 1.1.3.1. Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years Answer before DVV Verification: 	2016-17	2015-16	2014-15	2013-14	2012-13
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26	1	1	0	0 | Answer After DVV Verification : | 2016-17	2015-16	2014-15	2013-14	2012-13
---	---	---	---	---
0	0	0	0	0	
1.2.1	Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years 1.2.1.1. How many new courses are introduced within the last five years Answer before DVV Verification : 53 Answer after DVV Verification: 14 Remark : HEI Clarification response
1.2.3	Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years 1.2.3.1. Number of students enrolled in subject related Certificate or Diploma or Add-on programs

year-wise during the last five years

Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
301	272	200	120	90

Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

1.4.2	Feedback processes of the institution may be classified as follows: Answer before DVV Verification : B. Feedback collected, analysed and action has been taken Answer After DVV Verification: B. Feedback collected, analysed and action has been taken
2.2.3	Percentage of differently abled students (Divyangjan) on rolls 2.2.3.1. Number of differently abled students on rolls Answer before DVV Verification : 19 Answer after DVV Verification: 1

2.4.4 | Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

2.4.4.1. Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
4	1	0	0	0

Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
4	1	0	0	0

3.2.2 | Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

3.2.2.1. Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
30	27	16	0	0

	Answer After DVV Verification :				
	2016-17	2015-16	2014-15	2013-14	2012-13
	30	27	16	0	0

3.4.2	Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

3.4.2.1. Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
5	4	0	0	0

Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
3	2	0	0	0

5.1.1	Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

5.1.1.1. Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
248	205	112	80	0

Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
199	160	96	58	32

Remark : HEI clarification Response

5.1.2	Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

5.1.2.1. Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
3	4	42	8	4

Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
7	6	42	6	4

Remark : HEI clarification response

5.1.5	Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

5.1.5.1. Number of students attending VET year-wise during the last five years

Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
141	198	96	0	0

Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
0	66	0	0	0

6.5.3	Average number of quality initiatives by IQAC for promoting quality culture per year

6.5.3.1. Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
5	4	4	1	1

Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

6.5.4	Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements

2. Academic Administrative Audit (AAA) and initiation of follow up action

3. Participation in NIRF

	4. ISO Certification 5. NBA or any other quality audit Answer before DVV Verification : C. Any 2 of the above Answer After DVV Verification: D. Any 1 of the above
7.1.1	Number of gender equity promotion programs organized by the institution during the last five years 7.1.1.1. Number of gender equity promotion programs organized by the institution year-wise during the last five years Answer before DVV Verification: <table><tr><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td><td>2012-13</td></tr><tr><td>5</td><td>4</td><td>3</td><td>1</td><td>0</td></tr></table> Answer After DVV Verification : <table><tr><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td><td>2012-13</td></tr><tr><td>3</td><td>1</td><td>1</td><td>1</td><td>0</td></tr></table>
7.1.11	Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere) 7.1.11.1. Number of initiatives taken to engage with and contribute to local community year-wise during the last five years Answer before DVV Verification: <table><tr><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td><td>2012-13</td></tr><tr><td>5</td><td>1</td><td>1</td><td>1</td><td>0</td></tr></table> Answer After DVV Verification : <table><tr><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td><td>2012-13</td></tr><tr><td>2</td><td>1</td><td>1</td><td>1</td><td>0</td></tr></table>
7.1.15	The institution offers a course on Human Values and professional ethics Answer before DVV Verification : Yes Answer After DVV Verification: Yes

2.Extended Profile Deviations

ID	Extended Questions
1.3	Number of outgoing / final year students year-wise during the last five years Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
381	311	1	1	1

Answer After DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
381	295	1	1	1

2.2	Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
1209.39384	1267.27209	1975.49191	946.91487	575.45283

Answer After DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
1818.43	1475.47	2473.58	1064.57	3456.69