



## Yearly Status Report - 2019-2020

### Part A

#### Data of the Institution

<b>1. Name of the Institution</b>		ZAGDU SINGH CHARITABLE TRUST'S THAKUR COLLEGE OF ENGINEERING AND TECHNOLOGY
Name of the head of the Institution		Dr. B.K. Mishra
Designation		Principal
Does the Institution function from own campus		Yes
Phone no/Alternate Phone no.		02267308111
Mobile no.		9821285825
Registered Email		tcet.principal@thakureducation.org
Alternate Email		tcet@thakureducation.org
Address		Thakur College Of Engineering And Technology. A-Block, Thakur Educational Campus, Shyamnarayan Thakur Marg, Thakur Village, Kandivali(E). Mumbai - 400101.
City/Town		Mumbai
State/UT		Maharashtra

Pincode	400101																		
<b>2. Institutional Status</b>																			
Autonomous Status (Provide date of Conformant of Autonomous Status)	24-Jun-2019																		
Type of Institution	Co-education																		
Location	Urban																		
Financial Status	private																		
Name of the IQAC co-ordinator/Director	Dr. Rajesh Bansode																		
Phone no/Alternate Phone no.	02267308106																		
Mobile no.	9833179097																		
Registered Email	tcet.iqac@thakureducation.org																		
Alternate Email	rajesh.bansode@thakureducation.org																		
<b>3. Website Address</b>																			
Web-link of the AQAR: (Previous Academic Year)	<a href="https://www.tcetmumbai.in/Notice/IOA C/AQAR%20Report---%202018-19.pdf">https://www.tcetmumbai.in/Notice/IOA C/AQAR%20Report---%202018-19.pdf</a>																		
<b>4. Whether Academic Calendar prepared during the year</b>	Yes																		
if yes,whether it is uploaded in the institutional website: Weblink :	<a href="https://www.tcetmumbai.in/Notice/Academic%20calendar-2020-21.pdf">https://www.tcetmumbai.in/Notice/Academic%20calendar-2020-21.pdf</a>																		
<b>5. Accrediation Details</b>																			
<table border="1"> <thead> <tr> <th rowspan="2">Cycle</th> <th rowspan="2">Grade</th> <th rowspan="2">CGPA</th> <th rowspan="2">Year of Accrediation</th> <th colspan="2">Validity</th> </tr> <tr> <th>Period From</th> <th>Period To</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>A</td> <td>3.17</td> <td>2017</td> <td>30-Oct-2017</td> <td>29-Oct-2022</td> </tr> </tbody> </table>						Cycle	Grade	CGPA	Year of Accrediation	Validity		Period From	Period To	1	A	3.17	2017	30-Oct-2017	29-Oct-2022
Cycle	Grade	CGPA	Year of Accrediation	Validity															
				Period From	Period To														
1	A	3.17	2017	30-Oct-2017	29-Oct-2022														
<b>6. Date of Establishment of IQAC</b>	20-Jan-2018																		
<b>7. Internal Quality Assurance System</b>																			
<table border="1"> <tr> <td>Quality initiatives by IQAC during the year for promoting quality culture</td> </tr> </table>		Quality initiatives by IQAC during the year for promoting quality culture																	
Quality initiatives by IQAC during the year for promoting quality culture																			

Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries
IQAC meeting	30-Jun-2020 01	37
IQAC meeting	14-Feb-2020 01	29
IQAC meeting	29-Nov-2019 01	31
<a href="#">View File</a>		

**8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.**

Institution/Department/ Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Thakur College of Engineering and Technology	IEDC	DST	2020 365	800000
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**9. Whether composition of IQAC as per latest NAAC guidelines:**

Yes

Upload latest notification of formation of IQAC

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**10. Number of IQAC meetings held during the year :**

3

The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website

Yes

Upload the minutes of meeting and action taken report

[View File](#)

**11. Whether IQAC received funding from any of the funding agency to support its activities during the year?**

No

**12. Significant contributions made by IQAC during the current year(maximum five bullets)**

The contribution of IQAC cell is to ensure Quality in designing the following in department/sections 1. Design and development of scheme syllabus as per Holistic development (CBCGSH 2019) 2. Professional Skills (PS)/Activity Based Learning (ABL)/Project Based Learning (PBL)/Research Based Learning (RBL) are included in syllabus of autonomy from A.Y 201920 3. Industry specific/Industry linked curricula through an employability enhancement scheme 4. Examination scheme is revised for effective evaluation and assessment. Credits for specialization courses and online courses are included through graded online MOOCs. Noncredit mandatory courses, internship is included in scheme and syllabus 5. Inclusion of Formative Summative Assessment methods in autonomy scheme syllabus from A.Y

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

Plan of Action	Achievements/Outcomes
<p>Offer courses that include mathematics, management and core subjects</p>	<p>In MECH dept., Computer aided machine Drawing courses are offered to students to train them in computer related skills. CAD CAM CAE subject involves MATLAB and CNC programming required as a part of IT knowledge. In IT dept, Topics related to Set theory, Calculus I, II, Probability, Propositional logic, Applied statistics, Graph theory, Algebraic structures are used in UG and PG subjects viz. DBMS, Data Structures, Comp Graphics, Machine Learning, Computer Vision, Bioinformatics, etc. covered. In COMPs, UG: Applied Mathematics III and Management Information System (Institute Elective) are offered to IIIrd and VIIth semester respectively. PG: Mathematical Foundations of Computer Science Information Technology for Sem II of ME. In ETC, W.e.f 202021, courses viz. Product Life Cycle Management, Management Information System, Operation Research, Energy Audit Management etc. will be offered at Institute Level. In ELEX, Professional skill III (OOPM) are offered to students to train them in computer related skills. Specialization courses like Artificial Intelligence, Digital Design etc. are also offered. In CIVIL, Disaster Management, Professional skill III (Auto CAD) are offered to students. Specializations are also offered in multidisciplinary manner. In Humanities and Science, Engineering Mathematics in IT Department has topics like Number Theory, Modular Arithmetic and Discrete Mathematics which are useful for Cryptography, Cybersecurity, etc.</p>

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**14. Whether AQAR was placed before statutory body ?**

Yes

Name of Statutory Body	Meeting Date
Governing Council	24-Oct-2020
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	No
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2020
Date of Submission	07-Jan-2020
17. Does the Institution have Management Information System ?	Yes
If yes, give a brief description and a list of modules currently operational (maximum 500 words)	The management information system in our institute is incorporated through a customized ERP system. This software is intended to allow the institute to automate and manage all its activities and functionality ensuring that all its services are available to the stakeholders from anywhere at any time. We have been using this software since 2018 and are working towards incorporating the existing manual or semiautomatic processes without compromising on the standards defined. So far we have successfully integrated the existing process of students' admission, employee management, timetable allocation, course allocation, attendance monitoring, notice publishing system, feedback monitoring, elearning resource management, exam marks entry, fee collection, employee attendance and leave management.

## Part B

### CRITERION I – CURRICULAR ASPECTS

#### 1.1 – Curriculum Design and Development

##### 1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Programme Specialization	Date of Revision
BE	Choice Based Credit Grading Scheme with Holistic Student	Computer Engineering	10/07/2019

	Development (CBCGS -H 2019)		
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	Information Technology	10/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	Electronics and Telecommunication Engineering	10/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	Electronics Engineering	10/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	Mechanical Engineering	10/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	Civil Engineering	10/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	Engineering Sciences Humanities	01/08/2019
ME	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	Information Technology	10/07/2019
ME	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	Electronics and Telecommunication Engineering	10/07/2019
ME	Choice Based Credit Grading Scheme with Holistic Student	Computer Engineering	10/07/2019

Development (CBCGS  
-H 2019)

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1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Programme Specialization	Date of Introduction	Course with Code	Date of Introduction
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	22/07/2019	Employability Skill Development - I (ESD-CS-301)	22/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	22/07/2019	Employability Skill Development - II (ESD-CS-401)	22/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	22/07/2019	Professional Skills-III (PS-CS301)	22/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	22/07/2019	Professional Skills-IV (PS-CS401)	22/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	22/07/2019	Seminar / Workshop (SI301)	22/07/2020
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	22/07/2019	Activity Based Learning- III (HSD-CSABL301)	22/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	22/07/2019	Summer Internship (SI-CS301)	22/07/2019

	Student Development (CBCGS -H 2019)			
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	22/07/2019	Summer Internship (SI-CS401)	22/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	22/07/2019	Project Based Learning - II (HSD-CSPBL401)	22/07/2019
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	22/07/2019	Activity Based Learning- IV (HSD-CSABL401)	22/07/2019
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## 1.2 – Academic Flexibility

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

Programme/Course	Programme Specialization	Dates of Introduction
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS- H 2019)	22/07/2019
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### 1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	B.E. (Electronics and Telecommunication Engineering)	22/07/2019
ME	M.E. (Electronics and Telecommunication Engineering)	05/08/2019
BE	B.E. (Computer Engineering)	22/07/2019
ME	M.E. (Computer Engineering)	05/08/2019
BE	B.E. (Information Technology)	22/07/2019



ME	M.E. (Information Technology)	05/08/2019
BE	B.E.(Electronics Engineering)	22/07/2019
BE	B.E. (Mechanical Engineering)	22/07/2019
BE	B.E. (Civil Engineering)	22/07/2019

### 1.3 – Curriculum Enrichment

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

Value Added Courses	Date of Introduction	Number of Students Enrolled
NPTEL	22/07/2019	256
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#### 1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	1441
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### 1.4 – Feedback System

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

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

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

Feedback Obtained
<p>In Thakur College of Engineering and Technology, there exists a well-established feedback system. The feedback is obtained from all stakeholders' viz. students, teachers, employers, alumni and parents and analyzed from time to time. TCET is ISO9001:2015 certified and the feedback system adopted aims to complete the PDCA cycle of various processes like Admission, Academic semester conduct, Placement, Higher studies etc. During admissions, a survey is conducted among students and parents about the admission process which is used for improvement of services rendered by the institute to aspiring candidates. At the start of the semester, feedback is taken after completion of Semester Orientation Programme (SOP) and analyzed for any scope of improvement whose report is prepared by Heads of Departments and is reviewed and approved by vice-principal and Principal. During the semester, feedback is collected twice from students about teaching-learning process as per schedule given in the academic calendar. The particulars of this feedback includes punctuality and regularity, ability to hold student's attention and command over the class, effective</p>

utilization of lecture/practical time for teaching, effective knowledge and delivery in terms of communication skills, motivating students, practical demonstration etc. to name a few. The collated data is analyzed by the Heads of the Departments to identify the problem area, its causes and solution. Feedback is also taken from students about the institute and analyzed for problem areas by the Registrar. Appropriate corrective actions are initiated (if feedback is not up to the mark) by Registrar. Parents' meeting is scheduled twice in a semester as per the academic calendar preferably on Saturdays. TCET encourages parents to provide written feedback on Parent's Feedback form. Problem areas and their causes are identified, and appropriate corrective actions are taken. Class feedback is taken from all the faculty members teaching in a particular class with emphasis on the overall conduct of students. At the end of the semester students give survey about the various courses they had studied during that semester. This survey is designed using the course outcomes defined for the courses and serves as an indirect tool for measuring the attainment level of Course Outcomes. Feedback about the internal/external trainers is collected after the completion of the programmes viz. Student Development Programme, Pre-placement Training etc. Feedback is collected from Advisory / Governing council / Accrediting body members during Advisory committee meeting or accreditation process of institute and department about improving the services of the institute like academic conduct, placement, exams, co and extra-curricular activities etc. Feedback is taken from industry experts who come to the institute for recruitment about students who take part in placement process and about the institute. The Alumni feedback is taken during the alumni meet every year. Women Development cell coordinators collect feedback from all the female employees twice in a semester. The numerous feedbacks taken at different levels are sent for review to Vice Principal and approved by Principal. TCET aims to utilize all of the above feedbacks in the continual improvement of the institute and enhance stakeholder's satisfaction.

## CRITERION II – TEACHING- LEARNING AND EVALUATION

### 2.1 – Student Enrolment and Profile

#### 2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	180	1253	193
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### 2.2 – Catering to Student Diversity

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

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019	3049	36	166	Nil	25

### 2.3 – Teaching - Learning Process

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

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
166	166	5	45	6	10

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

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

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

Yes. Teacher guardian scheme is available in the institute where around 20-22 students are allotted to each faculty member. Each faculty mentor maintains a handbook that records the overall performance of a student under them. The handbook contains details viz. (1) Personal details of students like residential address, contact number, parents' occupation, parent's contact details (2) Score before taking admission in engineering i.e HSC and SSC marks (3) Workshops attended (4) Competitive exams given (5) Internships (6) Projects undertaken (7) Extra/co-curricular activities participation. Other than this, a record of the attendance per month, marks obtained per semester subject wise, overall CGPA attained is also maintained. The mentor interacts with each mentee (student) at-least two times in a semester or as per need to gauge the performance of the mentee students, difficulties faced during the semester and other kinds of personal discussion as per the comfort level between the mentor and mentee. The mentee's academic record, co-curricular and extra co-curricular activities and counseling record is maintained in Teacher Guardian book. Mentee's performance is monitored and based on his/her strength and weakness, guidance is provided to understand the challenges and opportunities present in college and develop a smooth transition to campus life at first year level and to enhance the mentee's growth, improve self-confidence, manage conflict and help to achieve their goals from second to final year level. Counselling is done for improvement in attendance, participation in co-curricular/extracurricular activities and improvement in academic results. Students are motivated to participate in technical events, competitions and paper publication. In the pandemic situation, the mentors and professional counsellor adopted virtual interaction sessions with students to keep them motivated for online learning and participation in doubt-clearing sessions, evaluation, Internships and on line courses for holistic development.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
3115	166	1:19

**2.4 – Teacher Profile and Quality**

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
166	166	Nil	5	35

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

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2019	Dr Kamal Shah	Professor	Golden Aim Award for Excellence in Leadership in education and Entrepreneurship development

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## 2.5 – Evaluation Process and Reforms

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

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	IV	09/10/2020	19/10/2020

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2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
Nil	Nil	0

## 2.6 – Student Performance and Learning Outcomes

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

<https://www.tcetmumbai.in/CMPN%20PSO.html>

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	BE	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	149	149	100

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## 2.7 – Student Satisfaction Survey

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

[https://www.tcetmumbai.in/All\\_Dept\\_feedback-inst](https://www.tcetmumbai.in/All_Dept_feedback-inst)

## CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 – Promotion of Research and Facilities

3.1.1 – The institution provides seed money to its teachers for research

Yes

Name of the teacher getting seed money

Dr. B K Mishra

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### 3.1.2 – Teachers awarded National/International fellowship for advanced studies/ research during the year

Type	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
National	Dr. Sangeeta Mishra	Dr.APJ ABDUL KALAM BEST YOUNG SCIENTIST AWARD	28/02/2020	BOSE SCIENCE SOCIETY

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### 3.2 – Resource Mobilization for Research

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

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Major Projects	365	IEDC (DST)	100000	100000

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#### 3.2.2 – Number of ongoing research projects per teacher funded by government and non-government agencies during the years

17

### 3.3 – Innovation Ecosystem

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

Title of workshop/seminar	Name of the Dept.	Date
Under Water Construction Workshop	Civil Engineering	19/09/2019

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

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
MHRD MEGA Online Challenge SAMADHAN certificate ( 14th April -25th April 2020) for	Hemant Kasturiwale	MHRD, AICTE, FORGE, Innovationcurs	10/06/2020	Faculty

solving  
pandemic  
challenges

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

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
01	TCET Incubation Centre	TCET	Three Apples	Employment generation	23/08/2019

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### 3.4 – Research Publications and Awards

#### 3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded
Information Technology	2
Computer Engineering	2

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

Type	Department	Number of Publication	Average Impact Factor (if any)
National	Information Technology	10	3.89

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

Department	Number of Publication
Civil Engineering	27

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#### 3.4.4 – Patents published/awarded during the year

Patent Details	Patent status	Patent Number	Date of Award
ELECTRONICS ENGINEERING - Disease analysis by machine learning over data from health community	Filed	202031001339 A	Nil

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#### 3.4.5 – Bibliometrics of the publications during the last academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Delay Incurred in	Sanjeev Ghosh	International Journal of	2019	1	TCET	1

Wireless Sensor Networks Using N-Policy M/M/1 Queuing Model and its Mitigation		Electronic s, Communi cations, and Measur ement Engi neering (IJECE)				
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### 3.4.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
IoT based Water Parameter Testing in Linear Topology	Bhushan Nemade, Deven Shah	IOSR	2020	7	4	Multicon W 2020

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

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	19	161	16	126
Presented papers	229	61	Nil	Nil
Resource persons	6	4	6	13

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## 3.5 – Consultancy

### 3.5.1 – Revenue generated from Consultancy during the year

Name of the Consultan(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
Information Technology	Bhakti vedanta Hosptial Diet App	Bhakti vedanta Hospital	15000

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### 3.5.2 – Revenue generated from Corporate Training by the institution during the year

Name of the Consultan(s) department	Title of the programme	Agency seeking / training	Revenue generated (amount in rupees)	Number of trainees
NIL	NIL	NIL	0	0

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## 3.6 – Extension Activities

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

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Blood Donation Drive	Lions Clubs	4	150
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3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Yoga training	Certificate	UOM	3
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3.6.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
Swachhta Abhiyan	UOM	Beach , Campus and UOM	4	105
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**3.7 – Collaborations**

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

Nature of activity	Participant	Source of financial support	Duration
International Space Apps Challenge - Pre Qualifier Round	287	Institute	1
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3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Information Technology - Internship	Internship	Intelligence Node Boston House, 201, 2nd floor, Suren Rd, Chakala, Andheri (E, Mumbai,	17/06/2019	17/07/2019	5



400093.  
Phone:  
086550 25056

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

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
DAB Research Lab LLP	03/05/2020	IOT and Augment Reality Project Development	2

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## CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 – Physical Facilities

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

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
6134.5	3844.7

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing

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### 4.2 – Library as a Learning Resource

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

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
KOHA	Partially	0	2005

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	29679	1900000	1437	80000	31116	1980000

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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Mr. Arpit Vyas	Machineries	Youtube	19/06/2020

[View File](#)

### 4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Co	Computer	Internet	Browsing	Computer	Office	Departme	Available	Others
------	----------	----------	----------	----------	----------	--------	----------	-----------	--------

	computers	Lab		centers	Centers		nts	Bandwidth (MBPS/GBPS)	
Existing	1200	33	0	33	3	0	0	155	0
Added	0	0	0	0	0	0	0	0	0
Total	1200	33	0	33	3	0	0	155	0

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

155 MBPS/ GBPS
----------------

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
Seminar Hall 1	<a href="https://youtu.be/H8TByv6fe-k">https://youtu.be/H8TByv6fe-k</a>

#### 4.4 – Maintenance of Campus Infrastructure

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

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
74160000	37299428	613450000	384477353

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

The resource management is done for infrastructure, equipment and other resources. Infrastructure and related utilities are provided by the Management which includes: i) Building / office premises / playground / garden ii) Library with books, ebooks, journals and other facilities iii) Laboratories with instruments and equipment for performing experiments as per guidelines of UOM. iv) Software required for academic, RD and administrative purposes. v) Appliances like Electrical systems, airconditioners, fans, LCD projectors, PCs, laptops, watercoolers, water purifiers, fire extinguishers, etc. vi) Support utilities like electricity / water supply vii) Furniture and Fixture viii) Office equipments / gadgets ix) Sports equipments x) Others Infrastructure maintenance is done by Maintenance and Purchase section (MAPS) for building, premises, utilities and facilities. The maintenance activities for equipment fall into three general categories: i) Routine Maintenance Activities are conducted while equipment and systems are in service. These activities are derived from preventive or predictive maintenance strategies. Means used are visual inspections, cleaning, functional tests, measurement of operating quantities, lubrication etc. ii) Maintenance Testing Activities involve using test equipment to assess condition in an offline state. These activities are predictable and can be scheduled and budgeted. They may be planned to coincide with scheduled equipment outages. iii) Diagnostic Testing Activities involve using test equipment to assess the condition of equipment after unusual events, such as equipment failure/ repair/replacement or when equipment deterioration is suspected. To elongate the functional life of laboratory equipment significantly, simple repairs may be adequate such as installing replacement parts as and when they are needed. Refurbishing, i.e. the process of dismantling pieces of laboratory equipment and cleaning each component part thoroughly is done at regular intervals. Calibration services are sought for equipment like measuring devices. Servicing of AC, Coolers, lifts etc. is done

either by inhouse personnel or by external party or through annual maintenance contract (AMC). Cleanliness daily maintenance of the interior facility (classrooms, laboratories, hallway, and staircase) is done by Class IV employees of the Institute under the supervision of the Admin Office. Cleanliness of toilet blocks and wash room has been outsourced. Fire extinguisher is outsourced since refilling of the cylinder is done once in a year. Maintenance of CCTV is outsourced and is maintained in coordination through technical person of computer center. ICT infrastructure is maintained by computer center personnel. Complaint related to computer / communication equipment can be recorded in Complaint Register (Computer and Communication equipment and network) The records of all these activities are maintained at appropriate departments/sections by concerned person and reviewed periodically for process improvement.

<https://www.tcetmumbai.in/Notice/IQAC/Resource%20Management.pdf>

## CRITERION V – STUDENT SUPPORT AND PROGRESSION

### 5.1 – Student Support

#### 5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Zagdu Singh Charitable Trust	2	100000
Financial Support from Other Sources			
a) National	TFWS	128	14647940
b) International	0	Nil	0

[View File](#)

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

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
ABL I II	20/08/2019	709	Yoga facilitator - Mrs. Seema Gudadhe

[View File](#)

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

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2019	Higher Studies	313	Nil	177	2

[View File](#)

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

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

36

36

30

**5.2 – Student Progression**

## 5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
91	484	300	NIL	Nil	7
<a href="#">View File</a>					

## 5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
2019	313	B.E.	0	0	0
<a href="#">View File</a>					

## 5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
GATE	29
CAT	6
GRE	110
TOFEL	64
Any Other	60
Any Other	1
Any Other	6
Any Other	4
Any Other	3
<a href="#">View File</a>	

## 5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
REFLEX (E-SPORTS)	INTRA	492
<a href="#">View File</a>		

**5.3 – Student Participation and Activities**

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

Year	Name of the award/medal	National/ International	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2019	NIL	Nil	Nil	Nil	Nil	Nil
<a href="#">View File</a>						

## 5.3.2 – Activity of Student Council &amp; representation of students on academic &amp; administrative bodies/committees of

the institution (maximum 500 words)

Students' Council activities include Sports and Cultural Events. There are two sports events T-Spark (Intra-College Sports event) and Enertia (Inter-College Sports events). Cultural events organized by STUDENTS' COUNCIL include Alumni Meet, Teachers' Day, Sojourn, BE Farewell and Special days such as Tie and Saree day, Traditional day and Rose Day. Sojourn is the annual cultural fest of TCET. Professional Bodies include CSI (COMP Department), ACM (IT Department), IEEE (ETC Department), IETE (ELEX Department), ASME (MECH Department), ASTUDENTS' COUNCIL (CIVIL Department) and ISTE (EHS Department). Professional Bodies are responsible for Zephyr, A Technical Fest organized every year and a 10-day long Industrial Visit to industries in different states and cities. Professional bodies also organize seminars and workshops during annual Conference - MULTICON-W. Social Bodies of TCET are EWT, NSS and Rotract. Social Bodies conduct activities all-round the year. These activities are Blood Donation Drive, Cleanliness Drive and Ganpati Visarjan and Camp where students' all-round development is focused are conducted by NSS. EWT focus on the value of Education and try to reach out the deprived students and help them in their schooling. They also conduct drives for road safety and student welfare. Rotract social body helps its volunteers to get a holistic development by their activities.

#### 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

Yes, the institute has its Alumni Association registered in September 2017. Alumni meets are conducted from 2011 which are supported by the institute. Also, from 2018, the association has started with Alumni Award for Alumni with outstanding contribution in his/her field. In 2018, the award was given to Mr. Aman Trikha, Alumni of batch 2008 for his contribution in Bollywood as a playback singer.

5.4.2 – No. of registered Alumni:

253

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

0

5.4.4 – Meetings/activities organized by Alumni Association :

Alumni meets are conducted from 2011 which are supported by the institute. Through Alumni meet, an opportunity is provided to students to interact with alumni to understand the work culture in industry. Alumni participation can be enhanced through their participation in institute activities like Student Development Programme, RD, etc. Distinguished alumni award to be presented every year to the rightful alumni. Continuous communication systems to be developed to keep the Alumni updated about the programmes and thereby increasing Alumni participation.

### CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 – Institutional Vision and Leadership

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

TCET has a clearly defined organizational hierarchy with well-defined roles and responsibilities for each and every staff member. ? The participative management at all levels including HODs, Section In-charges, Activity Heads

etc. enhanced due to involvement of all. TCET has Institutional committees for all activities in the organization for which members from the various departments are appointed. Apart from the staff members, students and Alumni are also involved in many of the committees which ensures a participative environment within the organization. Also, the parents are involved in the Advisory committee so that they know about the activities going on in the Institute and provide their valuable inputs for improvement. ? All departments are headed by the HOD and has been assigned a mentor Dean from the Institute. Under the leadership of Dean and HOD, each department conducts various co-curricular activities independently. The departments are also supported by a deputy HOD and two co-ordinators who look after all the academic and administrative activities of the department. For each and every class, there is a class teacher who is responsible for academic and administrative activities related to that class. This ensures appropriate academic control of the department. The delineation of responsibilities facilitates a healthy work environment throughout the organization. There is academic monitoring team which ensures smooth conduct of academic .The role of Mentor Dean was instrumental in guiding people of various departments for bringing better administration at departmental level.

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

Yes

## 6.2 – Strategy Development and Deployment

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

Strategy Type	Details
Curriculum Development	Under the Autonomy structure various courses were introduced to match industry requirements .Societal impact was considered as the key point in developing the curriculum. At Institute level, faculty have introduced the concept of Design based experiments and mini projects for most of the courses. Students are encouraged to take online courses such as NPTEL, Coursera etc. for which the institute faculty members act as mentors. Also, the Holistic Student Development approach adopted by the Institute since 2016 has been implemented and successfully continued in this Academic Year. Faculty members are also nominated to various Academic Bodies at University level.
Teaching and Learning	Faculty plans the academic conduct by syllabus detailing, developing resource book and course file, designing practice sessions, assignments and experiments, IAT paper and the effective conduct of academics. • All lectures and practical are to be conducted as per the plan and are reviewed time to time to improve the efficiency and effectiveness of teaching learning during semester. In Even semester of A.Y.19-20 the

unprecedented situation due to COVID-19 pandemic occurred. To cope up with this, latest teaching methodologies and various modes of learning were adopted by the faculty members. Various online platforms were used for content delivery viz. Zoom, Google classroom, Flipped classroom etc. The recordings of lectures were provided to students. As physical classes were not possible after March second week. • Process is monitored at 3 levels viz. Faculty, HOD and Dean Academic to avoid lapses.

Examination and Evaluation

Continuous evaluation through different methods like internal assessment test, assignments, presentations, projects etc. is carried out in each semester. At the end of each semester, university conducts the semester end examination for regular as well as A.T.K.T. examinations. Examinations are mainly, Term Work / Practical / Oral / Project viva/Theory. Examination committee is formed to ensure smooth conduct. Institute communicates the results on the internet through Institute website. Students can request for reevaluation of the end theory examination answer scripts within a stipulated period after announcement of the results. After reevaluation, records are updated with changes if any and the student is issued a revised memorandum of marks. Due to pandemic of COVID 19, the examination for all students were conducted in online mode (as per UGC guidelines) and results were declared on time. Online ESE examination for BE and promotion of students to next year based on their previous semester performance was done.

Research and Development

Areas of domain specific research in various programs are identified and all faculty members and students are encouraged to explore various research avenues. Domain development support like formal partnerships with external entities, facilitating faculty participation, resource procurement in various domains is provided. RD committee ensures compliance of various research proposals granted to institute. Pilot projects are launched for successful development and execution of the challenges so that good ideas can be implemented on a

	<p>small scale to verify feasibility and impact in a region. Students are encouraged to participate in State/National level Hackathon competitions.</p>
<p>Library, ICT and Physical Infrastructure / Instrumentation</p>	<p>To provide the learning resources to students/scholars and faculty to ensure effective teaching learning process with optimum resource utilization at the institute. Following strategies are adopted for improving teaching learning environment.</p> <ul style="list-style-type: none"> <li>• Procurement of books as per regulatory body.</li> <li>• Deputing of additional staff for circulation of books during peak period.</li> <li>• Providing additional reading rooms during exams.</li> <li>• Attracting students to utilize library services via orientation programs.</li> <li>• Availability of library services also on nonworking Saturdays during examination</li> <li>• Remote access facility is made available through mobile app</li> <li>• New reading room with 148 capacity is added.</li> <li>•ICT 155 Mbps 2 Mbps and Physical Infrastructure/ Instrumentation.</li> </ul>
<p>Human Resource Management</p>	<p>The Governing Body is the supreme body which is headed by the Chairman of the Management Council. Two members of the Management (Correspondent and Secretary), UGC, University and the State Government Nominees, the Principal, Director, Trustee, two External members as educationist's and two Senior Professors of the College are the members. A well-established team of the institute is responsible for ensuring compliance with employment and government laws. Proper care is taken in the selection process for keeping quality in the appointments. Staff sent for various types of training programme and workshops for enhancing their competence. Work distributed as per qualifications and experience of the staff</p>
<p>Industry Interaction / Collaboration</p>	<p>TP cell takes initiatives for collaboration with various MNCs and Local industries for industrial training and internships for students of all departments. There is in-house internship facility created for students. At the end of current academic year this internship was carried out in Online mode due to COVID-19 pandemic. Also International experts from Industry and academia were</p>



invited for Project Evaluation. There was Webinar series organised by TP section in Online mode, in which national level as well as international level industry/academia experts delivered talks on various topics. Industrial visits for students and faculty are arranged at local level as well as outside state. Technical seminars and workshops are arranged by Industry Experts in every semester. In the international conference organized by the institute every year, special workshop sessions are conducted for students by industry experts.

**Admission of Students**

Maximizing publicity and brand building of the institute through various awards and recognitions. Extending courtesy to interested candidates seeking information related to admission Prompt enquiry handling through adequate number of admission counters and helpdesks. Spreading awareness through outreach program to attract potential students. Informative brochure to be published and one page handout of brochure should reach maximum number of people. Website regularly updated with latest information related to admission highlighted. Compliance is met of various norms issued by statutory and regulatory bodies before or on time.

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

E-governance area	Details
<p><b>Planning and Development</b></p>	<p>The Academic and some of the administrative planning is done via ERP. Institute has adopted ERP mainly for academic monitoring and control. The lecture planning of all faculty members, attendance, syllabus coverage, Publishing notes/study material for students is done through ERP. Also, leave application is made online through ERP. Students are also provided access to necessary documents.</p>
<p><b>Administration</b></p>	<p>All records related to student's performance are prepared using software based tools for checking attainments. Consolidation is achieved in effective manner.</p>
<p><b>Finance and Accounts</b></p>	<p>The payment of salary to the faculty and staff is done through electronic clearance deposited in the bank. The payment of student fees is also</p>

	received through NEFT/RTGS mandates. Payment to affiliating bodies other stake holders is also done online through portals.
Student Admission and Support	Form filling, fees, notifications to concerned are published on Institute website. Online consents for Training and Placement, Higher studies, online certification cell activities etc. are taken from students. Also the feedback from students about faculty and Institute are taken online.
Examination	All notices are displayed through website related to Examination form filling, fees, notifications etc. Remuneration for examination is disbursed electronically. The results are prepared using in-house software.

### 6.3 – Faculty Empowerment Strategies

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

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2019	Mr. Sunil Khatri	Course Name: NNRMS-ISRO Sponsored Certificate Course in Remote Sensing Geographic Information System Technology and Applications	Nil	30000
<a href="#">View File</a>				

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

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2019	STTP on Design Thinking and Risk Mitigation to Enhance Educationa	Nil	Nil	Nil	6	Nil

1 Productivity  
24th-29th  
February  
2020

[View File](#)

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

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
Core Java	1	02/11/2020	02/11/2020	1

[View File](#)

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

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
132	34	85	51

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
Credit Co-operative Society, Medical Camps, Health Insurance, PF, Gratuity	Credit Co-operative Society, Medical Camps, Health Insurance, PF, Gratuity	Scholarships (Full and Partial), Travel Concession, Project Finance through Hobby Clubs

## 6.4 – Financial Management and Resource Mobilization

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

The institute conducts Internal Financial Audits regularly. The frequency of these audits is thrice per year. It is done by the CFO of the Institute. The Institute also deems it necessary to conduct external financial audits. The frequency of the same is twice per year. External Statutory Auditors are appointed for the purpose.

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

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Zagdu Singh Charitable Trust	50000	Financial Support

[View File](#)

6.4.3 – Total corpus fund generated

0

## 6.5 – Internal Quality Assurance System

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

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

Academic	Yes	IRQS	Yes	Internal QMS Auditors
Administrative	Yes	IRQS	Yes	Internal QMS Auditors

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

I. The parent teacher meeting is conducted every year during Induction programme of FE. II. Parent meet is organized twice every semester at Department level. At the start of semester it is for briefing about the semester and activities, and second meeting to inform about overall progress of their ward. Also, the feedback from parents is taken during such meets and suggestions are consolidated. In Even semester Parents feedback during online examinations was also taken. III. Apart from that, parents are also included in the Advisory committee of each department where they can give suggestions towards the growth and development of the organization.

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

Sr. No.	Title of the Programme	Date	Duration	No. of Participants
1	Camera Operating training for support staff	15-02-2020	2 Hours	10
2	Video making and editing	02-06-2020	03-06-2020	2 Hours
3	Effective Lab Conduct	08-06-2020	2 Hours	10

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

1. Successfully implemented Autonomy for all years (graded autonomy). 2. More focus on Skill development of students via Holistic Student Development scheme by incorporating Activity Based Learning (ABL)/Project Based Learning (PBL) in curriculum. 3. Intensify Industry Institute Interaction through various programmes.

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	Yes
c) ISO certification	Yes
d) NBA or any other quality audit	Yes

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019	Monthly Quality Checks	28/06/2019	28/06/2019	30/06/2020	123
<a href="#">View File</a>					

**CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES**

**7.1 – Institutional Values and Social Responsibilities**

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

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

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

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

a) The bill for the month of March-2020 is adjusted in the month of April -2020 bill. b) The bill for the month of month of December-2019 May-2020 is observed that the bill amount and units consumed are relatively less compared to previous months as it is the vacation period and activities held during the two months indicate institute is conscious of energy conservation during the same period. Sr.No. Month Number of units consumed Electricity bill amount Month wise in Rs. 1 July- 2019 68649 6,87,389 2 August - 2019 86038 10,09,251 3 Sept. - 2019 68543 12,37,978 4 October - 2019 76290 8,54,992 5 November - 2019 88651 10,07,462 6 December - 2019 55064 5,97,127 7 January - 2020 54753 6,23,868 8 February - 2020 69458 7,64,324 9 March - 2020 --- --- 10 April - 2020 12101 4,55,626 11 May - 2020 4820 39,655 12 June -2020 5984 1,05,492

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	Nil
Provision for lift	Yes	5000
Ramp/Rails	Yes	Nil
Braille Software/facilities	No	Nil
Rest Rooms	Yes	Nil
Scribes for examination	No	Nil
Special skill development for differently abled students	No	Nil
Any other similar facility	Yes	Nil

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2019	8	5	08/09/2019	1	AIDS AWARENESS	Volunteers understood the importance of spreading information about this sensitive topic among the people. A	73

positive response from the people lead to the success of this awareness drive

[View File](#)

#### 7.1.5 – Human Values and Professional Ethics

Title	Date of publication	Follow up(max 100 words)
ISO-Procedure Manual (Chapter 4-Conducive Work Environment)	01/07/2019	Code of conduct of staff and students is formulated by Principal. This is done to provide a conducive work environment. Code of conduct for Teaching and Non-Teaching staff is defined as per the Annexure-MP/04/01. Code of conduct for students is defined as per Annexure-MP/04/02

#### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Yoga Session (for relaxation of mind, body and soul)	13/05/2020	13/05/2020	14

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

1. E-waste Management System ? Unusable, irreparable or redundant IT and Electronics equipment are identified by the respective Laboratory In-charge and are declared as obsolete. ? Depending upon the nature, intensity of usage, maintenance cost, serviceability, obsolescence in terms of technology, up-gradation of technology etc., the related items are classified by the Lab In-charges with the help of Lab Assistant for the purpose of disposal of these items

2. Solid Waste management system ? Dry waste are placed in GREEN labeled and transported to BMC. Such bins are kept in front of the canteen, beside the food stalls in the campus and other prominent places. ? Recyclable materials are placed in separate bins. ? Wet waste are placed in BLUE labeled bins.

3. Energy Conservation Energy conservation is done during the semester break. Continuous monitoring during the semester. All labs which are not operational are closed and the seating arrangement of the staff is generally arranged in a way so that minimum electricity is consumed. Resources are localized.

4. Water Conservation Instructions are displayed in the restrooms for proper use of water and other facilities and waste disposal.

5. Green Area Trees and Grass areas are maintained in the campus to the standard and in an environmentally friendly way wherever possible.

6.6-S designed to enhance effectiveness and efficiency of Laboratories

1S - SORT (Take out unwanted items) • Focuses on eliminating unnecessary items from the workplace. • Categorize equipment,

furniture, tool in your working place into the following 3 categories 1. Necessary 2. Unnecessary 3. May not necessary • Place "Red tag" for unnecessary items • Move unnecessary items (broken tools, scrap and excess raw material etc.) to central stored area • Free up valuable floor space (Space utilization)

2S- SET IN ORDER (A place for everything and everything in its place) we organize all of the remaining items using ergonomic principles to locate items where they minimize movement and reduce stress. We also ensure that items are clearly identified and have a clearly identified home - "A place for everything, and everything in its place." "Set" is based on finding efficient and effective storage of necessary items Labeling, numbering, zoning for clear identification of storage areas to keep necessary items 3S- SHINE (The area is cleaned at the work is performed) This is the cleaning and painting of the area to bring it to a "new" standard. Clean up workplace daily so that there is no dust on floors, machines or equipment. Develop and follow regular cleaning and Maintenance schedule 4S- STANDERDISE (Maintain a high standard of housekeeping) we standardize the previous stages of the implementation by ensuring common color codes and ways of working in the same manner throughout the organization Display Work instructions, Standard Operating Procedures (SOPs) Color coding for waste segregation • Standardized common symbols 5S

## 7.2 – Best Practices

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

Best Practice 1: In-house Internship - In the face of cut-throat competition, rapid advancements in technology and globalization of business the holistic development of the student is a necessity. To bring this versatility in the student to face the stiff competition for the job and make them global leaders, we need to provide them extra skills apart from the University curriculum through internships. It is not possible for all the students to get industry internship, so TCET has taken the initiative to provide in-house internship for the students who are eager to do the same, and this initiative was taken in the A.Y. 2016-17. Best Practice 2: Faculty Development Program - FDP has become a significant process in Academic institutions as it proves a way to improve the quality of Academic Delivery and to respond to emerging faculty, student, program, and industry needs It focuses on realistic outcomes through these training programs. It also enhances the knowledge and skills of the teachers in the engineering domain helps equip the teachers with modern methods of teaching. They support interdisciplinary fields and also encourages team work. FDP's conducted at TCET are either Self-Financed, sponsored by approving authorities like AICTE,/ ISTE or Training Programs offered by IIT's conducted at TCET (Remote Center). It also involves Industry persons to be a part of these training programs as a Key Note Speaker/ Resource person for some of the sessions. This enables us to understand the current needs of the industry bridges the gap between Industry Academia. The faculty members also build a rapport with them for future acquaintances as well. Some of the FDP's/STTP's are supported with One day Industrial Visits to companies as well. This helps the faculty members gain a practical insight about their respective field of Engineering. These FDP programs are mainly theme based are relevant with the various Engineering Domains also on strengthening of various activities in the institute. The program aims to raise not only the quality of the teaching process but also enhances professional skill development of faculty members.

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

<https://www.tcetmumbai.in/Best%20Practice.html>

## 7.3 – Institutional Distinctiveness

### 7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and

thrust in not more than 500 words

Thakur College of Engineering Technology (TCET) was established in academic year 2001-02 with a clear objective of providing quality technical education in tune with international standards and contemporary global requirements. The College is recognized by All India Council for Technical Education (AICTE) Govt. of Maharashtra and was affiliated to the University of Mumbai (UOM). Currently the college has attained graded autonomous status for 10 years from July 2019. Thakur College of Engineering Technology has taken a lead in incorporating philosophy of Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS-HME 2020) in the process of curriculum development. The institute is primarily focusing on its vision and mission since its establishment. The institute is striving hard to become an internally renowned Institute of Engineering Technology and to make the students competent engineers to deliver quality results in industry. Along with the academic achievements, the institute provides the platforms for co- and extra-curricular activities which help in the holistic development of students. Student-led clubs, social, cultural and sports activities and many such activities are conducted to inculcate social, moral, ethical and universal values which help them become the responsible citizens of the world. Application of modern technology in teaching- learning process and effective day-to-day governance of the college makes TCET unique. Key initiatives like teacher-guardian scheme, book bank scheme, induction of resource books, yearly organization of events (like MULTICON-W, technical and cultural festivals etc.) make TCET an institute with a difference. Thus, in 19 years of its existence, TCET has got a position for itself as one of the leading engineering Colleges in Maharashtra. TCET is ISO 9001:2015 certified since 2017. The Institute is recipient of reputed IMC - Ramkrishna Bajaj National Quality Commendation Certification 2012 (Education) followed by IMC - Ramkrishna Bajaj National Quality Award 2015 (Education). TCET has been awarded in the category of Excellent Performing Innovative Engineering Institute in Maharashtra at National Maharashtra Education Summit Awards 2016, jointly organized by University of Mumbai CMAI Association of India. TCET is a member of National Entrepreneurship Network (NEN) and Confederation of Indian Industry (CII), for active industry-institute interaction where TCET has been felicitated by CII-Education Excellence Forum for enhancing Industry Connect, Employability and Faculty Competency.

Provide the weblink of the institution

<https://www.tcetmumbai.in/Recognition%20&%20Awards.html>

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

Thakur College of Engineering Technology (TCET) since its inception has been instrumental in offering quality technical education to aspiring students through System-Driven-Student-Centric approach. In the last decade it has put its best efforts to focus on broad based education leading to holistic student development as per international graduate attributes. Based on our strengths, the University Grants Commission (UGC) has conferred Autonomous Status" for 10 years to TCET under the revised UGC graded Autonomy Scheme 2018. As per the mandate of UGC under Graded Autonomy Scheme, TCET aspires to strengthen its program offerings to make our budding Engineers Globally Competent, Locally Relevant and Skill Oriented through:

- Program Specific curricula with focus on research in the emerging areas of Engineering and Technology.
- Industry Specific/Industry Linked curricula through an Employability Enhancement Scheme.
- All Round Personality Development model through its Holistic Development Scheme. Extra ordinary Credits for National level Achievements, National level Competitive Exams, Standard Industrial Certifications and Major Contributions to the Society.
- Credits for specialized courses and online courses done through graded online MOOCs and other graded online courses offered by the department from time to



time. The Choice Based Credit Grading System for Holistic Student Development (CBCGS-H 2019) is based on AICTE Model Curriculum and UGC which includes Scholastic, Co-Scholastic and Non-scholastic Credits which are Compulsory for every student. Additional Credits are assigned for the Student Achievers under Specialization (optional credits in Emerging Areas) and Achievers credits (National/ International level). The First Year (F.E) proposed scheme is aligned with the Model Curriculum which offers courses on Basic Sciences, Engineering Sciences and Humanities which imparts the fundamental importance of science to the students which could later be useful for Research in Applied Science and Engineering. The Second Year (S.E.) proposed scheme includes Program Specific core subjects which would introduce to them the core areas of the course giving them in-depth knowledge and form the basic foundation in them. The Third Year (T.E.) scheme offers Domain Specific "Industry Electives" which satisfies the current Industry demands and requirements. The syllabus scheme provides credits for online courses from Semester VI onwards along with self-learning attitude among students. The Final Year, Bachelor of Engineering (B.E) scheme is aligned towards Generalized Knowledge which is an important component of crystallized intelligence. The "Open Electives" are offered for students growth both on personal as well as academic level and develop the openness to experience, analyze situations for better solutions. The Examination Scheme is also revised and has been made keeping in view the kind of pressure a student under goes during continuous evaluation. The proposed scheme includes Formative and Summative Evaluation methods which would help in foster development and improvement in student during the course and simultaneously be able to assess whether the results have been able to meet the set target. This system would be deployed systematically which would drastically reduce the burden on the students. This scheme would help students to grow academically, professionally and holistically to become Globally Competent Professionals with Values.