Academic Performance Audit Report

(A.Y. 2022-23)

by

External Peer Team
(Constituted as per UGC Guidelines for Autonomous Colleges)

REF/TCET/ 2452 of 2023   11th October 2023

To,

University Grants Commission (UGC)

Bahadur Shah Zafar Marg,

New Delhi – 110002

Subject: Submission of Academic Performance Audit Report A.Y. 2022-23.

Dear Sir,

This is to inform you that the External Peer Team has conducted the Academic Performance Audit for A.Y. 2022-23 on 2nd August 2023. In this regard, we are sending herewith soft copy of Academic Performance Audit Report for A.Y. 2022-23.

The hard copy of the same is being sent by Courier.

Kindly acknowledge the same.

Thanking you,

Yours faithfully

(Dr. B.K. Mishra)

Encl: As mentioned above   **Principal**

NOTICE

Sr. No. Principal/ 12 6 / of 2023   26ᵗʰ July, 2023

To: All Faculty Members

Subject: Academic Performance Audit by External Peer Team (2ⁿᵈ August, 2023)
for A.Y 2022-23 ("Under the clause of monitoring of Autonomous colleges as per point No.8,
         pages 5 & 6 of UGC guidelines 2018 for Autonomous colleges")

This is to inform you all that, the "Academic Performance Audit" will be conducted on 2ⁿᵈ August, 2023 by the "External Peer Team" of experts constituted by IQAC of TCET. The details are as follows:

I. Purpose:

a) To Review/Assess the Academic performance of the college and send yearly report to UGC for A.Y 2022-23
b) To Review/Assess the initiatives taken by the college after receiving "Autonomous status" & suggest potential areas of growth.

II. Scope: To Review the progress and suggest improvements with regard to the following:

a) Curriculum Enrichment w.r.t Industry, Research & Holistic Student Development Perspective.
b) Effective deployment of TLP & Innovations appreciated by students/other stakeholders.
c) Academic Research, Consultancy, Sponsored research, Developmental Work, Entrepreneurship & Training
d) Students' Progression w.r.t Examination & Evaluation, Placements, Higher Education.
e) Best practices adopted by any Faculty/Department/Section which are documented as Innovative Practice/Case Study/Research Paper/Article
f) The outreach, extension and other initiatives of national importance.

III. Methodology & Person to be Audited:

To understand the strategic planning, design, deployment, measurements, outcomes and innovations carried out for AY 2022-23. The methodology/process is to assess the qualitative measures taken by the college through discussion / interaction/ presentation with the following members:

a) Principal & Chairperson (Academic Council)
b) Deans, Controller of Examinations
c) HODs & Chairman – Board of Studies of various departments
d) TPO, In-charge HOC Cell & Librarian

(Dr. B.K. Mishra)
Principal & Chairperson

Date: 26th July, 2023

Program Schedule (Tentative)
Academic Performance Audit for A.Y 2022-23 (2nd August, 2023)

"Under the clause of monitoring of Autonomous colleges as per point No.8, pages 5 & 6 of UGC guidelines 2018 for Autonomous colleges"

Time	Name	Persons to be Audited		Scope of the Audit
Welcoming the External Peer Team & Opening Meeting with Senior Leadership of TCET (10.30am)			
11.00am-11.15am	Dr. B. K. Mishra	Principal	Chairman (Academic Council)	Vision setting & strategic direction
11.15am-11.30am	Dr. R. R. Sedamkar	Director IQAC	Director IQAC	Initiatives taken towards Quality Enhancement
11.30am-11.45am	Dr. Sheetal Rathi	Dean (Academic)	Member - Dean Academic Board	Planning, Monitoring, Improvement & Growth w.r.t respective portfolio
11.45am-12.00pm	Dr. Vinit Dongre	Dean (R&D)	Member - Dean Academic Board	
12.00pm-12.15pm	Dr. Lochan Jolly	Dean (SSW)	Member - Dean Academic Board	
12.15 pm-12.30pm	Dr. Sanjeev Ghosh	IQAC Coordinator	Member of IQAC	Compliance and Measures taken towards quality enhancement
12.30pm-12.45pm	Dr. Sanjeev Chaudhari	Controller of Examination	Member - Board of Examination	Planning, Monitoring, Improvement & Growth w.r.t respective portfolio
12.45pm-1.00pm	Dr. Zahir Aalam	Training & Placement Officer	Member of IQAC	
1.00pm – 1.30pm	**Lunch Break**			
Visit to the Departments/Sections and Library on sample basis as decided by the Peer Team. The following persons should be available for the audit.			
1.30 pm to 4 pm	Dr. Rajesh Bansode	HOD (IT)	Chairman – Board of Studies of respective departments	Preparation, Design, Effective Deployment, Measurement & Outcomes
	Dr. Payel Saha	HOD (E&TC)		
	Dr. Siddesh Siddappa	HOD (MECH)		
	Dr. Seema Jagtap	HOD (Civil)		
	Dr. Harshali Patil	HOD (COMP)		
	Dr. Hemant Kasturiwale	HOD (ELEX)		
	Dr. Megharani Patil	HOD (AI&ML)		
	Dr. Sujata Alegavi	HOD (IoT)		
	Dr. Prachi Janrao	HOD (AI&DS)		
	Dr. Vidyadhari Singh	HOD (CSE)		
	Dr. Sudhakar Umale	HOD (MME)		
	Dr. Manoj Chavan	HOD (B.VOC)		
	Dr. Sunita Pachori	F.E. In-charge		
	Dr. Anil Vasoya	In-Charge (Higher Studies & Online Certification Cell)	Member of IQAC	Planning, Preparation, Deployment, Measurements of Outcomes
4 pm – 4:15 pm	**Tea Break**			
4:15 pm - 4.30 pm	• Meeting with Student Council Members, Members of IQAC (As per need) • Finalization of the "Academic Performance Audit Report" A.Y 2022-23			
4.30 pm -5.00 pm	**Closing meeting with senior leadership with External Peer Team**			

(Dr. B.K. Mishra)
Principal & Chairperson

Constitution of IQAC Cell – A.Y 2023-24

Date: 26-7-2023

Sr.No	Particulars	Name
1.	Chairperson: Head of the Institution	Dr. B.K. Mishra- Principal
2.	Member from Management	Mr. V.N. Datta – Development & Quality Assurance Officer
3.	External Peer Team (As per UGC Guidelines for Conduct of Annual Academic Performance Audit)	• Dr.Anil Kumar Singh, Director (Independent), RCF Ltd. - Mumbai, Professor (Retd.), Dean (Academic), IIT – Bombay, Mumbai • Dr B.Satyanarayana, Scientist , TIFR, Mumbai • Dr. G T Thampi, Principal , Thadomal Shahani Engineering College, Mumbai
4.	Teachers to represent all levels	• Dr. Rajesh Bansode – Professor (IT) & HoD • Dr.Payel Saha – Professor (E&TC) & HoD • Dr. Siddesh Siddappa – Professor (MECH) & HoD • Dr. Seema Jagtap – Professor (CIVIL) & HoD • Dr. Hemant Kasturewale- Associate Professor (E&CS) & HoD • Dr.Harshali Patil – Associate Professor (COMP) & HoD • Dr Megharani Patil – Associate Professor (AI&ML) &HoD • Dr.Prachi Janrao – Associate Professor (AI&DS) & HoD • Dr. Vidyadhari Singh – Associate Professor (CSE (CS)) & HoD • Dr.Sujata Alegavi – Associate Professor (IoT) & HoD • Dr.Sudhakar Umale – Adjunct Professor (MME) & I/C HoD • Dr.Sunita Pachori – Assistant Professor (ES&H) & FE In-Charge
5.	Few Senior Administrative Officers	• Dr. Lochan Jolly – Professor (E&TC Department) & Dean (SSW) • Dr.Vinitkumar Dongre – Professor (E&TC Department) & Dean (R&D) • Dr.Sheetal Rathi – Professor (COMP Department) & Dean (Academic) • Dr.Zahir Aalam- Professor (COMP Department) & TPO • Dr Sanjeev Chaudhary–Associate Professor (Civil Dept.) & CoE • Dr.Anil Vasoya – Associate Professor (IT) & In-Charge HOC Cell • Mr.Devidas Kalwale – Librarian
6.	Nominees from: • Local Society • Students • Alumni	• Mr. Manmohan RanjitSingh Mehta (District Chairman, Lions Club, Local Society) • Viraj Zaveri (GS), Sanika Lad (Jt. GS), Saachi Bangera (LR) • Mr. Manvendra Singh (AVP - Operations Transformation, HSBC - Alumni) • Mr Arya Mishra (Mingout Pvt. Ltd – Alumni)
7.	Nominees from: • Employer • Industrialist • Stakeholder	• Mr. Gaurav Ghelani (Regional Head – TCS Academic Interface Programme-Employer) • Mr. Ivan Castelino, Managing Director, In-Solution Global Private Limited • Mr. Yuvraj Malhotra, Chairman & MD Hilton Metal Forging Ltd. • Ms. Jyoti Kashyap, Mahesh Sharma, Bhaskar Joshi (Parent)
8.	Department Faculty IQAC Coordinators	• Ms. Purnima Chandrasekar – E&TC, Ms. Ashwini Shanbhag - CIVIL • Ms. Swati Abhang – IT, Ms. Shilpa Mathur - AI & ML • Mrs. Jyoti Kori – E&CS, Mr. Jayant Patil & Ms. Swetha Kulkarni – MECH • Ms. Siddhi Ambre - CSE (CS), Ms. Drashti Shrimal - COMP • Ms. Swati Mude – AI & DS, Ms. Usha Gupta– IoT • Mr. Shivram Poojari – ES&H, Mr. Amit Kolekar - MME Administrative staff - Mr. Uday Waskar & Mr. Shailesh Chavan
9.	IQAC Coordinator - TCET	Dr. Sanjeev Ghosh – Associate Professor (Department of E&TC & MR)
10.	Director of the IQAC -TCET	Dr. R.R. Sedamkar – Professor (Department of Computer Engineering & Head, Ph.D. Programs)

(Dr. B.K. Mishra)
Principal & Chairperson

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ANNEXURES

Proforma for Progress Report of College (Autonomous)

Progress Report for the Academic Year: 2022-23

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, the TCET has put its best efforts to focus on broad based education leading to holistic development of students as per international graduate attributes. TCET aspires to strengthen its programme offerings to make its graduates "Globally Competent, Locally Relevant and Skill Oriented."

The Choice-Based-Credit-Grading System for Holistic and Multidisciplinary Education (CBCGS- HME 2020) is based on AICTE model curriculum and UGC (Minimum standards of instruction for grant of First Degree through Formal Education) Regulations, 2003. Autonomy Scheme 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).

The curriculum focuses on promoting Holistic Student Development (HSD) which includes courses on Professional skills which focus on Basic Technology skills for second year, Industry/ Research/ Entrepreneurship skills for Third year and Final year. Project Based Learning (PBL) is made common for SE, TE, BE under HSD along with ABL (Co-curricular/ Extra-curricular/ Extension) for SE students and RBL (Online/ MOOCs) for TE and BE students. The students are also encouraged to take up Internships at core companies which would enhance their skills and make them updated with the current industry needs.

The Examination scheme is revised keeping in view the kind of pressure a student undergoes during continuous evaluation. The scheme includes Formative and Summative Evaluation methods, which would help in fostering development and improvement of students during the course. This would also enable to assess whether the results have been able to meet the set targets. This system is deployed systematically, which drastically reduces the burden on the students. Overall, the curriculum scheme is to help students to grow academically, professionally, and holistically to become Globally Competent Professionals with Values.

Process of getting reports validated from departments/ section in-charges

The institute follows ISO 9001:2015 norms and guidelines. The reports are initially prepared and proposed by the respective Process In-Charges and then checked by the respective Head of the Department (HoDs)/ Section In-Charge. Reports received from different departments/ sections are reviewed by the Vice-Principal, who then recommends the reports to the Principal for consideration and final approval. Such validated and approved reports are then shared with the IQAC members, along with the IQAC Coordinator and Director. The integrated reports are then put up in the quarterly IQAC meetings, to discuss on the action taken points of the last quarter meeting, and further suggestions are made for the actionable points for the next quarter.

For the last Academic Year, the IQAC meetings were held in September 2022 followed by January & April 2023. The data gathering was carried out using a reference template prepared by the IQAC cell and the same practice was followed by other Departments. The reports comprised of action taken report of the last 3 quarters (i.e., July – September 2022, October – December 22, January-March,2023) and the actionable points for the next quarter (i.e., October – December 22, January-March,2023) as per all 7-NAAC criterions. The reports shared by each department also comprised of Observations/ Suggestions Received from External Peer Team of Experts which includes key points viz. internal benchmarking on parameters including the Results, Placements, Feedback, Attendance and Publications etc.

1. Academic and research activities undertaken

1.1. Academic Activities:

1.1.1. Curriculum Design and Development:

The engineering curriculum offered to the students, since inception of the institute under affiliated system of the University of Mumbai (UoM), was as per the Semester Pattern of UoM's UG programmes. This curriculum included basic and foundation courses, core engineering courses, design and development, engineering and technological applications and other supporting courses along with projects/ thesis/ dissertation. However, after getting the autonomous status in July 2019, the curriculum has been redesigned by the institute to bring learning simplicity, flexibility, learning diversity, and Holistic Students Development (HSD). This change widened the scope of providing beyond-curriculum components viz., ABL, PBL, Professional skills, Employability skills, Internships, design-based experiments, mini-projects, case studies, etc., along with the perspective of national and international excellence and relevance. The objective has been to develop course specific technical knowledge with strong analytical skills, critical thinking, and innovative mindset among students. The curriculum designed in AY-2021-22 was with the theme to include core, multidisciplinary, industry linked, research-based learning and value-based HSD under autonomous system. Second year AIDS curriculum for 2021 admitted students was developed. In B.Voc a new course Software Development was added along with first year curriculum and modification of curriculum for was undertaken. All the above curriculum components viz. ABL, PBL, RBL, Professional skills, Employability skills, Internships, design-based experiments, mini-projects, case studies, etc. were added as a part of CBCGS system with Holistic and Multidisciplinary Education with the offering of major and minor courses, additional credits. The PG syllabus is also redesigned and broadly follows the AICTE model curriculum with the scope for industry projects component. For Ph.D. programme, the UGC guidelines were followed.

a) **Syllabus revision carried out during the academic year.**

Name of Programme	Scheme	Date of Revision
F.E. All UG Programmes	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	SEM-I - 29-06-2022 SEM-II - 09-01-2023
S.E. (Computer Engineering)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020))	01-07-2023
T.E. (Computer Engineering)	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	
B.E. (Computer Engineering)		
B.E. (Electronics and Telecommunication Engineering)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	--
B.E. (Information Technology)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS-HME 2020)	24-06-2022 & 09-01-2023
	Change of scheme (For TE Class) from 75:25 to 60:40 scheme.	
S.E. (Electronics and Computer Science Engineering)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	--
T.E. (Electronics and Computer Science Engineering)	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	
B.E. (Electronics and Computer Science Engineering)		
S.E. (Mechanical Engineering)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	05-06-2021
T.E. (Mechanical Engineering)	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	05-06-2021
B.E. (Mechanical Engineering)		

Name of Programme	Scheme	Date of Revision
S.E. (Civil Engineering)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	12-06-2021
T.E. (Civil Engineering)	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	24-06-2022
B.E. (Civil Engineering)		12-06-2021
S.T. (Artificial Intelligence and Data Science) (Semester 3) T.T. (Artificial Intelligence and Data Science) (Semester 5)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	24-06-2022
S.T. (Artificial Intelligence and Data Science) (Semester 4) T.T. (Artificial Intelligence and Data Science) (Semester 6)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	10-01-2023
T.T. (Artificial Intelligence and Machine Learning)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	24-06-2023
B.T. (Artificial Intelligence and Machine Learning)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	09-01-2023
S.T. (Internet of Things)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2023)	--
T.T. (Internet of Things)	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -HME 2020)	--
T.E. Mechanical and Mechatronics Engineering (Additive Manufacturing)	Choice Based Credit Grading with Holistic and Multidisciplinary Education (CBCGS-HME 2020)	With effective from AY 2022-23 No Revision

Programmes offered with specialisation:

Name of the programme	Specialisation offered
B.E. (Computer Engineering)	Artificial Intelligence
	Data Science
B.E. (Electronics and Telecommunication Engineering)	Communication Networks towards 5G (CN5G)
	Internet of Things (IOT)
B.E. (Information Technology)	Block Chain
	Infrastructure Security
B.E. (Electronics Engineering)	Robotics
	Sensor Technology
B.E. (Mechanical Engineering)	Industrial Automation, Energy Engineering
B.E. (Civil Engineering)	Infrastructure Engineering
	Green Technology and Sustainability
B.Tech. (Artificial Intelligence and Data Science)	AI&DS is the B.Tech. specialisation course.
B.Tech. (Artificial Intelligence and Machine Learning)	AI&ML is the B.Tech. specialisation course.
B.Tech. (Internet of Things)	IoT is the B.Tech. specialisation course.

b) **Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the academic year**

Programme	Name of the Course	Course Code	Activities/Content with a direct bearing on Employability/ Entrepreneurship/ Skill development
F.E. All UG Programmes	Bridge Course	-	The General English Proficiency Training (GEPT)
B.E. (Computer Engineering)	Employability Skill Development – III	ESD-CS301	Open source technologies and basics of cloud computing
	Employability Skill Development – IV	ESD-CS401	Expert Python Programming (EPP)/ Python for IoT (PI)
	Employability Skill Development – V	ESD-CS501	Web Development Skills
	Employability Skill Development - VI	ESD-CS601	Futuristic Web Development (FWD)
	Professional Skills- III	HME -CSPS301	Object oriented Programming using Java
	Professional Skills- IV	HME-CSPS401	Introduction to Python

Programme	Name of the Course	Course Code	Activities/Content with a direct bearing on Employability/ Entrepreneurship/ Skill development
	Professional Skill V	HME -CSPS501	Web Development
	Professional Skill VI	HME -CSPS601	Android App Development
	Professional Skill VII	HSDCSPS701	Software Testing
	Professional Skill VIII	HSDCSPS801	Cloud Computing
B.E. (Electronics and Telecommunication Engineering)	Employability Skill Development – III	ESDETC301	HTML &CSS
	Employability Skill Development – IV	ESDETC401	Java Script/React
	Employability Skill Development – V	ESDETC501	Web Development Skills
	Employability Skill Development - VI	ESDETC601	MongoDB
B.E. (Information Technology)	Employability Skill Development-I	ESD-IT 301	Advanced Java
	Professional Skills III	HME-ITPS301	Linux
	Employability Skill Development - II	ESD-IT 401	Expert Python Programming, Python for IoT
	Professional Skills IV	HME –ITPS401	ASP.NET
	Employability Skill Development - III	ESD-IT 501	Web Development Skills
	Professional Skills V	HME –ITPS 501	ASP.NET
	Employability Skill Development - IV	ESD-IT 601	Futuristic Web Development
	Professional Skills VI	HME –ITPS 601	Cloud Technology: AWS
B.E. (Electronics Engineering)	Employability Skill Development - I	ESD-ELE301	Open-Source Technologies-Linux Operating System
	Employability Skill Development - II	ESD-ELE401	Python for IoT, Expert Python Programming
	Employability Skill Development - III	ESD-ELE501	Database for Modern Applications, Machine Learning Tools for Nonprogrammers (MLT)
	Employability Skill Development - IV	ESD-ELE601	Futuristic Web Development (FWD)
	Professional Skill III	HME-ELEPS-301	OOPM
	Professional Skill IV	HME-ELEPS-401	Python Programming
	Professional Skill V	HSD-ELEPS-501	Web Development
	Professional Skill VI	HSD-ELEPS-601	Software testing
	Professional Skill VII	HSD-ELEPS-701	Digital Skills
	Professional Skill VIII	HSD-ELEPS-801	LATEX
B.E. (Mechanical Engineering)	Internship / Seminar / Workshop	SI301	Internship / Seminar / Workshop
	Employability Skill Development -I	ESD ME 301	Training on Open-source technologies and basics of cloud computing
	Professional Skills III (Computer Aided Machine Drawing)	HME MEPS 301	Training given on the Software related to the mechanical Engineering
	Professional Skills IV	HME MEPS 401	Training on SciLab Software
	Employability Skill Development -II	ESD ME 401	Training on Expert Python programming /Python for IOT
	Professional Skills V	HME MEPS 501	Modelling, simulation in Scilab & Xcos programming in Scilab
	Employability Skill Development - III	ESD ME 501	Training on Machine learning tools for nonprogrammers and Database for modern applications
	Summer Internship	SI-ME601	Internship
	Employability Skill Development - IV	ESD-ME601	Training on Futuristic web development
	Professional Skill VI	HME -MEPS601	Training on FEA and ANSYS software
B.E. (Civil Engineering)	Professional Skills-III	HME-CEPS301	Auto CAD
	Professional Skills-IV	HME -CEPS401	Blender 2.9
	Professional Skills- V	HME -CEPS501	MIDASGEN
	Professional Skills-VI	HME -CEPS601	Bar Bending Schedule
	Professional Skill VII	HSD-CEPS701	ETABS
	Professional Skill VIII	HSD-CEPS801	REVIT

Programme	Name of the Course	Course Code	Activities/Content with a direct bearing on Employability/ Entrepreneurship/ Skill development
	Employability Skill Development - I	ESD-CE301	Introduction and Installation of Linux, Commands, Linux Administration task, Process Management, Network Command.
	Employability Skill Development – II	ESD-CE401	Expert Python Python for IOT
	Employability Skill Development – III	ESD-CE501	Training on MongoDB, CRUD, Node.js.
	Employability Skill Development – IV	ESD-CE601	JavaScript, JavaScript Frameworks, AngularJS and React.Js
B.Tech. (Artificial Intelligence and Data Science)	Employability Skills Development - I	ESD-AIDS301	Advanced Linux & Cloud Computing
	Employability Skills Development - II	ESD-AIDS401	Expert Python Programming & Python for IOT
	Professional Skills- III	HME-AIDSPS301	Introduction to Python
	Professional Skills- IV	HME-AIDSPS401	Advanced Python & Data Wrangling
	Summer Internship	SI-AIDS301	Social Internship by Mendonsa Foundation
	Summer Internship	SI-AIDS401	Power BI
	Professional Skills – V	HME-AIDSPS501	R Programming
	Professional Skills – VI	HME-AIDSPS601	Go Language
	Employability Skill Development –III	ESD-AIDS501	Django
	Employability Skill Development –IV	ESD-AIDS601	react js
	Summer Internship	SI-AIDS601	Outhouse internship
B.Tech. (Artificial Intelligence and Machine Learning)	Employability Skill Development-I	ESD-AIML301	OPEN-SOURCE TECHNOLOGIES
	Employability Skill Development-II	ESD-AIML401	Expert Python Programming (EPP)/ Python for IoT (PI)
	Employability Skill Development-III	ESD -AIML501	(Python for IoT)
	Employability Skill Development-IV	ESD-AIML601	(Futuristic Web Development)
	Professional Skills III	HME -AIMLPS301	(Web Programming)
	Professional Skills IV	HME–AIMLPS401	(Artificial Intelligence Tools)
	Professional Skills V	HME -AIMLPS501	(Advanced Python for Machine Learning)
B.Tech. (Internet of Things)	Employability Skill Development – III	ESD-IOT501	Python Basics
	Employability Skill Development – IV	ESD-IOT601	Expert Python Programming/Python for IOT
	Employability Skill Development – V	ESD-IOT501	MongoDB
	Employability Skill Development - VI	ESD-IOT601	MongoDB
B.E. (Mechanical and Mechatronics Engineering)	Professional Skills III	HME - MMPS301	CAD Modelling using Solidworks
	Employability Skill Development-I	ESD – MM301	Python Basics
	Summer Internship	SI-MM301	Social Internship
	Project Based Learning-I	HME - MM/PBL301	TRIZ 40 Principles
	Activity Based Learning-III	HME - MM/ABL301	Personality Development through drama and group discussion
	Employability Skill Development-II	ESD – MM401	Expert Python Programming Python For IOT
	Project Based Learning-II	HME - MM/PBL401	Problem Identification Techniques
	Activity Based Learning-IV	HME - MM/ABL401	Personality Development through blog writing
	Summer Internship	SI-MM401	Python Programming for Mechatronics

1.1.2. Academic Flexibility

The proposed scheme/ syllabus is aligned with the model curriculum where courses on Basic Sciences, Engineering Sciences and Humanities & Social Sciences, are also offered by emphasizing on the fundamental role of sciences in research and development in S&T. In addition to this, there was inclusion of specialization courses, employability skills development courses, and basic list of practical, including beyond curriculum components viz. design-based experiments, mini-project, and technical paper writing. The students were allowed to opt for elective subjects at inter-department and institute level using department level optional courses (DLOC) and institute level optional courses (ILOC). The students were provided the choice for opting specialization courses, for which credits are allocated in the scheme; the courses can be completed using Swayam-NPTEL, Coursera and FOSS-IIT-B certification. Academic flexibility is about online delivery of lectures. If a student enrols for NPTEL 12-week course mentioned in the specialization but has not completed final examination conducted by the NPTEL due to various reasons, then the students must appear for in-house evaluation process, provided the student has completed mandatory assessment of NPTEL course, i.e., at least 8 assignments out of 12 assignments (for 12-week course). The respective faculty mentor is required to check the progress of assignment, marks of individual student, and must verify/validate whether the student has completed the pre-requisite assignment. On fulfilling these requirements, the students are allowed for in-house evaluation process. The courses offered under specialization through NPTEL are of 4 or 8 weeks, wherein students are required to attend the in-house training by the mentor faculty of the respective course for remaining weeks and earn 3 credits. If the student clears the examination of 4/8-week NPTEL examination, then the proportional credit transfer is done as per UGC policy and for remaining credits of the respective subject/ course, students are required to submit assignments given by the mentor and appear for in-house evaluation. In case of credit transfer of 3 credits in any specific course, student has to attempt internal examination, which is to be conducted by the faculty in the specified structure which is adopted by the MOOCs platform and is required to submit MOOC Certificate to the concerned mentor faculty.

a) **New programmes/courses introduced during the Academic year**
   B.Voc (Software Development)

b) **Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year**

Name of Programme	Level	Date of Implementation
B.E. (Electronics and Telecommunication Engineering)	UG	22-07-2019
B.E. (Computer Engineering)	UG	
B.E. (Information Technology)	UG	
B.E. (Electronics Engineering)	UG	
B.E. (Mechanical Engineering)	UG	
B.E. (Civil Engineering)	UG	
M.E. (Electronics and Telecommunication Engineering)	PG	05-08-2019
M.E. (Computer Engineering)	PG	
M.E. (Information Technology)	PG	
B.Tech. (Computer Engineering - Artificial Intelligence and Data Science)	UG	07-09-2020
B.Tech. (Information Technology - Artificial Intelligence and Machine Learning)	UG	
B.Tech. (Electronics Engineering - Internet of Things)	UG	
B.E. in Mechanical and Mechatronics Engineering (Additive Manufacturing)	UG	07-12-2021
B.E. in Computer Science and Engineering (Cyber Security)	UG	

1.1.3. Curriculum Enrichment

a) **Value-added courses imparting transferable and life skills offered during the academic year.**

TCET has established a mechanism to guide and support students for making the right career choice and decision. Students are provided with platforms for getting support of online certification through NPTEL, Coursera and other MOOC programmes. Value added certification courses are initiated in the department in A.Y 2022-23. Every semester is identified with one MOOC/NPTEL

Course to be undertaken by students with 3 credits. Evaluation criteria is set i.e., 12 assignments of 25 marks and final evaluation of 75 marks. After completing all the courses with certification and evaluations given in the scheme students can get a specialization degree B.E. with honours. Students are also encouraged for higher studies and qualifications such as pursuing Master level programme in India and abroad, graded online courses and professional certification courses, various competitive examinations, etc. These measures, guidance and support have resulted in continual career and professional growth of the students.

Swayam-NPTEL:

Course Run	Enrolment	Present	Gold	Elite	Silver	Successful	Participation	Topper
Jan-Mar 2023	114	129	4	13	6	22	21	0
Jul-Oct 2022	62	51	0	9	6	6+	6	1
Jul-Dec 2021	536	205	1	35	18	65	86	6
Jan-Apr 2021	232	63	1	24	21	9	8	7
Jan-Dec 2020	432	103	7	27	29	21	19	10
Jul-Dec 2019	469	256	3	83	76	43	51	13

Other Courses:

FOSS-IITB (Spoken Tutorials)

AY	Students Enrolled	Certification Completed
2022-23	1380	1380
2021-22	921	891
2020-21	824	786
2019-20	216	202

Note: In AY 2021-22 the number of students completed certification for FOSS-IITB were 891 and in AY 2022-23 the number of students completed certification for FOSS-IITB are 1380. The enrolment increased by 489 students.

List of other activities undertaken by HOC in 2022-23

Sr. No.	Activity Name	Date	Number of Student Participation
1	Orientation about HOC cell	25-07-2022	All students of SE
2	NPTEL course awareness and registration	25-07-2022	ALL students
3	FOSSEE online Certification Courses & Exam held During Internship	01-08-2022	875
4	Report on Education Fair	23-08-2022	1008
5	One to One Counselling for Final Year Engineering Students	01-09-2022	204
6	Awareness about Microsoft, Apple, EC Council, Autodesk, Online Certification	24-10-2022	610
7	One to One follow-up Counselling for Final Year Engineering Students	17-01-2023	219
8	NPTEL course awareness and registration	21-01-2023	ALL students
9	Opportunities for Higher Studies Abroad	24-02-2023	484
10	Webinar on Higher Studies Opportunities in Germany	25-04-2023	315
11	Awareness about Competitive Exam (GRE, TOEFL, IELTS, CAT)	25-04-2023	131

Event Detail: - TCET organized its Third Education Fair with the sustenance of HOC Cell in collaboration with Imperial Overseas Education consultant on 23st August, 2022.

Participation in Edufair				
BRANCH	**SE**	**TE**	**BE**	**TOTAL**
COMP	105	104	24	233
CSE	49	0	0	49
INFT	37	104	18	159
MECH	19	38	15	72
CIVIL	30	50	19	99
E&TC	43	56	12	111
ELEX	0	25	10	35
E&CS	46	9	3	58
IOT	9	3	0	12
AIDS	31	55	1	87
AIML	14	37	0	51
MME	42	0	0	42
TOTAL	**425**	**481**	**102**	**1008**

Note: In the second Education fair held in A.Y. 2018-19, 1385 students participated whereas for the Third Education Fair held in AY 2022-23 the number of students participated is 1008.

One-to-One Counselling by HOC

HOC Cell organized a counselling session for all the students of final year, who gave consent for higher studies. The final-year students participated in the activity, which was conducted with the objective of creating awareness amongst the students about higher education and also provide them guidance with regard to higher study programmes. The following main points were discussed during this counselling session:

1) Student profile building and guidance
2) Selection of higher study programme
3) Country selection for higher studies
4) Competitive examination selection and scheduling
5) Guidance about application process to various overseas universities
6) Scholarship opportunities in higher studies
7) Provided guidance for education loan and visa processing.

Batch	Dated	Total Student Admitted	No of student Opted for Higher Studies	No of Student counselled
2023	1st Aug 2022 to 20th Aug 2022	852	304	204
	17th Jan 2023 to 4Th Feb 2023			219

b) **Internships Undertaken**

Internships are mandated to students to improve their technical skills, for all round development and to get the right career with the right type of job in all levels of organizations. The internship activities enhance knowledge, skill, attitude, and the right kind of aptitude to meet the manpower requirements of the industry. Such internships are structured and short-term, and involve supervised placements often focused on particular tasks or projects with defined timescales. The objectives to do internship include

test of theoretical knowledge in the real world, gain practical knowledge, hands-on experience, strengthen networking with industry personnel and understand industry's requirement and find role-models. The Training & Placement Cell of the institute is a facilitator and counsellor for training and placement related activities of internship both at the in-house (Social & technical) and out-house. There has been a consistent growth in the students' undergoing internships in their areas of interest during each academic year leading to improvement in their employability skills.

Academic Year	Number of Participants
2022-23	3371
2021-22	2630
2020-21	2563
2019-20	1562
2018-19	1085

Details of Internships undertaken during the academic year is mentioned in Annexure – I

Internship Summary of the academic year:

COMP				E&TC				IT				E&CS			
In-house	Out-house		Total	In-house	Out-house		Total	In-house	Out-house		Total	In-house	Out-house		Total
	Company	Course			Company	Course			Company	Course			Company	Course	
421	364	0	**785**	276	175	**0**	**451**	278	136	0	**414**	140	71	0	**211**

MECH				CIVIL				AI&DS				AI&ML			
In-house	Out-house		Total	In-house	Out-house		Total	In-house	Out-house		Total	In-house	Out-house		Total
	Company	Course			Company	Course			Company	Course			Company	Course	
70	67	**0**	**137**	149	287	0	**436**	70	0	0	**70**	166	73	0	**239**

IoT				ES&H				MME				Overall			
In-house	Out-house		Total	In-house	In-house		Total	In-house	Out-house		Total	In-house	Out-house		Total
	Company	Course			Company	Course			Company	Course			Company	Course	
36	**33**	**0**	**39**	33	1000	**0**	**1000**	68	0	0	**68**	2674	1206	0	3850

1.1.4. Faculty Profile and Quality

The faculty profile and quality are measured on the basis of faculty qualification, faculty cadre, faculty retention, experience, and faculty appointments on regular basis. It is noted that, at regular intervals as per the increase in student sanctioned intake, the institute has taken timely action and complied with the statutory and regulatory guidelines with respect to faculty recruitment for effective and smooth conduct of the academic programmes and other related activities. There has been a consistent increase in gender ratio proportion, faculty qualification enhancement (during their tenure at the institute), faculty cadre, and faculty retention.

Faculty Qualification																				
	TCET					COMP					IT					E&TC				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
PhD/MPhil	56	53	45	40	30	09	10	10	9	4	7	9	5	7	4	9	9	6+1*	5	5
ME/MTech	143	145	146	123	133	24	27	22	19	26	16	14	21	21	24	16	20	21	22	24
MSc/MA	23	22	16	9	10	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
BE/BTech	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Total	**222**	**220**	**207**	**172**	**175**	**33**	**37**	**32**	**28**	**31**	**23**	**23**	**26**	**28**	**28**	**26**	**29**	**28**	**28**	**30**

	E&CS					MECH					CIVIL					ES&H				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
PhD/MPhil	3	5	2+1*	2	2	2	2	2+1*	2	2	3	2	2	2	2	17	16	15	13	11
ME/MTech	9	8	12	13	13	18	23	23	21	21	16	22	22	18	18	22	20	25	9	7
MSc/MA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	22	16	8	9

BE/ BTech	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Total	**12**	**13**	**15**	**15**	**15**	20	**25**	**26**	**23**	**23**	**19**	**24**	**24**	**20**	**21**	**62**	**58**	**56**	**30**	**27**

	AI&DS					AI&ML					IoT					MME				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
PhD/ MPhil	1	0	-	-	-	02	0	-	-	-	1	0	-	-	-	2	-	-	-	-
ME/ MTech	6	4	-	-	-	07	4	-	-	-	5	3	-	-	-	4	-	-	-	-
MSc/MA	0	0	-	-	-	0	0	-	-	-	0	0	-	-	-	0	-	-	-	-
BE/ BTech	0	0	-	-	-	0	0	-	-	-	0	0	-	-	-	0	-	-	-	-
Total	**07**	**4**	**-**	**-**	**-**	**09**	**4**	**-**	**-**	**-**	**6**	**3**	**-**	**-**	**-**	**6**	**-**	**-**	**-**	**-**

Faculty Cadre																				
	TCET					COMP					IT					E&TC				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Prof./ A.Prof.	15	13	13	15	12	03	3	2	3	2	3	4	3	4	3	4	4	5	5	4
Asso. Prof.	21	19	14	13	10	05	4	5	4	2	3	2	2	2	2	5	4	2	2	1
Asst. Prof.	186	187	179	142	147	25	30	25	21	25	17	17	21	22	23	17	21	21	21	25
Other	0	1	1	2	6	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Total	**222**	**220**	**207**	**172**	**175**	**33**	**37**	**32**	**28**	**31**	**23**	**23**	**26**	**28**	**28**	**26**	**29**	**28**	**28**	**30**

	E&CS					MECH					CIVIL					ES&H				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Prof./ A.Prof.	1	1	1	1	1	1	2	2	2	2	1	0	0	0	0	0	0	0	0	0
Asso. Prof.	2	3	3	3	3	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0
Asst. Prof.	8	9	11	11	11	19	23	24	21	21	16	22	22	18	18	62	57	55	28	24
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	2	3
Total	**12**	**13**	**15**	**15**	**15**	**1**	**25**	**26**	**23**	**23**	**19**	**24**	**24**	**20**	**21**	**62**	**58**	**56**	**30**	**27**

	AI&DS					AI&ML					IoT					MME				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Prof./ A.Prof.	0	0	-	-	-	1	0	-	-	-	0	0	-	-	-	1	-	-	-	-
Asso. Prof.	1	0	-	-	-	1	1	-	-	-	1	1	-	-	-	1	-	-	-	-
Asst. Prof.	6	4	-	-	-	7	3	-	-	-	5	2	-	-	-	4	-	-	-	-
Other	0	0	-	-	-	0	0	-	-	-		0	-	-	-	0	-	-	-	-
Total	**7**	**4**	**-**	**-**	**-**	**9**	**4**	**-**	**-**	**-**	**6**	**3**	**-**	**-**	**-**	**6**	**-**	**-**	**-**	**-**

Faculty Experience in Years. Months (Not decimal)																				
	TCET					COMP					IT					E&TC				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2020-21	2019-20	2018-19	2017-18
Min.	0.5	0.09	0.02	1.10	0.05	1.00	1.00	1.00	3.05	1.08	1.2	9.03	7.00	3.10	0.05	0.5	5.07	2.03	2.06	1.08
Max.	34.7	42.00	36.00	40.00	39.00	30.00	29.00	27.00	40.00	39.00	25.6	25.11	24.08	23.11	22.11	20	34.02	36.00	36.08	35.08
Avg.	12.74	15.00	09.06	13.01	11.11	13.25	12.24	11.03	13.05	11.11	15	17.06	08.05	14.08	13.07	11.5	17.00	15.03	16.01	13.11
Med.	10.95	13.11	11.05	12.02	11.00	13.00	12.00	11.05	12.05	11.00	14.6	17.01	13.05	14.06	13.06	14.5	18.00	16.08	17.07	15.03

	E&CS					MECH					CIVIL					ES&H				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Min.	7	6.00	2.02	4.00	2.04	3	1.07	0.02	2.07	1.09	6.0	5.07	0.03	2.06	1.06	1	0.09	2.00	1.10	1.00
Max.	32.10	34.09	29.00	30.11	29.11	29	29.10	28.06	27.10	26.10	34.7	32.09	32.07	30.09	29.09	31.4	42.00	29.02	29.07	28.07
Avg.	16.1	17.10	13.11	14.08	13.06	15	13.00	10.08	11.02	10.01	11.4	11.01	1.06	8.07	7.03	15	14.00	09.08	12.04	12.01
Med.	15.1	16.01	13.04	13.09	12.09	8.04	11.00	7.07	9.00	8.00	9.0	8.10	7.00	6.11	5.01	13	12.11	08.05	11.02	10.02

	AI&DS					AI&ML					IoT					MME				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Min.	2	6.00	-	-	-	3.8	11.06	-	-	-	4	12.09	-	-	-	3	-	-	-	-
Max.	17.4	42.00	-	-	-	19.6	36.00	-	-	-	16	40.03	-	-	-	29	--	-	-	-
Avg.	9.7	20.03	-	-	-	10.2	24.08	-	-	-	8	22.06	-	-	-	15	-	-	-	-
Med.	5.7	16.06	-	-	-	10	25.06	-	-	-	8	14.06	-	-	-	**9.5**	-	-	-	-

Faculty Appointment			
TCET	COMP	IT	E&TC

	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Regular	104	121	127	132	137	15	18	20	20	22	14	22	22	24	24	19	22	23	23	25
Ad-Hoc	118	99	80	40	38	18	19	12	8	9	9	1	4	4	4	7	7	5	5	5
Total	**222**	**220**	**207**	**172**	**175**	**33**	**37**	**32**	**28**	**31**	**23**	**23**	**26**	**28**	**28**	**26**	**29**	**28**	**28**	**30**

	ELEX					MECH					CIVIL					ES&H				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Regular	7	11	13	14	15	15	16	17	19	19	15	15	16	15	15	14	15	16	17	17
Ad-Hoc	5	2	2	1	0	4	9	9	4	4	4	9	8	5	6	48	43	40	13	10
Total	**11**	**13**	**15**	**15**	**15**	**19**	**25**	**26**	**23**	**23**	**19**	**24**	**24**	**20**	**21**	**62**	**58**	**56**	**30**	**27**

	AI&DS					AI&ML					IoT					MME				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Regular	1	0	-	-	-	1	1	-	-	-	2	1	-	-	-	1	-	-	-	-
Ad-Hoc	6	4	-	-	-	8	3	-	-	-	4	2	-	-	-	5	-	-	-	-
Total	**7**	**4**	**-**	**-**	**-**	**9**	**4**	**-**	**-**	**-**	**6**	**3**	**-**	**-**	**-**	**6**	**-**	**-**	**-**	**-**

Gender Ratio																				
	TCET					COMP					IT					E&TC				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Male	107	97	101	90	93	10	10	8	7	10	14	13	14	15	15	11	8	10	11	12
Female	115	123	106	82	82	23	27	24	21	21	9	13	14	13	15	15	21	18	17	18
Total	**222**	**220**	**207**	**172**	**175**	**33**	**37**	**32**	**28**	**31**	**23**	**26**	**28**	**28**	**30**	**26**	**29**	**28**	**28**	**30**

	E&CS					MECH					CIVIL					ES&H				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Male	5	6	5	6	5	16	21	22	20	20	11	10	11	11	12	30	28	32	21	19
Female	7	7	10	9	10	3	4	4	3	3	08	14	13	9	9	32	30	24	9	8
Total	**12**	**13**	**15**	**15**	**15**	**16**	**25**	**26**	**23**	**23**	**19**	**24**	**24**	**20**	**21**	**62**	**58**	**56**	**30**	**27**

	AI&DS					AI&ML					IoT					MME				
	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19	2022-23	2021-22	2020-21	2019-20	2018-19
Male	3	1	-	-	-	1	0	-	-	-	1	0	-	-	-	5	-	-	-	-
Female	4	3	-	-	-	8	4	-	-	-	5	3	-	-	-	1	-	-	-	-
Total	**7**	**4**	**-**	**-**	**-**	**9**	**4**	**-**	**-**	**-**	**6**	**3**	**-**	**-**	**-**	**6**	**-**	**-**	**-**	**-**

1.1.5. Honours and Recognitions Received by the Faculty

The faculty members, who joined at the initial stage of the institute, have gained experience, and attempted to create their presence felt through their contributions at various levels. The faculty members have strengthened the R&D through research publications, patents and copyrights, peer recognitions and awards, and research grants from various funding agencies such as UoM, AICTE, IEDC, DST, etc. The faculty members also participate in inter-university, inter-state, and national-level competitions like the Smart India Hackathon (SIH), where they have been winners in a few selected categories. The students and faculty members are encouraged to take part in various national and international S&T events and competitions to enhance their technical competency. Innovative ideas are encouraged and considered for technical writing among students, IPR/ copyrights and patents, awards, and recognitions. Various workshops and webinars are organized in emerging areas, where students are given exposure to latest technologies beyond syllabus. This activity also helps in bridging the gap between academia and industry and provides opportunity to students for further enhancing their professional skills.

Sr. No.	Name of faculty member	Event	Honours/Recognitions received	Date
1	Dr. Lochan Jolly	Educational activity committee	Educational activity committee Chair	29-04-2023
2	Dr. Sanjeev Ghosh	Conference Organizing Committee Meet	IEEE POCO	08-12-2022
3	Dr. Arpit Rawankar	Research	Visiting Researcher at Tata Institute of	14-01-

			Fundamental Research	2023
4	Mrs. Archana Deshpande	BEQET competition	2nd Prize winner	04-02-2023
5	Dr. Sukruti Kaulgud	STEM Programs	IEEE BS EAC committee along with IEEE TCET Student Branch	06-04-2023

List of Expert/ Invited Talks Delivered during AY 2021-22 can be seen in Annexure – II

1.1.6. Preparation of Academic Calendar

Academic Calendar is prepared on semester basis which includes all activities held in each 6 months complete span (July to December & January to June) considering the university calendar, the list of holidays, students' activities, etc. The academic calendar is prepared with the integration of list of activities to be conducted from all professional body chapter from departments, placement office activities, HOC cell activities, NSS, NCC, EWT activities, IPR cell activities, student council activities, TEDx activities etc. Initially, a tentative academic calendar is released 21 days before the semester commencement. The tentative calendar is shared with all HODs at the beginning of each semester to receive inputs/suggestions for incorporating if in case any activities are left out or the academic calendar is required to be moderated. The academic calendar is conducted for initial 15 days after that if there are any lapses still found are then added in the academic calendar to finalize it. The Heads of the Departments prepare departmental calendar in alignment with the institute's academic calendar. Academic calendar is notified on notice board and website.

According to the academic calendar prepared at the institute level, the following academic activities are conducted for 15 weeks in each semester which includes conduct of theory/ practical. The In-semester assessment is conducted during 5th, 11th, 15th week for SE & TE students whereas the In-Semester Assessment for BE is conducted in 7th - 8th week followed with Retest during the 11th week.

The open house is also conducted for students for improvisation in marks scored in In-Semester Assessment. The Term work submission is carried out during the 16th - 17th week of semester followed by End semester Oral/ practical examinations is conducted during the 18th week; preparation leave in 19th week, 20th – 21st week the Semester-End Examination is conducted with all ATKT examinations held in 24th week. The internships are conducted between 22nd – 26th week of the semester and during 26th week. The conduct of specialization in-house examination is also conducted in 26th week of semester.

Academic calendars can be found under "Education" section on https://www.tcetmumbai.in/

Students are informed about these internal examinations well in advance by the department and examination section. Internal assessment dates are also provided by the college in the proposed academic calendar prepared at the beginning of each semester. Students are informed about the university notices and circulars related to the examinations from time to time through student notice board, departmental notice boards, and college website.

1.1.7. Curricular, Co-Curricular, Extra-Curricular and Professional Body Activities

a) **Curricular Activities:**

Curriculum under autonomy prepared for global career through holistic and multidisciplinary education with provision for specialization and minor subjects. The conduct of technical seminars, webinars to students in emerging areas of Technology from industry experts.

Odd Semester Activities AY 2021-22

FE/ FT

Activity	Start Date	End Date
Semester Duration	04-11-2022	25-02-2023
ISE1	19-12-2022	23-12-2022

Activity	Start Date	End Date
ISE2	23-01-2023	27-01-2023
Sem End Exam Oral- Pract.	30-01-2023	104-02-2023
Sem End Exam Theory	06-02-2023	17-02-2023
Sem Review	22-04-2023	-
Results Regular	16-03-2023	-
Results ATKT	In Process	-

SE /ST to BE/ BT

Activity	Start Date	End Date
Semester Duration (SE to BE)	5/7/2022	4/1/2022
SE : ISE 1	26/9/2022	28/9/202
ISE 2	1/11/2022	3/11/2022
ISE 3	30/11/2022	2/12/2022
TE : ISE 1	3/8/2022	5/8/2023
ISE 2	12/9/2022	14/9/2022
ISE 3	12/10/2022	14/10/2022
ISA Exam (TE and BE)	12/9/2022	16/9/2022
Sem End Exam Oral/Pract. SE TE/BE	12/12/2022 31/10/2022	17/12/2022 7/11/2022
Innovative Examination (IE) SE TE	5/12/2022 17/10/2022	7/12/2022 19/10/2022
Sem End Exam Theory (SE to BE)	SE: 26/12/2022 TE and BE: 25/11/2022	4/1/2023 8/12/2022
Sem Review (SE to BE)	22/12/2022	22/12/2022
Results Regular (SE to BE)	SE 19/1/2023 TE : 29/12/2022 BE: 24/3/2022	19/1/2023 29/12/2022 24/3/2022

Even Semester Activities AY 2021-22

FE/ FT

Activity	Start Date	End Date
Semester Duration	27-02-2023	30-06-2023
ISE1	03-04-2023	07-04-2023
ISE2	22-05-2023	27-05-2023
Summer Internship	19-06-2023	30-06-2023
Sem End Exam Oral-Pract.	29-05-2023	03-06-2023
Sem End Exam Theory	05-06-2023	17-06-2023
Sem Review	20-07-2023	-
Results Regular	24-07-2023	-
Results ATKT	In Process	-

SE /ST to BE/ BT

Activity	Start Date	End Date
Semester Duration (SE to BE)	1/1/2023	30/6/2023
SE & TE : ISA 1	27/2/2023	1/3/2023
ISA 2	27/3/2023	29/3/2023
ISA 3	26/4/2023	28/4/2023
ISA Exam (BE)	27/3/2023	1/4/2023
Summer Internship Internship Evaluation	May 2023 20/06/2023	June 2023 23/06/2023
Innovative Examination (IE)	2/5/2023	3/5/2023
Sem End Exam Oral/Pract. (SE to BE)	8/5/2023	12/5/2023
Sem End Exam Theory (SE to BE)	22/5/2023	3/6/2023
Sem Review (SE to BE)	31/5/2023	31/5/2023
Results Regular (SE to BE)	SE 11/7/2023 TE 6/7/2023 BE 21/6/2023	11/7/2023 6/7/2023 21/6/2023
Results ATKT (SE to BE)	Not declared	Not Declared

Innovative Learning Leading to Effective Evaluation and Assessment:

The objective was to ensure and continue the teaching learning process in a seamless manner, strengthen the students' critical thinking and problem-solving skills, apply the knowledge gained in real-time situations, develop research and innovation capacity and design and development skills, with overall holistic development of the student.

- Digital platforms like the Google Classroom, Zoom and Google Meet are used by the teachers for teaching and learning process. Online lectures & practical, necessary study material are uploaded on GCRs and ERP.
- Zoom platform was used for doubt solving sessions, project progress demonstrations/ presentations and oral/ practical examination.
- Google classroom was used for sharing learning resources- PPTs, notes, Topic wise contents, Conduct Formative Assessment test and Summative Assessment.
- Assignments and notes are uploaded in ERP-Academic Monitoring module.
- After the pandemic, the lectures and lab were conducted in blended mode. extra sessions were taken by the faculty for doubt solving.

Technical Seminar:

Sr. No.	Department	Name of Program	Dates	No of Students
1	COMP	Cloud Computing, Mr. Ankur Sinha, Specialist in Cloud Infra and Services, L&T Infotech, Mumbai (SE)	29-09-2022	179
		Data End to End Analysis (TE), Mr. Rohil Singh, Data Engineer, Glints, Singapore	25-08-2022	167
		Social Media Marketing (BE), CEO, Bloomzen Infosolutions Pvt.Ltd.,Thane (W)	17-08-2022	163
		Software Testing, Mr. Mitesh Deodhar, QA Engineer, Zeus Learning, Mumbai (SE)	06-03-2023	159
		The Illustrated Transformer in NLP, Mr. Devarat Singh Bisht, Software Engineer, J.P.Morgan Chase, Mumbai (TE)	06-03-2023	135
		DevOps, Mr. Sanket Berde, Black currant Labs, Black currant Labs, Mumbai(BE)	06-03-2023	105
		Git and Github, Ms. Ashita Prasad, Business consultant, Flutter gems, Mumbai (TE)	14-03-2021	200
		Game Development, Mr. Sumit Jain, Technical Architect, XR Innovative tech, Mumbai (TE)	14-04-2023	135
2	E&TC	Exact Application of Signals and Systems and EM (SE)	06/04/2023	95
		Networking Applications in Industry (TE)	24/03/2023	39
		Microsoft Azure Data Platform (BE)	11/04/2023	64
3	IT	Competitive Programming	20th September ,2022	108
		NoSQL & Web Programming- Creating Applications using Node.js and MongoDB	10th Aug ,2022	122
		Auzre ML (Machine Learning in IT Application Development)	10th Aug ,2022	94
		Low-Code No-Code Technology	5th April ,2023	121
		Harnessing the power of AI/ML with CHATGPT	5th April ,2023	127
4	ELEX	Emerging Technologies in Electronics Engineering	18th April 2023	TE & BE
5	CIVIL	CAREER OPPORTUNITIES IN GOVERNMENT, DEFENCE AND PARAMILITARY SECTOR REPORT	12/8/2022	128
		Rebarman Software- "Centre Of Excellence And Training Program For Civil Engineers"	8/2/2023	70
		Climate Change and Sustainability-The Future	3/3/2023	40
6	AI&DS	Basics of Backend and Data Engineering	30/09/2022	110
		"NLP: Attention is all you need"	08-03-2023	38
		"Scope of SDET Role"	21-03-2023	54
7	AI&ML	Robotics Process Automation	22/09/2022	S.T. AI&ML
		Computer Vision in Artificial Intelligence	29/07/2022	T.T. AI&ML
		Best Coding Practices	13/03/2023	S.T. AI&ML

Sr. No.	Department	Name of Program	Dates	No of Students
		Data Journey Towards ML insights	10/03/2023	T.T. AI&ML
8	IoT	Solar Energy implementation in projects, 4 Life Energies	15/09/2022	ST, SE &TT
		Implementation of IoT in Industry and Project, BuilTINT	16/9/2022	31
		Learn and identify various healthcare issues and implementations using IoT technology, Glutrac	14/10/2022	103
		Future of IoT in Retail Sector.	29th March 2023	SE & TE

b) **Co-curricular Activities:**

Under autonomy, co-curricular activities are incorporated through Professional skills, ESD, PBL and RBL with well-defined curriculum and the credits. Activities are spread over the semester and in alignment with the professional development as per the AICTE guidelines. Similarly, ABL events are conducted on every Friday as per timetable for 2 to 3 hrs through well-defined curriculum. Outreach, Extension, and social programmes are also the part of co-curricular activities. Moreover, it includes teaching-learning on life skills as per UGC and Induction programme curriculum of AICTE. To expose the student to industry/ corporate environment, institute has created the provision of internship at UG and PG levels during summer vacation. In addition, a large number of activities are conducted as per the previous practices under professional and social bodies of student chapter. These activities include activities done at institute level, department level and section level. These activities are to promote Holistic Student Development (HSD).

The following activities have been conducted:

i) For Odd semester, ABL, PBL, RBL and ESD activities will be conducted throughout the semester.
ii) ABL activities were conducted 23rd Jan - 27th Jan 2023 (Even Sem) on the theme of problem, solution, design, and product. Many students came out with the prototype on waste management (Technical and Non-Technical).
 iii) PBL activities were conducted for SE & TE during PBL weeks, 16th - 20th Jan 2023 and 30th Jan - 2nd Feb 2023 (Even Sem) on the theme of 'INSPIRATION, RESEARCH, IDEATION & IMPLEMENTATION
iv) RBL activities were conducted for TE and BE during RBL weeks, 16th - 20th Jan 2023 and 23th - 27th Jan 2023
 v) ESD activities were conducted for SE and TE from 6th - 10th Feb 2023 and 30th Jan - 3rd Feb 2023 respectively.

c) **Extra-Curricular Activities:**

ODD SEMESTER

   o   Samvaad 1.0: 29th August 2022
   o   Teachers' Day Celebration: 5th September 2022
   o   Bollywood Day: 23rd, 26th & 29th September 2022
   o   Garba Celebration: 30th September 2022
   o   REFLEX 4.0: 14th to 16th September 2022
   o   Booster Dose Vaccination: 8th & 10th August 2022
   o   Azadi ka Amrit Mahotsav: 13th to 15th August 2022
   o   Zephyr: 06th – 08th October 2022
   o   Bootcamp: 16th October 2022
   o   LeaderCon: 15th October 2022
   o   Student Leadership Program: 28th July 2022
   o   Engineer's Day: 15th September 2022
   o   IndiaBulls Seminar: 27th July 2022

- o Debate-E-Darbar: 27th of August to 12th September 2022
- o Samvaad 1.2: 21st October 2022
- o Personality Development seminar for Women: 26th August 2022

EVEN SEMESTER

- o Sojourn: 16th & 17th March 2023
- o Fiesta: 18th March 2023
- o Women's Day: 10th March 2023
- o Matribasha Divas: 17th February 2023
- o T-Spark: 6th February to 9th February
- o ENERTIA: 10th February to 19 February
- o Hackanova: 20th January to 21st January

d) **Professional Body Activities:**

TCET believes that students should be provided with an environment which fosters not only academics but also helps in personality development. It is required for the overall growth of the students. Personality development opportunities are provided through co-curricular and the extra-curricular activities which are organized by various students' forums like MUN, ISTE, IEEE, CSI, IETE, ACM, ASME, NSS, EWT etc. at inter- / intra-collegiate level.

The details of Professional Body Activities can be seen in Annexure XI.

1.1.8. Evaluation and Evaluation Process Reforms.

Reforms Initiated on Continuous Internal Evaluation (CIE) System at the Institutional Level:

Continuous evaluation is carried out for assessing the learning of the students on regular basis from the start of semester on weekly and monthly basis as well as mid-semester and semester-end examinations. Weekly evaluation is done for practical performance/ tutorial/ project, quizzes, surprise test, etc. Monthly evaluation is for Formative assessment and remedial work done by the students who are weak on certain points (academically weak, slow learners, and others). Mid-term evaluation includes compliance for term work, assignment, internal examination and mid semester review of the student classroom participation, and the laboratory work. At each stage of evaluation, students are categorized into three levels (Level-I: Low, Level-II: Medium, Level-III: High) and the students' performance is communicated to them. The In-semester assessment is planned during the 8th-9th week of the semester, which is followed by the Retest during the 10th-11th week of the semester, term work submission during 18th week, oral/practical exams in 19th week, followed at the end of semester in 21st week and all ATKT/ supplementary examinations in the 24th week as per academic calendar.

The evaluation of the term work is done and granted by the subject teacher. Further this granted list is to be approved by the competent authority. The term work is assessed on regular basis and the records are maintained with the concerned laboratories. In the examinations, the effort is taken to align the question paper with Revised Bloom's Taxonomy (RBT) model, which helps the institute to understand the attainment of course outcomes (COs) and programme outcomes (POs), as per the institute guidelines within the framework of a Choice Based Credit Grading System for Holistic Development (CBCGS-HME 2020).

The AICTE examination reforms help in attainment of POs. For the development of POs to meet requirements of outcome-based learning (OBE) model, the examination system is learner-centric to ensure that learning be tested using the RBT model and Performance Indicator (PI), which in turn is linked to CA (competencies to be attained) and then to POs.

Institute Level Reforms: The examinations (In-Semester assessment, End-Semester Examinations, Practical/ Major Projects/ Orals) were conducted in offline mode. Overall conduct of the examination was smooth.Open house was conducted after provisional result declaration with amendment in marks to resolve the grievances and supplementary examinations were also conducted.

1.1.9. Student Performance for the Academic Year

The students' performance measured as academic results for the past batches has been consistently over 95% in the informal teaching. The addition of beyond curriculum components such as PBL, RBL, ESD, professional skills, blended learning, etc. in autonomous formal system has sustained and improved the overall success rates of all the batches across the Departments.

			2022-23	2021-22	2020-21	2019-20	2018-19
COMP	No. of Students	Appeared	213	154	141	149	163
		Passed	213	154	141	149	161
		Pass %	100%	100%	100%	100%	99%
E&TC	No. of Students	Appeared	137	147	142	144	163
		Passed	135	147	142	144	150
		Pass %	98.54%	100%	100%	100%	92%
IT	No. of Students	Appeared	141	140	145	151	154
		Passed	141	140	145	151	154
		Pass %	100%	100%	100%	100%	100%
E&CS	No. of Students	Appeared	139	72	68	74	78
		Passed	120	71	68	74	76
		Pass %	100%	98.61%	100%	100%	97%
MECH	No. of Students	Appeared	339	139	154	140	149
		Passed	312	138	154	140	144
		Pass %	88.7%	99.28%	100%	100%	97%
CIVIL	No. of Students	Appeared	151	150	149	136	151
		Passed	143	150	149	136	142
		Pass %	94.7	100%	100%	100%	94%
AI&ML	No. of Students	Appeared	137	-	-	-	-
		Passed	136	-	-	-	-
		Pass %	99.27%	-	-	-	-
AI&DS	No. of Students	Appeared	139	-	-	-	-
		Passed	136	-	-	-	-
		Pass %	97.84	-	-	-	-
MME	No. of Students	Appeared	142	-	-	-	-
		Passed	110	-	-	-	-
		Pass %	77.5%	-	-	-	-
IoT	No. of Students	Appeared	33	-	-	-	-
		Passed	33	-	-	-	-
		Pass %	100%	-	-	-	-
TCET	No. of Students	Appeared	1571	802	799	794	858
		Passed	1479	800	799	794	827
		Pass %	94.14%	99.75%	100%	100%	96.39%

Graduate Aptitude Test in Engineering (GATE) Training

Under the auspices of Thakur Institute of Career Advancement (TICA), the Departments conducts an efficiently monitored course for preparing students for the Graduate Aptitude Test in Engineering (GATE).

GATE-2023

Sr. No.	Name	GATE marks	GATE Score	AIR	Batch
1	SIKHWAL MANONEET MAHESH	59	649	774	2022-23
2	AGARWAL NAMAN VIPIN	34	367	9213	2022-23
3	PANDEY VISHAL SAHABDEEN	29.33	314	14440	2022-23
4	KHAN UMAIR JAMIL AHMED	28	299	16457	2022-23
5	YADAV NEELAM PRAKASH	22	232	27749	2022-23

Sr. No.	Name	GATE marks	GATE Score	AIR	Batch
6	GUPTA CHANCHAL	-	649	774	2022-23
7	CHOUDHARY ROSHAN	-	543	2167	2022-23
8	VIPUL SHYAMSUNDAR PRASAD YADAV	-	364	7838	2022-23
9	PARTH SANKHE	-	372	7495	2022-23
10	TODMAL SHREYA ATUL	37.67	521	117	2022-23
11	RATHOD SHREYAS	61	671	608	2022-23
12	USADADIYA PRIYANK PRAKASH	50.94	640	1383	2022-23
13	SINGH AMAN KUMAR	33.33	386	10168	2022-23

1.1.10. Students Mentoring System

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 following details:

- Personal details of students like residential address, contact number, parents' occupation, parent's contact details
- Score before taking admission in engineering i.e., HSC and SSC marks
- Workshops attended
- Competitive examinations given
- Internships
- Projects undertaken
- Extra/co-curricular activities participation.

Other than this, a record of the attendance per month, subject-wise in-semester assessment marks obtained during the semester and 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 mentees, 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 counselling 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.

Year	Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
2022-23	3894 (UG) + 10 (PG) + 21 (PhD) + 64(B. Voc) = 3942	222	1:20
2021-22	3570 (UG) + 12 (PG) + 28 (PhD) = 3610	220	1:20
2020-21	3337 (UG) + 25 (PG) + 30 (PhD) = 3392	206	1:20
2019-20	3049 (UG) + 36 (PG) + 30 (PhD) = 3115	168	1:20
2018-19	3172 (UG) + 39 (PG) + 30 (PhD) = 3251	183	1:20
2017-18	3175 (UG) + 44 (PG) + 9 (PhD) = 3228	177	1:20
2016-17	3021 (UG) + 65 (PG) + 9 (PhD) = 3095	169	1:20

1.2. Research Activities:

Understanding the need of encouraging engineering graduates towards pursuing research, the TCET Research & Development Cell was setup in the year 2013. Under this Cell, the technical talent of students is nurtured. It gives them a platform to check the feasibility of their ideas by developing small circuits or projects under hobby club facilities, applying for research grants from various agencies etc. There are various activities conducted under Research based learning (RBL) e.g., Idea presentation,

Group discussion, debates, Business canvas and pitch presentations, industry linkage, IPR, Consultancy, Grants and Patent related sessions, project competitions etc. The projects developed by students in RBL, and Major Project are evaluated at various levels, first at the department level and then at institute level by experts from reputed academic institutes and industries for maintaining quality of work. The projects which have the potential of being converted into products are reviewed by expert entrepreneurs and industrialists. Furthermore, students are encouraged to take part in various national and international level competitions to enhance their technical competency. Innovative ideas are even considered for Intellectual Property Right like copyrights and patents. Various workshops and webinars are also organized, where students are given exposure for latest technologies beyond syllabus which helps them to bridge the gap between academia and industry, and for skill enhancement.

1.2.1. Research Funds Sanctioned and Received from Various Agencies during the academic year

Name of the Investigator	Dept.	Title of the project and duration	Amount sanctioned	Funding Agency	Year
Dr. Lochan Jolly	E&TC	IKS	Rs. 7,50,000	-	2022-23
Dr. Lochan Jolly	E&TC	IKS	$600	IEEE R10	2022-23
Dr. Kalawati Patil	IT	IKS	Rs. 7,50,000	-	2022-23
Mr. Prashant Narayane	CIVIL	Mission AmriMission Amrit Sarovar – Jal Dharohar Sanrakshan Internshipt Sarovar	2,00,000/-	AICTE	2022-23
Dr. Seema Jagtap Mr. Prashant Narayane	CIVIL	IKS internship Water resources development and management using ancient Indian knowledge system.	7,50,000/-	IKS	2022-23

SrNo	Faculty	Amount	Grant received
1	Mrs. Vaishali Nirgude	1.2 Lakhs	15th Maharashtra state inter-university research competition

1.2.2. Innovation Ecosystem

Research plays a vital role in the success of any institution. Fundamental research in the field of engineering is a national challenge. Quality research in technology is the need of the hour for sustainable growth. In order to provide a strong platform to the researchers, academicians and scholars, the institute regularly organizes various national and international-level conferences, symposia and seminars, workshops and colloquium and encourages for copyrights and patent activities. These initiatives enable the stakeholders to build their capacity for critical examination and sound judgment, thereby facilitating them to contribute to the existing body of knowledge though R&D activities.

a) **Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative Practices during the Year includes:**

- Intellectual Property Rights (IPR):

Title of Workshop/Seminar	Name of the Dept.	Name of the Speakers	Date(s)
Importance of IPR lecture for BE students	IP Creation team	Dr. Vinitkumar Dongre	16/07/2022
Journal Selection Criteria for Publication and Quality Aspects in Scientific Paper Publication	IP Creation team	Dr. Arpit Rawankar, Dr. Mehboobsaab Nadaf, Dr. Sukruti Kaulgud	07/10/2022
Basics of Quality Research Paper Writing and Publishing	IP Creation team	Dr. Mehboobsaab Nadaf, Dr. Sukruti Kaulgud	10/03/2023
Patent Awareness and Filing Procedures	IP Creation team	Mr. Jatin Darve (NIPAM)	24/03/2023
Journal Selection Criteria for Publication in UGC care and Scopus/WOS	IP Creation team	Dr. Arpit Rawankar, Dr. Mehboobsaab Nadaf, Dr. Sukruti Kaulgud	19/04/2023

Title of Workshop/Seminar	Name of the Dept.	Name of the Speakers	Date(s)
Seminar on Indian Patent Application Drafting	IP Creation team	Mr. Dnyaneshwar Kamble & Dr. Vinitkumar Dongre	26/04/2023

- Industry-Academia Innovative Practices:

Title of Workshop/Seminar	Name of the Dept.	Name of the Speakers	Date(s)
CAREER OPPORTUNITIES IN GOVERNMENT, DEFENCE AND PARAMILITARY SECTOR REPORT	CIVIL	Cdr. Vijaypratap Singh	12/8/2022
Rebarman Software- "Centre Of Excellence And Training Program For Civil Engineers"	CIVIL	Mr. Muniraja (Rebar Software)	8/2/2023
Climate Change and Sustainability-The Future	CIVIL	Mr. Shivram Shethuraman, Dr. Karan Sadhawani and Mr, James Samuel, AWT Energy	3/3/2023

b) **Details of Teachers Awarded with National/International Fellowship for Advanced Studies/ Research During the Year**
   Nil

c) **No. of Incubation/ Start-ups during the year**
   Nil

1.2.3. Research Publications

Thakur College of Engineering & Technology brought out the first issue of its annual magazine QUASAR in the year 2010. Since then, every issue of the magazine has been meticulously handled by the Editorial Committee, which comprises of both faculty and student members. In QUASAR are showcased inspiring and enlightening articles of interest to students, researchers, and teachers.

There is yearly increase in the faculty and students' publications in international conferences. The institute has also provided a platform for the conduct of conferences each year, with different affiliations, viz. Springer, IEEE, ACM, Scopus Indexed Journals, UGC approved Journals, etc. The departments also have with them newsletters and technical magazines, wherein all stakeholders contribute articles.

a) **Faculty Publications Summary:**

Departments						
Year	ICWET+ Multicon-W	International /National Journals	International / National Conference	Book Publications	Resource Book	Total
ES&H						
2018-19	32	06	02	04	9	53
2019-20	29	02	02	04	9	46
2020-21	26	06	03	03	9	47
2021-22	41	00	00	01	10	52
2022-23	72	01	02	01	10	77
COMP						
2018-19	88	22	29	30	14	183
2019-20	93	19	6	38	15	171
2020-21	67	19	5	38	11	140
2021-22	35	21	08	01	35	100
2022-23	49	34	01	01	35	120
E&TC						
2018-19	128	3	2	0	24	157
2019-20	25	4	2	0	24	55
2020-21	40	5	4	0	10	59
2021-22	46	11	1	2	10	70

		Departments				
Year	ICWET+ Multicon-W	International /National Journals	International / National Conference	Book Publications	Resource Book	Total
2022-23	60	4	3	1	0	68
		IT - ICCSOD+ Multicon-W				
2018-19	42	19	23	15	24	123
2019-20	53	9	21	18	25	126
2020-21	17	6	15	18	25	81
2021-22	42	13	0	4	25	84
2022-23	75	33	00	03	26	137
		ELEX				
2018-19	5	9	0	0	1	15
2019-20	3	12	1	0	1	17
2020-21	0	7	2	0	1	10
2021-22	10	0	0	0	0	10
2022-23	19	5	0	5	1	30
		MECH – ICWAME + Multicon-W				
2018-19	53	7	53	0	5	118
2019-20	20	4	20	0	5	49
2020-21	37	0	37	0	5	79
2021-22	27	4	0	0	0	31
2022-23	43	0	0	0	8	51
		CIVIL - ICAMCE + Multicon W				
2018-19	17	22	19	0	4	62
2019-20	38	4	38	0	9	89
2020-21	35	1	41	0	21	98
2021-22	32	3	44	0	8	87
2022-23	81	0	05	05	01	92
		AI&DS				
2018-19	-	-	-	-	-	-
2019-20	-	-	-	-	-	-
2020-21	-	-	-	-	-	-
2021-22	9	3	0	1	10	23
2022-23	13	-	6	Nil	5	24
		AI&ML				
2018-19	-	-	-	-	-	-
2019-20	-	-	-	-	-	-
2020-21	-	-	-	-	-	-
2021-22	-	-	-	-	-	-
2022-23	51	00	51	04	11	117
		IoT				
2018-19	-	-	-	-	-	-
2019-20	-	-	-	-	-	-
2020-21	-	-	-	-	-	-
2021-22	-	-	-	-	-	-
2022-23	08	06	10	1	0	25
		Institute				
2018-19	365	88	128	49	81	711
2019-20	261	54	90	60	88	553
2020-21	222	44	107	59	82	514
2021-22	242	55	53	9	98	457
2022-23	471	83	78	21	88	741

Note: In AY 2021-22 total number of faculty publications were 457 and in AY 2022-23 total number of faculty publications are 741.

b) The research publication as available in indexed journals comprise of faculty members from all departments. The journal publications comprise of various emerging topics viz., Artificial Intelligence, Machine Learning, DevOPs, Internet of Things, Deep Learning, Experimental Learning

Applications etc. **Details of research publications in the journals notified on UGC website during the academic year can be seen in Annexure – III**

c) The books/ chapters are written by faculty members in the advance topics viz., Design of Clustering Algorithms for Wireless Sensors Network, AI based Chatbot, Inductive Learning Approach in Job Recommendation, Skill Enhancement in Holistic Development Activities, Aerial Surveillance etc. which are published in indexed publishers like Chapman & Hall/CRC, Springer, Taylor & Francis etc. **The details of books and chapters in edited volumes / books published, and papers in national / international conference proceedings during the year can be seen in Annexure – IV**

d) The details of books published includes Multicon-W 2022 Proceedings on various themes viz., Multicon-W ICHSTE, e-Conference on Data Science & Intelligent Computing eC-DSIC 2021, Proceedings of Intelligent Computing & Networking, Communications, Computing & Data Security, Advances in Mechanical and Civil Engineering etc. **The details of books published at institute level can be seen in Annexure – V**

1.2.4. Faculty Participation in Seminars/Conferences and Symposia during the Academic Year

For effectively translating the curriculum in improving Teaching-Learning Process (TLP), the faculty members are encouraged to continuously update and improve their knowledge by obtaining support from IITs, Government of India Schemes conducted for Teachers, AICTE/ UGC sponsored STTP, ISTE approved Faculty Development Programmes (FDPs), Industry linked training programmes and the training programmes conducted at/ by the institute. The faculty members of the institute actively participate in such FDPs and training programmes. The faculty members have advanced in their technical knowledge and skills, and now are also delivering lectures / share their acquired knowledge with other institutes and industries, and in turn bringing recognition to themselves and to the institute as well.

	ES&H	COMP	E&TC	IT	E&CS	MECH	CIVIL	AI&DS	AI&ML	MME	IoT
International Level - Attended Seminars/ Workshops **(Dept-Faculty)**	01	07	04	00	03	15	00	01	00	04	06
National Level- Attended Seminars/ Workshops **(Dept-Faculty)**	02	22	04	21	00	00	05	00	00	10	06
State Level - Attended Seminars/ Workshops **(Dept-Faculty)**	00	32	00	04	00	00	04	00	00	00	06
Local Level Attended Seminars/ Workshops **(Dept-Faculty)**	12	32	00	00	00	00	19	03	05	06	06
International Level – Presented papers **(Dept-Faculty)**	72	108	63	73	00	19	19	00	08	00	06
National Level- Presented papers **(Dept-Faculty)**	00	13	00	00	00	00	00	00	00	00	06
International Level – As resource persons **(Dept-Faculty)**	00	04	00	00	00	00	01	00	00	00	02
National Level- As resource persons **(Dept-Faculty)**	00	06	02	02	00	00	00	01	02	00	06
State Level - As resource persons **(Dept-Faculty)**	00	03	400	02	00	00	02	00	00	00	00
Local Level - As resource persons **(Dept-Faculty)**	02	06	06	05	00	00	02	05	00	04	00
Total	89	233	79	107	03	34	52	10	15	24	44
Grand Total		690									

Note: In AY 2021-22 total number of faculty participations in seminars/conferences and symposia were 562 and in AY 2022-23 total number of faculty participations in seminars/conferences and symposia are 690. The number of faculty participations in seminars/conferences and symposia is increased by 118.

1.2.5. Patents Published/Awarded during the Academic Year

The implementation of recommendation on enhancing the research and development (R&D) culture in the institute is resulting in participation of more and more student and staff in R&D activities. Research funding has been increasing and so are the applications for research proposals. However, there is a good scope of improvement on this front.

The research publications by the students and faculty members have been increased. Also, awareness regarding IPR has improved and as a result, today the institute is also working on having copyrights, patents, and trademarks. The R&D cell of the institute has defined the MVS and the R&D objectives.

Patent Details	Patent status	Patent Number	Date
COVALENT –STARTUP COLLABORATION AND OUTSOURCING PORTAL	Published	202221005948A	06-09-2022
A REAL-TIME POMEGRANATE DISEASE MANAGEMENT SYSTEM FOR POMEGRANATE DISEASES DETECTION, PREDICTION, AND CLASSIFICATION	Granted	202022101222	27-10-2022
A SYSTEM FOR IDENTIFYING CLINICAL FIXES USING EEG SIGNALS (BRAIN SIGNALS)	Granted	202022101294	28-07-2022
PERFORMANCE IMPROVEMENT FOR INDIAN ELECTION CAMPAIGN USING AI DRIVEN APPROACH	Published	202321013726A	05-05-2023
A SYSTEM FOR AUTOMATICALLY DETECTING AND DIAGNOSING PROBLEMS IN A DOT MATRIX PRINTER	Published	2023032113320800DE	21.03.2023
APPLIED FOR PATENT FOOD VALIDATING SYSTEM (DR. NEHA MISHRA, DR. ILA AGARKAR)	APPLIED	IN202221052740	14-10-2022
TYPE 2 DIABETES PREDICTION USING IMPROVED ENSEMBLE LEARNING DIMENSIONALITY REDUCTION (DR. KAMAL SHAH)	PATENT FILED AND PUBLISHED	APPLICATION NO-202221005490	2022-2023
A SHORTEST PATH FINDING SYSTEM TO ELIMINATE THE NETWORK OVERHEAD DURING THE COMMUNICATION (DR. RAJESH BANSODE)	GRANTED	GERMAN PATENT 202022106165	11-NOV-22
PREDICTION OF ANEMIA DISEASE USING MACHINE LEARNING ALGORITHMS (DR. SANGEETA VHATKAR)	GRANTED	APPLICATION NO: 202211057114	14/10/2022
IOT BASED AUTOMATED WATER BORNE DISEASE PREDICTION (DR. BHUSHAN NEMADE)	GRANTED	20221061732	29-10-2022
AUTOMATED IOT BASED SMART WASTE MANAGEMENT SYSTEM (MS. NEHA KAPADIA)	PATENT IS FILED AND PUBLISHED	APPLICATION NO: 202321006552	2022-2023
UNCOVERED MANHOLE DETECTION AND ALERT SYSTEM ON ROADS DURING RAINFALL (MRS. NEHA PATWARI)	PATENT FILLED AND PUBLISHED	APPLICATION NO. 202241050160	2022-2023
DEEP FAKE DETECTION AND ANALYSIS	IN-PROCESS	-	06-04-2023

Note: The no. of patents filed in 2022-23 is 13, which was 26 in the previous academic year.

1.2.6. Revenue Generated from Consultancy during the Academic Year

At the institute, as per the design of curriculum, technical core subjects are taught to students from second year of engineering. During each semester and in each branch, institute identifies specific subject in one of the specialized domains, wherein students learn industry relevant technologies. Good research-oriented projects are allotted to students in consultation with R&D cell, which increases the involvement of industry mentors. At the end of the year, project evaluation is carried out by industry experts. Projects with potential for further product development are handed over to Entrepreneurship cell for start-up formalities and business plan development. The 3I Cell (Industry Institute Interaction) supports students and faculty to associate themselves with reputed industries for research and product development. Some of the tie-ups with industries are developed in the form of establishing centres of excellence. Faculty members also learn new technologies and apply knowledge in developing various projects which boosted the consultancy work of faculty members. The policy of sharing of revenue by institute and the faculty is 30:70 wherein 30% after deduction of the expenditure as envisaged here in above shall be paid to the institute, while 70% shall be retained by the concerned faculty.

Consultancy Name	Initiator of Programme (Dept.)	Dept.	Amount of Consultancy	Year

Consultancy Name	Initiator of Programme (Dept.)	Dept.	Amount of Consultancy	Year
Training to Indian Air Force staff on "Artificial Intelligence" through Pal india on topic Uninformed/Informed Search Strategies	Dr. Shiwani Gupta	COMP	5,294	2022-23
Training to Indian Air Force staff on "Artificial Intelligence" through Pal india on topic Reinforcement Learning	Dr. Manish Rana	COMP	5,294	2022-23
Training to Indian Air Force staff on "Artificial Intelligence" through Pal india on topic NLP & Implementation	Dr. Rekha Sharma	COMP	2,647	2022-23
Training to Indian Air Force staff on "Artificial Intelligence" through Pal india on topic ML basics with Applications, Data Preparation	Dr. Rashmi Thakur	COMP	2,647	2022-23
Training to Indian Air Force staff on "Artificial Intelligence" through Pal india on topic Applications of AI in different Field	Ms. Anam Khan	COMP	2,647	2022-23
Training to Indian Air Force staff on "Artificial Intelligence" through Pal india on topic python on machine learning	Mr. Aniket Mishra	COMP	2,647	2022-23
Training to INS Hamla Naval Officers on "Artificial Intelligence"	Dr. Shiwani Gupta	COMP	4,500	2022-23
Training to INS Hamla Naval Officers on "Cybersecurity"	Ms. Huda Khan	COMP	4,500	2022-23
Training to INS Hamla Naval Officers on "Replication, Recovery & cybersecurity"	Ms. Huda Khan	COMP	13,500	2022-23
Training to INS Hamla Naval Officers on "Software Development Lifecycle"	Mrs. Veena Kulkarni	COMP	13,500	2022-23
Training to INS Hamla Naval Officers on "SSAD"	Dr. Anand Khandare	COMP	13,500	2022-23
Training to INS Hamla Naval Officers on "Data Analytics"	Mr. Loukik Salvi	COMP	4,500	2022-23
Training to INS Hamla Naval Officers on "Sybase"	Dr. Rashmi Thakur	COMP	22,500	2022-23
Training to INS Hamla Naval Officers on "Power Builder"	Dr. Rashmi Thakur	COMP	22,500	2022-23
Training for Central Bank Officers on Data Structure, Object Oriented Programming	Dr. Shiwani Gupta	COMP	9,000	2022-23
Training for Central Bank Officers on Computer and Network Security	Ms. Pranjali Sankhe	COMP	2,250	2022-23
Training for Central Bank Officers on Web Technology	Mrs. Sayali Salkade	COMP	2,250	2022-23
Development of a custom machine learning module for "converting unstructured documents into an 'accessible' format using NLP"	Dr. Shiwani Gupta	COMP	38,000	2022-23
Automated Software for Quality Plastic	Dr. Harshali Patil	COMP	15,000	2022-23
Indian Air Force	Dr. Kamal Shah	IT	24088.00	2022-23
INS Hamla Naval Officers	Dr. Sangeeta Vhatkar	IT	76500.00	2022-23
Training for Central Bank Officers	Dr. Sangeeta Vhatkar	IT	6750.00	2022-23
Training to INS Hamala Naval Officers through Pal India	Dr. Megharani Patil	AI&ML	13500	2022-23
Air Force Training	Mrs. Shilpa Mathur	AI&ML	5294	2022-23
Design and Manufacturing of Shoulder Pin" for Vasai Based industry		MME	10000	2022-23
2 Consultancies done for Air Force and Central Bank of India IT officers through Pal India on 27th Feb 2023	Dr. Sujata Alegavi	IoT	4897/-	2022-23
1 Consultancy done for Air Force through PAN India on 15th March 2023	Diya Kushwaha	IoT	2647/-	2022-23
		Grand Total	**3,22,808**	

Note: In the A.Y. 2021-22 the revenue generated from consultancy was 17,45,036 and in A.Y. 2022-23 the revenue generated is 3,22,808.

2. Administrative Activities Including Meetings of Statutory Bodies

TCET's organizational and governance structure comprises of three levels: strategic, operational, and advisory. At the strategic level, there is the Trust consisting of the Chief Executive Officer, Board of Trustees, and the Trustee In-charge. The Chairman of the Trust (the Trustee-in-Charge of the Institute) is responsible for setting the direction, defining policies, and guiding the Institute's activities in consultation with the Principal and institute senior leadership team.

At the advisory level are two bodies, the Governing Council and an Advisory Committee formed as per the AICTE/ University of Mumbai (UOM)/ Department of Technical Education (DTE) guidelines. These

two advisory bodies review the Institute's performance and recommend additional programmes, changes required in the institutional functioning (academic and research environment) student and faculty development (personal, professional, and social), outreach and advocacy programmes to sustain institutional growth, welfare of students and staff, etc.

The operational level is a matrix structure and comprises of Principal, Vice-Principal, Deans and Head of the Departments (HODs), assisted by the various Local Managing Committees (LMCs). Each Committee comprises of cross functional and inter-departmental staff. Day-to-day management work is the responsibility of the Principal who develops rules and procedures to implement the policies outlined by the Board of Trustees. Vice-Principal and Deans form the senior leadership team to support Principal for the operation of the institute. The meetings of statutory committees, viz. the Governing Body, Advisory Committee, College Development Committee, Academic Council, Board of Studies, and Finance Committee are conducted twice during each academic year.

2.1. Meetings of Statutory Bodies

Sr. No.	Statutory Body	Meetings Dates	
1	Governing Body	18-03-2023	
2	Advisory Committee	17-12-2022	01-04-23
3	College Development Committee	18-03-2023	
4	Academic Council	02-07-2022	28-01-2023
5	Board of Studies	29-06-2022	09-01-2023
6	Finance Committee	18-03-2023	

2.2. Practices of Decentralization and Participative Management during the Academic Year

TCET has a clearly defined organizational hierarchy with well-defined roles and responsibilities for each and every staff member.

- TCET has instituted committees for all activities in the institute, and for which members from various units of the institute are appointed. Apart from the staff members, students and Alumni are also involved in many of these committees, which ensures participative environment within the organization. The parents are also involved in the advisory committee so that they know about the activities planned in the institute and provide their valuable inputs for improvement.
- Each department is headed by a Head of the Department (HOD). The Departments are assigned a Mentor Dean from the Institute. Under the leadership of Dean and HOD, each department conducts various curricular and 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 in the Department. The delineation of responsibilities facilitates a healthy work environment throughout the organization. The academic monitoring team is also formed to ensure smooth conduct of academic programmes. The role of Mentor Dean has been instrumental in guiding people in the Departments for bringing better administration at the Department level. Various activities at the department level and institute level are well distributed amongst the department faculties to ensure the smooth conduct of department as well as institute level activities.

2.3. Strategy Development and Deployment

2.3.1. Quality Improvement Strategies Adopted

- **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. The

concepts of Design-based experiments and mini projects for most of the courses have been introduced at the Institute level. Students are encouraged to take online courses such as NPTEL, Coursera, etc. for which the institute's faculty members act as Mentors. Faculties also enrol for the course and gets certified. Under blended learning students enrol for the non-credit course and discussion is carried out in the class with the subject teacher. Also, the Holistic Student Development approach adopted by the Institute and by the department to carry out the activities like ABL and PBL since 2016 which has been implemented and successfully continued in this Academic Year. Faculty members are also nominated to various Academic Bodies at the University level. The curriculum is developed by the department after taking the inputs from the various stake holders and getting sanctioned from the properly formed BOS.

Being autonomous from A. Y. 2019-20 onwards, the institute has the freedom to design its own curriculum, not only trying to comply with the requirements of affiliated universities but also trying to achieve global excellence in the field of technical education. Revision cycle has been set for three years where the first- and second-year curriculum revisions are done simultaneously. Curriculum highlights the practical & practice-based learning, problem & project-based learning, industry & research orientation and pedagogy is supplemented with andragogy & heutagogy has made the curriculum unique. Intention is to build the higher order skills on the strong foundation of lower order skills. The strategy and approach for curriculum design has not only made the institute achieve various compliances but also made the curriculum evolutionary and well accepted by stakeholders including industry.

a. The curriculum is aligned with the AICTE model curriculum for academic credits, major/minor credits, Examination reforms, INTERNSHIP, and Activity points to promote holistic and multidisciplinary education.
b. Concurrence is created with the state universities (particularly UOM), premiere institutions for student's mobility for effective implementation of MEME under NEP 2020 which the institute will be implementing soon.
c. To make students competitive for the brighter career, the institute has integrated the syllabus of GATE, and in future will be integrating IES, public service syllabus or the bridge courses to support careers in public sector, government sectors, research laboratories etc.
d. Institute developed curriculum PSD, HSD, ESD, PBL, RBL TAC etc. for enhancing competencies, professionalism, employability, and employments based on various national and international reports. Also encourages the relevant online courses certification.

- **Teaching and Learning:**

  o Faculty members make lesson plan for the allotted subject in the semester as per standard format given in the institute. Faculties also develop resource book/s and course file, design practical list, assignments, remedial work, and practice sessions in each semester. ISE question paper, end semester exam question paper etc. are also designed by the faculty.
  o Theory and practical session need to be conducted as per the plan and are reviewed time to time to improve the efficiency and effectiveness of teaching learning during the semester. Student performance is recorded on regular basis for continuous evaluation.
  o Various pedagogical approaches are used by the faculties for their respective subjects during the semester. Digital platforms viz. Zoom, Google Classroom, Flipped Classroom concept, etc. were used for content delivery, and the recordings of lectures provided to the students.
  o Lecture and Practical are conducted in hybrid mode during pandemic.
  o The TLP is monitored at 3 levels: Faculty, Dept. Coordinator and HOD.
  o An effective connected model to improve the quality of teaching and learning is being adopted which includes Teaching learning process (online as well as offline), understanding the students' learning needs, adopting a wide variety of instructional methods and

pedagogical initiatives, motivating the students to understand the concept/principles via theory/practical etc.

o Faculty members plan the academic conduct as per the syllabus, detailing and developing resource book and course file, designing practice sessions, assignments, and experiments, IAT paper, and effective conduct of the academics.

o All lectures and practical classes are to be conducted as per the plan and are reviewed time to time to improve the efficiency and effectiveness of teaching learning during the semester. The latest available teaching methods and various modes of learning are also adopted by the faculty members during the pandemic. Various digital platforms viz. Zoom, Google Classroom, Flipped Classroom concept, etc. were used for content delivery, and the recordings of lectures provided to the students.

o PDCA cycle is followed to bring improvement, value addition, and innovation in TLP for effective implementation of curriculum. Also, Implementation of relevant pedagogies to make lectures more engaging and productive.

- **Examination and Evaluation**

The Examination Committee is formed to ensure smooth conduct of the examinations. 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, the institute conducts the semester-end examination as well as the A.T.K.T. students. Examinations are mainly for Term Work, Practical, Oral, Project viva-voce, and Theory.

Institute communicates the results on the internet through Institute website. After announcement of the results, students can request for revaluation of the semester-end theory examination answer scripts within a stipulated period. After revaluation, records are updated with changes if any and the student is issued a revised memorandum of marks.

In Semester Assessment and End Semester Examination is being conducted strictly as per the academic calendar including the formative assessment at frequent interval.

For academic activities, the students' evaluation is done to check the learning at various levels and pass the credits in proportion with learning as reflected in academic results. The evaluation is done by checking the quality of Assignments, setting question papers for ISA & ESE, conducting continuous assessment through Formative Assessment (FA) etc. The project work allows students to use their learning in a more concrete manner. It makes students think beyond the boundaries of the classroom, helping them apply their skills, improve their behaviour, and the confidence necessary for success in the outside world.

The examinations for all students were conducted in offline mode (as per UGC guidelines) and results were declared on time. ESE examination for FE to BE was conducted and results were declared within the time frame without impacting on the academic year of the student.

- **Research and Development**

Areas of domain specific research in various programmes 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. R&D committee ensures compliance of various research proposals granted to the institute. Pilot projects are launched for successful development and execution of the challenges so that good ideas can be implemented on a small scale to verify feasibility and impact. Students are encouraged to participate in State/National level Hackathon competitions.

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

The institute provides 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:

o Procurement of books (as per regulatory body).
o Deputing additional staff for circulation of books during peak period.
o Providing additional reading rooms during examinations.
o Motivating students to utilize library services via orientation programmes.
o Availability of library services also on non-working Saturdays during examination
o Remote access facility made available through mobile app Nimbus.
o ICT 1000 Mbps, 2 Mbps and Physical infrastructure/ instrumentation.
o Requisition of text/reference books to central library.
o Identification and requisition to the central library for department relevant journal subscription at National and International level.
o Motivating students to utilize library services.

• **Human Resource Management:**

The Governing Body is the supreme body, which is headed by the Chairman of the Management Council of TCET. The Governing Body comprises of i) two members of the Management (Correspondent and Secretary), ii) one nominee of State Government, iii) one nominee of University of Mumbai, iv) one nominee of the UGC, v) Principal of TCET, vi) Director, Trustee, vii) two external members (as educationists), and viii) two senior professors of TCET.

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 members are sent for various types of training programme and workshops for enhancing their competence. Works are distributed as per qualifications and experience of the staff member.

Department recruits teaching/non-teaching staff as per AICTE norms. Proper care is taken in the selection process for keeping quality in the appointments. Staff members are encouraged to undergo program specific training programmes and workshops for enhancing their competence. Work distribution is done as per qualifications and experience of the staff member.

• **Industry Interaction / Collaboration (International Evaluator for Project Examination from Industry and Academia)**

Training & Placement (T&P) cell takes initiatives for collaboration with various MNCs and Local industries for industrial training and internships for students of all departments at the institute level.

There is also an in-house internship facility created for the students. Owing to COVID-19 pandemic, the internship programme is conducted in online mode. Also, experts from industry and academia were invited for project evaluation. T&P Cell organized a four-week webinar series in which national-level as well as international-level experts from industry/ academia delivered talks on various topics. There are 2 internships in the academic year, summer internship and winter internship. The in-house internship is of two kinds, Social and Technical. For social internship department reach out to NGOs and conduct internship sessions. Students complete the task given by the NGO in stipulated time period.

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.

Department identifies the program specific track for the technical in-house internship and the track is offered to the students. The faculty and external resource are responsible for successful conduction of internship. This includes theory, hands-on and self-learning sessions. Owing to COVID-19 pandemic, the internship programme is conducted in online mode in A. Y. 2021-22.

The department have not only made efforts in the direction of making students ready for industry by enhancing their skill sets through training on recent tool and technologies by various activities like Technical Seminars, Employability Skill Development, Guest Lecture, Alumni Connect, Internships, Industrial Visits, Workshops, Industry Resource persons in STTP, FDP, Conferences etc. but also has taken up many initiatives to bridge the gap between academia and industry. Initiatives related to industry internship/summer training were taken by E&TC Department like In-house Internship, Outhouse Internship, Pre-Placement Training, Corporate Training, and Infosys Campus Connect Programme (ICCFP)-InfyTQ etc.

- **Admission of Students**

  o Maximizing publicity and brand building of the institute through various awards and recognitions.
  o Extending courtesy to interested candidates seeking information related to admission.
  o Prompt enquiry handling through adequate number of admission counters and helpdesks.
  o Spreading awareness through outreach programmes to attract potential students.
  o Publication of Informative Brochure and one page handout of brochure
  o Website regularly updated with latest information related to admission.
  o Timely compliance is met of various norms issued by statutory and regulatory bodies.

2.3.2. Implementation of e-Governance in Areas of Operations

- **Planning and Development:** The academic monitoring and control, and some of the administrative planning are done via ERP. The lecture planning of all faculty members, attendance, syllabus coverage, publishing notes/ study materials for students are also done through ERP. Also, leave application is made online through ERP. Students are also provided access to necessary documents.

- **Administration:** All records related to students' performance are prepared using software-based tools for checking attainments. Consolidation is achieved in effective manner.

- **Finance and Accounts:** The payment of salary to the faculty and staff is done through electronic clearance and deposited in the bank. The payment of student fees is also received through NEFT/RTGS mandates. Payment to affiliating bodies and other stake holders is also done online through e-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 related to Examination form filling, fees, notifications, etc. are displayed through website. Remuneration for examination is disbursed electronically. The results are prepared using in-house software. The Examination Committee is formed to ensure smooth conduct of the examinations. 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, the University conducts the semester-end examination as well as the A.T.K.T. students. Examinations are mainly for Term Work, Practical, Oral, Project viva-voce and Theory.

2.4. Faculty Empowerment Strategies

2.4.1. Teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the academic year by the institute

Name of teacher	Name of conference/ workshop attended for which financial support was provided	Name of the professional body for which membership fee was provided	Amount of support
Dr. Lochan Jolly	TiHAN Skill Development Program on-Global Navigation Satellite Systems" held during 25-29 July 2022	IITDM,Kurnool	1180
Dr.Sanjeev Ghosh	IEEE POCO	IEEE	1000
Dr. Sangeeta Mishra	IEEE-ICAST-2022	IEEE	5000
Ms. Aradhana Manekar	IBSSC 2022	IEEE	5000
Mrs. Rashmita Kumari Mohapatra	TiHAN Skill Development Program on-Global Navigation Satellite Systems" held during 25-29 July 2022	IITDM,Kurnool	1180
Dr. Lochan Jolly	TiHAN Skill Development Program on-Global Navigation Satellite Systems" held during 25-29 July 2022	IITDM,Kurnool	1180
Divya kushwah	Blockchain developer certification course	online portal edureka	12000
Pratibha Sajwan	NIT Delhi STC Conf.	NIT Delhi	300
Divya kushwah	IEEE MEMBERSHIP	IEEE	534
		Total	26194

Note: In 2021-22 the institute provided Rs. 19200 as a financial support to attend conferences/ workshops and towards membership fee of professional bodies and in 2022-23 the amount has increased to Rs. 26194.

2.4.2. Number of professional development/ administrative training programmes organized by the College for teaching and non-teaching staff during the academic year.

Title of the professional development programme organised for teaching/ non-teaching staff	Department	No. of participants, Teaching/ Non-Teaching	Dates
One Week Online FDP on "Recent Tools for Integration of Smart Systems"	E&TC, MECH, ETRX	58	6th June 2022 to 11th June 2022
Microsoft Training Program on Microsoft office 365, Programming and Data analytics tools	ES&H	62	10th October 2022 to 14th October 2022
One Week Online STTP on "Blockchain Technology"	IT	56 (Teaching)	23rd June 2023 to 1st July 2023
One day workshop on Database Technology	IT	06 non-Teaching	6th October 2022
One day workshop on Linux	IT	06 non-Teaching	7th October 2022
Sustainable Development Through Traditional Way: Capacity Building Program	MECH	17	24/6/2023 to 1/7/2023
FDP on Machine Learning and OBE	AI&ML	7, Teaching	6th October 2022
Workshop on "Machine Learning Algorithm and ANN" during technological conference 2022-23	AI&ML	5, Teaching	25th November 2022 to 26th November 2022
STTP on concepts and applications of AI subfields	AI&ML	7, Teaching	2nd Jan 2023-7th Jan 2023
FDP on Technical Paper Writing	AI&ML	8, Teaching	2nd Feb 2023
FDP on question Bank generator Demonstration	AI&ML	8, Teaching	18-Mar-2023
FDP on Effective conduct of academics/FDP on Effective research/FDP on HSD	AI&ML	9, Teaching	27th March 2023-6th May 2023
FDP on OBE	AI&ML	9, Teaching	22nd June 2023

Title of the professional development programme organised for teaching/ non-teaching staff	Department	No. of participants, Teaching/ Non-Teaching	Dates
FDP on Web Development Design	AI&ML	1, non-Teaching	11th Jan2023- 13th Jan 2023
Dept FDP on Python	AI&DS, CSE and IoT	20, Teaching and Non - teaching	28/02/2023, 01/03/2023, 02/03/2023, 04/03/2023, 16/03/2023, 17/03/2023
Dept FDP on Basic Excel and Advanced Excel	AI&DS	07 non-Teaching	28/04/2023, 29/04/2023
ISTE Approved STTP on Exploring Recent Trends and Opportunities in Data Science using IoT.	AI&DS and Computer	59, Teaching	23rd June -1st July 2023
Sustainable Development Through Traditional Way: Capacity Building Program	MME	6	24/6/2023 to 1/7/2023
STTP on Cyber Physical Systems: Bridging IOT, Computer Science and Cybersecurity	CS&E, IoT, E&CS	CS&E (05), IOT (05), E&CS, external participants (42)	23rd June- 1st July

2.4.3. Welfare Schemes

a) Teaching and Non-Teaching Staff: Credit Co-operative Society, Health Insurance, PF, Gratuity

b) Students: Scholarships (Full and Partial), Project Finance through Hobby Clubs

Apart from the above facilities, faculty members are reimbursed for the FDPs, workshops, conferences etc. (the details of which is given below) that they attend for which they are required to simply furnish the proof of participation and amount paid. This encourages faculty members to participate in more such development activities.

Sr. No.	Name of the faculty	Name of the courses/ conferences/ journals	Details of affiliation or online portal	Fees Amount (in Rs.)	Remark (for course, marks mentioned)	Recommendation
1.	Dr. Lochan Jolly	GNSS	NPTEL	1100	79%	1100
		TiHAN Skill Development Programon-Global Navigation Satellite Systems" held during 25-29 July 2022	IITDM Kurnool	1180	Certificate	1180
2.	Dr. Payel Saha	Introduction to Internet of Things	NPTEL	1100	78%	1100
3.	Dr. Sanjeev Ghosh	IEEE POCO	IEEE	1000		1000
4.	Dr. Sangeeta Mishra	IEEE-ICAST-2022	IEEE	5500	Publishedin IEEE	5000
5.	Ms. Aradhana Manekar	IBSSC 2022	IEEE	7080	Publishedin IEEE	5000
6.	Dr. Manoj Chavan	Finance for Non-Finance Professionals	Coursera	2250	94.50%	2250
		Programing, Data Structures and Algorithms using Python	NPTEL	1100	79	1100
7.	Mrs. Anvita Birje	Control Systems	NPTEL	1000	73%	1000
		Design Thinking	NPTEL	1100	75%	1100
					Total	19830

There is a sick room facility available for students and teaching as well as non-teaching staff with a Nurse on campus for a dedicated twelve hours.

In the department, there exists a teacher-guardian system in which for every twenty-two students there is a teacher-guardian whose role is to maintain the overall progress of the student in the handbook and interact with the mentee students at least twice a system to understand any problems that may be faced by the student. The institute has also recruited a professional counsellor whom students can approach.

2.4.4. Activities and Support from the Parent – Teacher Association

The parent-teacher meeting is conducted every year during the First-Year batch Induction Programme. In addition, Parents' meet is organized twice every semester at the Department level. Also, the feedback from parents is taken during such meets and suggestions made by the parents are noted and worked upon.

Apart from the above, parents are also included in the Advisory Committee of each Department where they can give suggestions towards the growth and development of the organization. Parents' meet is organized every semester at the Department level. During the interaction, doubts are resolved, and the suggestions are noted. Parents are also included in the Advisory Committee of the Department where they can give suggestions towards the growth and development of the department as well as the organization.

Parent teacher meeting is conducted every year to get their feedback and at the same time to make them aware about the institute's initiatives and other academic achievements and progress.

Some of the feedback given by parents are as follows:

Sr. No.	Feedback	Action taken
1.	Parents appreciated that faculty members personally call parents and keep them updated about student's performance in academics	Every semester at least one parents meeting is conducted
2.	One of the parents appreciated the department's efforts in organizing such parents meeting and requested the department to take appropriate steps wherever needed for the improvement of students with assurance that he and many other parents would support the department decision	Students' performance is continuously monitored and attendance, result-oriented data is available on ERP or institute website
3.	Parents of direct admission to second year students pointed out that since their admissions were very late due to which they got less time to prepare for examinations that lead to poor results, they felt that in such situations extra lectures be taken	Extra lectures have been conducted for DSE students
4.	Few parents suggested that important notices should be shared with them apart from students	Teacher guardians have created WhatsApp groups with parents of students in which all important notices are shared. Parents are also given access to ERP system of college.

2.4.5. Internal Quality Assurance System Details:

TCET aims at continuous enhancement and sustenance of quality in technical education. The quality assurance provides confidence to the stakeholders for developing competent graduates in an efficient and effective way.

ISO 9001 standard based Quality Management System (QMS):

The institute adopted ISO 9001:2001 quality management system (QMS) in the year 2005. The system was the upgraded to ISO 9001:2008 QMS followed by ISO 9001:2015 QMS. The QMS employs the process approach, which incorporates the Plan-Do-Check-Act (PDCA) cycle and risk-based thinking.

There are 4 internal quality audits conducted annually, each followed by a management review meeting to assure compliance with the ISO 9001 standards. Also, an annual external audit is conducted by the ISO 9001 certifying body. These audits and reviews are carried out to assess the overall operations.

Academic Quality Assurance:

The QMS is flexible and allows institute to align its processes with other statutory, regulatory and accrediting bodies which enabled the institute to bring in further amendments in the system to incorporate requirements of accreditation bodies like National Board of Accreditation (NBA) and National Assessment and Accreditation Council (NAAC). For NBA the major change brought in was focus on outcome-based education keeping NBA graduate attributes in mind. For NAAC it was formation of Internal Quality Assurance Cell (IQAC). Here the institute already had its own QMS team in place looking after quality assurance. The QMS team was reorganised to form IQAC. The IQAC takes the responsibility of developing a system for conscious and consistent improvement in the overall performance of the institute. IQAC is responsible for development, application and monitoring of quality benchmarks for various academic and administrative activities of the institution.

The institute conducts internal quality assessment meetings every quarter to assess its academic performance. An academic performance audit by external peer team is also conducted annually in accordance with UGC guidelines.

Quality Assurance System Outcomes:

TCET obtained NBA accreditation of 6 UG programs for three years. TCET has also obtained NAAC accreditation with "A" grade for five years with effect from October 2017 and which is further extended till 2024.

In its commitment to ensure quality in all academics and administrative processes, the institute has got "Autonomous" status from academic year 2019-20 and deployed an innovative scheme with focus on holistic education leading to enhanced employability. Specialization credits with honours and minor degree are integrated for interdisciplinary/multidisciplinary learning.

2.4.6. Number of Quality Initiatives Undertaken during the Year

- An MoU has been signed between the department and Kitami Institute of Technology, Japan for collaborative research, research funding, joint publication and exchange of resources
- An IEEE sponsored Capacity Building Program was organized by the department on "LabView Programming & Hardware Interface" from 23rd June-1st July 2023
- Based on the feedback of students and after going through the Qualification Skill Pack specified by NASSCOM, the Professional Skills course of semester VII was revamped from Latex to LabView programming
- MoU Signed with Black Chain Company Snapper Future Tech Pvt. Ltd., Pune
- Two (02) MOUs with NGOs for Internship & Placements
- Paper writing session was conducted during Pre workshop to increase Quality of paper writing
- Library Automation Software is developed for IT department library
- Specialization courses offered as part of curriculum, under Autonomous scheme.
- Employability Skills Development Programme for enhancing IT skills for students.
- Agile Methodology is followed for developing application-based BE Projects.
- Online conduct of in-house internship was successfully carried out.

- Training programmes for GATE, GRE, GMAT, conducted at institute level for students to get into higher studies.
- Innovative Examinations & Sessions on universal human values
- Offline conduct of in-house internship was successfully carried out.
- use of JIRA software for PM
- Formation of Professional body ACM SIGAI and Department level club "Super AI Stake Holder Connect "to conduct PSR activities
- Two days' workshop conducted on Machine Learning Algorithms and ANN during Technology Conference Nov'22 in Hybrid mode.
- Doubt solving sessions and revision session a conducted for ST and TT students during Innovative Exam Week
- Innovative FA's given in subject to map higher PO's
- Conduct of TLP using identified pedagogies, timely completion and checking of Practical during Lab sessions.
- Mind map making for missed topics task was allocated to defaulter students in SL/CL and Zero hour. Also, all mind maps are collected by subject teachers, integrated together and circulated to the whole class.
- Expert lecture in Professional Elective subject by Industry Expert.
- Workshop on QP Machine Learning Engineer conducted during MulticonW23.
- Faculty members shared resource materials, PPTs and write-ups on time to students.
- RBL expected outcomes are categorized into patent, consultancy, funded research, quality publication on the basis of its potential by conducting meeting with RBL project group members and their guide.
- Expert Lecture by other department faculty members
- Organized competition on real time trends Chatgpt prompt writing under department club PSR Activities: SuperAI Community Stakeholder Connect and Organized all National level events under professional body ACM-SIGAI.
- Organized AI&ML sector specific Ideathon competition with cash prizes under PSR Activities to motivate students to come up with innovative problem statement with appropriate methodology.
- Invited internal speaker from Google USA for seminar organized under professional body ACM-SIGAI.
- Virtual IV with Hydrotek Farm LLC was organized for faculty members during STTP during "Concepts and applications of Artificial Intelligence Subfields" during 2/1/2023 to 7/1/2023.
- Specialization courses offered as part of curriculum, under the Autonomous scheme.
- Conduct of doubt solving session, and low learner session done in order to enhance the understanding of students and improve the performance of slow learners.
- Employability Skills Development Programme for enhancing IT skills for students.
- Agile Methodology is followed for developing application-based BE Projects.
- Online conduct of in-house internship was successfully carried out.
- Training programmes for GATE, GRE, GMAT, conducted at institute level for students to get into higher studies.
- Bridge courses – GEPT.
- Concept of blended learning and flipped classroom was used for the courses like Environmental Studies and Value Education.
- Program Based Examination is carried out in odd and even semester based on the fundamental subjects and GATE exam format.
- Sector specific domains are identified for the department and webinars are carried out by industry experts on various sectors. Students have selected sector of their interested.
- Display of Recent Articles on AI&DS and sectors identified by department posting on notice board (Student activity).

- Online conduct of in-house internship (social and technical) was successfully carried out during the academic year 2022-23.
- Hands-on workshop on Cloud Computing on Amazon Web Services, on weekends (25 hours course).
- The projects were offered from the areas specified in TV-2035, NEP2020, SIH, SDG and Industry.

2.4.7. Differently Abled (Divyangjan) Friendliness

Items Facilities	Yes/No
Physical facilities	Yes (Washrooms for Differently abled)
Provision for lift	Yes
Ramp/ Rails	Yes (1 Wheelchair)
Rest Rooms	Yes
Any other similar facility	Yes (Disability Resource Centre)
Exam related	Yes (One writer if writing disability)
Language lab with headphones and other equipment	Yes
Reserved designated parking	Yes
Text to speech software for hands-on learning	Yes (Otter software)

3. Extension Activities Undertaken

The institute has strengthened the extension and outreach activities since it received the NAAC accreditation in the year 2017. It has started putting efforts to motivate faculty and students to take part in extension activities for overall professional development. The institute has also started organizing extension and outreach programmes.

The institute has NSS wing along with the programme officers of NSS units. Every student member of NSS serves for a period of at least two years with 120 hours of engagement in community service, per year, excluding annual camps. At the end of two years of satisfactory service, each student member receives NSS Certificate, which is considered as equivalent to a diploma in Social Service.

The Student Organisation for Reform & Transformation (SORT), a club established in October 2019 in association with Vyakti Vikas Kendra India, engages students for their development and the development of society and the nation. With clear objective of Self Development, Talent Incubation and Spirituality, SORT Club stands out of all the committees; and club to focus solely on student's development.

In addition, the institute has started advocacy and outreach activities to expand the institute connect with the outside world. During the pandemic situation, the advocacy and outreach cell has conducted various programmes in online mode on National Technology Day, IQAC symposium on theme NEP-2020, and Technology Vision-2035. The department has strengthened the extension and outreach activities. It has started putting efforts to motivate faculty and students to take part in extension activities for overall professional development.

Outreach activities: TCET - National initiative program student exchange programs.

As per the Initiatives of Ministry of Human Resource -Development and AICTE, Thakur College of Engineering and Technology started to conduct Students exchange programs. Student exchange program gives an opportunity for students to broaden their knowledge on their study of choice from a different institute. This gives them a chance to develop their work experience by seeing how the course/research domain they are studying is being practised in another institute. It helps them to understand the working philosophy of the other institute and also enhances their ability to work in collaboration for project development and paper writing with students of other institutes. The purpose is to learn the culture, living styles, social customs, food habits and such other aspects of the social and cultural affairs of each other's institute along with learning technical skills regarding a latest technology.

Objectives of TCET National initiative program student exchange programs:

- Develop a collaborative learning platform to exchange academic, co-curricular and extracurricular activities with partner institutes to bring diversity in learning.
- Adopt the national initiatives under EBSB: Students exchange program at institute level.

3.1. 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 Academic Year.

3.2. The details of extension and outreach programmes with objectives and outcomes can be seen in Annexure – VI

Extension Work Details Reflecting the Contribution to the Society

Unnat Bharat Abhiyan by CIVIL Department.

Date of Visit: 20 November 2022
Place of Visit: Vehloli
Purpose: To interact with villager and understand their problems
Faculty members visited village and counselling done about educating them about quality of drinking water.

AC-STEM - Promotion by F.E. Department
The event, AC-STEM 2023 Syndicate, took place on June 9th, 2023 at Thakur College of Engineering and Technology, where students and parents were addressed by Dr. B.K. Mishra, the Principal of TCET. During his address, Dr. Mishra not only highlighted the importance of STEM education, emerging engineering fields, and future prospects but also shed light on the distinctive features of Thakur College of Engineering and Technology, setting it apart from other universities. The diverse range of courses offered by TCET was emphasized, showcasing the institution's commitment to providing a comprehensive education experience. The winners of all the events of AC-STEM 2023 were felicitated with certificates and prize money, acknowledging their remarkable achievements. The event witnessed a total of 135 participants, including parents, who were enthralled by the informative sessions and engaging activities. Additionally, a special arrangement was made before and after the Stem Syndicate for interested students and parents to have a Campus Tour of TCET, providing them with a glimpse of the college facilities and infrastructure. The event aimed to share the findings of various tracks, celebrate the winners, and gather valuable feedback from the participants, contributing to the success of AC-STEM 2023
Events:
1) Ghostly Whispers
2) Brain Brawl
3) Picture Perfect
4) ATSTEM 5.0

Event Details: AC-STEM 2023 was organised by TCET-ISTE (Indian Society for Technical Education) student chapter of Thakur College of Engineering and Technology.
Participants: 10 th / 11 th and 12 th (current and board examination appeared students) of Science, Arts and Commerce streams of any Board (Maharashtra Board/CBSE/ISC/Any other State Board)

Objectives:
● To imbibe the importance of STEM education among students.
● To inspire and develop Scientific/Engineering temperament.
● To help the students understand their capabilities to pursue STEM education.
● To ignite passion to experience hands-on and skill-based technical knowledge to become a skilled professional by pursuing STEM education.

Outcomes:

1)The feedback collected from participants reflected a high level of satisfaction and contentment with their AC-STEM 2023 experience.

2) A remarkable registration of a total of 1543 registered participants was witnessed, who signed up through the Google form, and were actively engaged in the entire AC-STEM 2023 event.

3) Student participants expressed delight and pride upon receiving recognition and accolades during the STEM Syndicate Event.

4)The issuance of merit certificates and participation certificates added an exhilarating touch, further elevating the participants' sense of accomplishment and fulfilment.

5)The meticulous organization of the events by the TCET- ISTE students' chapter garnered positive feedback and appreciation from the student community.

3.3. Awards and recognitions received for extension activities from Government and other recognized bodies during the academic year

Name of the Institution / Teacher / Student	Name of the Award/ Recognition	Name of the Awarding Body/Agency	Month and Year of award
Dr. Krishnakant Mishra	Invited as A Resource Person for Delivering lecture on Experimental physics Topic Synthesis and Applications of Biomaterials	University of Mumbai	
Dr. Rajani Bahuguna	1st Best Paper Award Student Professionals Development-Fostering Critical Thinking among Students	Multicon 23	Feb 2023
Mrs. Sonali Singh	2nd Best Paper Award Enhancing Learning for basic electrical engineering subject using course website as a teaching tool	Multicon 23	Feb 2023
Dr. Karuna Nikum	2nd Best Paper Award Enhancing Learning for basic electrical engineering subject using course website as a teaching tool	Multicon 23	Feb 2023
Dr. Neha Mishra	1st Prize in Investor Pitch	NES Ratnam College of Science	Feb 2023
Dr. Sainath Bhavsar	Won Young Researcher Award	InSc Under the Ministry of MSME and Corporate affairs Govt. of India 2022	
Tushar Mishra Shivam Mishra Ruchishree Arun Kumar Rohan Prajapati	1st Prize in Ideation in a project named Carbon Capturing Titans	NES Ratnam College of Science VENUE : Ratnam College Mumbai	Feb 2023
Yash Patel Vansh Pariekh Sidhartha Neha Roy	2nd Prize in Ideation Ideation in a project named Carbon Capturing Titans	NES Ratnam College of Science VENUE : Ratnam College Mumbai	Feb 2023

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

The students' participation in various activities with Govt. / non-Govt. organisations include webinar on Nasha Mukti, Recycled Paper Making Workshop, online First-Aid training programme, Electricity Conservation Awareness, Awareness Programme on Govt. Schemes, Fitness Activity, General Mental Health Awareness webinar, Career Guidance in Public and Defence Sector webinar etc. **The details can be seen in Annexure – VII**

3.5. Initiatives taken to address local and national advantages and disadvantages during the academic year

Initiatives were taken to address local and national issues viz., Webinar on Road Safety & Traffic Control, Awareness on Marine Pollution, Paper and Cloth Bag Making, Street Play on Social Cause, Voter ID Registration Drive & Awareness, Interactions with Elderly, National conference on Role and Contribution of Students and Youth Movements in Nation Building, Webinar on importance of Mangrove Ecosystem etc. **The details can be seen in Annexure – VIII**

Prepared by:	Verified by:	Reviewed by:	Approved by:
Mr. Shivram Poojari	Dr. Sanjeev Ghosh	Dr. R. R. Sedamkar	Dr. B. K. Mishra
Dy. IQAC Coordinator	Associate Dean (Quality Assurance & Accreditation) & IQAC Coordinator	Vice Principal & Director – IQAC	Principal

Financial Report:

Item	Unutilized Grant available from Previous year	Resources generated through fees and other sources	Grant received from UGC and other funding agencies during the year	Expenditure during the year	Unspent balance	Remarks
Our institute is a Self-Financing College and we do not receive autonomy grant.						

Place: Mumbai

Date:

Signature of Principal with seal:

External Peer Team

Prof. Anil Kumar Singh,
Professor (Retd.) & Dean Academic Programmes,
Indian Institute of Technology Bombay, Mumbai.
Former Vice-Chancellor, University of Allahabad
(Central University)
Chairperson

Dr. B. Satyanarayana,
Scientist, TIFR, Mumbai.
Member

leave of absence granted.

Dr. G. T. Thampi,
Principal, Thadomal Shahani Engineering College,
Mumbai.
Member

ANNEXURES

Sr. No.	Name of the Company	No. of Students
59	Nirmal Corportion	1
60	NYX Wolves	1
61	Oasis Infobyte	21
62	Offerteria	4
63	Orient Press Limited	2
64	Paypoint India	1
65	Perfect E-learning Pvt Ltd	1
66	Pick My Work	1
67	QuadB technologies	1
68	Raa Technocrates	5
69	Ramu Car A.C. Services	1
70	Recruit NXT	1
71	RP tech India	1
72	Ruchi Infotech	2
73	Rxedia Meditech Pvt Ltd	1
74	Sahu Technologies	69
75	SAN Industries	4
76	SecOps Solution	7
77	Shree Infosystem	1
78	Smartknower	3
79	Social Consultant	1
80	Solitaire Solution	1
81	Sortwind	1
82	Suven Consultancy and Technology	29
83	TCR Innovation	1
84	Tech Cryptors	1
85	The Akiro Store	1
86	The Spark Foundation	61
87	Totem Games	1
88	TRIMURTY ESTATES	1
89	Trivia Software	1
90	Veena College of Commerce and Science	1
91	Vialytics	2
92	Vijaydeep Agencies	1
93	Virtual internship at Accenture (Forage)	2
94	Visanka Tech. Pvt. Ltd	1
95	Workshare-Inc	1
96	Xebia IT Architects	1
97	XivTech	1
98	Zobotronics	2
99	Comeforth Foundation	65
100	Lions Club	65
101	FriendstoSupport	65
102	Data Science	65
103	UX Design	51
104	Machine Learning	68
105	Software Testing	42
106	Agastya Foundation	53
107	Junoon Foundation Trust	43
108	Gully Classes Foundation	16
109	Sparsh Charitable Trust	26
110	Data Networking and Cyber Security	20
111	LABVIEW Programming	17
112	PMVKY	36
113	Data Analysis & Visualization using Power BI	3
114	Full STACK Developer	4
115	Robotic Process Automation	2
116	Secure Mobile App Development	3
117	Machine Learning	3
118	Software Testing	13
119	Data Science	6
120	UX Design	1

Sr. No.	Name of the Company	No. of Students
121	Web Development	13
122	Digital Marketing	17
123	Cosmic Technosolution	2
124	Aassh Brick & Blocks	1
125	Abacus Educare	5
126	Acrosys Infotech	2
127	Chaudhary & Co	1
128	Deluxe Enterprise	1
129	Dolphin RFID	1
130	EDJOBSTER PVT LTD	1
131	Edunet Foundation	1
132	Elite Techno Group	1
133	Emertxe Information Technologies	6
134	Exposys Data Labs	4
135	HDFC ERGO	1
136	Hydrotek Farm LLC	2
137	IBM (In collaboration with AICTE and Edunet Foundation)	2
138	IBM Edunet	1
139	IBM Skillbuild under AICTE with collaboration with Edunet Foundation	1
140	IBM skillsbuild: Edunet foundation	2
141	Iotlot.in	1
142	Janvi Construction	1
143	LectureNotes Technologies	1
144	Lets Grow More	14
145	Margosatree Technologies	1
146	Metro TV Network	1
147	Oasis Infobyte	5
148	Pantech Solutions	2
149	Prem Intercom & Engineers	1
150	Sahu Technologies	94
151	Spark Foundation	1
152	Steigensoft Technologies LLP	1
153	TCET, Mumbai	3
154	The Sparks Foundation	1
155	TickTech IT Solutions	1
156	Triumph Foundation	1
157	Vulcantech Software Pvt Ltd	1
158	Acmegrade	1
159	Code Clause	3
160	Corizo Edutech	1
161	Cresene Dreamworks Pvt. Ltd.	1
162	Mena Tile & Trading	1
163	NullClass	1
164	Pledge Foundation	1
165	Prime	1
166	SQL & Python	126
167	Machine Learning Developer	63
168	Draughtsman Civil (CTS)	37
169	Cloud Application Developer	124
170	Security Analyst	64
171	Cloud Application Developer	191
172	IoT-Software Analyst	31
173	Cloud Computing	191
174	Automotive Assembly Lead Technician	62
175	CNC MACHINIST 3-AXIS	48
176	Electronic Hardware Design Engineer	63
177	Snehankit Helpline, Helpline for Visually Impaired	44
178	Pasaydan Seva Prakalp	44
179	Abhishek Shaikshanik V Samajik Sanstha Mumbai	51
180	Web Development	45
181	Digital Marketing	23
182	Data Analysis & Visualization using Power BI	3

Sr. No.	Name of the Company	No. of Students
183	Data Networking and Cyber Security	2
184	Data Science	4
185	Full STACK Developer	4
186	Machine Learning	16
187	Secure Mobile App Development	3
188	UX Design	16
189	PMKVY	14
190	Open Source	8
191	Out House Internship	1
192	Academor	1
193	Airport Authority of India	1
194	Algodoc investing	1
195	Alhansat Technologies	1
196	Apurva Creation	1
197	Arihant Enterprise	4
198	Asiana Times	1
199	Cleversmith Media	1
200	codeclause	2
201	CoverKarlo Pvt Ltd.	3
202	CybraneX Technologies	1
203	Digiopto Technologies Pvt Ltd.	2
204	dissent time	1
205	Emertxe	2
206	Fiora Business Support Services Ltd.	1
207	Harmoni Kitchen	2
208	Intelligent Technology Development Pvt. Ltd.	1
209	Internspedia	1
210	ITdeation Technologies LLP	1
211	Jio Platforms	1
212	KP webbate Technologies	3
213	let's grow more	9
214	Luxnur Digitally	6
215	Nob Serv Integrated Services Pvt. Ltd.	1
216	Olive Tex Silk Mills Pvt Ltd.	1
217	Orient Press Limited	1
218	Outword Concepts	2
219	Pooja food products	1
220	Purplle	1
221	Sahu Technologies Ltd.	1
222	Raise financial services	2
223	Right Advertising	2
224	Rounak Infra	1
225	Sahu Technologies	3
226	ScoopEarth	1
227	SecOps Solution	1
228	Servify	1
229	Snapper Future tech	1
230	Sun Pharma Ind. Ltd.	1
231	TDS org	1
232	tech musketeers	1
233	The Sparks Foundation	9
234	TICKTECH	1
235	Zero Digit	2
236	Abel Software & Consultants Pvt. Ltd.	1
237	Accenture	1
238	Asmi Logistics Solutions Pvt Ltd.	1
239	Clarus info solutions	1
240	Coense Solution	1
241	Continual Engine	1
242	Devtown	3
243	DGB Consultants	1
244	dipti creation	2

Sr. No.	Name of the Company	No. of Students
245	Forage - BlackBird	3
246	Gustovalley Technovations Pvt Ltd	1
247	Hexaview Technologies Pvt Ltd	1
248	Infigon Futures Pvt Ltd	1
249	J P Morgan Chase and Co.	1
250	Kalltrip Pvt Ltd	1
251	Kp webbate technologies LLP	5
252	Lets grow more	10
253	MetaVolf	1
254	Microsoft future ready talent	1
255	MobbyPark	1
256	Oasis Infobyte	10
257	offeteria Pvt Ltd.	1
258	Osource global	1
259	Shunya IoT AI Research Private Limited	1
260	Thadani Hospitality	1
261	Two Waits	1
262	Vintech pvt ltd	1
263	Mechanical Intern	3
264	Product Development Intern	8
265	3D printing assistant	1
266	Product Development Intern	1
267	Mechanical Intern	3
268	Data Research Analyst Intern	1
269	Product Development Intern	1
270	Understanding the electric CV market and mapping of powertrain technologies	1
271	OPERATION INTERN	1
272	Plant Supervisor	1
273	Production and Outfitting Trainee	1
274	Mechanical Intern	1
275	Engineering Trainee	1
276	Summer Internship- Siemens NX design and Simulation	1
277	Product Development Intern	1
278	3D printing assistant	5
279	R&D Intern	1
280	Trainee Engineer	5
281	Content Developer	1
282	Engineering Trainee	1
283	Digital marketing Intern	1
284	Trainee Engineer	1
285	Commercial Banking Virtual Experience	1
286	Google UX Design Specialization	1
287	In-Plant Trainee	1
288	Study of Diesel, Electric Locomotive	1
289	Trainee Engineer	1
290	Undergraduate Traiee	1
291	Trainee Engineer	1
292	CNC/VMC Manufacturing Intern	1
293	CNC PROGRAMMING , AUTOCAD AND MECHATRONICS	4
294	INTERN	1
295	DIGITAL MARKETING	1
296	Trainee Engineer	1
297	In-Plant Trainee	1
298	Mechanical Trainee	2
299	INDIAN RAILWAY	1
300	Mechanical Trainee	1
301	Indian Railway	1
302	Intern Trainee	1
303	Indian Railway	1
304	In-Plant Trainee	1
305	Mechanical Trainee	1
306	Production Trainee Engineer	1

Sr. No.	Name of the Company	No. of Students
307	FUNDAMENTALS OF EV	32
308	Web Development	5
309	Robotic Process Automation (RPA)	1
310	Pmkvy solar panel technician	1
311	PMKVY Assistant Technician Air Conditioner	23
312	UI/UX Design Internship	4
313	Digital Marketing	2
314	Data Analytics and Visualization using Power BI	1
315	Machine Learning	1
316	ACASA	1
317	ACG ASSOCIATED CAPSULES PVT LTD	1
318	Altiostar Networks India Pvt. Ltd.	1
319	Code Clause	5
320	Coding ninjas	1
321	coffeee.io	3
322	Coutloot	5
323	CYBERNXT SOLUTIONS LLP	1
324	Emertxe - Institute For Embedded Systems & IoT Courses	1
325	Feynn Lab	6
326	Gvmr	1
327	HackVeda	2
328	HydroTek	1
329	Ignitus	2
330	KP WEBBATE TECHNOLOGIES LLP	2
331	Livestream Moments(YouTube)	1
332	my insurance club	3
333	NNM Securities Pvt. Ltd.	1
334	Ozibook	4
335	Phn technology	1
336	PHYSICS WALLAH PVT. LTD	1
337	PLYRS.in	1
338	Sheetal Industries	1
339	Shri Agni Motors	1
340	Simplomatic	3
341	Smartknower	4
342	Teccrown Software	3
343	The Sparks Foundation	9
344	Transparent Capital	1
345	TXON	1
346	Uday Electrical Industries	1
347	udemy	1
348	VLine InfoTech	1
349	Xcideducation	1
350	zaptax leagal services	1
351	Smiti Social work foundation	68
352	Full Stack Developer	98
353	Aashiyaanaa Villa	1
354	AC&AT Consulting civil engineer	1
355	Afcons Infrastructures Limited	1
356	AICTE - MISSION AMRIT SAROVAR	17
357	AL kHADEEJ INFRASTRUCTURES	2
358	ARCHIVE Consulting Structural Engineers	1
359	Aron Enterprises Civil Contractor	1
360	A-Square Reality	1
361	Bhojani Enterprises	1
362	Big sky construction	5
363	Bitcon India Infrastructure Developer Pvt. Ltd.	1
364	BUCON Engineers & Infrastructures Pvt. Ltd.	1
365	Building Technologies India Pvt. Ltd	1
366	CHALAK ASSOCIATES	2
367	CIDCO Ltd	1
368	Civico Infra Projects	1

Sr. No.	Name of the Company	No. of Students
369	Code Clause	1
370	Coursera	2
371	Delux Corporation	2
372	Drilltech Engineers Pvt Ltd	2
373	Emertex	1
374	Farooqui Consultant and construction engineer	2
375	FORMS & SURFACES	1
376	Gaurang Prakash Sawant PWD register Contractor	1
377	Global Lab	7
378	GSV Vertica	1
379	Gurukrupa Construction	1
380	Hm associates	2
381	Ideal Properties	5
382	IKS	9
383	Impish Entertainment	1
384	Indian knowledege system	7
385	INTRACT	2
386	IRA STRUCTURAL CONSULTANTS	2
387	J.R.S Infrastructures	1
388	janvi construction	3
389	JAY SHREE KRISHNA	2
390	JAY SHREE KRISHNA	2
391	K.k enterprises/ civil works	1
392	Kamal Brothers	2
393	khatter & associates architects	2
394	L&T Limited Constrcutuion	1
395	Lets Grow More	1
396	Little Climbers	1
397	M/S Supertech Construction Company PVT.LTD	3
398	Madane Design Workshop, LLP	1
399	N.P.VYAWHARE Civil Contractor	1
400	National Cooperatives Database Internship offered by Ministry of Cooperation	1
401	Navkar Estates & homes PVT.Limited	1
402	Neelkanth Construction	1
403	Om Sai Suvrey	1
404	ONGC INDIA LIMITED	1
405	Palsiddha Construction	1
406	Patel Trading Co.	2
407	Pentarch Ventures	4
408	Phoneix group	1
409	Power Mech Projects	1
410	Power Mech Projects	5
411	PRAGATI ENTERPRISES	4
412	Pralita Infraprojects	4
413	Prasanna Joshi & Associates	2
414	Prathmesh Engineers And Contractors LLP	2
415	Prince Construction and Developers	1
416	Priti Construction	1
417	Puja & Company, Civil Engineering	5
418	Ramesh & Associates	3
419	Rushabh Karnavat	7
420	Rushabh Surendra Karnavat	3
421	S K Infrastructure Company	3
422	S.S. Consruction	1
423	Sadguru Group of Constructions	1
424	Samruddhi Enterprises	1
425	Sarthak Enterprises	1
426	SD Corporation Pvt.Ltd	1
427	Seth construction	2
428	Seven Eleven Construction Pvt. Ltd.	1
429	Shailesh H Waghela Engineer and Contractor	6
430	Shantiwan Homes	1

Sr. No.	Name of the Company	No. of Students
431	Sharvari Construction	5
432	Shilpi Construction	2
433	Shivam parivar Developers PVT LTD	4
434	Shivoham Associates	2
435	Shubham Civil Projects Pvt. Ltd.	2
436	Shubham Construction	2
437	Shyam Civil Construction	4
438	Siddhivinayak Habitats	2
439	SIMMI Foundation	1
440	SkillVertex	1
441	SKY Construction	3
442	Star Lite Construction	1
443	Sun Shine Construction	5
444	Sunny Engineering services	3
445	Sunrise Stone Industry	4
446	Sunteck Realty ltd	2
447	Surya landmark developers Pvt.Ldt.	2
448	Swastik Enterprises	2
449	Technical CivIL Institute	1
450	Tejas Arc Construction	2
451	Ten Construction India Pvt. Ltd.	1
452	The design interior	5
453	The office of Deputy Registrar Cooperative Societies, National Cooperative database	3
454	Timbuktu	3
455	Tirupati Group Washim	4
456	TRANSCON - SHETH CREATORS PVT LTD	1
457	Trident Enterprise	2
458	True earth view	1
459	ultra elevators pvt ltd	1
460	Umang Construction Co	2
461	Umiya Associates	1
462	Unschool	1
463	Vardhan Consulting Engieers	10
464	vedika enterprises	2
465	Vikas Reality	3
466	Vikas Shinde Construction	3
467	Vinit Enterprises	3
468	Vitrag Infraprojects LLP	2
469	YOSH INFRATECH PRIVATE LIMITED	2
470	FUNDAMENTALS OF EV	22
471	Web Development	1
472	Robotic Process Automation (RPA)	22
473	PMKVY solar panel technician	11
474	UI/UX Design Internship	4
475	Digital Marketing	2
476	Data networking and cyber security	2
477	Machine Learning	1
478	Secure Mobile App Development	3
	Total	**3371**

Annexure – II

List of Expert/ Invited Talks Delivered During 2022-23

Sr. No	Name of Speaker / Faculty	Topic	Event	Organizing Institution and Date
1	Mr. Nand Kishore Musale (Deputy Manager in Industrial Engineering) Mahindra Vehicle Manufacturing Ltd. Pune.	Induction Programme	Lecture by Eminent People-I Time - 01:00 pm to 03:00 pm	TCET,Mumbai 07.11.22
2	Dr. Mohan B. Rao Dean at IES Management College	Induction Programme	Universal Human Values (Basic Human Aspiration) Time - 01:00 pm to 03:00 pm	TCET,Mumbai 09.11.22
3	Prof. Sandhya Save Electronics Engineering Department , TCET, Mumbai	Induction Programme	Universal Human Values (Self-Assessments & health) Time - 01:00 pm to 03:00 pm	TCET,Mumbai 10.11.22
4	Ms. Aparajita Singh Universal Human Values	Induction Programme	Universal Human Values (Relationship and Society) Time - 01:00 pm to 03:00 pm	TCET,Mumbai 11.11.22
5	Dr. A.P. Jayaraman President STEAM Academy Dr. Baldev Krishan Sharma	Induction Programme	Lecture by Eminent People-II Time - 01:00 pm to 03:00 pm	TCET,Mumbai 14.11.22
6	Chairman & Founder, Creative and innovation (CIIA) Dr. Salil Verma, Bhabha Atomic Research Centre, Mumbai, Maharashtra	Induction Programme	Research to Technology Implementation: A Scientists Role Time – 11.00 am to 01.00 pm	TCET,Mumbai 24.2.23
7	Dr.Megharani Patil	C++	INS Hamala Naval Officers through Pal India	TCET,Mumbai 2/03/2023, 3/03/2023 and 4/03/2023
8	Mrs Shilpa Mathur	Clustering in Machine Learning	Indian Airforce	TCET,Mumbai 20/3/2023 and 21/03/2023
9	Cr.vijay Pratap singh	Carrier opportunities in Government Defence and paramilitary sectors	Technical -seminar	TCET-12th Aug 2022
10	Mr.Chaitanya Bulusu	converting innovation into start up	Technical -seminar	TCET- 30th Sept 2022
11		Inauguration and oreintation Bureau of Indian Standard	Technical -seminar	TCET- 10th Feb 2023
12	Mr.Subodh Srivastav	Different types of gas turbine and their applications	Technical -seminar	TCET-23rd March 2023
13	Mr.Tushar Nankani	Competitive Programming	Seminar	TCET, 20th September ,2022
14	Mr.Maunash Ajay Jani	NoSQL & Web Programming- Creating Applications using Node.js and MongoDB	Seminar	TCET,10th Aug ,2022
15	Mr. Jay Laxman Borade	Auzre ML (Machine Learning in IT Application Development)	Seminar	TCET,10th Aug ,2022
16	Ms. Priyanka Sharma	Low-Code No-Code Technology	Seminar	TCET,5th April ,2023
17	Mr. Pranav Dave	Harnessing the power of AI/ML with CHATGPT	Seminar	TCET,5th April ,2023
18	Mr. Susmit Vengurlekar	Neural Feature Information	Seminar	TCET,5th April ,2023
19	Internet of Things: A	Mr. Swastik Sharma Java Developer -	Seminar	TCET,29th July, 2022

	Career to Choose	SunBase Data Systems, Mumbai.		
20	Big Data Analysis	Mr. Sarvesh Dubey- Cloud Data Engineer at Persistent System	Webinar	TCET,23th July, 2022
21	Cyber-security	Mr. Pratik Sonawane, India head, Cyber Security Trainings and Regional Manager – West, Cyber security services in Network Intelligence, Institute of Information Technology, and Mumbai.	Seminar	TCET,30th September 2022,3rd September 2022
22	Dr. Pavan Kumar Scientist, National Geophysical Research Institute, Hyderabad	Latest trends in the field of Seismology	International Conference on Communication, Computing and Data Security	TCET (E&TC dept.) 24/2/2023
23	Mr. Ashish Sharma R&D Engineer, Reliance Jio	Exact Application of Signals and Systems and EM	Technical Seminar	TCET (E&TC dept.) 06/04/2023
24	Mr.Pushkar Bagayatkar IT Head, Fanatisch Marketing Services	Networking Applications in Industry	Technical Seminar	TCET (E&TC dept.) 24/03/2023
25	Mr.Yogesh Gupta Solution Head, TCS Founder & Design Engineer, ITG	Microsoft Azure Data Platform	Technical Seminar	TCET (E&TC dept.) 11/04/2023
26	Mr. Shirish Kumar Joshi Director, Applied Digital Microsystems Pvt Ltd	Programmable Logic Devices	Technical Seminar	TCET (E&TC dept.) 22/09/2022
27	Dr.Kushal Tuckley, Director,AGV Systems Pvt Ltd	Radar Technology and Applications	Technical Seminar	TCET (E&TC dept.) 20/09/2022
28	Dr.Rabinder Henry ATLAS SkillTech, University ,Mumbai	Applications of AI and ML	Technical Seminar	TCET (E&TC dept.) 16/09/2022
29	Mr. Ashish Shekhar LTT-Mumbai,Reliance Jio Infocomm Pvt. Ltd.	Technologies for 5G and beyond communications	Guest lecture	TCET (E&TC dept.) 16/02/2023
30	Mr. Gaurav Punjabi Head of Business Technical Program and Cyber security, India Bonds Pvt. Ltd.	SQL injections on databases	Guest lecture	TCET (E&TC dept.) 27/1/2023
31	Mr. Pavan kale	Robotics Process Automation	Technical Seminar	TCET 22/09/ 2022
32	Mr. Godson Michael Dsilva	Computer Vision in Artificial Intelligence	Technical Seminar	TCET 29/09/ 2022
33	Mr. Devrath Singh Bisht	Prerequisites to deep learning	Expert Session	TCET 29/10/2022
34	Ms Nikita Tandel	Machine Learning Algorithms and Artificial Neural Networks	Workshop	TCET 25/11/2022,26/11/2022
35	Mr. Venkatesh Gunsekaran	Data Journey towards ML Insights	Technical Seminar	TCET 10/03/2023
36	Ms. Aishwarya Verma	Best Coding Practices	Technical Seminar	TCET 13/03/2023
37	Mr Laki S	Emerging tools under Professional elective subject	Expert Session	TCET 15/05/2023
38	Mr. Naresh R. Jasotani	Dive into the AI & ML Universe	Expert Session	TCET 8/04/2023
39	Mrs. Anuprita Deshmukh	Nasscom Qualification pack "Machine Learning Engineer"	Workshop	TCET 20/2/2023 to 24/2/2023
40	Dr. Shiwani Gupta	Fundamentals of AI & ML	Expert Session	TCET 02/01/2023
41	Dr. Anjali Yeole	Application of AI & ML in Healthcare/Evaluation/Interactive Session-I	Expert Session	TCET 02/01/2023
42	Ms. Ela Gore	Application of AI & ML in Healthcare/Evaluation/Interactive Session-II	Expert Session	TCET 02/01/2023
43	Dr. Sujata Alegavi	Deep Learning	Expert Session	TCET 03/01/2023
44	Ms. Rajashree Gadhave	Application of AI & ML in Agritech/Evaluation/Interactive Session-I	Expert Session	TCET 03/01/2023

45	Ms.Surekha Janrao	Application of AI & ML in Agritech/Evaluation/Interactive Session-II	Expert Session	TCET 03/01/2023
46	Dr Krishna Kumar Singh	Computer Vision	Expert Session	TCET 04/01/2023
47	Dr.Preetha Jagannathan	Application of AI & ML in Security/Evaluation/Interactive Session-I	Expert Session	TCET 04/01/2023
48	Dr. Vinayak Ashok Bharadi	Application of AI & ML in Societal benefits/Evaluation/Interactive Session-I	Expert Session	TCET 05/01/2023
49	Mr.Sagar Patil	Application of AI & ML in Societal benefits/Evaluation/Interactive Session-II	Expert Session	TCET 05/01/2023
50	Dr. Rajanikant Aluvalu	Application of AI & ML in Education/Evaluation/Interactive Session III	Expert Session	TCET 05/01/2023
51	Mr.Sudhir Mundhra,	Machine Vision Solution Strategies	Expert Session	TCET 06/01/2023
52	Dr. Radhika Kulkarni	Natural Language Processing	Expert Session	TCET 06/01/2023
53	Mrs. Aruna Pavate	Application of AI & ML in Societal benefits/Evaluation/Interactive Session	Expert Session	TCET 06/01/2023
54	Mr. Laki S	Advancement in AI & ML	Expert Session	TCET 07/01/2023
55	Mr. Rajesh Pitoriya	Industrial Applications of PLC, SCADA and AC drives	Technical Seminar	TCET-12/04/2023 2.30 to 4.30
56	Mr. Hari N. Khatavkar (U.S.)	Webinar-on Oppoutunities of Higher studies in US	Webinar	TCET-08/03/2023 4.00 to 6.00
57	Mr. Kushal Mahidhar	Automation and Robotics in Industries	Seminar	TCET-10/03/2023 9.30 to 10.30
58	Mr. Rajesh Pitoriya	Industrial Applications of PLC, SCADA and AC drives	Technical Seminar	TCET-12/04/2023 2.30 to 4.30
59	Mr. Hari N. Khatavkar (U.S.)	Webinar-on Oppoutunities of Higher studies in US	Webinar	TCET-08/03/2023 4.00 to 6.00
60	Mr. Kushal Mahidhar	Automation and Robotics in Industries	Seminar	TCET-10/03/2023 9.30 to 10.30
61	Ms. Easha Badheka and Team	Technical Seminar on "Solar Power Generation and applications"	Technical seminar under SDP	TCET, E&CS dept, 28-09-2022
62	Mr. Kalpesh Ghadigaonkar & Ms. Aditi Gangar	How to start career in data analytics	Seminar	TCET, IETE-TCET 26/8/22
63	Mr. Anil Kotnis	Technical Seminar on "Medical IoT and other applications"	Technical seminar under SDP	TCET, E&CS dept,14-10-2022
64	Dr Samarjeet Bohra	Key note address -	IOT SIAC technology conference	TCET, 25 & 26 Nov 2022
65	Mr. Vishal Jariwala	Technical Seminar on "Emerging Technologies in Electronics Engineering"	Technical seminar under SDP	TCET, E&CS dept,18-04-2023
66	Mr. Deepak Varma and Team	Technical Seminar on "Future of IoT in Retail Sector"	Technical seminar under SDP	TCET, E&CS dept,29-03-2023
67	Dr. Sudhakar Umale	Design aspects of electric vehicles	seminar	TCET, IETE-TCET 26/2/23
68	Mr. Masood Sheikh	Introduction to ChatGPT	Webinar	TCET, IETE-TCET 28/1/23
69	Mr. Khushal Mahidar	Alumi Talk	Seminar	TCET, IETE-TCET 3/3/23
70	Mr. Prakash Kolhe,	Key note address	ICCDS 2023 International conference	TCET, 24 & 25 Feb 2023
71	Dr. Pavan Kumar Vengala,	Key note address ICCDS 2023	ICCDS 2023 International conference	TCET, 24 & 25 Feb 2023
72	Mr. Shivam Sethuraman Manager,	Rebarman Software- "Centre Of Excellence And Training Program For Civil Engineers"	Technical Seminar	TCET Civil Department 8/2/2023
73	Mr. Munuraja Managing Director	Climate Change and Sustainability-The Future	Technical Seminar	TCET Civil Department 3/3/2023
74	Dr. Sanjeev Ghosh & Dr. Anand Khandare, TCET	Department FDP on OBE & CO PO Mapping	FDP	26/09/2023 & 27/09/2023

75	Gaurav Sharma, Cybersecurity Professional	Technical Seminar on Cybersecurity & Cybercrime	Technical Seminar	10-10-2022
76	Ms. Rutu Ataliya, Cybersecurity Incident Responder, Amazon Web Services (AWS)	Guest Lecture on Cybersecurity: Scope, Current Trends & Future	Guest Lecture	19/11/2022
77	by Institute of Information Security, Mumbai	AICTE Cybersafety Campaign	AICTE Cybersafety Campaign	28/12/2022
78	Mr. Shivanshu Shrivastav, COMP Alumni (Batch 2022)	on Research Paper Writing – Alumni Interaction Session	Expert Talk	21/01/2023
79	Avishkar Winner, Ms. Vaishali Nirgude, TCET	Session on Guidelines for making Poster Presentation	Expert Talk	27/01/2023
80	TCET-CS&E Dept & CyberPeace Foundation	Group discussion Session on Cybersafty under AICTE Cybersafety Campaign	AICTE Cybersafety Campaign	27/01/2023
81	Dr. Hemant Kasturiwale, TCET	Orientation on IIC Cell	Expert Talk	03-02-2023
82	Ms. Ditixa Mehta, TCET	Session on Research Paper Writing	Expert Talk	04-02-2023
83	Institute of Information Security, Mumbai	Pre-Conference Workshop on Cybersecurity Fundamentals	Pre-Conference Workshop	20/02/2023 to 25/02/2023
84	Conducted with E&TC department, TCET	ICCCDS 2023	Multicon	24/02/2023 to 25/02/2023
85	In collaboration with IoT and AI&DS department, TCET	Department FDP on Python Programming	FDP	28-29 Feb & 16-17 March 2023
86	Mr. Ashwani Paliwal, CEO, SeCop Solutions	Technical Seminar on Network Security	Technical Seminar	09-03-2023
87	Mr. Pratik Sonawane, Information Security Specialist, Amdocs, Pune	Session on Cyber Security Best Practices for Online Privacy under AICTE Cybersafety Campaign	Cybersafety Campaign	29/03/2023
88	Dr. Ritesh Patel, Professor and Head, CE, CSPIT, CHARUSAT	Guest Lecture Network Layer Fundamentals	Guest Lecture	01-04-2023
89	Ms. Kinjal Patel, M. Com Co-ordinator, Maniben Nanavati Women's College, Vile Parle (West), Mumbai	Guest Lecture on Personality Development and Stress Management	Guest Lecture	10-04-2023
90	Mr. Ameya Kharkar, COMP Alumni (Batch 2022)	Alumni Interaction Session on Career Guidance and Certificate Courses – Alumni Interaction Session	Alumni Interaction Session	01-04-2023
91	Ms. Priyanka Sharma, Accenture Mr. Divyanshu Vashisht, CloudThat	2 days Online Workshop on 'Power BI' & 'Blockchain Technology'	Online Workshop	20/07/2023 & 21/07/2023
92	Mr.Tushar Nankani	Competitive Programming	Technical Seminar	20th September ,2022
93	Mr.Maunash Ajay Jani	NoSQL & Web Programming- Creating Applications using Node.js and MongoDB	Technical Seminar	10th Aug ,2022
94	Mr. Jay Laxman Borade	Auzre ML (Machine Learning in IT Application Development)	Technical Seminar	10th Aug ,2022
95	Ms. Priyanka Sharma	Low-Code No-Code Technology	Technical Seminar	Accenture, Mumbai, 5th April ,2023
96	Mr. Pranav Dave	Harnessing the power of AI/ML with CHATGPT	Technical Seminar	Innovatiive Creators group, Vasai, 5th April ,2023
97	Mr. Susmit Vengurlekar	Neural Feature Information	Technical Seminar	Zeza Technologies, Mumbai, 5th April ,2023
98	Mr. Swastik Sharma Java Developer - SunBase	Internet of Things: A Career to Choose	Seminar	29th July, 2022

	Data Systems, Mumbai.			
99	Mr. Sarvesh Dubey-Cloud Data Engineer at Persistent System	Big Data Analysis	Webinar	23th July, 2022
100	Mr. Pratik Sonawane, India head, Cyber Security Trainings and Regional Manager – West, Cyber security services in Network Intelligence, Institute of Information Technology, and Mumbai.	Cyber-security	Seminar	30th September 2022, 3rd September 2022
101	Mr. Kamlesh Nagware, CTO, Snapper Future Tech	Budding technology-Blockchain	Seminar	10th March, 2023
102	Priyanka Sharma, Program Manager Automation Analytics, Accenture, Mumbai	Robotic Process automation	Seminar	21st April 2023

Annexure – III

Research Publications in the Journals Notified on UGC Website during the Academic Year

Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Journal	Month and Year of publication	ISSN
Dr R R Sedamkar	COMP	Multiscale Rotation Invariant Local Features Extraction for Hyperspectral Image Classification Using Cnn	Computing and Communications Engineering in Real-Time Application Development, Apple Academic Press	Sept, 2022	9781003277721 7
		Automated Classification of Hyperspectral Image Using Supervised Machine Learning Approach	Applications of Artificial Intelligence and Machine Learning, Springer	August, 2022	1876-1119
		Prediction of depression using Machine Learning and NLP approach	Intelligent Computing and Networking, Springer	Aug-22	2367-3389
Dr. Sheetal Rathi	COMP	Enhanced DSSM (deep semantic structure modeling) technique for job recommendation	Journal of King Saud University-Computer and Information Sciences, Elsevier	August, 2022	1319-1578
		Smart Car Parking System Using IoT and Cloud Technology	Computing and Communications Engineering in Real-Time Application Development, Apple Academic Press	Sep-22	9781003277721 7
		Exploratory Data Analysis and Optimal Feature Selection on Pomegranate Dataset for Enhancing the Performance Of Pomegranate Disease Prediction	ANNALS OF FOREST RESEARCH	2022	20652445
		Improving the Accuracy of Real Field Pomegranate Fruit Diseases Detection and Visualization using Convolutional Neural Networks and Grad-CAM	Journal of Data Analysis Techniques and Strategies,Indexed in Scopus, Inderscience Publishers	In Process. Paper Accepted	1755-8069
Dr. Harshali Patil	COMP	Statistical Data Analysis using GPT3: An Overview	IEEE XPLORE	Feb, 2023	978-1-6654-9291-1
		Impact of Covid on Emotional Well-being of people using Machine Learning Approach	IJCTE, Scopus Indexed Journal		2248-9622
		Recent trends in Assessment techniques and novel approach for assessment using 3-2-1 methodology	IJCRT	2023	2320-2882
		Water conservation in residential areas using ensemble techniques	IJEAT	December, 2022	2249-8958
		Meal Match Bridging the Gap between Food Waste and Hunger	International Journal of Innovative Research in Technology (IJIRT)	Mar-23	2349-6002
		Effective Teaching Assessment Model: Utilizing the Kirkpatrick Evaluation Framework	International Journal of Creative Research Thoughts (IJCRT)	Mar-23	2320-2882
		Opacity to Transparency: A Journey into Explainable Recommender Systems	INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY	Jun-23	2349-6002
Dr. Anand Khandare	COMP	Study of python library for NLP	IJDATS, inderscience	Paper Accepted	1755-8069

Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Journal	Month and Year of publication	ISSN
		MentoCare: An Improved Mental Healthcare System for Public	Applied Computer Vision and Soft Computing with Interpretable AI	September, 2022	9781032417233
Dr. Shiwani Gupta	COMP	Automated Short Answer Evaluation using Natural Language Processing and Lemmatization	ICERI	2022	978-93-92105-77-7
Dr. Rekha sharma	COMP	Design of CRMSOFT: A customer relationship management system using Analytical tools	NOVYI MIR Research Journal	2023	0130-7673
		Entertainment Assistant for the Digital Inclusion of Elderly People	NOVYI MIR Research Journal	2023	0130-7673
Dr. Manish Rana	COMP	BRAIN TUMOR DETECTION & SEGMENTATION USING DEEP LEARNING	I-manager's Journal on Computer Science	Aug-22	2249-0736
		Language Detection using Multinomial naive Bayes Algorithm	I-manager's Journal on Computer Science	Aug-22	2249-0736
		Gradify: Analysis of Twitter account using classification algorithm	I-manager's Journal on Computer Science	Aug-22	2249-0736
Mrs. Vaishali Nirgude	COMP	Improving the Accuracy of Real Field Pomegranate Fruit Diseases Detection and Visualization using Convolutional Neural Networks and Grad-CAM	Journal of Data Analysis Techniques and Strategies,Indexed in Scopus, Inderscience Publishers	In Process. Paper Accepted	1755-8069
		Exploratory Data Analysis and Optimal Feature Selection on Pomegranate Dataset For Enhancing The Performance Of Pomegranate Disease Prediction	ANNALS OF FOREST RESEARCH	2022	20652445
		One Framework to Detect Them All: A CrossIndustry Object Detection System Using Detectron	TIJER	Apr-23	2349-9249
Mrs. Veena Kulkarni	COMP	Bug Tracking System with severity prediction and triage assistance	International Journal of Advanced Research in Computer and Communication Engineering	Aug-22	2319-5940
Mrs. Foram Shah	COMP	Text Recognition from Images	IJRASET	Nov-22	2321-9653
Ms. Tanmayi Nagale	COMP	Identification of ClickJacking Attack using IFrame	IJCRT	Apr-23	2320-2882
Ms. Drashti Shrimal	COMP	Opacity to Transparency: A Journey into Explainable Recommender Systems	INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY	Jun-23	2349-6002
Mrs. Sayali Salkade	COMP	Recent trends in Assessment techniques and novel approach for assessment using 3-2-1 methodology	IJCRT	2022	2320-2882
Arpit Rawankar, Abhijeet Ravankar	E&TC	Real-Time monitoring of Elderly People through Computer Vision	Artificial Life and Robotics	Oct-22	ISSN- 1614-7456
Abhijeet Ravankar, Arpit Rawankar	E&TC	Video Stabilization Algorithm for Field Robots in Uneven Terrain	Artificial Life & Robotics	Jun-23	ISSN 1614-7456

Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Journal	Month and Year of publication	ISSN
Rashmita K. Mohapatra, Rushil Pathare, Vansaj Gupta, & Sreyas Nair	E&TC	Solar Panel Energy with Smart Irrigation System	Andalasian International Journal of Applied Science	Apr-23	ISSN-2797-0442
Dr. Kamal Shah	IT	Rohini Patil, Kamal Shah, Deepak Bhosle "Impact of COVID-19-related Stress on Glycaemic Control in Hospitalized Patients with Type 2 Diabetes Mellitus"	Journal of Health Sciences and Surveillance System	2022	10.30476/JHSSS.2022.93669.1470
Dr. Kamal Shah	IT	Performance Evaluation of Machine Learning Classifiers for Prediction of Type 2 Diabetes Using Stress-Related Parameters	springer	Jul-22	https://doi.org/10.1007/978-981-19-2211-4_8
Dr. Rajesh Bansode	IT	S. Sall, R. Bansode, "Lightweight Cryptography Using Pairwise Key Generation and Malicious Node Detection in Large Wireless Sensor Network,"	Indian Journal of Science and Technology	Oct-22	
Dr. Rajesh Bansode	IT	A.Pavate, R.Bansode, "Associative Discussion Among Generating Adversarial Samples using Evolutionary Algortihm and Samples Generated Using GAN, "	Journal of Healthcare Engineering SCI	Oct 2022	
Dr. Rajesh Bansode	IT	S. Sall, R. Bansode, "Novel Approach for Service and Channel Selection with QoS Parameters using Optimization Techniques in Large Networking Environment",	International Journal of Engineering Research & Technology, vol. 11, Issue 9,	Sept. 2022	ISSN: 2278-0181
Dr. Rajesh Bansode	IT	S. Sall, R. Bansode, "Optimization Based Path Finding Techniques Using Genetic Algorithm in Large Wireless Sensor Network"	Journal of Educational and Social Research, Sept. 2022, Vol. 8, Issue 3	Sept. 2022	ISSN: 2239-978X
Dr. Rajesh Bansode	IT	A Chaudhari and R.Bansode, "Design and Development of Framework to Secure IoT Data",	Journal of Network Modelling Analysis in Health Informatics and Bioinformatics	Sept. 2022	e-ISSN: 2192-6670

Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Journal	Month and Year of publication	ISSN
Dr. Rajesh Bansode	IT	A.Chaudhari and R.Bansode, "A fully homomorphic encryption framework for secure data transmission and attack detection in IoT enabled smart cities using MAES and DHGNN",	Journal of Ad Hoc Network, Elsevier. (Under review, Submitted for review in Aug., 2022)	Aug., 2022	
Dr. Rajesh Bansode	IT	A. A. Pavate and R. Bansode, "Evolutionary algorithm with self-learning strategy for generation of adversarial samples"	International Journal of Ambient Computing Intelligence, vol.13, no.1, Article 16, pp.1-21	Jul-22	DOI: 10.4018/ IJACI.300797
Dr. Sangeeta Vhatkar	IT	Sangeeta Vhatkar, Aditya Dixit, Rahul Jha, Runak Mishrs, "Prediction of Anemia Disease using Machine Learning Algorithms",	Journal Of Electronics Information Technology Science And Management	Aug-22	ISSN NO: 0258-7982
Dr. Sangeeta Vhatkar	IT	Sangeeta Vhatkar, Zahir Aalam, Kautilya Joshi, Deep Modi, "A Futuristic and Robust Claimate Surveillance System Using Wireless Sensor Network",	Journal Of Electronics Information Technology Science And Management	Aug-22	ISSN NO: 0258-7982
Dr. Sangeeta Vhatkar	IT	Sangeeta Vhatkar, Zahir Aalam, Bimal Sharma, "Automation: Generating Relational Schema from E-R Diagram	Journal Of Electronics Information Technology Science And Management	2022	ISSN NO: 0258-7982

Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Journal	Month and Year of publication	ISSN
Dr. Sangeeta Vhatkar	IT	Sangeeta Vhatkar ,Manali Raut , Dr.Sangeeta Vhatkar , Zahir Aalam , "Intrusion Detection System: using Honeywords From Existing Passwords technique"	Journal Of Electronics Information Technology Science And Management	Aug-22	ISSN NO: 0258-7982
Dr. Sangeeta Vhatkar	IT	Dr.Sangeeta Vhatkar, Dr. C A. Dhote ,Deepak H. Sharma , Manish M. Potey " Security-as-a-Service (SECAAS) Cloud: Implementation and Integration of various innovative options" ,	Journal Of Electronics Information Technology Science And Management	Aug-22	DOI:10.37896 /JEISMV12.8/ 1239
Dr. Sangeeta Vhatkar	IT	Sangeeta Vhatkar, Anjali Chauhan b, Vaibhav D, " Confidentiality of Patient's Medical ",	International Journal of Intelligent Communication, Computing and Networks Open Access Journal	2022	ISSN: 2582-7707
Dr. Sangeeta Vhatkar	IT	Sangeeta Vhatkar, Zahir Aalam, " Design,Development and Performance Evaluation of a Novel Adaptive Routing Protocol for Wireless Sensor Netwoks" ISSN:1308-5581 ESCI-Web of science Journal (Received Acceptance Letter) Aug 2022	Web of Science	Aug-22	ISSN:1308-5581
Dr. Sangeeta Vhatkar	IT	Sangeeta Vhatkar, Alisha Gupta, Bhushan Chudhary, Pratibha Dwivedi , "Block Chain: A Comprehensive Study on namecoin" ISSN:1308-5581 ESCI-Web of science Journal (Received Acceptance Letter) Aug 2022	Web of Science	Aug-22	ISSN:1308-5581
Dr. Sangeeta Vhatkar	IT	Sangeeta Vhatkar, Harsh Rawal, Shubham More, Vishal Patel, "Web Server Log Analysis" ISSN:1308-5581ESCI-Web of Science Journal (Received Acceptance Letter Aug 2022	Web of Science	Aug-22	ISSN:1308-5581

Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Journal	Month and Year of publication	ISSN
Dr. Rajesh Bansode	IT	A. Chaudhari, R. Bansode,"A Privacy Preservation Strategy using Hybrid Fully Homomorphic Encryption Scheme in IoT"	International Journal of Cooperative Information Systems	April - 2023	p-ISSN: 0218-8430
Dr. Rajesh Bansode	IT	Submitted a article in Springer Journal titled: "Improving AODV for guaranteed message delivery using selective hopping techniques"	Journal of Soft Computing – A Fusion of Foundations, Methodologies & Applications	May-23	e-ISSN: 1433-7479, p-ISSN: 1432-7643
Dr. Rajesh Bansode	IT	Associative Discussion among Generating Adversarial Samples using Evolutionary Algorithm and Samples Generated Using GAN – (Submitted for review), PLOS Journals, March -2023.	PLOS Journals	Mar-23	
Dr. Sangeeta Vhatkar	IT	Sangeeta Vhatkar, Aditya Dixit, Rahul Jha, Runak Mishrs, "Prediction of Anemia Disease using Machine Learning Algorithms"	Intelligent Computing and Networking Lecture Notes in Networks and Systems	2023	https://doi.org/10.1007/978-981-99-0071-8_18
Mrs. Pranjali Kasture	IT	"Recent Studies on Deep Learning Techniques for Stock Market Forecasting	International Conference on Sustainable Computing and Smart Systems (ICSCSS) sponsored by IEEE, Hindustan College of Engineering and Technology; Madras (Coimbatore)	2023	10.1109/ICSCSS57650.2023.10169585
Purvi Sankhe	IT	Purvi Sankhe,Shruti Mathur,Tasneem Bano Rehman, Mukesh Dixit "Review of Agile software development methedology with SCRUM and XP Methodology with SCRUM & Extreme Programming"	IEEE Conference (CCET)/978-1-6654-5415-5/2022 IEEE	2022	

Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Journal	Month and Year of publication	ISSN
Neha Patwari	IT	Neha Patwari, "Embedded light weight cryptography technique to preserve privacy of healthcare wearable Iot Device Data"	IEEE	Jun-23	10.1109/ICDCECE57866.2023.10151002
Neha Patwari	IT	Neha patwari "Symmetrized Feature selection with Stacked Generalization based Machine Learning Algorithm for the Early Diagnosis of Chronic Diseases"	the 5th International Conference on Smart Systems and Inventive Technology (ICSSIT 2023)	Mar-23	10.1109/ICSSIT55814.2023.10061062
Shruti Mathur	IT	Purvi Sankhe,Shruti Mathur,Tasneem Bano Rehman, Mukesh Dixit "Review of Agile software development methedolgy with SCRUM and XP Methodology with SCRUM & Extreme Programming	IEEE Conference (CCET)/978-1-6654-5415-5/2022 IEEE	2022	
Arpit Vyas, Akshat Shah, Harshad Sawakhande, Dinesh Prajapati, Dhruman Shah	Civil	Utilization of Waste Fibers in Road Construction	International Journal for Research in Applied Science & Engineering Technology	May-23	ISSN: 2321-9653
Dr. Archana Belge	MME	Proposed Bio-Battery for Energy Generation	Journal of Emerging Technology and Innovative Research (JETIR)	2022	2349-5162
Hemant Kasturiwale , Vaibhav Gijare	E&CS	Assessment System or Method for Developing Attitude Competency and Mindset of learners	Journal of Engineering Education Transformations, January 2023	2022-23	2349 - 2473
Hemant Kasturiwale, Ninad Khandare , R R Sedamkar	E&CS	Integrated Laboratory Practices in the Question Papers	Journal of Engineering Education Transformations, January 2023	2022-23	2349 - 2473
Hemant Kasturiwale,Swati Bhisikar	E&CS	HAND GESTURE CONTROLLED POWERPOINT PRESENTATION USING OPENCV	Eur. Chem. Bull	2023	5137 – 5145
Dr. Hemant Kasturiwale, Mrs. Reena Shinde, Mr. Deepak Shinde	E&CS	LUNG CANCER DETECTION USING LOCAL ENERGY BASED SHAPE HISTOGRAM (LESH) AND ADABOOST MACHINE LEARNING TECHNIQUES	INTERNATIONAL JOURNAL OF CURRENT SCIENCE (IJCSPUB)	April 2022	2250-1770
Hemant Kasturiwale , Yogesh Thakre	E&CS	Intelligent Life Saver System for People Living in Earthquake Zone	International Journal of Next-Generation Computing	March 2022	0976-5034
Alegavi S., Belge A., Mishra S	IoT	A Review on Alternative Energy Sources	IEEE International Conference on Advances in Science and Technology (ICAST -2022)	2-3rd December 2022	
Alegavi S., Sedamkar R.R., Gadhave R	IoT	Hyperspectral Image Classification Using Neural Networks With Effect Of Feature Optimization On Fused Convolutional Features	AIP Scopus indexed conference proceedings. (In process)	2022-23	

Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Journal	Month and Year of publication	ISSN
Alegavi S., Bharadi V., Toyle S	IoT	Sentiment Analysis of Tweets for COVID-19 Outbreak and its Impact using Named Entity Recognition	AIP Scopus indexed conference proceedings. (In process)	2022-23	
Alegavi S., Bharadi V., Nemade B	IoT	Using CNN-LSTMs and Transformer RNNs for COVID19 Impact Prediction	IEEE Conference (In process)	2022-23	
Khatri, Sunil & Kokane, Pravin & Kumar, Vinay & Pawar, Shubham	IoT	Prediction of waterlogged zones under heavy rainfall conditions using machine learning and GIS tools: a case study of Mumbai	GeoJournal.	2022	

Annexure – IV

Books and Chapters in Edited Volumes / Books published, and Papers in National/International Conference Proceedings during the Year

Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference	Name of the conference	National / International	Year and month of publication	ISBN of the Book/Conference Proceeding	Affiliating Institute of the teacher at the time of publication	Name of the Publisher
Dr. Harshali Patil	Applied Data Science					February, 2023	978-93-5563-341-5	TCET, Mumbai	TechKnowledge Publication
		Design and Development of Stubble Selling and Assistance Application				September, 2022	9781774917008	TCET, Mumbai	Apple Academic Press
Dr. Anand Khandare		Improved Healthcare System using Artificial Intelligence: Technology and Challenges			Applied Computer Vision and Soft Computing with Interpretable AI	2022	9781032417233	TCET, Mumbai	Taylor and Francis-CRC-Press
Dr. Shiwani Gupta		Quantum Computing to enhance performance of Machine Learning			Computing and Communication Engineering in Real Time Application Development	Sep-22	9781774638361	TCET, Mumbai	Apple Academic Press
Mr. Loukik Salvi	Applied Data Science					February, 2023	978-93-5563-341-5	TCET, Mumbai	TechKnowledge Publication
Dr. Neha Mishra	Published a book on Coumarin as a Boon to Earth. A new Cancer Treatment?					2022-23	9783346815385	TCET, Mumbai	Grin Publication

Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference	Name of the conference	National / International	Year and month of publication	ISBN of the Book/Conference Proceeding	Affiliating Institute of the teacher at the time of publication	Name of the Publisher
Ms. Niki Modi		Comparative Analysis of Different BlockChain Technology to Improve the Security in Social Network			Intelligent Computing and Networking	Mar-23		TCET, Mumbai	Springer, Singapore
Shailendra P. Shastri, Archana Deshpande	Printed Antennas	Antenna in RFID smart systems	-	-	-	-	ISBN: 9781003347057	TCET, Mumbai	CRC Press
Ms. Niki Modi		"Enhancing Session Hijacking Attacks Using Session Security on a Browser with Disposable Credentials Using OTC" in Computing and Communications Engineering in Real-Time Application Development			Computing and Communication Engineering in Real Time Application Development	Sep-22	9781774638361	TCET, Mumbai	Apple Academic Press

Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference	Name of the conference	National / International	Year and month of publication	ISBN of the Book/Conference Proceeding	Affiliating Institute of the teacher at the time of publication	Name of the Publisher
Ms. Tanmayi Nagale		Improvement of Makespan and TCTime in Dynamic Job Ordering and Slot Utilization for MapReduce Workloads			Intelligent Computing and Networking	Mar-23		TCET, Mumbai	Springer, Singapore
Dr. Sangeeta Vhatkar	Big Data Analytics Compulsory Subject Code (Code: CSC702)	--	--	--	--	2022-2023	ISBN: 978-93-5583-080-7	TCET, Mumbai	Tech-Neo Publication
Dr. Sangeeta Vhatkar	Big Data Analytics Compulsory Subject Code (Code: CSC702)	--	--	--	--	2022-2023	978-93-5583-202-3	TCET, Mumbai	Tech-Neo Publication
Ms. Trupti Shah	Cryptography and Network Security	--	--	--	--	Apr-23	ISBN978	TCET, Mumbai	(Dr. Babasaheb Ambedkar Technologycal University)Lonare, Maharastra
Dr. Kamal Shah	--	Computing and Communications Engineering in Real-Time Application Development	--	--	--	2022	eBook ISBN: 9781003277217	TCET, Mumbai	Robust Reversible Watermarking Using Binary Xored
Dr. Kamal Shah	--	Handbook of Research on Machine Learning	--	--	--	2022	eBook ISBN: 9781003277330	TCET, Mumbai	Machine Learning in Healthcare: Applications, Current Status, and Future Prospects

Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference	Name of the conference	National / International	Year and month of publication	ISBN of the Book/Conference Proceeding	Affiliating Institute of the teacher at the time of publication	Name of the Publisher
Dr. Rajesh Bansode, Rahul Neve,	--	Review of Lightweight Cryptography for Secure Data Transmission in Resource Constraint Environment of IoT	--	--	--	2022	ISBN9781003277217	TCET, Mumbai	Apple Academic Press, 2022
Dr. Rajesh Bansode,	--	"Cyber security Concern for Internet of Behaviour	--	--	--	2022		TCET, Mumbai	Internet of Behaviors" by Taylor & Francis CRC press (Publisher)
Dr. Anil Vasoya,	--	"Smart Healthcare System using Deep Learning and Blockchain Technologies"	--	--	--	2022	HBK: 978-1-032-41086-9	TCET, Mumbai	by CRC Press, Taylor & Francis Group,
Dr. Megharani Patil	Evolution and Future of Quantum Computing,Scrivener Publishing Wiley	Building a Virtual Reality based framework for education of autistic kids	-	-	-	Mar-23	**ISBN-13**: 978-1119904861	TCET, Mumbai	Wiley
Mr. Sunil Khatri		Predictive Analysis for Flood Risk Mapping Utilizing Machine Learning Approach				2022-23		TCET, Mumbai	

Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference	Name of the conference	National / International	Year and month of publication	ISBN of the Book/Conference Proceeding	Affiliating Institute of the teacher at the time of publication	Name of the Publisher
Dr.Megharani Patil	Computer Vision: Applications of Visual AI and Image Processing, edited by Pancham Shukla, Rajanikanth Aluvalu, Shilpa Gite and Uma Maheswari, Berlin, Boston: De Gruyter	Automated healthcare system using gamification and AI-based chatbot	-	-	-	Mar-23		TCET, Mumbai	De
Dr.Megharani patil	Smart Urban Computing Applications (1st ed.)	An End – End Framework for Autonomous Driving Cars in CARLA Simulator			-	Feb-23	ISBN:9781003373247	TCET, Mumbai	River Publishers
	Applications of Artificial Intelligence, Digital Twin, and Internet of Things for Sustainable Development,	Medication Discovery Using Neural Networks", Applications of Artificial Intelligence, Digital Twin, and Internet of Things for Sustainable Development						TCET, Mumbai	IGI Global

Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference	Name of the conference	National / International	Year and month of publication	ISBN of the Book/Conference Proceeding	Affiliating Institute of the teacher at the time of publication	Name of the Publisher
Dr.Megharani patil			Implementation of a PID Controller for Autonomous Vehicles with Traffic Light Detection in CARLA	In: Balas, V.E., Semwal, V.B., Khandare, A. (eds) Intelligent Computing and Networking. Lecture Notes in Networks and Systems, vol 632.	-	Mar-23	**ISBN**-9819900719, 97898199007 18	TCET, Mumbai	Springer, Singapore
Dr.Megharani patil			Blockchain Based E-Voting System	In: Balas, V.E., Semwal, V.B., Khandare, A. (eds) Intelligent Computing and Networking. vol 632.	-	Mar-23	**ISBN**-9819900719, 97898199007 18	TCET, Mumbai	Springer, Singapore
Dr.Megharani patil			Automated Healthcare System Using AI Based Chatbot	In: Balas, V.E., Semwal, V.B., Khandare, A. (eds) Intelligent Computing and Networking. Lecture Notes in Networks and Systems, vol 632	-	Mar-23	**ISBN**-9819900719, 97898199007 18	TCET, Mumbai	Springer, Singapore
Mrs Rupinder Kaur			Performance enhancement of FSO system under the effect of Scintillation	AIP proceedings ,Scopus		Dec. 2022	**ISBN**-2576, 020006	TCET, Mumbai	AIP

Annexure – V

Details of Books Published at Institute Level

Sr. No.	Proceeding Title Name	Name of the Editors	ISBN No.	Details	Year of publishing
1.	Proceedings of International Conference on Intelligent Computing and Networking - 2023 (IC-ICN)	Dr. Sangeeta Vhatkar Dr. Harshali Patil Dr. Anand Khandare Dr. Megharani Patil Dr. Shiwani Gupta Mrs. Neha Patwari	979-8-98798-39-1-1	Total papers received = 240 Presented = 211	2023
2.	International Conference on Communication, Computing And Data Security (Ic-Ccds – 2023)	Ms. Rashmita Kumari Mohapatra –Assistant Professor –E&TC Mr. Nikhil Tiwari –Assistant Professor –E&TC Ms. Rajashree Kapse – Assistant Professor –E&TC Ms. Sonal Dubal –Assistant Professor –E&TC	**ISBN: 979-8-9879839-0-4**	The International Conference on Communications, Computing, and Data Security-ICCCDS 2023 is an initiative of TCET that offers multiple platforms for all the stake holders under one roof to contribute their original research work. International Conference on Communications, Computing and Data Security-(ICCCDS) aims to bring together researchers, engineers and scholar students to exchange and share their experiences, new ideas and research results about all aspects.	2023
3.	Multicon-W ICHSTE-2023 Proceeding	Dr. Sunita Pachori Dr. Krishnakant Mishra Mr. Rohitkumar Singh Mr. Yogesh Bhalekar Dr. Karuna Nikum Mr. Karthik Sankararama Ms. Kshama Shukla Mrs Ekta Desai Dr. Achala Khandelwal	979-8-9879839-3-5	Published with 102 papers	2023
4.	Proceedings of International conference on advances in Mechanical & Civil engineering - 2023 (IC-AMCE)	Dr.Seema Jagtap Dr.Siddesh Sidappa Dr. Vaibhav Shinde Mr.Ghanshyam Pal	ISBN: 979-8-9879839-2-8	Published	2023
5.	Proceedings of International Conference on Intelligent Computing and Networking - 2023 (IC-ICN)	Dr. Sangeeta Vhatkar Dr. Harshali Patil Dr. Anand Khandare Dr. Megharani Patil Dr. Shiwani Gupta Mrs. Neha Patwari	979-8-98798-39-1-1	Total papers received = 240 Presented = 211	2023

Annexure – VI

Details of extension and outreach programmes conducted during the academic year

Sr. No.	Date	Name of activity	Objective	Outcome	Domain	Count of volunteers
1	25-07-2022	CATC Camp	The camps help the cadets to develop camaraderie, teamwork, leadership qualities, self-confidence, self-reliance.	The cadets got the experience of camp life and got to apply their theoretical knowledge into practical skills.	Basic military camp	24
2	15-08-2022	Independence Day	The Azadika Amrit Mahotsav and Independence Day celebration was conducted from 13th Aug to 15th Aug 2022.	The event was successfully conducted by NCC Unit & Students Development and Welfare Committee of Thakur College of Engineering & Technology, Mumbai.	National event	140
3	17-09-2022	Puneet Sagar	A cleanship drive was organized between 7.30 am to 10.30 am on 17th September 2022 at Aksa Beach, Malad, Mumbai with the help of NCC cadets and other volunteers of TCET.	Maximum load of waste was cleared and collected by our cadets and the volunteers. The waste materials were segregated and handed over to Project Mumbai team for further recycling and disposal action in association with BMC staff.	Society	18
4	15-10-2022	Prayaas 1.0	True happiness comes from sharing and caring, and pure bliss is helping others. The best way to spread happiness is to help people in need with food, shelter, clothing, and basic items.	The event named Prayaas 3.0 was organized by NCC cadets wherein old clothes, shoes, toys, books, stationary etc. were distributed among the families living in slums. The cadets got an opportunity to spread their kindness, loving and caring nature towards the society.	Society	29
5	20-10-2022	Drug Free India	The cadets of TCET NCC UNIT presented a Guard of Honour to Central Govt Minister, Shri Kaushal Kishore on 20th October 2022. Minister Kishore Kaushal was the chief guest and resource person during the seminar on 'Nasha Mukt Samaj Abhiyan' at Thakur College of Engineering & Technology on 20th October 2022.	The cadets also conducted a program called "Drug Free India" under the chairmanship of the minister and other personalities from Politics, Bollywood and media who were present and were involved in Drug Free India. The event empowered the youth and adults with factual information about drugs so they can make informed decisions to live drug-free.	Society	104
6	31-10-2022	Unity Run	The purpose of the run was to spread the message of unity and integrity among youth and other fellow citizens so as to ensure the highest level of internal security. Such events are organized to show unity, solidarity, feeling of national integration and brotherhood among youth of different walks of life.	UNITY RUN was conducted on the occasion of Rashtriya Ekta Diwas to remember the union and actions of Sardar Vallabhbhai Patel between 0630 hrs to 0830 hrs by NCC unit of Thakur College of Engineering & Technology, Kandivali (East), Mumbai under the directive/instructions of 3 Maharashtra Battalion, Mumbai Group A. Pledge for unity and assurance of internal security of our country was also taken by participants as per details received through Govt sources.	National Integration	97

7	18-11-2022	NCC Office Inauguration	An office for poised control and administration of NCC training & activities was established on 18th November 2022 under the command and control of 3 Maharashtra Battalion, Colaba, Mumbai.	The guest of the event was respected Lt. Col. Sunil Zutshi. Principal B.K. Mishra welcomed the chief guest with warm regards and a bouquet of flowers which was followed by guard of honour given by Cdt. Shreyash Sharma and fellow cadets.	Internal	30
8	26-11-2022	Blood Donation Camp	The objective of the campaign was to spread awareness about blood donation. The campaign conveyed a strong message that, "Blood cannot be manufactured- it can only come from generous donor".	A Blood Donation Camp was conducted on 26th November 2022 in Sathaye College. The donation process started at around 3.00pm with the principal donating his blood. Proper arrangements were made to store blood once collected.	Society	5
9	02-12-2022	Puneet Sagar	The objective of the event was to create awareness among NCC cadets, students and fellow citizens about the growing environmental issues and its scale. Also, to explain them the various ways & means through which they can contribute towards saving our mother earth and make them understand relation between sustainable development and environment.	A cleanup drive was organized between 7.30 am to 10.30 am on 2nd December 2022 at Aksa Beach, Malad, Mumbai with the help of NCC cadets and other volunteers of TCET. The activity was conducted under ongoing PunitSagarAbhiyan as per the directives/instructions of NCC Directorate, Mumbai.	Society	25
10	06-12-2022	Firing Camp	The firing camp in NCC aims to develop well-rounded cadets who possess the skill and confidence to handle firearms safely and effectively, and demonstrate discipline, teamwork, and respect for authority.	The firing camp in the National Cadet Corps (NCC) is an important training program for cadets, designed to develop their skills in handling firearms and enhance their marksmanship.	Basic military training	20
11	26-01-2023	Republic Day	Republic Day is a significant event celebrated in India with great enthusiasm and fervor. The National Cadet Corps (NCC) is an essential part of celebration, and its participation in the Republic Day parade is always a spectacle to watch.	The first-year cadets showed their passion by singing various patriotic songs that surely aroused patriotism in the hearts of everyone. Senior Cadets performed a silent rifle drill that included many types of salutes. Their powerful performance proved their hard work for the day.	National	195
12	04-02-2023	Patriotic Run	The event was initiated by the Flag off ceremony by Honorable Principal Dr. B. K. Mishra. The run started at 6.30 am with all the runners pumped up. Most of the runners completed the run within a short span of 20 to 30 minutes. NCC cadets were stationed along the route for guiding the directions to all the participants.	The winners were felicitated by Dr. B K Mishra (Principal), Cdr Vijay Pratap Singh & Lt. Dr. Nivant Kambale with medals, certificates and cash prizes ranging from 5000/-, 3000/- and 2000/- for the students and staff category both, primarily to encourage and motivate the runners. The felicitation ceremony was followed by a vote of thanks proposed by Associate NCC officer Lt. Dr. Nivant Kambale.	National Integration	175
13	04-03-2023	G20 Poster Making & Presentatio	The Poster making and Presentation competition based on the theme G20 was	The posters indicated details about the countries participating in G20, which were	National	45

	n	conducted by the NCC unit of TCET on 4th March 2023. The event showcased the innovative ideas and creative talents of NCC cadets and students.	highly appreciated by guests who were also designated as judges to figure out winners.			
14	08-03-2023	Women's Day	The Women's Day Celebration was conducted by ISTE committee members in collaboration with the TCET NCC Unit on 8th March 2023. The event emphasised on empowering and promoting women participation in different domains and sectors of our country.	The event took place in the multipurpose hall of TCET. It started by welcoming the chief guest and all the wonderful women sitting in the hall. It was then followed by three main activities; 1. Self defence program 2. cultural event 3. fun games	Society	175
15	31-03-2023	Motivation Lectur on Mental Toughness	A seminar based on 'Mental Toughness and Resilience' was conducted by the TCET NCC unit and TCET-SORT & Literary Club on 31st March 2023. Cdr. Vijay Pratap Singh, the Officer-in-Charge of TCET NCC were present to address the audience.	Coming from a defence background and having been faced with demanding situations earlier in his life, he was the most appropriate person to enlighten the students regarding mental health and resilience.	Society	20
16	11-04-2023	Commanding Officer Visit	The cadets of TCET-NCC Unit presented a guard of honour to Col. D.S. Sayana, CO, 3 Maharashtra Battalion, Mumbai Group 'A' on 11th April 2023. The inspection of guards was conducted by Commanding Officer at PT & Drill Ground of TCET.	Commanding Officer along with his subordinate officer and staff visited TCET-NCC Office and had a brief conversation with Principal B.K. Mishra, ANO Lt. Dr. Nivant Kamble and Cdr. Vijay Pratap Singh regarding online enrollment of next year's cadets and encouraged entry of cadets in armed forces.	Internal	68
17	21-04-2023	Captain J.V. Singh's Visit	Captain J.V. Singh had visited the TCET NCC Unit on 21 April 2023. He was warmly welcomed by the pilots who escorted him till the seminar hall, where cadets had been eagerly waiting to listen to his words of wisdom.	He explained how Indian Navy helped him shape his and shared insights from his previous interview sessions and told that Honesty, Integrity, Courage, and Conviction are the qualities which will help the aspirants to move one step closer towards their goal.	Internal	30
18	22-04-2023	Participation In Defence Exhibition	A defence exhibition was organized by the Atharva Foundation in collaboration with 15 Assam Regiment at Kora Kendra Ground, Borivali. The exhibition was attended by many respectable defence personnel, NCC cadets of Mumbai division as well as the locals and schoolchildren.	Equipment's such as rifles and rocket launchers were exhibited. Also, a short briefing session was conducted by the Air Force on the simulator. The exhibition took place on an extensive scale and was an incredible experience.	Defence	20
19	Every Friday	Defence Career & Personality Development Training	To develop effective communication skills, including verbal and non-verbal communication which includes tips on how to speak clearly	Conduct of tests like Thematic Apperception Tests (TAT), Word Association Test (WAT), Situation Reaction Test (SRT), Self- Description Test (SDT) and	Personality Development	30

			and confidently, how to listen effectively, and how to express themselves articulately.	OIR test. The objective is to understand the importance of personality development and build Self-confidence.		
20	17-09-2022	Ozone day awareness	To spread awareness regarding depletion of ozone layer in our society.	The motive of this project was to raise awareness about the depletion of the ozone layer.	Society, Environment	20
21	17-09-2022	Beach clean up	To help and save marine life from pollution	As a result of this drive, volunteers from various Colleges came together for a noble cause	Society, Environment	47
22	18-09-2022	Free medical Camp survey	To spread awareness about the Free medical Camp and Other important parameters of medical camp.	The volunteers were able to spread knowledge About medical Camp and gained Information about the problems facing by society.	Society, Health	29
23	24-09-2022	Plastic pickup	To spread awareness about the ill effects of plastic.	As a result of this drive, volunteers were able to clean up micro plastic and gained some more information about types of plastic	Environment	44
24	25-09-2022	Webinar on nutrition	To spread awareness about the Important of nutrition and balanced diet. Outcome.	The volunteers gained information about The nutrition cycle and understand about The balanced diet concept	Society, health	63
25	27-09-2022 TO 30-Sep-22	Joy of giving	To encourage the students, teaching and non-teaching staff of TCET to donate goods for a noble cause	Help others but also learn how to create awareness regarding the importance of donation amongst the youth in specific	Society	31
26	28-09-2022	Voter id registration drive	To guide, assist and help the students, teaching and non-teaching staff of TCET to generate a voter id card.	Volunteers were able to learn about and teach the online registration process to others.	Society, health	32
27	30-09-2022	Paper bag making	To inspire volunteers And other individuals to make use of paper bag	As a result of this project, Volunteers understood the Importance of recycling papers to make something useful Out of them.	Society, environment	31
28	01-10-2022	Nasha mukti rally	Spread awareness about the ill effects of drugs and addiction to them.	The NSS volunteers from various colleges all across Mumbai came together for this noble cause.	Society, EnvironmentHealth	20
29	02-10-2022	International day of non-violence	To disseminate the message of non- violence, including through Education and public awareness.	Volunteers were able to understand the importance of non- violent intervention and protest and persuasion	Society, education	22
30	02-10-2022	Gandhi Jayanti	To Commemorate the birth anniversary of the father of our nation, Mahatma Gandhi.	On this auspicious occasion, Volunteers from Colleges from all over Mumbai came together and remembered him with Bhajans and soulful music.	Society	20

31	15-10-2022	Ayurveda-Video making	To raise awareness about the value of Ayurveda in improving health and daily life through video	Volunteers were able gained knowledge about video making and improving Health and daily life.	Society, Education, Health	37
32	16-10-2022	Traffic management t	To motivate the volunteers and people on the road about traffic management and safety.	As a result, the volunteers were able to spread Awareness on the Importance of road safety.	Society, Health	36
33	20-10-2022	Blood donation Awareness	To spread awareness about the blood donation conducted Within college	Volunteers were able make society understand about the importance of blood Donation for society.	Society, education, health	27
34	21-10-2022	Blood Donation camp	To motivate and maintain a permanent well-indexed record of voluntary blood donors.	Volunteers gained knowledge about the blood donation process.	Society, health	18
35	31-10-2022	National day of unity	To uplift the nation's unity and spread awareness about the contribution of Sardar Vallabhbhai Patel	Volunteers learned about Sardar Vallabhbhai Patel's contributions and the value of our country's unity	Society	24
36	12-11-2022	Energy conservatio n	To reduce the use of energy and to encourage people to use it efficiently	Volunteers have been able to answer many ways to lessen energy intake to the society	Society, environment	66
37	08-12-2022	Marine pollution	Impact of human ac7ions on the ocean	Aware about the marine pollution	Environment Education	5
38	1 I-01-2023	Road safety week (mu)	To promote safe driving habits and raise awareness about the importance of road safety.	Volunteers were able to spread awareness on streets and aware People about wearing helmets and seat belts.	Education, Society	7
39	15-01-2023	Smile foundation (mu)	To improve the lives of underprivileged children by providing them with access to healthcare, education, and livelihood opportunities	Volunteers were able to understand the problems faced by children and to find solution to it.	Education, Society	19
40	26-01-2023	Republic day Parade	To instil a Sense of patriotism, to promote unity in diversity, to Showcase the unit's Discipline and teamwork	Volunteers were Able to give the& contribution by participating in parade and maintaining the smooth flow op The project.	Society	14
41	04-02-2023	Electricity conservatio n	To reduce energy Consumption and conserve natural resources.	Volunteers were able to understand about different aspect which increase the Bill and learnt ways to overcome	Environment Education, Society	89
42	18-02-2023	Old age home mahashivrat r i	To provide companionship and emotional support, to promote intergeneration bonding	Volunteers were able to interact with the senior citizens and also established the companion relation with them.	Education, Society	8
43	22-02-2023	Akashra ngo youth festival (mu)	To provide a platform for young people to showcase their talents and skills and also promoting community involvement.	Volunteers were able to perform various tasks which were based on talent and also learnt many lessons.	Education, Society	54
44	25-02-2023	Gurudev bhajan sandhya (mu)	To promote the practice of meditation and yoga, to honour and celebrate the teachings of spiritual gurus.	Volunteers were able to understand the importance of yoga and meditation in life and gained life lessons from Gurudev.	Education, Society	70
45	05-03-2023	Poster making for ashram beautificati	To encourage members of the aashram community to participate in beautification efforts, to promote teamwork	Volunteers were able to make posters which	Society	54

			on	and collaboration			
46	06-03-2023	Cardiac arrest seminar	To raise awareness about cardiac Arrest and its Impact on individuals and communities.	Volunteers were able to perform chest compressions by Hands-On experience on dummy.		Health, Education	56
47	12-03-2023	Dandi memorial yatra (mu	To commemorate the historic salt march, which was a significant event in India's struggle for independence from British rule.	Volunteers were able to gain knowledge about the Dandi history and gained some important lessons.		Education	9
48	19-03-2023	Defensive driving (mu)	To improve the driving skills of participants by providing them with knowledge and skills that will help them become more aware, alert, and prepared while driving.	Volunteers were able to understand the importance of defensive driving and also gained life lessons.		Health, Society	89

Annexure – VII

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

Sr.No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
1	15-08-2022	Azadi ka Amrit Mohatsav	To make Volunteers celebrate the struggle of Independence	Volunteers developed a sense of Patriotism	Society	30
2	15-08-2022-22-08-2022	Flag Collection Drive	To make volunteers aware about importance of respect of national flag	Volunteers collected all the flags at their locality	Society	35
3	10-09-2022	Mental Health Webinar	To make Volunteers aware about Mental Health	Volunteers learned about importance of Mental Health	Health , Society	100
4	24-09-2022	Health Check-up Camp	To make Volunteers aware about regular Health Check Up	Volunteers were aware about Mental Health	Health , Society	12
5	21-10-2022	Joy of Giving (Donation Drive)	To make Volunteers have a joy of giving and help underprivileged society	Volunteers donated and helped the society	Society	25
6	31-10-2022	Run for Unity (National Unity Day)	To promote unity and integrity of the nation	Volunteers ran for unity and integrity of the nation	Society	33
7	04-02-2023	Patriotic Run	To promote patriotism among the youth	Volunteers ran to promote patriotism	Society	25
8	10-02-2023	Udaan fest	To provide a platform for students to showcase their talents	Volunteers showcased their talents	Competitions	15
9	15-02-2023 16-02-2023	D Fest	To provide a platform for students to showcase their talents	Volunteers	Competitions	20
10	14-03-2023	Junoon Foundation Awareness Volunteering	To make Volunteers aware about the work of Junoon Foundation	Volunteers learned about the work of Junoon Foundation	Society	10

Annexure – VIII

Initiatives taken to address local and national advantages and disadvantages during the academic year

SR. NO	DATES	NAME OF ACTIVITY	OBJECTIVE	OUTCOME	DOMAIN	COUNT
1	22-04-2022	Group discussion activity on social issues	The goal of this project was to increase the volunteers' knowledge regarding some major events like Jallianwala Baug, civil services day and health & safety at work.	A total of 14 volunteers made posters highlighting issues and had a group discussion regarding the events that occurred at Jallianwala Baug, the different civil services like IAS, IPS, etc. and discussed about government schemes for the health and safety of workers at workplace.	EDUCATION	14
2	4-06-2022	World environment day 2022 (Swachhata Abhiyan)	To encourage the volunteers about the action for the protection of the environment and spread awareness regarding various environmental issues on the occasion of world environment day.	A total of 32 volunteers understood the severeness of environmental issues and an awareness wave was spread in the college campus and locality by them.	SOCIETY	32
3	4-06-2022	World environment day 2022(poster making)	To make posters highlighting the environmental issues like water pollution and electricity conservation.	A total of 32 volunteers made posters and explained the causes and methods of prevention of water pollution and the need for electricity conservation.	SOCIETY	32
4	4-06-2022	Each one feed one	To feed the birds and animals to awaken a feeling of compassion and kindness amongst volunteers towards the voiceless and helpless part of the society.	A total of 32 volunteers fed and took care of stray animals the help of posters and infographics volunteers went from door to door to talk with the locals regarding the topic. Volunteers suggested the locals to keep water feeders and other ways in which they can help the stray animals.	SOCIETY	32
5	7-06-2022	Swachhata and environmental day Awareness week (inaugration of majhi yasundhara initivative)	To encourage the volunteers about the action for the protection of the environment.	A total of 10 volunteers became alert regarding scorching issues of environment pollution and the volunteers also helped in the cleaning of worli fort.	SOCIETY	10
6	16-06-2022 TO 21-06-2022	University level yoga training camp (cyp)	To raise awareness about yoga and understand the fundamental purpose of yoga which is to foster harmony in the body, mind, and environment.	A total of 2 volunteers coordinated among people through yoga.	HEALTH	2
7	19-06-2022	Yog utsav mumbai university	To promote good mental and physical health of people through yoga.	A total of 4 volunteers were present there and they understood the importance of yoga in terms of physical,	HEALTH	4

8	21-06-2022	International yoga day (institute level)	The international day of yoga aims to raise awareness worldwide of the many benefits of practicing yoga.	A total of 40 volunteers participated in the understanding of all the eminent yoga traditions in india and practiced the same.	HEALTH	40
9	29-07-2022	Har ghar tiranga (online)	To make volunteers aware about the competition of 75 years of independence of india and motivate the volunteers to virtually pin a flag in their locality.	A total of 44 volunteers became more aware of the 'har ghar tiranga' initiative brought about by the government of india and were motivated to not only pin virtual flags but also encourage hoisting flags at their own houses.	SOCIETY	44
10	30-09-2022	Human trafficking	To raise awareness of the plight of human trafficking victims and promote and protect their rights.	As a result of this session, the volunteers became aware about human trafficking and the day that is observed for the same.	Society, education	21
11	01-08-2022 TO 02-08-2022	Nss orientation – te	To spread awareness about nss in second year college student and encouraging them for social work.	The student's get Knowledge about the nss And importance Of social work.	EDUCATION	38
12	06-08-2022 TO 07-08-2022	Se recruitment	To recruit new volunteers in national service scheme from second year.	New 136 volunteers were recruited in national service scheme.	EDUCATION	90
13	08-08-2022 TO 10-08-2022	Booster dose	To motivate the students and faculty of the college to take the booster dose.	As a result of this drive, a total of 718 people were able to benefit from this initiative.	SOCIETY, HEALTH	43
14	13-08-2022 TO 14-08-2022	Azadi ka amrit mahotsav	To spread the awareness about the indian national flag.	The volunteer learn about the importance of indian flag.	SOCIETY	29
15	14-08-2022	Tiranga rally	A rally was organized to promote and spread awareness about the indian national flag.	The nss volunteers from various colleges came together to celebrate 75 years of india's independence with great pride and honor.	SOCIETY	10
16	15-08-2022	Har ghar tiranga	To make volunteers aware about the completion of 75 years of the independence of india.	As a result of this project, the volunteers became more aware of the 'har ghar tiranga' initiative brought about by the government of india.	SOCIETY, EDUCATION	51
17	15-08-2022	Independence day celebration	To commemorate the valor and spirit of the freedom fighters who fought for the independence of the nation.	The volunteers paid respect to the indian national flag and became aware about the struggles of our freedom Fighters.	SOCIETY, EDUCATION	27
18	23-08-2022	Edu-fair	To spread important information about the higher studies in	Volunteers gained information about the scholarship and other	SOCIETY, EDUCATION	36

			volunteers.	important parameters for higher studies.		
19	22-08-2022 TO 26-08-2022	E-waste	To motivate the students and faculty of the college to increase awareness about disposal of electronic-waste.	As a result of this drive, a total of 4kg e-waste was collected at the end of the week.	SOCIETY, ENVIRONMENT	18
20	27-08-2022	Fitness activity	To encourage the volunteers to start physical activity and yoga in their daily routine.	As a result of this session, the volunteers became aware about the various yoga poses and the significance of staying fit.	SOCIETY, HEALTH	93
21	28-08-2022	Tree plantation	To make the volunteers aware of the importance of keeping the environment clean and green.	All the saplings were planted in the park by volunteers and they took an oath to look after the planted saplings, plant more and more trees and encourage others to do the same.	SOCIETY, ENVIRONMENT	57
22	01-09-2022, 04-09-2022, 05-08-2022, 06-08-2022 AND 09-09-2022	Ganpati visarjan	The main objective was to help and guide the people who were present at the pond site for ganpati visarjan.	As a result of this project, people visiting the pond with their ganesha idols for visarjan were able to benefit From this initiative.	SOCIETY	55
23	04-09-2022	Cwc high school	To increase the managing skills and handling various situation of the event.	The volunteers were able to increase their communication skills and managing people also to maintain discipline of the event	EDUCATION	10
24	15-09-2022	Engineers day	To commemorate the contributions of the engineers to the nation.	Volunteers were able to spread knowledge about the contribution of engineers towards their country.	SOCIETY, EDUCATION	07
25	17-09-2022	Ozone day awareness	To spread awareness regarding depletion of ozone layer in our society.	The motive of this project was to raise awareness about the depletion of the ozone layer.	SOCIETY, ENVIRONMENT	20
26	17-09-2022	Beach clean up	To help and save marine life from pollution	As a result of this drive, volunteers from various Colleges came together for a noble cause	SOCIETY, ENVIRONMENT	47
27	18-09-2022	Free medical camp survey	To spread awareness about the free medical camp and other important parameters of medical camp.	The volunteers were able to spread knowledge about medical camp and gained information about the problems facing by society.	SOCIETY, HEALTH	29
28	24-09-2022	Plastic pickup drive	To spread awareness about the ill effects of plastic.	As a result of this drive, volunteers were able to clean up micro plastic and also gained some more information About types of plastic.	SOCIETY, ENVIRONMENT	44
29	25-09-2022	Webinar on nutrition	To spread awareness about the important of nutrition and balanced diet	The volunteers gained information about the nutrition cycle and understand about the balanced diet concept.	SOCIETY, ENVIRONMENT	63

30	27-09-2022 TO 30-09-2022	Joy of giving	To encourage the students, teaching and non-teaching staff of tcet to donate goods for a noble cause.	Help others but also learn how to create awareness regarding the Importance of donation amongst the youth in specific.	SOCIETY	31
31	28-09-2022 TO 30-09-2022	Voter id registration drive	To guide, assist and help the students, teaching and non-teaching staff of tcet to generate a voter id card.	Volunteers were able to learn about and also teach the online registration process to others.	SOCIETY, HEALTH	32
32	28-09-2022	Debate on current social issues	To know about the proper functioning and conduct of a debate competition.	As a result of this project, the importance of being able to debate was analyzed and understood.	EDUCATION, SOCIETY	54
33	29-09-2022	Article writing on freedom fighters	To motivate the students to writes articles on freedom fighters who inspired them.	As a result of this project, the volunteers came to know about how to write an article properly.	SOCIETY, EDUCATION	32
34	30-09-2022	Paper bag making	To inspire volunteers and other individuals to make use of paper bag.	As a result of this project, volunteers understood the importance of recycling papers to make something useful Out of them.	SOCIETY, ENVIRONMENT	31
35	01-10-2022	Nss week celebration	To celebrate the foundation day of nss unit and spread information about the domain and core values of nss.	The volunteers were able to gained information about the core values and domains of nss Unit.	EDUCATION	56
36	01-10-2022	Nasha mukti rally	Spread awareness about the ill effects of drugs and addiction to them.	The nss volunteers from various colleges all across mumbai came together for this noble cause.	SOCIETY, ENVIRONMENT, HEALTH	20
37	02-10-2022	International day of non- violence	To disseminate the message of non-violence, including through education and public awareness.	Volunteers were able to understand the importance of non-violent intervention and protest and Persuasion.	SOCIETY, EDUCATION	22
38	02-10-2022	Gandhi jayanti rally	To commemorate the birth anniversary of the father of our nation, mahatma gandhi.	On this Auspicious occasion, volunteers from colleges from all over mumbai came together and remembered him with Bhajans and soulful music.	SOCIETY	20
39	15-10-2022	Ayurveda- video making	To raise awareness about the value of ayurveda in improving health and daily life through video.	Volunteers were able gained knowledge about video making and improving health and daily life.	SOCIETY, EDUCATION, HEALTH	37
40	15-10-2022	Paper bag making	To inspire volunteers and other individuals to make use of paper bag.	As a result of this project, volunteers understood the importance of recycling papers to make something useful Out of them.	SOCIETY, ENVIRONMENT	52

41	16-10-2022	Traffic management	To motivate the volunteers and people on the road about traffic management and safety.	As a result, the volunteers were able to spread awareness on the importance of road safety.	SOCIETY, HEALTH	36
42	20-10-2022	Blood donation camp awareness	To spread awareness about the blood donation conducted within college Outcomes	Volunteers were able make society understand about the importance of blood donation for society.	SOCIETY, HEALTH, EDUCATION	27
43	21-10-2022	Blood donation camp	To motivate and maintain a permanent well-indexed record of voluntary blood donors.	Volunteers gained knowledge about the blood donation process.	SOCIETY, HEALTH	18
44	31-10-2022	National Day of Unity	To uplift the nation's unity and spread awareness about the contribution of vallabhbhai patel.	Volunteers learned about sardar vallabhbhai patel's contributions and the value of our country's Unity.	SOCIETY	24
45	05-11-2022	Paper bag distribution	To spread importance of paper bag as they can be reused and generates no pollution.	Volunteers were able to aware society about the harmfulness of using plastic bags.	SOCIETY, HEALTH, ENVIRONMENT	27
46	12-11-2022	Energy conservative	To reduce the use of energy and to encourage people to use it efficiently.	Volunteers have been capable of deliver many answer on the way to lessen energy intake to the society.	SOCIETY, ENVIRONMENT	66
47	22-11-2022	District cultural program	To promote sustainable relationships between people of different cultures, creeds, nationalities, languages and backgrounds.	Volunteers had been capable of meet people from extraordinary way of life and apprehend approximately their way of life.	EDUCATION	3
48	22-11-2022	Quiz	To raise awareness about hiv/aids and demonstrate international solidarity in the face of the pandemic.	Volunteers had been capable of conscious society approximately hiv/aids and exhibit global team spirit withinside the face of the Pandemic.	EDUCATION	2
49	22-11-2022	Skit	To spread knowledge about acting, scriptwriting, and helping volunteers overcome their stage fright.	The volunteers were able to perform on stage and gained information about acting parameter.	SOCIETY	3
50	08-12-2022	MARINE POLLUTION	To inform the public of the impact of human actions on the ocean.	Volunteers were able make society aware about the marine pollution.	ENVIRONMENT, EDUCATION	56
51	11-01-2023	ROAD SAFETY WEEK (MU)	To promote safe driving habits and raise awareness about the importance of road safety.	Volunteers were able to spread awareness on streets and aware people about wearing helmets and seat belts.	EDUCATION, SOCIETY	7
52	15-01-2023	MARATHON	The volunteers were a part of the motivatonal box for the people running marathon and prformed a flashmob	Volunteers were able to realise the cause of the marathon which was for the underprivileged students and help spread the message.	SOCIETY	32

53	15-01-2023	SMILE FOUNDATION (MU)	To improve the lives of underprivileged children by providing them with access to healthcare, education, and livelihood opportunities.	Volunteers were able to understand the problems faced by childrens and to find solution to it.	EDUCATION, SOCIETY	19
54	26-01-2023	REPUBLIC DAY PARADE	To instill a sense of patriotism, to promote unity in diversity, to showcase the unit's discipline and teamwork	Volunteers were able to give their contribution by participating in parade and maintaining the smooth flow of the project.	SOCIETY	14
55	04-02-2023	ELECTRICITY CONSERVATION	To reduce energy consumption and conserve natural resources	Volunteers were able to understand about different aspect which increase the bill and learnt ways to overcome it.	ENVIRONMENT, EDUCATION, SOCIETY	89
56	17-02-2023	MULTICON-W INAUGRATION	Multicon inauguration is to mark the beginning of a new venture, facility, or project, and showcase it to the public.	Volunteers were able to create brand awareness, establish connections, and promote collaborations to drive growth and success for the organization.	EDUCATION	28
57	18-02-2023	OLDAGE HOME MAHASHIVRATRI	To provide companionshp and emotional support, to promote intergenerational bonding.	Volunteers were able to interact with the senior citizens and also established the companion relation with them.	SOCIETY, EDUCATION	18
58	21-02-2023 - 02-03-2023	SOFT SKILLS DEVELOPMENT (MU)	To enhance an individual's personal and professional skills, abilities, to interact effectively with others and achieve their goals.	Volunteers understood, how soft skills development plays a vital role in enhancing an individual's personal and professional growth.	EDUCATION	1
59	22-02-2023	AKASHRA NGO YOUTH FESTIVAL (MU)	To provide a platform for young people to showcase their talents and skills and also promoting community involvement.	Volunteers were able to perform various tasks which were based on talent and also learnt many lessons.	EDUCATION, SOCIETY	54
60	24-02-2023	MULTICON-W	To disseminate technical knowledge and specify topics to target audience.	Volunteers were able to present their knowledge by presenting ppt's to the audience.	EDUCATION	32
61	25-02-2023	GURUDEV BHAJAN SANDHYA (MU)	To promote the practice of meditation and yoga, to honor and celebrate the teachings of spiritual gurus.	Volunteers were able to understand the importance of yoga and medition in life and also gained life lessons from gurudev.	EDUCATION, SOCIETY	70
			To encourage members	Volunteers were able to		

62	05-03-2023	POSTER MAKING FOR ASHRAM BEAUTIFICATION	of the aashram community to participate in beautification efforts, to promote teamwork and collaboration.	make posters which motivates the senior citizens of the ashram and beautify the place with posters.	SOCIETY	54
63	06-03-2023	CARDIAC ARREST SEMINAR	To raise awareness about cardiac arrest and its impact on individuals and communities.	Volunteers were able to perform chest compressions by having an hands-on experience on dummy.	HEALTH, EDUCATION	56
64	12-03-2023	DANDI MEMORIAL YATRA (MU)	To commemorate the historic salt march, which was a significant event in india's struggle for independence from british rule.	Volunteers were able to gain knowledge about the dandi history and gained some important lessons.	EDUCATION	9
65	16-03-2023 - 17-03-2023	CULTURAL EVENT DISCIPLINE(INSTITUTE LEVEL) DISCIPLINE	To ensure that the event runs smoothly and efficiently with proper management of the crowd, safety, and security measures.	Volunteers were able to maintain proper security and maintaining the smooth flow of the project.	SOCIETY	36
66	16-03-2023	CULTURAL EVENT (INSTITUTE LEVEL)	To celebrate the richness and diversity of indian culture by showcasing various forms of performing arts.	Volunteers were able to perform the tradition and maintained the legacy of the tcet nss unit.	SOCIETY	71
67	19-03-2023	DEFENSIVE DRIVING (MU)	To improve the driving skills of participants by providing them with knowledge and skills that will help them become more aware, alert, and prepared while driving.	Volunteers were able to understand the importance of defensive driving and also gained life lessons.	HEALTH, SOCIETY,	89

Annexure – IX

Students' participation in TCET National initiative program student exchange programs:

Sr. No.	Activity	Date of Conduct
1	Student exchange program under Ek Bharat Shresth Bharat Initiative - Hosted 50 students and 4 faculty members from Odisha	29th June 3rd July 2022
2	Academic Exchange - Reviewers for PBL & RBL presentation from partner colleges	20th to 24th February 2023
3	Workshop on Jal Dharohar Sangrashan	13th March 2023
4	Poster competition on "Panch Pran- Five Pledges for Developed India"	1st April 2023
5	YUVA Sangam Phase – II	3rd to 5th April 2023

Annexure – X

Faculty achievements for the academic year 2022-23:

Sr. No	Name of the faculty	Achievements
1	Dr. R. R. Sedamkar	1 student completed PHD
2	Dr. Sheetal Rathi	2 Patent registered and granted 2022-23
3	Dr. Zahir Aalam	Published book, Reviewer for IEEE Conferences
		Session chair for IEEE conferences
4	Dr. Harshali Patil	Patent registered
		PhD Thesis Reviewer, Sandip University, Nasik
		Session chair, ECDSIC
5	Dr. Rekha Sharma	Innovation Ambassador Foundation level" from MOE's innovation cell
		Reviewed Ph.D. this is for AY.2021-22 from Banasthali Vidyapeeth Rajasthan
6	Ms. Shiwani Gupta	PhD completion
		Best paper award
		German patent granted and published
		Indian copyright
		Top stats on researchgate from tcet
		632 views and 245 reads of my medium blog
7	Dr. Rashmi Thakur	5 papers accepted in Scopus Book chapter
		Consultancy project
		Attended FDP ,Conducted 5 days session to on SAP tool
		training on machine learning & data science
8	Mrs. Vaishali Nirgude	German Patent Registered, published & Granted 1- research paper accepted in SCIE & Scopus Journal
		submitted SERB-power Research Grant on 19/10/2022
9	Mrs. Vidyadhari Singh	Promoted as Associate Professor and Incharge HOD Cyber Security
10	Mr. Vikas Singh	Attended FDP on BI Tools and Applications
11	Mrs. Lydia Suganya	Completed udemy course on "Selenium Testing"
		attended FDP on "Business Intelligence Tools and Application"
12	Dr. Manish Rana	Got promoted as Associate Professor
13	Mrs. Veena Kulkarni	Attended FDP on "BI tool and application"
14	Ms Ashwini Patil	Attended FDP on "BI" tools and Application
15	Ms. Niki Modi	Completed Udemy course on Core java & Python
		Attended FDP on B1 tools
16	Mr. Aniket Mishra	Conducted FDP on Python in E&H Dept, TCET.
		Conducted FDP on "Business Intelligence Tools and Application"
17	Ms. Poonam Joshi	PET Cleared
		AICTE Approved FDP on Amazon Web Service
		Attend FDP on "Business Intelligence Tools and Application" doing course on ML
18	Ms. Tanmayi Nagale	PET Cleared with 79 Marks out of 100
		Completed Udemy course on CVE's for Ethical hacking/Bug Bounties and Penetration Testing

		Completed Udemy course on Ethical Hacking/Penetration testing and Bug Bounty Hunting
		Reported two Clickjacking and one Broken Link Hijacking vulnerabilities on Bugcrowd and Hackerone platform.
19	Mr. Loukik Salavi	Conducted Webinar at RAIT on Water conservation.
		Conducted FDP on Data Analytics and Tableau in E&H Dept, TCET.
		Completed One Week AICTE approved FDP on "Amazon Web Services"
		Attended FDP on BI tools in TCET
20	Ms. Drashti Shrimal	PET cleared with 65/100
		Conducted FDP on "Business Intelligence Tools and Applications" in COMP
		Delivered guest lecture on "Career opportunities in SDLC"
21	Ms.Priyanka Bolinjkar	PET Cleared 84/100, Attended FDP on "Business Intelligence Tools and Application" completed udemy course on ML
22	Ms.Anam Khan	Skill Lync Workshop on Data Science in Healthcare.
		Skill Lync Workshop on ADAS and Autonomous Vehicle.
		Attended FDP on " Business Intelligence Tools and Applications".
23	Mr. Swapnil Bhagat	Attended FDP on "Business Intelligence Tools and Application, Attended Red Hat Summit connect
24	Ms. Pranjali Sankhe	PET -60/100
		completed tableau course in Udemy
25	Ms. Chandana Nighut	Attended FDP on BI Tools FDP on Recent Trends in Deep Learning
26	Ms. Tarunima Mukherjee	FDP on BI tools and application
27	Ms. Sayali Salkade	Cleared patent exam with with 69% attended fdp "BI Tool Doing course from udemy on ML
28	Dr. R.R Sedamkar	1 Patent Published " Performance Improvement for Indian Election Campaign using AI driven Approach"
		Chief Guest for Oscillation '23 a Technical paper Presentation organized by Vidyavardhini College of Engineering and technology
29	Dr. Sheetal Rathi	Mentor for fellowship research grant received (1.2 Lakhs) of Aavishkar-2023: 15th Maharashtra State Inter-University Research competition.
30	Dr. Zahir Aalam	Invited as Guest for Golden Jubilee Celebrations (50th Year) for Children's Academy Group of Schools
		Reviewer for IEEE International Conferences at Malaysia and others
		Completed 3 outhouse industry projects
		Registered 2 PhD Scholars
31	Dr. Harshali Patil	Reviewer at Springer
		Reviewer at Autonomous College for Syllabus Setting
		2 Patent Filing in process
		1 Patent Granted
		1 Copyright in process
		Coordinator for ISTE approved STTP
		Session Chair for Multicon-W 2023
		Reviewer for IEEE Conference

		Best Paper at ICICAT 2023
		Program Committee member for International Conference on DS and Big Data Analytics, ACM Chapter Event, affiliated with Springer Book Series
		5 Consultancy Project Guided
32	Dr. Anand Khandare	Conducted Session on QML at Fr. Agnel, Vashi.
		Worked as Session chair at CBIT, Hyderabad
		Paper acceptance in Inderscience journal
		BE Project MentoCare - appreciated and recommended for societal use by Psychiatrist.
33	Dr. Rekha Sharma	Grant of Rs.35000 for project from Mumbai University
		Session Chair
		Journal Papers - 4
34	Dr. Rashmi Thakur	Grant for PMKVY 4.0(240 Students training with Rs.6900 each)
35	Dr. Manish Rana	4 paper published in I-manager(Free Journal)
36	Dr. Shiwani Gupta	Topper 2% in NPTEL course: Python for Data Science
		Reviewer: Shri Dharmasthala Manjunatheshwara College of Engineering and Technology, Dharwad International Conference on Applied Intelligence and Sustainable Computing (ICAISC-2023)
		Paper setter of UoM 3 PG courses
		1 consultancy of 38000/- in industry, 1 of 9000/- in Central Bank, 1 of 9000/- in Pal India IAF
		1 Springer publication
		Conducted STTP in AIML department
		Organized inter department hackathon
		Started Society 4 Data Science for AI&DS students and faculty
		Organized FDP for AI7DS CSE IoT
		642 reads on technical article on medium
		133 citations 7h-index 4 i-10 index
		3rd most read research items from institute on researchgate(1 article has 10000 reads)
37	Mrs. Vaishali Nirgude	Received 1.2 Lakhs fellowship research grant of Aavishkar-2023: 15th Maharashtra State Inter-University Research competition.
		Applied for "SERB Power Women Research Grant": 30 Lakhs, Title: Design and Development of a Real-Field Surveillance and Disease Management System to Enhance the Performance of Fruits Disease Detection and Prediction in Horticulture Area,
		Status : Stage 1- Peer Review Proposal sent for refereeing.
		Improving the Accuracy of Real Field Pomegranate Fruit Diseases Detection and Visualization using Convolution Neural Networks and Grad-CAM", International Journal of Data Analysis Techniques and Strategies (IJDATS), Scopus (Elsevier)
38	Mr. Vikas Singh	Consultancy Project "Security Enhancement in RFID based Solutions"
		Paper on Innovative Practices in Multicon-W 2023
		Awarded 1st Position (Trophy + Certificate + 5000 Cash Prize) in PPG level, Aavishkar: 15th Maharashtra State Inter-University Research Convention held at Savitribai Phule Pune University,
39	Mrs. Lydia Suganya	Organized ESD Programmes
		Outhouse internship for students by communicating with companies

40	Ms. Veena Kulkarni	Admission to PhD
		Consultancy done at INS Hamla for SDLC.
		4 papers in multicon
41	Mr. Shailesh Sangle	Published Patent
		Published 1 paper in SCOPUS
		Published 1 paper in SPRINGER
		Published 2 papers in UGC care journal
		Published 4 papers in ICICN 23
		Reviewer for International Conference on ACTA-2023
42	Mrs. Ashwini Patil	6 Paper Publication in Multicon W 23
		1 paper submitted to Springer Book chapter
43	Ms. Deepali Joshi	Paper Publication,
		Attended FDP,
		1 online course in process
44	Mr. Loukik Salvi	1.Published book for UoM on Applied Data Science for SEM-VIII
		2.Paper Publication:-1 Journal,2 International Conference,1 springer journal in Process
		3.FDP conducted:-03
		4.Paper Setter for Mumbai University for Data Science and Security
		5.Published course on team-lead
		6.Online Course Completed:-02
45	Ms. Foram Shah	Paper Publication 3
		Attended FDP
		Reviewer for ICICN-2023
46	Ms. Niki Modi	Completed 2 online certification course from udemy (Core Java,PHP)
		Published 2 Paper in Multicon W-2023
		Published One Book Chapter In ICICN 23
47	Mr. Aniket Mishra	Published a paper in IBSSN: 2022-23
48	Ms. Poonam Joshi	Multicon Paper Publish , Course on AWS
49	Ms. Tanmayi Nagale	Published paper "Identification of ClickJacking Attack using IFrame", IJCRT ISSN : 2320-2882, Volume 11 - Issue 4- e65-e69, April 2023
		Published paper "Comprehensive Review of Lie Detection in Subject based Deceit Identification", Multicon-ICICN-2023,
		Completed course
		1)"Google Colab, GreatLearning, April 2023
		2) "Introduction to Deep Learning", GreatLearning, April 2023
50	Ms. Drashti Shrimal	1 Copyright (in process),
		Co-coordinator for ISTE approved STTP,
		Completed Udemy certified Course on "Explainability of systems",
		Resource person for STTP on "Exploring trends in Data Science"
51	Ms. Anam Khan	2 Paper published in Multicon W.
		Reviewed 2 Papers in ICECCME 2023.
		Faculty mentor for AI specialization.
		Conducted HTML and CSS Session for PMKVY 4.0
52	Ms. Priyanka Bolinjkar	Published 2 papers in Multicon W-2023
		Completed 1 online certification course from Udemy(ML)
53	Mr. Swapnil Bhagat	Reviewer for ICICN-2023
		Attended FDP,

		1 online course in process
54	Ms. Pranjali Sankhe	Trainer on Computer Network and Security at Central Bank
		Published 3 papers in Multicon 2023(paper id 316,322,30 R&D)
55	Ms. Chandana Nighut	Admission in PhD
		Paper on Innovative Practices in Multicon-W 2023
		Attended FDP
		Reviewer for ICICN-2023
56	Ms.Tarunima Mukherjee	Paper in Multicon W (ICICN 23)
57	Ms. Sayali Salkade	Paper on "A Unique Approach For Assessment Combining the 3-2-1 Methodology along with Recent Developments in Assessment Technique" IJCRT
		Nptel Course on" Introduction To Machine Learning"
58	Ms. Huda Khan	Paper Published in IJCRT with name "Effective Teaching Assessment Model: Utilizing
		the Kirkpatrick Evaluation Framework "
59	Dr. S. C. Patil	1. BOS Chairperson
		2. Speaker in Faculty Development Program sessions
		3. Reviewer for ICCCDS &IOTSIAC conference journals papers
		4. Paper Reviewer and Session Chair in Multicon-W
		5. 2023.
		6. Department Faculty Development Program
60	Dr. Hemant Kasturiwale	1. SCOPUS paper ''Assessment system or method for developing attitude competency and mind setoff learners'.'
		2. SCOPUS paper ''Integrated Laboratory Practices in the Question papers''.
		3. Institute Level Coordinator for Pre-Conference
		a. Workshop under Multicon-W 2023.
		4. Paper Reviewer and Session Chair in Multicon-W 2023
		5. .BOS member.
61	Dr. Sandhya Save	1. BOS member
		2. a project leader to present idea at 4th Feb 2023, NCQM Learning Centre 1, NCQM Vikhroli, Mumbai
		3. Best Paper award to paper ''Women Entrepreneurs: A New Approach to Women Empowerment'' in an International Conference on Gender Equality and Women Empowerment, ICGEWE 2023 Pune, India Reviewer for Springer and Web of Science journals
		4. UHV-II program attended.
		paper Education in ''Rural Communities" International Conference on Gender Equality and Women Empowerment, ICGEWE 2023, Pune, India
	Mrs. Jyoti Kori	1. Session Chair in Multicon W
		2. Paper reviewer for ICCDS
		3. Department Faculty Development Program Conducted and attended.
		4. Resource person for IT company
63	Mrs. Leena C.	1. Multicon 23 Publicity
		2. Delivered session to SE Student in Seminar
		3. Conducted and Attended FDP
		4. Conducted Technical Seminar for SE &TE students
		5. Being a member of the Publicity team in MULTICON visited a number of colleges..
64	Mr. Sumit Kumar	1. Attended FDPs.

		2. Attended IETE Bombay section Council Day
		3. Paper Reviewer and Multicon-W-2023.
		4. P.B. Parikh. Mem Lect. Organized under IETE chapter
		5. E Magazine Publication in the Department
		6. Being a member of the Publicity team in MULTICON visited a number of colleges..
65	Mrs Jalpa B.	1. Attended FDPs.
		2. Attended IETE Bombay section Council Day
		3. Paper Reviewer and Multicon-W-2023.
		4. P.B. Parikh. Mem Lect. Organized under IETE chapter
66	Mr Varun Mishra	1. Attended FDPs
		2. Paper Reviver in Conference at SFIT Mumbai
		3. Syllabus Design member in M o U E&TC
		4. Being a member of the Publicity team in MULTICON visited a number of colleges.
		5. Paper Reviewer and Multicon-W-2023
67	Mrs Veena H.	1. Attended FDPs.
		2. Paper Reviewer and Multicon-W-2023
68	Mrs Dhanashri L	1. Conducted SDP for TE and SE.
69	Ms Vaishali S.	1.Paper Presented in Multicon-W-2023
70	Mrs Heena S .	1.Paper Presented in Multicon-W-2023
71	Dr. Sujata Alegavi	1. BOS Chairperson
		2. Consultancy undertaken for Air force training
		3. Speaker in Faculty Development Program sessions
		4. Reviewer for Springer and Web of Science journals
		5. UHV-II program attended.
		6. Department Faculty Development Program attended.
		7. Space Tutor for ISRO
		8. Outreach activities under TCET Astronomy club
72	Mr. Sunil Khatri	1. UHV-II program attended.
		2. Department Faculty Development Program attended.
		3. Institute Level Coordinator for Pre-Conference Workshop under Multicon-W 2023.
		4. Paper Reviewer and Session Chair in Multicon-W 2023
73	Ms. Ketki Balde	1. Delivered FDP on Python
		2. Session Chair in Multicon W
		3. Department Faculty Development Program attended.
74	Ms. Divya Kushwah	1. Delivered FDP on Python
		2. Certification of blockchain developer
		3.Delivered session on machine learning to IAF officers.
		4. Attended FDP on visualization tool
75	Ms. Pratibha Sajwan	1. Attended FDPs.
		2. Attended IEEE Bombay section Council Day
		3. Conducted Departmental FDPs.
		4. Paper Reviewer and Multicon-W-2023 co-ordinator.
		5. UHV-I program attended

		6. The Committee Member in Industry and Institute Symposium.
		7. Conducted Technical Seminar For ST &TT students
		8. Being a member of the Publicity team in MULTICON visited a number of colleges.
		9. Conducted number of SDP for TE/TT and SE/ST.
		10. Presented Paper in MULTICON.
76	Ms. Sony Jha	1. Attend FDP on Python
		2. Attended FDP on visualization tool
		3. Certification Cyber Era Today - Myths & Realities"
		4. Paper Reviewer and Multicon-W-2023 co-ordinator.
77	Dr. Sujata Alegavi	ISTE member, Reviewer for Springer journal, Microsoft CMT
78	Mr. Sunil Khatri	IEEE and ISTE member, Jury member - Anveshana Competition (Agastya Foundation)
79	Ms. Pratibha Sajwan	IEEE and ISTE member

Annexure – XI

Professional Body Activities for the academic year 2022-23:

TCET-CSI

Sr. No.	Activities Conducted	Date
1	Core committee formation	15th July, 2022
2	Interaction with SE & TE Students about CSI-TCET	11th August, 2022
3	CSI Alumni Connect	20th August, 2022
4	Workshop on overseas loan procedure and eligibility criteria with Gyandhan	03rd September, 2022
5	Higher Studies Webinar with IMFS	6th September, 2022
6	Higher Studies Counseling with IDP	14th September, 2022
8	Workshop on Stock Market Basics	18th-19th October, 2022
9	Industrial Visit	2nd - 11th January, 2023
10	Coding Competition	03rd February, 2023
11	Workshop on Git and Github	14th March, 2023
12	Workshop on game development	14th March, 2023
13	Project Competition	14th - 21st April, 2023

IEEE Activities conducted in 2022-23

Sr. No.	Activity conducted	Date
1	Educational Excursion to Delhi-Jim Corbett- Nainital	3rd January - 11th January, 2023
2	Photography Competition	27th January, 2023
3	Webinar on Data Analytics by Ms. Deeksha Anand	3rd February, 2023
4	Workshop on Figma by Mr. Shiv Kanojiya	10th February, 2023
5	Pre-Workshop - Artificial Intelligence and Machine Learning by Mr. Karan Thakur	20th February 2023 - 25th February 2023
6	Webinar on Metastructure based Antenna Design by Dr.Ashwini Kotrashetti	24th March, 2023
7	Technical Webinar on Introduction to Flutter by Mr. Aditya Thakur	31st March 2023
8	Technical Seminar - IEEE Educational Week 2023	6th April, 2023
9	Webinar on 'Training and awareness on IPR'	1st August 2022
10	Webinar on 'Metaverse and Beyond'	5th August 2022
11	Workshop on 'UI/UX Design'	13th August 2022
12	Webinar on 'Startup Ecosystem'	26th August 2022
13	Webinar on 'Wearable Antennas'	9th September 2022
14	Webinar on 'Higher Studies and Placements'	23rd September 2022
15	Webinar on 'Study Abroad After Engineering'	28th September 2022

TCET-MUN

Sr. No	Date	Key Activities	Participa tion- Internal/ external number (if any) against total strength	Objective	Outcome
1	03-08-2022	Awareness program	19	To create awareness about the benefits of participating in TCET-MUN Society activities.	Able to generate the required awareness among students regarding TCET_MUN society activities
2	19-09-2022	Training Program	50	To simulate an enviroment just like the original MUN conference to give an understanding to students through participation	Able to understand the working of MUN and importance of diplomacy and dialogue

3	24-09-2022	Mock MUN	63	1. To make participants comfortable with the MUN enviroment of debate 2. To make participants understand the basis of research. 3. To counsel new comers and understand the diplomacy traits and communication skills	1. Able to adapt the MUN environment 2. Able to get the research done, report making and make the notes for debating. 3. Able to understand the diplomacy traits and importance of communication
4	30-09-2022 to 02-10-2022	TCET-MUN 2022 Conference	92	1. To develop communication skills, debate, public speaking etc. 2. To develop general knowledge at national and international level 3. To enhance diplomacy and interpersonal skills	1. Able to develop communication and debate skills with confidence. 2. Develop networking as well as general knowledge at national and international level. 3. Develop diplomacy and interpersonal skills 4. Appreciation is given to students in the form of cash prizes and certificates.
5	14-02-2023	Awareness program	20	To create awareness about the benefits of participating in TCET-IYP	Able to generate the required awareness among students regarding TCET-MUN society and upcoming event of IYP
6	21-02-2023	Training Program and Mock IYP	25	1. To be able to give an understanding of the event 2. To make participants understand the basis of research. 3. To counsel new comers and understand the diplomacy traits and communication skills	1. Able to understand the importance of parliamentary diplomacy and dialogue 2. Able to work on research skills and content development for debating 3. Able to participate with zeal and develop professional communication
7	04-03-2023	Indian Youth parliament Conference 2023	32	1. To develop communication skills, debate, public speaking etc. 2. To develop general knowledge at national and international level 3. To enhance diplomacy and interpersonal skills	1. Able to develop communication and debate skills with confidence. 2. Develop networking as well as general knowledge at national and international level. 3. Develop diplomacy and interpersonal skills 4. Appreciation is given to students in the form of cash prizes and certificates.

EWT

Sr No	Date	Name of Activity	Participants	Guided By
1	5th March 2023	Sunday Funday on Sunday (Girgaon Chowpatty)	42	Dr. Ela Agarkar, Mr. Ashwin Pathak
2	14th March 2023	Junoon Foundation Awareness Volunteering	10	
3	16th to 17th March 2023	Sojourn 2023	40	
4	22nd March 2023	Online Movie Noon	47	
5	28th Jan to 25th March 2023	Municipal School Teaching Activity	20	

| 6 | 29th Jan to 26th March 2023 | Teaching Sessions at Sri Ram Vidya Mandir High School | 60 | |

ACM

Sr.No.	Name of Activity	Date
1.	Webinar on Latest IT Technology	22 July 2022
2.	Technical Seminar	29 July 2022
3.	Technical Workshop	12 August 2022
4.	Coding Comptetetion	19 August 2022
5.	Technical Quiz	26 August 2022
6.	Zephyr Preparation	16 September 2022
7.	Zephyr - Technical Festival 2022	23 September 2022
8.	Technical Workshop	30 September 2022
9.	Release of Bulletin for Odd Sem - 2022	7 October 2022
10.	Industrial Visit for TE & BE	3rd Jan to 11thJanuary
11.	Meeting with Core and working committee membersto discuss further events	20 January 2023
12.	Senior Interaction-Sharingthe experience by current placed students/Students scored good	3rd February2023
13.	Alumni connect	10th February2023
14.	Seminar on Recent Trends &Technology RPA	27th January2023
15.	Multicon W 2023 Professional Body Workshop Multicon-W QP WorkshopsRPA QP Workshop DAA WorkshopAWS Workshop	21st Feb 2023 to24th Feb 2023
16.	Idea Presentation	15th April 2023
17.	Coding/DebuggingCompetition	24 March 2023
18.	Article Submission for EzineMagazine	24 March 2023
19.	Seminar/Webinar onBudding Technology	10 March 2023
20.	Project Competition	11 April 2023 & 12 April 2023
21.	Release of Bulletin for Evensem 2023	28 April 2023

The Departmental Professional body **ACM-SIGAI** was established to conduct National level events by AI&ML Dept.
Odd Sem Activities

Sr.No	Date	Activity	Mode of Conduct	Resource Person/ Expert	Students Participated
1	16th September	Formation of ACM-SIG-AI	Offline	Faculty	TT and ST Students
2	22nd September	Consent form circulation for core members of SIG AI	Offline	Faculty	TT and ST Students
3	07th October	Industrial Visit-Local	Offline	Faculty	TT Students
4	04th October	Conduction of interviews for the core members SIG AI	Offline	Faculty	TT and ST Students
5	10th October	Proposal making and approval of ACM-SIG AI	Offline	Faculty	TT and ST Students
6	17th October	Member ship drive- ACM-SIG-AI	Offline	Faculty	TT and ST Students

Even Sem Activities

Sr.No.	Date	Key Activity	Mode of Conduct	Count	Resource Person/Participants
1	21-Jan-23	Core Committee Formation	Online	10	Core Members
2	28-Jan-23	Membership drive	Online	44	Student Members
3	10-Feb-23	National Level Expert Talk	Online	538	Mr Prathik Shetty
			Online		(TCET,Third Year AI&ML Student)
4	20-Feb-23	Multicon-W 2023 Events	Online		Ms. Anuprita Deshmukh

	to 25-Feb-23	● Qualification Pack Workshop ● Annual Conference Multicon-W Organization				
5	10-Mar-23	National Level Technical Debate	Online	16	Students from All over India	
6	24-Mar-23	National Level Kaggle Competition	Online	127	Students from All over India	
7	03-Apr-23	National Level Ideathon	Online	–		

AI&DS Department has currently no Professional body. Instead Mind Benders group have been formed at the department level to conduct the technical sessions for AI&DS students as well as students from another department. The activities conducted by Mind Benders in Even Sem (22-230 is mentioned in the table below.

Sr. No	Date	Time	Topic of Activity	Class	Speaker	Designation	Attendance
1	02/04/2023	5 pm – 6.30 pm	Webinar on Kaggle Notebooks and Discussion	All ST and TT Students	Mr. Somesh Fengade	Kaggle 2x expert (Final Year student at A.P. Shah College of Engineering)	85 Participants
2	14/04/2023	5 pm – 6 pm	Unlock the power of data – EDA and Automated Techniques	All ST and TT Students	Mr. Hrishikesh Yadav	Vice chairperson at GDSC – TCET (IT Department)	104 participants

E&CS & IoT

DATES	NAME OF ACTIVITY	OBJECTIVE	OUTCOME	DOMAIN	COUNT	REPORT
3rd to 11th January 2023	Industrial Visit 2023	To prepare students for successful careers in the industry, by identifying the gaps between the curriculum and industry requirements.	This visit promoted awareness amongst students for life-long learning and to inculcate in their professionalism, ethical attitude, good leadership qualities and commitment to social responsibilities.	Society, Education	TE-44, BE-3, Faculties-2	Submitted and approved by IETE Branch Counsellor
20th January 2023	Even sem orientation	To orient students about the various activities, competitions and seminars planned by the IETE professional body in the even semester.	Students got an idea of the events planned and also got the opportunity to give their suggestions and ideas for the new semester.	Society, Education	TE-24, SE-24	Submitted and approved by IETE Branch Counsellor
28th January 2023	ChatGPT Webinar	To provide students with an idea of Opportunities in AI and future advancements in the field of ChatGPT.	Students were given knowledge about ChatGPT and its applications in real life.	Education	SE-83, TE-42, BE-6	Submitted and approved by IETE Branch Counsellor
3rd March 2023	Alumni Interaction	To hold an interactive and informative session about higher studies and portfolio building.	Through this interaction, students could interact with their alumni and learn from their experiences.	Society, Education	SE-47, TE-9	Submitted and approved by IETE Branch Counsellor

7th March 2023	PCB Design workshop day-1	To provide students with hands-on training in PCB Design.	The workshop provided the participants with a good understanding of the basics of PCB design.	Education	SE-31, TE-21	Submitted and approved by IETE Branch Counsellor
10th March 2023	PCB Design workshop day-2	To refine participants' understanding of circuit design.	The workshop provided hands-on practice and experimentation, which helped participants gain a deeper understanding of the design process.	Education	SE-08 , TE-11	Submitted and approved by IETE Branch Counsellor
24th March 2023	PCB Design workshop day-3	To provide participants with hands-on experience in transferring a design to a copper-clad board using a heat transfer process.	Practical application of knowledge gained through designing and building a NE555 timer circuit	Education	SE=08, TE=11	Submitted and approved by IETE Branch Counsellor
6th April 2023	Oscillation 2023	The event also aimed to encourage teamwork, problem-solving skills, and creativity among the participants.	The event engaged the participants in creative exercise wherein they evaluated their knowledge, weakness and threats positively.	Education , Society	SE=22, TE=15	Submitted and approved by IETE Branch Counsellor
21th April 2023	Project Competition	To encourage students to learn through research of recent technological trends through their project ideas.	The event provided a platform for the students to showcase their technical knowledge and presentation skills.	Education, society	TE=99, BE= 72	Submitted and approved by IETE Branch Counsellor
28th April 2023	Bulletin Release	To disseminate information about activities, events, and research within IETE-TCET, keeping members and stakeholders informed.	Enhanced professional development, community building, and reputation of IETE-TCET by promoting engagement, knowledge enhancement, and attracting new members.	Society, Education	-	Submitted and approved by IETE Branch Counsellor