Estd. 2001

Conferred Autonomous Status by University Grants Commission (UGC) for 10 years w.e.f. AY 2019-20

ISO 9001:2015 Certified Institute	NBA Accredited Programs	NAAC Accredited Institute with 'A' Grade	AICTE-CII Survey rating in Platinum category for Industry linkages	IMC Ramkrishna Bajaj National Quality Award (RBNQA) in 2015 for Perfoamnce Excellence	Among Top 250 Colleges in NIRF Ranking 2019-20 & 2020-21	68th & 78th in All India Rank by Outlook survey published in June 2019 & May 2018 respectively

Academic Performance Audit Report

(A.Y. 2021-22)

by

External Peer Team

(Constituted as per UGC Guidelines for Autonomous Colleges)

Lagdu Singh Charitable Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

Autonomous College Affiliated to University of Mumbai

Approved by All India Council for Technical Education(AICTE) and Government of Maharashtra

A - Block, Thakur Educational Campus, Shyamnarayan Thakur Marg, Thakur Village, Kandivali (East), Mumbai - 400 101

Tel.: 022-6730 8000 / 8106 / 8107 Telefax: 022-2846 1890 • Email: tcet@thakureducation.org

• Website: www.tcetmumbai.in www.thakureducation.org

Estd. in 2001

Laxdu Singh Charitable Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

Autonomous College Affiliated to University of Mumbai

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Conferred Autonomous Status by University Grants Commission (UGC) for 10 years w.e.f. A.Y 2019-20

Amongst Top 200 Colleges in the Country, Ranked 193rd in NIRF India Ranking 2019 in Engineering College category

• *ISO 9001:2015 Certified* • *Programmes Accredited by National Board of Accreditation (NBA), New Delhi*

• *Institute Accredited by National Assessment and Accreditation Council (NAAC), Bangalore*

Website : www.tcetmumbai.in

REF/TCET/ 3155 of 2022

27th September 2022

To,
University Grants Commission (UGC)
Bahadur Shah Zafar Marg,
New Delhi - 110002.

Sub: Submission of Academic Performance Audit Report A.Y.2021-22

Dear Sir,

This is to inform you that the External Peer Team has conducted the Academic Performance Audit for A.Y.2021-2022 on 29th August 2022. In this regard, we are sending herewith soft copy of Academic Performance Audit Report for A.Y.2021-2022.

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

Kindly acknowledge the same.

Thanking you,

Yours faithfully,

(Dr.B.K.Mishra)
Principal

Encl: As mentioned above

A - Block, Thakur Educational Campus, Shyamnarayan Thakur Marg,Thakur Village, Kandivali (East), Mumbai - 400 101
Tel.: 022-6730 8000 / 8106 / 8107 Telefax: 022-2846 1890 • Email: tcet@thakureducation.org

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Fw: Invitation - "Academic Performance Audit" by "External Peer Team" for A.Y 2021-22 on 29th August 22 from 10.30am onwards

Raghavendra Sedamkar <rr.sedamkar@thakureducation.org>
Tue 27-09-2022 13:03
To: Rajesh Bansode <rajesh.bansode@thakureducation.org>
Cc: TCET TEACHING <tcet.teaching@thakureducation.org>

Thanks & Regards,

Dr. R R Sedamkar, Director - IQAC
Professor & HoD (Ph.D Programs)
Board Tel. Nos: 91-22- 6730 8000,106,107
Direct Nos.: 91-22-6800 8115,Cell: 9920640772
Email: rrsedamkar27@gmail.com

TCET

From: retinal@chem.iitb.ac.in <retinal@chem.iitb.ac.in>
Sent: Wednesday, August 24, 2022 3:35 PM
To: Raghavendra Sedamkar <rr.sedamkar@thakureducation.org>
Cc: retinal@chem.iitb.ac.in <retinal@chem.iitb.ac.in>; vasudevanhari@yahoo.com <vasudevanhari@yahoo.com>; ppbhave@ci.vjti.ac.in <ppbhave@ci.vjti.ac.in>; TCET Principal <tcet.principal@thakureducation.org>; Kamal Shah <kamal.shah@thakureducation.org>; lochan jolly <lochan.jolly@thakureducation.org>; Vinitkumar Dongre <vinit.dongre@thakureducation.org>; sheetal.rathi <sheetal.rathi@thakureducation.org>; Rajesh Bansode <rajesh.bansode@thakureducation.org>; zahir.aalam <zahir.aalam@thakureducation.org>; Sanjay kumar <sanjay.kumar@thakureducation.org>; payel.saha <payel.saha@thakureducation.org>; Harshali Patil <harshali.patil@thakureducation.org>; sangeeta vhatkar <sangeeta.vhatkar@thakureducation.org>; Dr. Siddesh Siddappa <siddesh.siddappa@thakureducation.org>; Seema Jagtap <seema.jagtap@thakureducation.org>; Sanjay Patil <scpatil66@thakureducation.org>; Sunita Pachori <sunita.pachori@thakureducation.org>; anilk.vasoya <anilk.vasoya@thakureducation.org>; hemant.kasturiwale <hemant.kasturiwale@thakureducation.org>; Sanjeev Chaudhari <sanjeev.chaudhari@thakureducation.org>; Sanjeev Ghosh <sanjeev.ghosh@thakureducation.org>; anand.khandare <anand.khandare@thakureducation.org>; Rajeshwar Deshmukh <rs.deshmukh@thakureducation.org>; rohitkumar.singh <rohitkumar.singh@thakureducation.org>; krishnakant.mishra <krishnakant.mishra@thakureducation.org>; yogesh.bhalekar <yogesh.bhalekar@thakureducation.org>; Vijaykumar Yele <vijaykumar.yele@thakureducation.org>; Rupali Mane <rupali.mane@thakureducation.org>; Dev Kalwale <devidas.kalwale@thakureducation.org>; Dr. Rekha Sharma <rekha.sharma@thakureducation.org>; rajni.bahuguna <rajni.bahuguna@thakureducation.org>; aradhana.manekar <aradhana.manekar@thakureducation.org>; manish.rana <manish.rana@thakureducation.org>; sandhya.save <sandhya.save@thakureducation.org>; megharani.patil <megharani.patil@thakureducation.org>; pranjali.kasture <pranjali.kasture@thakureducation.org>; namdeo badhe <namdeob.badhe@thakureducation.org>; TCET TEACHING <tcet.teaching@thakureducation.org>
Subject: Re: Invitation - "Academic Performance Audit" by "External Peer Team" for A.Y 2021-22 on 29th August 22 from 10.30am onwards

Dear Prof Sedamkar:
Thank you for your email below.
I confirm my attendance herewith for the 'Academic Performance Audit Committee' meeting scheduled on 29th August, 2022.
Regards,
AK Singh

Professor Anil Kumar Singh,
Tel.: (022) 2847 1761 / Cell Ph: 9820 74 7167
E-mail:<retinal@chem.iitb.ac.in> <retinal.iitb@gmail.com>

> Dear Sir,
>
> On behalf of "Internal Quality Assurance Cell of TCET", I am pleased to

> invite you as an expert on the "Academic Performance Audit Committee"
> which is constituted to monitor the progress of the institute and send the
> report to UGC as per their guidelines.
>
> The constitution of the committee for the A.Y 2021-22 is as follows :
>
> 1. Prof. Dr. Anilkumar Singh - Chairperson
> 2. Prin. Dr. Harivasudevan - Member
> 3. Dr. P.P Bhave - Member
>
> The Academic Performance Audit Report for the current year and the Action
> Taken Report for the previous year will be tabled on the day of the audit
> for your ready reference.
>
> The Audit is scheduled on 29th August 22 from 10.30 am onwards with an
> opening meeting with the Principal, Vice Principal, Deans, MR, TPO, CoE,
> HoDs and members of the management in the Board Room.
>
> The audit process will continue from 11.00 AM onwards at the respective
> locations by interaction/discussion/presentation/meetings with all
> concerned stakeholders to assess/review the progress of the institute. The
> tentative flow of the program is as follows:
>
> 1. Opening Meeting - 10.30am - 11.00am
> 2. Principal & Chairperson (Academic Council) - 11.00am
> 3. Vice-Principal & Member Secretary (Academic Council) - 11.15am
> 4. Deans, Controller of Examinations & TPO -11.30 12.45pm
> 5. Lunch Break - 12.45-1.30pm
> 6. HODs & Chairman – Board of Studies of various departments - 1.30
> -4.00pm
> 7. Tea Break - 4.00 - 4.15 pm
> 8. Section In-Charges, Activity Heads - 4.15 -5.00pm
> 9. Closing Meeting - 5.00pm - 5.30pm
>
> We thank you for accepting our invitation and looking forward to seeing
> you on 29th August 22 for the opening meeting.
>
>
> Thanks & Regards,
> Dr. R R Sedamkar, Director - IQAC
> Professor & HoD (Ph.D Programs)
> Board Tel. Nos: 91-22- 6730 8000,106,107
> Direct Nos.: 91-22-6800 8115,Cell: 9920640772
> Email: rrsedamkar27@gmail.com
>
> [TCET]
>
>

This email was sent using SquirrelMail.
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http://squirrelmail.org/

Date: 25th August, 2022

Program Schedule (Tentative)
Academic Performance Audit for A.Y 2021-22 (29th August , 22)

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

Welcoming the External Peer Team & Opening Meeting with Senior Leadership of TCET (10.30am)				
Time	**Name**	**Persons to be Audited**		**Scope of the Audit**
11.00am-11.15am	Dr.B.K.Mishra	Principal	Chairman (Academic Council)	Vision setting & strategic direction
11.15am-11.30am	Dr.Kamal Shah	Vice-Principal	Member Secretary (Academic Council)	Planning & Design
11.30am-11.45am	Dr.Lochan Jolly	Dean (SSW)	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.Sheetal Rathi	Dean (Academic)	Member - Dean Academic Board	
12.15pm-12.30pm	Dr.Sanjay Kumar	Controller of Examination	Member - Board of Examination	
12.30pm-12.45pm	Dr.Zahir Aalam	Training & Placement Officer	Member of IQAC	Planning, Preparation, Deployment, Measurements of Outcomes w.r.t Placement, Higher studies
12.45pm-1.00pm	Dr.Anil Vasoya	In-Charge (Higher Studies & Online Certification Cell)	Member of IQAC	
1.00pm – 1.30pm	**Lunch Break**			
1.30pm – 1.45pm	Dr.Payel Saha	HOD (E&TC)	Chairman – Board of Studies of respective departments	Preparation, Design, Effective Deployment, Measurement & Outcomes
1.45pm-2.00pm	Dr.Harshali Patil	HOD (COMP)		
2.00pm-2.15pm	Dr.Siddesh Siddappa	HOD (MECH)		
2.15pm – 2.30pm	Dr.Sangeeta Vhatkar	I/C HOD (IT)		
2.30pm-2.45pm	Dr.S.C. Patil	HOD (ELEX)		
2.45pm-3.00pm	Dr.Seema Jagtap	HOD (Civil)		
3.00pm-3.15pm	Dr.Kamal Shah	HOD (AI&ML)		
3.15pm-3.30pm	Dr.Lochan Jolly	HOD (IoT)		
3.30pm-3.45pm	Dr.Sheetal Rathi	HOD (AI&DS)		
3.45pm-4.00pm	Dr.Sunita Pachori	HoD (ES&H)		
4.00pm-4.15pm	**Tea Break**			
4.15pm- 5.00pm	Dr.Sandhya Save Dr.Rekha Sharma Dr. Rajni Bahuguna Dr.Manish Rana Ms.Aradhana.M Mr.Devidas Kalwale	Activity Heads & Librarian	Student support system	Planning & Deployment of Holistic Student Development, Outreach, Extension activities
5.00pm-5.15pm	• Meeting with Student Council Members, Members of IQAC (As per need) • Finalization of the "Academic Performance Audit Report" A.Y 2021-22			
5.15pm-5.30pm	**Closing meeting with senior leadership with External Peer Team**			

Sd/-
(Dr. B.K. Mishra)
Principal & Chairperson

Estd. in 2001

Laxmi Singh Charitable Trust's (Regd.)
THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY
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• Institute Accredited by National Assessment and Accreditation Council (NAAC), Bangalore

Constitution of IQAC Cell (A.Y. 2021-2022)

Sr.No	Particulars	Name
1.	**Chairperson:** Head of the Institution	Dr. B.K. Mishra- Principal
2.	**Special Invitee**	Dr.Kamal Shah - Vice Principal
3.	**Director of the IQAC**	Dr. R.R. Sedamkar – Professor (COMP)
4.	**Member from the Management**	Mr. V.N. Datta - Advisor
5.	**IQAC coordinator**	Dr. Rajesh Bansode - Management Representative
6.	**Senior administrative officers:** (3 members)	• Dr. Lochan Jolly - Dean (SSW) • Dr.Vinitkumar Dongre – Dean (R&D) • Dr.Sheetal Rathi – Dean (Academic)
7.	**Other members by invitation**	• Dr.Zahir Aalam- Training & Placement Officer • Mr.Anil Vasoya – In-Charge HOC Cell
8.	**External Members**	• Mr. Sharad Tiwari (Associate Consultant - TCS) • Dr. Radha Shrinivas (Stakeholder-IQAC Coordinator, UOM) • Dr. S. M. Ganechari (Stakeholder- Principal-T.Poly) • Mr. Neeraj Yadav (Alumni)
9.	**Student Members**	• Mr. Ankur Kulkarni – COMP • Mr. Dheerav Nahar – CIVIL • Ms. Vaishnavi Patil – MECH • Mr. Kamal Chaudhary – E&TC • Mr. Hardik Ramparia – IT • Ms.Athira Arvind Sindhu – ELEX • Mr.Kunal Pawar.– ES & H • Ms.Mitali Mandge - AI & DS • Mr.Prabhat Shukla - AI & ML • Mr.Vishal Patil - IoT
10.	**Faculty members (8 members)**	• Dr. Sanjay Kumar - MECH • Dr. Payel Saha - E&TC • Dr. Sangeeta Vhatkar - IT • Dr. Harshali Patil - COMP • Dr. S.C.Patil - ELEX • Dr. Siddesh Siddappa - MECH • Dr. Seema Jagtap - CIVIL • Dr. Sunita Pachori – ES&H
11.	**Coordinators**	• Ms. Purnima Chandrasekar – E&TC • Ms. Ashwini Shanbhag - CIVIL • Dr.Aditya Desai – IT, • Ms.Shilpa Mathur - AI & ML • Mrs. Jyoti Kori - ELEX • Mr. Jayant Patil & Ms. Swetha Kulkarni - MECH • Dr.Megharani Patil & Dr. Vidyadhari R. Singh- COMP • Dr.Prachi Janrao /Ms.Anushree Patkar – AI & DS • Ms.Jalpaben Pandya – IoT • Mr. Shivram Poojari – ES&H **Administrative** - Mr. Uday Waskar & Mr. Shailesh Chavan

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

Proforma for Progress Report of College (Autonomous)

Progress Report for the Academic Year: 2021-22

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) and Achievers' credits (National/International level).

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 quarter, the IQAC meeting was held in November 2021 followed by January & April 2022. 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 2021, October – December 21, January-March,2022) and the actionable points for the next quarter (i.e., October – December 21, January-March,2022) 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. 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, and the recognition for national and international achievements through credits and citations. 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	Programme Code	Date of Revision
F.E. All UG Programmes	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	03-06-2021
S.E. (Computer Engineering)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020))	04-06-2021
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)	08-06-2021
B.E. (Information Technology)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS-HME 2020)	07-06-2021
S.E. (Electronics Engineering)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	04-06-2021
T.E. (Electronics Engineering)	Choice Based Credit Grading Scheme with Holistic Student Development (CBCGS -H 2019)	07-09-2020
B.E. (Electronics 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)		
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

Name of Programme	Programme Code	Date of Revision
S.T. (Artificial Intelligence and Data Science)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	24-06-2022
S.T. (Artificial Intelligence and Machine Learning)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	10-01-2022
S.T. (Internet of Things)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	13-06-2021 & 10-01-2022

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	Advanced Java
	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
	Professional Skill V	HSD -CSPS501	Web Development
	Professional Skill VI	HSD -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	ESD-ETC301	Open-Source Technologies & Basics of cloud computing
	Employability Skill Development – IV	ESD-ETC401	Expert Python Programming/Python for IOT
	Employability Skill Development – V	ESD-ETC501	Database for Modern Applications/Machine Learning tool for non-programmer
	Employability Skill Development - VI	ESD-ETC601	Futuristic Web Development
	Professional Skills III	HSD-ETCPS301	Java
	Professional Skills IV	HSD-ETCPS 401	Python
	Professional Skills V	HSD-ETCPS501	Web Technology
	Professional Skills VI	HSD-ETCPS601	R Programming
B.E. (Information Technology)	Employability Skill Development-I	ESD-IT 301	Advanced Java

Programme	Name of the Course	Course Code	Activities/Content with a direct bearing on Employability/ Entrepreneurship/ Skill development
	Employability Skill Development - II	ESD-IT 401	Expert Python Programming, Python for IoT
	Employability Skill Development - III	ESD-IT 501	Web Development Skills
	Employability Skill Development - IV	ESD-IT 601	Futuristic Web Development
	Professional Skills III	HSD-ITPS301	Linux
	Professional Skills IV	HSD –ITPS401	Data Pre-processing for Machine Learning
	Professional Skills V	HSD –ITPS 501	ASP.NET
	Professional Skills VI	HSD –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-30	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	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	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	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	HSD-MEPS601	Training on FEA and ANSYS software
B.E. (Civil Engineering)	Employability Skill Development - I	ESD-CE301	Introduction to Python, Decision Making and Functions, Object Oriented Programming in Python, Exception Handling in Python, Data Structure in Python
	Employability Skill Development – II	ESD-CE401	Introduction to Python OOP's Concepts, Packages & Atomisator, Web Services & Testing, Application Integration, Managing Code & Life Cycle
	Employability Skill Development – III	ESD-CE501	Introduction to IoT using Python, Python and IoT Connectivity, Networking with RESTful APIs, Web Sockets Using Flask, Connecting Your Raspberry Pi to the Physical World-Part I, Connecting Your Raspberry Pi to the Physical World-Part II
	Employability Skill Development – IV	ESD-CE601	Introduction to JavaScript, Control Structures: JSON, Node.js, Angular.js, ReactJS, Introduction to Progressive Web Apps, Service Workers, Web App Manifest, Web Applications Testing, Web security
	Professional Skills-III	HSD-CEPS301	Auto CAD
	Professional Skills-IV	HSD-CEPS401	Blender 2.9
	Professional Skills-V	HSD-CEPS501	MIDASGEN
	Professional Skills-VI	HSD-CEPS601	Bar Bending Schedule
	Professional Skills-VII	HSD-CEPS701	ETABS
	Professional Skills-VIII	HSD-CEPS801	REVIT

Programme	Name of the Course	Course Code	Activities/Content with a direct bearing on Employability/ Entrepreneurship/ Skill development
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-AIDS401	Power BI
B.Tech. (Artificial Intelligence and Machine Learning)	Professional Skills III	HME – AIMLPS301	Core Python
	Professional Skills IV	HME – AIMLPS401	Web Programming
	Summer Internship	SI-AIML301	Internship
B.Tech. (Internet of Things)	Employability Skill Development – I	ESD-IOT301	Advanced Java
	Employability Skill Development – II	ESD-IOT401	Expert Python Programming
	Professional Skills- III	HME-IOTPS301	Object Oriented Programming using Java
	Professional Skills- IV	HME-IOTPS401	Python Programming

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 with regard to 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 have to 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 have to 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**

Name of Programme	Programme Code	Date of Introduction
B.E. in Mechanical and Mechatronics Engineering (Additive Manufacturing)	Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS -HME 2020)	01-07-2021
B.E. in Computer Science and Engineering (Cyber Security)		

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 been providing quality technical education since its inception. Towards this, among several measures, it has also undertaken curriculum enrichment from time-to-time aimed at providing to students' ample opportunity for their career and professional growth. In the curriculum, several beyond-learning components are included- viz., ABL, PBL, professional skills, RBL, etc. In addition, TCET has established a mechanism to guide and support students for making right career choice and decision. Students are provided with platforms for getting support of online certification through NPTEL, Coursera, FOSS-IITB, Employability skills 2.0 and other MOOC programmes. 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
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
Jan-Apr 2019	123	71	3	21	23	21	3	8
Jul-Dec 2018	161	130	3	17	0	52	5	9

Note: In AY 2020-21 the number of students enrolled for SWAYAM-NPTEL were 432 and in AY 2021-22 the number of students enrolled for SWAYAM-NPTEL are 768. The enrolment increased by 336 students.

Other Courses:

FOSS-IITB (Spoken Tutorials)

AY	Students Enrolled	Certification Completed
2021-22	921	891
2020-21	824	786
2019-20	216	202
2018-19	142	136

Note: In AY 2020-21 the number of students completed certification for FOSS-IITB were 786 and in AY 2021-22 the number of students completed certification for FOSS-IITB are 891. The enrolment increased by 105 students.

COURSERA

Duration	Students Enrolled	Certification Completed
2020 to 2022	2988	10421

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

Participation Analysis and Outcomes for 2021-22 Batch:

1) Event is conducted in online mode of communication on Zoom platform where professional counsellor with faculty coordinator available to counsel the student.
2) 33 students recognized with Elite certificates, 13 students recognized with Silver Certificates and 2 students recognized with Gold Certificates by SWAYAM – NPTEL during Jan 2022 to Jun 2022
3) 196 students from different branches participated in the event.
4) Students' doubts regarding selection of higher study course, country, examinations, procedure, + schedule, profile building, etc., were resolved.
5) Students learnt about higher studies program selection, and the processes for making application, education loan, Visa, scholarship opportunities, etc.
6) 05 students secured admission in IIITs/IITs and 01 student secured admission in IIM-Bangalore
7) 22 students secured admission in top 100 global universities (as per QS world ranking)
8) 30+ students received scholarship between 10% to 100% from various universities for higher studies master's programme

Sr. No.	Branch	Number of Students
1	Computer Engineering	32
2	Electronics and Telecommunication Engineering	31
3	Information Technology	21
4	Electronics Engineering	8
5	Mechanical Engineering	58
6	Civil Engineering	66
7	Artificial Intelligence and Data Science	-
8	Artificial Intelligence and Machine Learning	-
9	Internet of Things	-
	Total	**196**

Note: In AY 2020-21 the one-to-one counselling was offered to 188 students and in AY 2021-22 the one-to-one counselling was offered to 196 students. The number of students benefited by the counselling increased by 8 students.

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
2021-22	2630
2020-21	2563
2019-20	1562
2018-19	1085
2017-18	1139
Total	**8979**

The internship carried out by students in AY2021-22 were in offline mode out house internship. The total number of students who have undergone outhouse internship in AY 2021-22 is 2630, which in comparison to AY 2020-21 no. of students who have undergone internship were 2563. Thereby the total number of internship were increased by 67. **Details of Internships undertaken during the academic year is mentioned in Annexure – I**

Internship Summary of the academic year:

COMP				E&TC				IT				ELEX			
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	
211	329	37	**577**	138	284	1	**423**	138	235	43	**416**	66	135	9	**210**

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	
139	240	22	**401**	138	235	58	**431**	70	0	0	**70**	69	0	0	**69**

IoT				Overall			
In-house	Out-house		Total	In-house	Out-house		Total
	Company	Course			Company	Course	
33	0	0	**33**	**1002**	**1458**	**170**	**2630**

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				
	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18
PhD/ MPhil	53	45	40	30	30	10	10	9	4	4	9	5	7	4	4	9	6+1*	5	5	5
ME/ MTech	145	146	123	133	144	27	22	19	26	29	14	21	21	24	26	20	21	22	24	26
MSc/ MA	22	16	9	10	8	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
BE/ BTech	0	0	0	2	7	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0

Total	**220**	**207**	**172**	**175**	**189**	**37**	**32**	**28**	**31**	**34**	**23**	**26**	**28**	**28**	**30**	**29**	**28**	**28**	**30**	**31**
	ELEX					**MECH**					**CIVIL**					**ES&H**				
	2021-22	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**
PhD/ MPhil	5	2+1*	2	2	2	2	2+1*	2	2	2	2	2	2	2	2	16	15	13	11	11
ME/ MTech	8	12	13	13	15	23	23	21	21	22	22	22	18	18	16	20	25	9	7	10
MSc/ MA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	16	8	9	8
BE/ BTech	0	0	0	0	1	0	0	0	0	2	0	0	0	1	3	0	0	0	0	0
Total	**13**	**15**	**15**	**15**	**18**	**25**	**26**	**23**	**23**	**26**	**24**	**24**	**20**	**21**	**21**	**58**	**56**	**30**	**27**	**29**
	AI&DS					**AI&ML**					**IoT**									
	2021-22	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**					
PhD/ MPhil	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-					
ME/ MTech	4	-	-	-	-	4	-	-	-	-	3	-	-	-	-	** Thesis Submitted*				
MSc/ MA	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-					
BE/ BTech	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-					
Total	**4**	-	-	-	-	**4**	-	-	-	-	**3**	-	-	-	-					

Faculty Cadre																				
	TCET					**COMP**					**IT**					**E&TC**				
	2021-22	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**
Prof./ A.Prof.	13	13	15	12	10	2	2	3	2	1	4	3	4	3	3	4	5	5	4	3
Asso. Prof.	19	14	13	10	12	6	5	4	2	2	2	2	2	2	2	4	2	2	1	3
Asst. Prof.	187	179	142	147	156	29	25	21	25	29	17	21	22	23	24	21	21	21	25	25
Other	1	1	2	6	11	0	0	0	2	2	0	0	0	0	1	0	0	0	0	0
Total	**220**	**207**	**172**	**175**	**189**	**37**	**32**	**28**	**31**	**34**	**23**	**26**	**28**	**28**	**30**	**29**	**28**	**28**	**30**	**31**
	ELEX					**MECH**					**CIVIL**					**ES&H**				
	2021-22	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**
Prof./ A.Prof.	1	1	1	1	1	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0
Asso. Prof.	3	3	3	3	3	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0
Asst. Prof.	9	11	11	11	13	23	24	21	21	22	22	22	18	18	16	57	55	28	24	27
Other	0	0	0	0	1	0	0	0	0	2	0	0	0	1	3	1	1	2	3	2
Total	**13**	**15**	**15**	**15**	**18**	**25**	**26**	**23**	**23**	**26**	**24**	**24**	**20**	**21**	**21**	**58**	**56**	**30**	**27**	**29**
	AI&DS					**AI&ML**					**IoT**									
	2021-22	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**					
Prof./ A.Prof.	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-					
Asso. Prof.	0	-	-	-	-	1	-	-	-	-	1	-	-	-	-					
Asst. Prof.	4	-	-	-	-	3	-	-	-	-	2	-	-	-	-					
Other	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-					
Total	**4**	-	-	-	-	**4**	-	-	-	-	**3**	-	-	-	-					

Faculty Experience in Years.Months (Not decimal)																				
	TCET					**COMP**					**IT**					**E&TC**				
	2021-22	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**	**2021-22**	**2020-21**	**2019-20**	**2018-19**	**2017-18**
Min.	0.09	0.02	1.10	0.05	0.06	1.06	1.00	3.05	1.08	1.02	9.03	7.00	3.10	0.05	2.00	5.07	2.03	2.06	1.08	0.08
Max.	42.00	36.00	40.00	39.00	48.10	39.00	27.00	40.00	39.00	25.06	25.11	24.08	23.11	22.11	21.11	34.02	36.00	36.08	35.08	30.02
Avg.	15.00	09.06	13.01	11.11	10.11	14.00	11.03	13.05	11.11	9.11	17.06	08.05	14.08	13.07	12.05	17.00	15.03	16.01	13.11	13.03
Med.	13.11	11.05	12.02	11.00	9.09	13.07	11.05	12.05	11.00	9.11	17.01	13.05	14.06	13.06	12.06	18.00	16.08	17.07	15.03	14.08
	ELEX					**MECH**					**CIVIL**					**ES&H**				

	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18
Min.	6.00	2.02	4.00	2.04	2.00	1.07	0.02	2.07	1.09	0.09	5.07	0.03	2.06	1.06	0.06	0.09	2.00	1.10	1.00	1.05
Max.	34.09	29.00	30.11	29.11	28.11	29.10	28.06	27.10	26.10	48.10	32.09	32.07	30.09	29.09	28.09	42.00	29.02	29.07	28.07	27.07
Avg.	17.10	13.11	14.08	13.06	11.05	13.00	10.08	11.02	10.01	10.02	11.01	1.06	8.07	7.03	6.03	14.00	09.08	12.04	12.01	11.10
Med.	16.01	13.04	13.09	12.09	11.04	11.00	7.07	9.00	8.00	6.08	8.10	7.00	6.11	5.01	4.01	12.11	08.05	11.02	10.02	12.11

	AI&DS					AI&ML					IoT				
	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18
Min.	6.00	-	-	-	-	11.06	-	-	-	-	12.09	-	-	-	-
Max.	42.00	-	-	-	-	36.00	-	-	-	-	40.03	-	-	-	-
Avg.	20.03	-	-	-	-	24.08	-	-	-	-	22.06	-	-	-	-
Med.	16.06	-	-	-	-	25.06	-	-	-	-	14.06	-	-	-	-

Faculty Appointment

	TCET					COMP					IT					E&TC				
	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18
Regular	121	127	132	137	146	18	20	20	22	24	22	22	24	24	25	22	23	23	25	29
Ad-Hoc	99	80	40	38	43	19	12	8	9	10	1	4	4	4	5	7	5	5	5	2
Total	**220**	**207**	**172**	**175**	**189**	**37**	**32**	**28**	**31**	**34**	**23**	**26**	**28**	**28**	**30**	**29**	**28**	**28**	**30**	**31**

	ELEX					MECH					CIVIL					ES&H				
	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18
Regular	11	13	14	15	16	16	17	19	19	19	15	16	15	15	14	15	16	17	17	19
Ad-Hoc	2	2	1	0	2	9	9	4	4	7	9	8	5	6	7	43	40	13	10	10
Total	**13**	**15**	**15**	**15**	**18**	**25**	**26**	**23**	**23**	**26**	**24**	**24**	**20**	**21**	**21**	**58**	**56**	**30**	**27**	**29**

	AI&DS					AI&ML					IoT				
	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18
Regular	0	-	-	-	-	1	-	-	-	-	1	-	-	-	-
Ad-Hoc	4	-	-	-	-	3	-	-	-	-	2	-	-	-	-
Total	**4**	-	-	-	-	**4**	-	-	-	-	**3**	-	-	-	-

Gender Ratio

	TCET					COMP					IT					E&TC				
	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18
Male	97	101	90	93	99	9	8	7	10	10	14	13	14	15	15	8	10	11	12	13
Female	123	106	82	82	90	28	24	21	21	24	9	13	14	13	15	21	18	17	18	18
Total	**220**	**207**	**172**	**175**	**189**	**37**	**32**	**28**	**31**	**34**	**23**	**26**	**28**	**28**	**30**	**29**	**28**	**28**	**30**	**31**

	ELEX					MECH					CIVIL					ES&H				
	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18
Male	6	5	6	5	5	21	22	20	20	23	10	11	11	12	14	28	32	21	19	19
Female	7	10	9	10	13	4	4	3	3	3	14	13	9	9	7	30	24	9	8	10
Total	**13**	**15**	**15**	**15**	**18**	**25**	**26**	**23**	**23**	**26**	**24**	**24**	**20**	**21**	**21**	**58**	**56**	**30**	**27**	**29**

	AI&DS					AI&ML					IoT				
	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18	2021-22	2020-21	2019-20	2018-19	2017-18
Male	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-
Female	3	-	-	-	-	4	-	-	-	-	3	-	-	-	-
Total	**4**	-	-	-	-	**4**	-	-	-	-	**3**	-	-	-	-

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. Payel Saha	Interview of ad-hoc faculty at UMIT, SNDT University	Subject Expert Member	23-02-2022
2	Cdr. Vijay Pratap Singh	1. Seminar on Application of Technologies in Indian Armed Forces 2. Technical Seminar on Electromagnetic Interference & Electromagnetic Compatibility (EMI/EMC) in Warships and Submarines for IEEE committee. 3. Soft skill workshop on Mental toughness & Resilience for Rotaract Club 4. Webinar on National Integration for TCSC and TCET 5. Proposal & Presentation to Indian Army for approval to establish NCC unit in TCET thereafter Army agreed and NCC unit was set up in the month of October 2021	Resource Person	29-06-2022
3	Dr. Manoj Chavan	Internet of Things and AI&ML (ICCC-2022) Finolex Academy of Management & Technology, Ratnagiri	Chair and Reviewer	08 & 09-04-2022
4	Ms. Sukruti Kaulgud	IEEE sponsored FDP on 'Education 4.0: tools for effective NEP 2020 implementation'	Resource Person	29-06-2022
5	Ms. Anvita Birje	1. IEEE sponsored FDP on 'Education 4.0: tools for effective NEP 2020 implementation' 2. Techworld workshops for school 3. Conducted central bank training at SPBT, Vile Parle	Resource person	1. 27-06-2022 2. 29-08-2021, 23-12-2021, 25-02-2022, 25-03-2022 3. 31-12-2021
6	Ms. Megha Gupta	1. IEEE sponsored FDP on 'Education 4.0: tools for effective NEP 2020 implementation' 2. 'Advanced Networking' training for INS Hamla 3. Guest Lecture on "Wireless Sensor Network using Cisco Packet Tracer", Shankar Narayan College of Arts and Commerce	Resource person	1. 29-06-2022 2. 12, 13, and 16-04-2022 3. 03-03-2022
7	Mr. Niket Amoda	Arduino & IoT Inhouse Internship	Resource person	13 to 25-06-2022
		IEEE FDP on Recent Tools for Integration of Smart Systems	Resource person	07-06-2022
		Book chaper "Artificial Intelligence-Enabled IoMT for Medical Applications" in Apple Academic Press	Author	05-01-2022
		Linux Administration Training at INS Hamla	Resource person	21-04-2022
		Conducted training "To interface different sensors with Arduino"	Resource person	17-03-2022
8	Ms. Purnima Chandrasekar	IEEE sponsored FDP on 'Education 4.0: tools for effective NEP 2020 implementation'	Resource person	29-06-2022
9	Dr. Karuna Nikum	IEEE sponsored FDP on 'Education 4.0: tools for effective NEP 2020 implementation'	Resource person	29-06-2022

The details of expert/ invited talks were delivered by faculty members in emerging areas at ATAL FDPs, corporate training, invited talks, NBA guidance etc. The emerging areas comprises of topics as Quantum Computing, AI in Cyber Security, Data Warehousing, UXD based web development, Machine Learning, Reinforcement Learning, Outcome Based Academic Research, NEP 202 implementation to name a few. **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 5^{th}, 11^{th}, 15^{th} week for SE & TE students whereas the In-Semester Assessment for BE is conducted in 7^{th} - 8^{th} week followed with Retest during the 11^{th} 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 16^{th} - 17^{th} week of semester followed by End semester Oral/ practical examinations is conducted during the 18^{th} week; preparation leave in 19^{th} week, 20^{th} – 21^{st} week the Semester-End Examination is conducted with all ATKT examinations held in 24^{th} week. The internships are conducted between 22^{nd} – 26^{th} week of the semester and during 26^{th} week. The conduct of specialization in-house examination is also conducted in 26^{th} week of semester.

Academic calendars can be found under "Academic" 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	07-12-2021	11-03-2022
ISE1 ISE2	31-01-2022 07-03-2022	04-02-2022 11-03-2022
Sem End Exam Oral- Pract.	14-03-2022	19-03-2022
Sem End Exam Theory	28-03-2022	06-04-2022
Sem Review	31-05-2022	-
Results Regular	29-04-2022	-
Results ATKT	In Process	-

SE /ST to BE/ BT

Activity	Start Date	End Date
Semester Duration	01-07-2021	31-12-2021
SE: ISA1 ISA2 ISA3 TE and BE: ISA Exam	20-09-2021 20-10-2021 22-11-2021 23-08-2021	22-09-2021 22-10-2021 24-11-2021 27-08-2021
Sem End Exam Oral- Pract.	SE: 19-11-2021 TE and BE: 25-10-2021	04-12-2021 30-10-2021
Sem End Exam Theory	SE: 13-12-2021 TE and BE: 08-11-2021	22-12-2021 18-11-2021
Sem Review	18-04-2021	18-04-2021
Results Regular	30-11-2021	30-11-2021
Results ATKT	31-12-2021	31-12-2021

Even Semester Activities AY 2021-22

FE/ FT

Activity	Start Date	End Date
Semester Duration	11-04-2022	02-07-2022
ISE1 ISE2	01-06-2022 29-06-2022	03-06-2022 01-07-2022
Sem End Exam Oral-Pract.	04-07-2022	09-07-2022
Sem End Exam Theory	20-07-2022	29-07-2022
Sem Review	In Process	-
Results Regular	In Process	-
Results ATKT	In Process	-

SE /ST to BE/ BT

Activity	Start Date	End Date
Semester Duration	01-01-2022	30-06-2022
SE: ISA1 ISA2 ISA3 TE and BE: ISA Exam	14-02-2022 21-03-2022 04-04-2022 28-02-2022	16-02-2022 23-03-2022 08-04-2022 05-03-2022
Sem End Exam Oral-Pract.	02-05-2022	10-05-2022
Sem End Exam Theory	18-05-2022	18-05-2022
Sem Review	30-05-2022	31-05-2022
Results Regular	SE and TE 01-07-2022 BE 16-06-2022	01-07-2022 16-06-2022
Results ATKT	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.
- Due to pandemic, sessions were conducted using flip classroom mode by sharing resource material such as PPTs, notes, links etc. and then conducting formative and summative assessment followed by doubt solving, revision lecture and practice tests.
- 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.

The blended mode of TLP planned for A.Y 2021-22 is aimed at generating more and more interest among students towards technical subjects. The endeavour is to make the students understand the topics properly during the lectures/ practical, by conducting brief online test and checking students learning through interactive software platforms like the Padlet, Mentimeter, etc. In the future, blended TLP involving both online as well as offline modes would be used.

Technical Seminar:

Sr. No.	Department	Name of Program	Dates	No of Students
1	COMP	Basics of Cloud Computing, Mr. Ankur Sinha, Cloud Specialist, L&T Infotech Pvt. Ltd. (SE)	09-09-2021	148
		Blockchain (Hyper ledger), Mr. Shailesh Sonare, Manager, Netcore Cloud (TE)	09-09-2021	151
		Robotics Process Automation, Dr.Priyanka Bagde, Developer, Pinstrom Technologies Pvt Ltd (BE)	09-09-2021	125
		Launching Android Application, Mr. Satyam Vishwakarma, Deputy Lead-Mobile Application Development, Jio Infocomm, Mumbai (SE)	09-03-2022	173
		Robotic Process Automation, Dr. Priyanka Bagde, Developer, Pinstorm Technologies Pvt Ltd (TE)	09-03-2022	165
		Continuous Integration and Continuous Development, Continuous Integration and Continuous Development (BE)	09-03-2022	119
2	E&TC	Applications of Electromagnetics	15-04-2022	112
		Intelligent sensors and sensor solutions for industrial application	22-04-2022	107
		Application of Technology in Indian Armed Forces	15-04-2022	93
		Embedded systems in IOT and Automotive Industries	04-09-2021	80
		What is in IT for me	08-09-2021	85
		IPsec VPN & MPLS	04-09-2021	108
3	IT	Introduction of Cyber Security and Networking	11-03-2022	98
		Data architecture	11-03-2022	98
		Agile and develops in Software Engineering	11-03-2022	88
		Data Structures in AI&ML and Robotics Process Automation	16-10-2021	104
		Recent Trends in Lightweight Cryptography (Computer Network and Security)	04-09-2021	118
		Latest Trends and Techniques in Machine Learning (Machine Learning in IT Application Development)	04-09-2021	92
4	ELEX	Technical seminar on ""Solar Power applications"" for TE and BE ELEX	04-09-2021	50
		Technical seminar on "India and research quality culture for better solutions" for SE	22-10-2021	46
		Technical seminar on "Automation Technologies" for TE and BE	31-03-2022	71
		Technical seminar on "Coding and Embedded Systems using Smowcode" for SE	23-03-2022	28
5	MECH	Webinar on "Implementation of an idea, Astronomy & Aerospace"	14-08-2021	47
		Webinar on "3D Printing"	13-08-2021	117
		Workshop on "Robotics & Automation,3D Journal"	02 & 03-10-2021	24
		Seminar on "Mechanical Engineering Application in Capsule Filling Technology as Support to Pharma Industry"	16-02-2022	180
		Workshop on Surface Modelling	25 & 26-02 2022	96
		Seminar on CAD CAM and CAE products	30-03-2022	152
6	CIVIL	Smart Village Development	15-09-2021	98
		Smart Waste Management	20-10-2021	81
		Career Opportunities in Rapidly Changing Build Environment Sector Post Covid-19	28-01-2022	113
		Software used in Civil Engineering and Project Management Products	29-03-2022	118
		Seminar on BIM	09-04-2022	120
7	AI&DS	Micro Services: The Next Big Thing in Information Technology	29-09-2021	59

Sr. No.	Department	Name of Program	Dates	No of Students
		Applied Statistics for Data Science – Techniques & Concepts	19-03-2022	64
8	AI&ML	Technical Seminar on Data Visualization using Tableau	11/03/2022	69
		Technical Seminar on Data Structures in AI&ML and Robotics Process Automation	14/10/2021	69
9	IoT	Technical seminar on "Project Development using Tesla IoT Board and Industry Grade Microcontroller" for ST IOT	05-02-2022	33
		Technical seminar on "Coding and Embedded Systems using Smowcode." for ST	23-03-2022	33

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. ABL activities for SEM-III was conducted from 1st September to 8th September 2021 on the Situation Reaction Test (SRT), Thematic Apperception Test (TAT), Word Association Test (WAT) and Self-Description Test (SDT) and for SEM-IV, it was conducted from 31st January to 05th February 2022 on the theme "Green IT" with basic idea of Agile Methodology.
ii. PBL activities for SEM-III was form 9th September to 17th September 2021 on the theme of "TRIZ inventive principle" toll to find the solution for TV 2035 problem statements and for SEM-IV, it was conducted from 24th January to 28th January 2022 on the theme of 5E's using sectors/ specializations of department. In both the semester project competition was judged by the eminent judges.
iii. Orientation on ESD training was conducted on 7th January 2022 for all ST students to enhance their technical skills as per the industry requirement.
iv. ESD programme was also conducted for SEM-IV from 24th January to 29th January 2022 on various technical topics attended.
v. An ESD programme was conducted for SEM-III from 25th to 31st August 2021 on Open-Source Technologies and Basics of Cloud Computing. Total 64 students form AI&DS department was attended by students.
vi. PBL activities were conducted for SE & TE during PBL week, 7th - 11th Feb 2022 (Even Sem) on the theme of 'INSPIRATION, RESEARCH, IDEATION & IMPLEMENTATION
vii. Orientation on ESD training was conducted from 25th – 31st August 2021 (Odd Sem) & 24th - 28th Jan 2022 (Even Sem) for all SE students to enhance their technical skills as per the industry requirement.
viii. ESD programme was also conducted for SEM-V from 17th Jan to 21st Jan 2022 (Even Sem) & 2nd - 7th August 2021 and this event was attended by 799 students.

c) **Extra-Curricular Activities:**

Since June 2021, more than 40 programmes were conducted in online offline and hybrid mode. Student participation and productivity were found to be progressively increasing in these programmes.

- AICTE has launched 100 Activity Point Programme for the students, which needs to be completed in 4 years. In this regard, the institute is initiating Activity Point Diary, where the students' participation in various activities can be recorded and verified by student heads and faculty in-charges. Later, at the end of 4 years, after verification by the Dean in-charge, Vice-Principal and Principal, the transcripts will be generated. This will be essential part of granting the Degree.

- Activities are organized at Intra-/ Inter-College levels. All these activities and events are receiving good response from outside. Some of the programmes conducted during this pandemic include:

    - Progressive India 2021: 18-08-2021 by CSI-TCET
    - E-Sports (Reflex 3.0) 21-09-2021 by TSDW
    - Teachers' Day and many more such activities: 07th September 2021 (organized by TSDW)
    - TEDx: 18th September 2021 - A programme of local, self-organized event that brings people together to share a TED-like experience (organized by TEDx Team- of Electronics Engineering Department).
    - National Initiative Program (Student Exchange Program): 21-09-2021 by TSDW
    - T-Spark 2022: 18-02-2022 by TSDW
    - Traditional Day: 21-03-2022 by TSDW
    - Marathi Bhasha Diwas: 21-03-2022 by TSDW
    - Sojourn 2022: 23-03-2022 by TSDW
    - Hackanova 2022: 08-04-2022 by TSDW
    - Fiesta (2022 Cultural Festival) for F.E./F.T./F.B.voc on 29th & 30th April 2022 by ISTE.

d) **Professional Body Activities:**

- **ACM**

    - Progressive India Event: 16th July 2021
    - Seminar on Latest Trends in Web Development: 6th August 2021
    - Seminar on Contactless Payments and Less-Cash Society: 13th August 2021
    - Webinar on Cyber Security: 14th Sept. 2021
    - Workshop on Android Development: 4th February 2022
    - Technical Seminar on Big Data Analysis: 11th February 2022
    - Webinar on Design Thinking and Innovations: 11th March 2022
    - Technical Seminar on Cyber Security-Developing Secure Software Application: 28th March 2022

- **CSI**

    - Progressive India: 12th - 13th July 2021
    - Webinar on How to build a LinkedIn profile: 16th August 2021
    - Webinar on Importance of problem solving (Code-a-thon): 03rd September 2021
    - National Level Coding Competition: 04th September 2021
    - Website Development Competition: 9th February - 16th February 2022
    - Acing the Job Interviews (The Interview Prep Guide 101): 19th Feb 2022
    - Multicon – W 2022 Pre-Conference - Blockchain: 25th – 26th Feb 2022
    - Multicon – W 2022 Pre-Conference - Django: 25th – 26th Feb 2022
    - Nation level Project Competition: 13th April 2022

- **ASCE Activities**

    - Entrepreneurship Development Programme
    - Design with Vastu
    - Ideas for Green City

- Poster De Debate
- Workshop on MatLab
- Workshop on Mahavastu

- **ASME /SAE Activities**

  - Formation of committee 16-Jul-2021
  - A Technical Debate Competition 6-Aug-2021
  - Seminar/Webinar 13-Aug-2021
  - Technical Quiz Competition 20-Aug-2021
  - Alumni Interaction 3-Sep-2021
  - Zephyr 2020(Technical Workshop on Robotics/Industry 4.0) 24-Sep-2021
  - Project Exhibition - SE, TE and BE 8-Oct-2021
  - Release of Bulletin for Odd Sem - 2021 22-Oct-2021

- **IEEE Activities:**

  - Progressive India Event: 12th – 13th July 2021
  - Webinar on Cloud Computing and AI: 7th August 2021
  - Workshop on Block chain: 2nd - 3rd October 2021
  - Webinar on IoT: 8th October 2021
  - Workshop on Canva: 21st January 2022
  - Webinar on Research Paper Writing: 28th January 2022
  - Multicon-W 22: Workshop on Data Science Using Python: 25th – 26th February 2022

- **IETE Activities:**

  - Progressive India: DAY1- 12-07-2021, DAY2- 13-07-2021
  - Membership Drive: 30-07-2021
  - Debate Competition: 08-07-2021
  - Inspire: 14-08-2021
  - Webinar on Solar Batteries and Electric Vehicles: 20-08-2021
  - Zephyr working committee formation: 09-09-2021
  - Zephyr Workshop on Open Source and Linux Desktop: 02-10-2021 & 03-10-2021
  - Zephyr Workshop on Resume Building and Placement Training: 02-10-2021 & 03-10-2021
  - Workshop on Emerging Technology- Getting started with Arduino: 08-10-2021 & 09-10-2021
  - Virtual Industrial Visit: 12-10-2021
  - Know My Area: 22-10-2021
  - Meeting with core and working committee members: 21-01-2022
  - Webinar on higher studies: 28-01-2022
  - Webinar on Research Paper writing: 02-04-2022
  - Online Gaming Quiz Competition: 12-02-2022
  - Professional Body Workshops on Smart Automation: 25-02-2022 & 26-02-22
  - Professional Body Workshops on Web Development: 25-02-2022 & 26-02-22
  - Workshop on Photoshop: 01-04-2022
  - Workshop on Python Programming: 08-04-2012
  - Workshop on GATE Preparation Bootcamp: 22-04-2022
  - Release of Bulletin: 29-04-2022

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, Semester-End Examinations, Practical/ Projects/ Orals) were conducted in Blended mode. Conduct of blended examination was adopted using digital platforms (Google Classroom, online apps viz. Zoom, Microsoft Teams, Google Meet, etc.), open-book, open-choice questions, while maintaining quality and integrity.

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.

			2021-22	2020-21	2019-20	2018-19	2017-18
COMP	No. of Students	Appeared	154	141	149	163	144
		Passed	154	141	149	161	143
		Pass %	100%	100%	100%	99%	99%
E&TC	No. of Students	Appeared	147	142	144	163	149
		Passed	147	142	144	150	145
		Pass %	100%	100%	100%	92%	97%
IT	No. of Students	Appeared	140	145	151	154	154
		Passed	140	145	151	154	149
		Pass %	100%	100%	100%	100%	97%
ELEX	No. of Students	Appeared	72	68	74	78	73
		Passed	71	68	74	76	71
		Pass %	98.61%	100%	100%	97%	97%
MECH	No. of Students	Appeared	139	154	140	149	157
		Passed	138	154	140	144	150
		Pass %	99.28%	100%	100%	97%	96%

			2021-22	2020-21	2019-20	2018-19	2017-18
CIVIL	No. of Students	Appeared	150	149	136	151	135
		Passed	150	149	136	142	131
		Pass %	100%	100%	100%	94%	97%
TCET	No. of Students	Appeared	802	799	794	858	812
		Passed	800	799	794	827	789
		Pass %	99.75%	100%	100%	96.39%	97.17%

Graduate Aptitude Test in Engineering (GATE) Training by the Department of Civil Engineering

Under the auspices of Thakur Institute of Career Advancement (TICA), the Department of Civil Engineering conducts an efficiently monitored course for preparing students for the Graduate Aptitude Test in Engineering (GATE). The second batch, with 20 students was started on September 2019.

GATE-2022

Sr. No.	Name	GATE marks	GATE Score	AIR	Batch
1	Anurag Rajesh Tiwari	51.67	701	578	2021-22
2	Saurabh Rajesh Mishra	51.33	697	605	2021-22
3	Divyam Choudary	36.33	499	3112	2021-22
4	Suraj Yadav	47.74	624	3267	2021-22
5	Ritesh Talla	50.63	552	3336	2021-22
6	Sanya Mahendra Gandhi	34.33	473	3805	2021-22
7	Ritik Mehta	48.63	532	3826	2021-22
8	Roshan Choudary	33.67	464	4071	2021-22
9	Anurag Tripathi	43.03	594	4421	2021-22
10	Shubham Shivkumar Pandey	31.67	438	5030	2021-22
11	Mayur Vaman Tarfe	41.78	504	5101	2021-22
12	Sahil Shital Sabnis	41.08	496	5320	2021-22
13	Yash Dilip Chaughule	27.33	379	5867	2021-22
14	Sanjay Yadav	38.34	453	6623	2021-22
15	Shinde Niraj Rajendra	40.21	448	6682	2021-22
16	Vishu Vijay Tiwari	27.33	381	7770	2021-22
17	Hiteshkumar Dubey	35.64	402	9152	2021-22
18	Chaitanya Ravindra Ranade	31.75	391	9624	2021-22
19	Rawat Vinay K Ashok	30.97	354	12549	2021-22
20	Kabir Jangam	28.97	336	14859	2021-22
21	Alpesh Sangam	25.22	298	19335	2021-22

Note: In AY 2020-21 total number of students cleared the GATE exam were 20 and in AY 2021-22 total number of students cleared the GATE exam were 21. The number of who cleared the GATE exam is increased by 1 student.

After successful completion of third batch, the institute proposed for fourth batch. However, mentoring and guidance to aspiring students for the GATE examination is being regularly provided by the faculty of the Department of Civil Engineering.

In GATE-2022, a total of 22 civil students benefitted from this course, with valid GATE score. 03 students from Computer department have received valid GATE score in GATE-2022. 21 students from Electronics department have scored a valid GATE score in GATE -2022. 03 students from I.T department have received valid GATE score in GATE-2022.

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.

In the pandemic situation, the mentors and professional counsellors adopted virtual interaction sessions with students to keep them motivated for online learning and participation in doubt- clearing sessions, evaluation, internships, and online courses for holistic development.

Year	Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
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	STEM initiatives	1,30,000/-	IEEE	2021-22
Dr. Vinitkumar Dongre	E&TC	Modernisation of Microcontroller Laboratory by merging IOT Lab kits	13,74,510/-	AICTE	2021-22

AICTE - Grants					
Sr. No.	**Name of the Program/ Scheme/ Project**	**Name of the Faculty In-Charge received grant**	**Department**	**Sanction date, duration of grant**	**Total Sanction Amount (in Rs.)**
1	Study Tour to Atal Tunnel	Mr. Arpit Vyas	CIVIL	2021-22	2,00,000/-

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:**

- Journal selection criteria for publication and quality aspects in Scientific paper publication: 04-12-2021
- IPR awareness programme: 04-02-2022 At institute level by Dr. Vinitkumar Dongre
- Virtual Industrial Visit on "Use cases of Recommendation System in media Industry" conducted on 26-03-2022.

Title of Workshop/Seminar	Name of the Dept.	Name of the faculty coordinator	Date(s)
Importance of IPR lecture for BE students	Institute level	Dr. Vinitkumar Dongre	16-07-2021
FDP lecture on Opportunities for creating Intellectual Property and procedure for patent filing	Institute level	Dr. Vinitkumar Dongre	26-08-2021
Patent Draft discussion: Potential patent Draft	Institute level	Dr. Vinitkumar Dongre	16-10-2021
Selection of patentable works	Institute level	Dr. Vinitkumar Dongre	30-10-2021
Training and awareness on IPR by Dr. Suhas Kulkarni, Controller of Patents, Regional Patent office, Mumbai. Under Initiative of Azadi ka Amrit Mahotsav, the Government of India initiative to impart training and awareness to 10 lakh students on IPR	Institute level	Dr. Vinitkumar Dongre	30-11-2021
National Intellectual Property awareness Mission- Seminar by Mr. Yogesh V. Bajaj, Assistant Controller of Patents and Designs.	Institute level	Dr. Vinitkumar Dongre	18-01-2022
Training and awareness on IPR by Ms. Ujjwal Singh, Examiner of Patent and Designs, Indian patent office Mumbai.	Institute level	Dr. Vinitkumar Dongre	04-02-2022
Patent Draft discussion: Potential patent Draft preparation	Institute level	Dr. Vinitkumar Dongre	23-04-2022
Selection of patentable works	Institute level	Dr. Vinitkumar Dongre	07-05-2022
Application for AICTE-KAPILA grant for Patents filing	Institute level	Dr. Vinitkumar Dongre	04-05-2022
Journal selection criteria for publication and quality aspects in Scientific paper publication	Institute level	Dr. Vinitkumar Dongre	04-12-2021
IPR awareness programme	Institute level	Dr. Vinitkumar Dongre	04-02-2022
Workshop on Matlab	CIVIL	Ms. Rutuja Shinde	25-02-2022
Workshop on Mahavastu	CIVIL	Ms. Rutuja Shinde	25-02-2022
Seminar on Smart Village Development	CIVIL	Ms. Rutuja Shinde	15-09-2021
Seminar on Smart Waste Management	CIVIL	Ms. Rutuja Shinde	20-10-2002

Title of Workshop/Seminar	Name of the Dept.	Name of the faculty coordinator	Date(s)
Seminar on Career Seminar on Opportunities in Rapidly Changing Build Environment Sector Post Covid-19	CIVIL	Ms. Rutuja Shinde	28-01-2022
Seminar on Software used in Civil Engineering and Project Management Products	CIVIL	Ms. Rutuja Shinde	29-03-2022
Seminar on BIM	CIVIL	Ms. Rutuja Shinde	09-04-2022
Virtual Industrial Visit on "Use cases of Recommendation System in media Industry"	AI&DS	Mr. Shailesh Sangle	26-03-2022

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

Name of the teacher	Name of the Award/Fellowship	Month and Year of Award
Dr. Archana Belge	Women's Researcher Award (International Scientist award on Engineering, Science and Medicine)	March 2021

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

Sr. No.	Company Name	Person	Dept.
1	Edverb Learning Private Limited.	Swastik Sharma	COMP
2	One Decoder	Deepak Verma, Krishna Vishwakarma, Sumit Pai	ELEX

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						
2017-18	22	10	03	04	9	48
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
COMP						
2017-18	84	40	28	30	14	196
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
E&TC						
2017-18	81	2	3	0	24	110
2018-19	128	3	2	0	24	157
2019-20	25	4	2	0	24	55
2020-21	40	5	4	0	10	59

Departments						
Year	**ICWET+ Multicon-W**	**International /National Journals**	**International / National Conference**	**Book Publications**	**Resource Book**	**Total**
2021-22	46	11	1	2	10	70
IT - ICCSOD+ Multicon-W						
2017-18	72	14	18	15	19	138
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
ELEX						
2017-18	6	11	8	0	1	26
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
MECH – ICWAME + Multicon-W						
2017-18	38	1	38	0	5	82
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
CIVIL - ICAMCE + Multicon W						
2017-18	17	9	19	0	4	49
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
AI&DS						
2017-18	-	-	-	-	-	-
2018-19	-	-	-	-	-	-
2019-20	-	-	-	-	-	-
2020-21	-	-	-	-	-	-
2021-22	9	3	0	1	10	23
Institute						
2017-18	320	87	117	49	76	649
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

Note: In AY 2020-21 total number of faculty publications were 514 and in AY 2021-22 total number of faculty publications are 457.

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	ELEX	MECH	CIVIL	AI&DS	AI&ML	IoT
International Level - Attended Seminars/ Workshops **(Dept-Faculty)**	1	-	1	-	-	-	4	-	-	-
National Level- Attended Seminars/ Workshops **(Dept-Faculty)**	2	30	13	25	26	-	4	4	-	2
State Level - Attended Seminars/ Workshops **(Dept-Faculty)**	-	30	3	-	2	-	2	-	-	1
Local Level Attended Seminars/ Workshops **(Dept-Faculty)**	47	-	25	22	35	20	1	8	-	2
International Level – Presented papers **(Dept-Faculty)**	-	-	25	48	12	-	1	8	-	-
National Level- Presented papers **(Dept-Faculty)**	-	118	-	-	-	-	-	-	-	-
International Level – As resource persons **(Dept-Faculty)**	-	-	-	-	5	-	-	-	-	-
National Level- As resource persons **(Dept-Faculty)**	-	5	5	-	-	-	-	5	-	-
State Level - As resource persons **(Dept-Faculty)**	-	-	-	4	-	-	-	-	-	-
Local Level - As resource persons **(Dept-Faculty)**	2	4	-	2	-	-	5	3	-	-
Total	**52**	**187**	**72**	**101**	**80**	**20**	**17**	**28**	**0**	**5**
Grand Total	**562**									

Note: In AY 2020-21 total number of faculty participations in seminars/conferences and symposia were 438 and in AY 2021-22 total number of faculty participations in seminars/conferences and symposia are 562. The number of faculty participations in seminars/conferences and symposia is increased by 124.

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
An Air Purifier Device	Published	202221018494	15-04-2022
Smart Assistant to aid walking and vocally assist the visually impaired	Published	202221005948A	25-02-2022
An automatic scalable system for optimized work recommendations	Published	202022101222	21-04-2022
A system for classifying ' remotely sensed images using fused convolution features with Machine Learning	Published	202022101590	12-04-2022

Patent Details	Patent status	Patent Number	Date
A block chain-based API system to improve user privacy in private block chain-based applications	Published	202022101294	23-03-2022
An Adaptive Multistage mathematical system to improve diagnostic performance	Granted	202022101501.5	29-06-2022
Covalent Startup collaboration and outsourcing Portal	In process	-	29-04-2022
A method for frequency reconfiguration by helical antenna loaded in a pentagonal cavity and antenna thereof	Granted	Indian patent No. 382090,	18-11-2021
Smart healthcare system for monitoring and control of the indoor environment using IoT technology and artificial intelligence	Granted	Australian patent No. 2021104034	27-04-2022
Polarization dependent electromagnetic band gap (PD-EBG) structure integrated low SAR circularly polarized (CP) textile antenna for body wearable application	Published	Indian patent application no. 202221008388	04-03-2022
An improved linearly polarized microstrip antenna	Filed	Indian patent application no. 202221008396	17-02-2022
An improved microstrip antenna for generation of circular polarized radiation	Filed	Indian patent application no. 202221008405	17-02-2022
Interoperable Blockchain for Judicial System	Granted	Australian Patent Application 2021106569	23-08-2021
A System and Method for Conglomerate Crop Recommendation Using Ensemble Multilabel Learning	Granted	Australian Patent Application 2021105968	19-08-2021
A System and Method for Monitoring Better Growth, Health, and Water Quality for Plants, Fish, and Bacteria Based on Iot Aquaponic Farming	Granted	Australian Patent Application 2021105855	18-08-2021
Method For Detecting Edos Attack in Virtual Server and Serverless Model of Cloud Computing	Granted	Australian Patent Application 2021105861	18-08-2021
A System and A Method to Augment Development And Information Technology Operations (Devops)	Granted	Australian Patent Application 2021105866	18-08-2021
IoT-Based Automated Air Quality Prediction System Using Unmanned Aerial Vehicle (Uav)	Granted	Germany Patent Application 202022100778.0	10-02-2022
An Auto Shutdown Charging System	Granted	Germany Patent Application 202022100095.6	07-01-2022
A System for Securing IoT Devices Generated Data Using Homomorphic Encryption	Granted	German patent No. 202022101128	21-04-2022
An Autonomous Trash Collecting Boat (Aqua-Drone) System data using Homomorphic encryption	Granted	German patent No. 202022101128	11-03-2022
Traffic Density Detection: IR Based Traffic Density Detection and Automatic Signal Adjustment using IoT based Notification System	Published	Indian Patent number 202121035703	03-12-2021
Deep Neural network-based offloading of video surveillance IoT applications in cloud computing	Filed	Indian patent application number 202121023777	02-07-2021
An Efficient Generator Monitoring System	Published	2021121047489	06-08-2021
A Double Acting Single Phase Generator	Published	202112104748	29-10-2021
An auto scalable system for optimized job	Granted	202022101222.9	21-04-2022

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
Physical data modelling Diagram for 340+tables along with all the whimsies of Indian Navy	Dr. Rashmi Thakur	COMP	25,000	2021-22
Object Detection models to detect the pest/insect and fungal diseases	Dr. Megharani Patil	COMP	1,00,000	2021-22
Development of web application for Digital Forum	Dr. Harshali Patil Mr.Aniket Mishra	COMP	3,000	2021-22
Development for Digital marketing	Dr. Harshali Patil Mr.Aniket Mishra	COMP	2,000	2021-22
Development of Custom Linux Distribution	Mrs.Shiwani Gupta	COMP	10,000	2021-22
Training for Central Bank officers (30-12-21 to 01-01-2022)	Mrs.Lydiya Suganya	COMP	1,800	2021-22
Training for Central Bank officers (30-12-21 to 01-01-2022)	Mrs.Ashwini Patil	COMP	1,800	2021-22
Training for Central Bank officers (30-12-21 to 01-01-2022)	Dr.Anand Khandare	COMP	1,800	2021-22
Training for Central Bank officers (06-01-22 to 07-01-2022)	Dr.Anand Khandare	COMP	1,800	2021-22
Mobile application enhancements	Dr.Harshali Patil Mrs.Forum Shah	COMP	5,000	2021-22
Development of software application to communication with a custom-built hardware device using serial communication	Dr.Harshali Patil Mr.Aniket Mishra	COMP	7,500	2021-22
Auto Generated System List	Dr.Harshali Patil	COMP	15,000	2021-22
Web based application which can enable online classroom application	Dr. Harshali PatilAniket Mishra	COMP	17,500	2021-22
Design and Development of Admin Panel For Parkadda	Mr Vikas Singh	COMP	15,000	2021-22
"Machine Learning"	Mrs.Rashmi Thakur	COMP	20,000	2021-22
Topic " reinforcement Learning"	Mr.Manish Rana	COMP	2,500	2021-22
Android and web application which can enable on field sales application	Harshali patilAniket mishra	COMP	13000	2021-22
Training of Power builder software for Indian Navy	Mrs.Rashmi Thakur	COMP	25000	2021-22
INS Hamla Naval Officers through Pal India	IT	E&TC	19,500	2021-22
INS Naval Officers Delhi	Namdeo Badhe	IT	30,000	2021-22
Indian Navy INS Hamla (Pal Computers)	Dr. Bijith Marakarakandy	IT	3,54,000	2021-22
Dr. D.Y. Patil Institute of Management & Research, Pune	Dr. Kamal Shah	IT	28,000	2021-22
Mahindra & Mahindra Batch 2	Dr. Deven Shah	IT	3,75,000	2021-22
Mahindra & Mahindra Batch 1	Dr. Deven Shah	IT	3,75,000	2021-22
Central bank of India Batch 3	Dr. Kamal Shah	IT	7,200	2021-22
Central bank of India Batch 2	Dr. Kamal Shah	IT	6,136	2021-22
Central bank of India Batch 1	Dr. Kamal Shah	IT	66,000	2021-22
HQ WNC, Tiger Gate, Mumbai	Dr. Kamal Shah	IT	60,000	2021-22
Indian Navy (INS Valsura) (Pal Computers)	Dr. Kamal Shah	IT	1,18,000	2021-22
Anish Electrical and Electronics	Dr. Sandhya Save	ELEX	15,000	2021-22
Imprint solutions, Bhiwandi	Dr Hemant Kasturiwale	ELEX	3,700	2021-22
Central Bank of India		CIVIL	19,800	2021-22
		Grand Total	**17,45,036**	

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	23-10-2021	18-06-2022
2	Advisory Committee	09-04-2022	-
3	College Development Committee	09-04-2022	-
4	Academic Council	12-03-2022	-
5	Board of Studies	04-06-2021	10-01-2022
6	Finance Committee		

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:**

  - 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.

- 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.
- 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.
- Lecture and Practical are conducted in hybrid mode during pandemic.
- The TLP is monitored at 3 levels: Faculty, Dept. Coordinator and HOD.
- The hybrid mode is adopted because of pandemic for classroom lecture and the recorded lectures were shared on the Google Classrooms for later references along with the study materials and the videos. In addition to this the doubt clearing sessions were conducted for week students. E-visits are organized for making learning more effective as per requirement.
- 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.
- For the Odd semester of A.Y. 21-22, all sessions were conducted in Online mode. In the even semester, theory sessions were conducted in Hybrid mode whereas practical sessions were conducted in Offline mode.
- 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.
- 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.

- **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.

  Due to the COVID-19 pandemic, the examinations for all students were conducted in online mode (as per UGC guidelines) and results were declared on time. Online ESE examination for FE to BE was conducted and results were declared within the timeframe without impacting on the academic year of the students.

  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.

- **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.

  Artificial Intelligence and Data Science being the specialized branch, five sector specific domains are identified for the department. This sector includes FinTech, AgriTech, Education, Entertainment and Hospitality, Retail, Manufacturing and E-commerce and Life Sciences & Pharmaceuticals. Students are given orientation about each sector by the faculty sector in-charge. Various webinars were carried out in each sector to give exposure to the students.

  Faculty members and students are encouraged to explore various research avenues. Students are encouraged to participate in State/National level Hackathon competitions. One group had participated in the Hackathon.

  As far as the research is concerned faculty is very much aware and actively involved in the research work. The college also encourages the teachers and the students by organizing the Technology conferences. The department has 2 faculty with PhD and 4 faculty are pursuing PhD.

- **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:

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

  - Maximizing publicity and brand building of the institute through various awards and recognitions.
  - Extending courtesy to interested candidates seeking information related to admission.
  - Prompt enquiry handling through adequate number of admission counters and helpdesks.

- Spreading awareness through outreach programmes to attract potential students.
- Publication of Informative Brochure and one page handout of brochure
- Website regularly updated with latest information related to admission.
- 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. Sunita Pachori	FDP on Four Quadrant Model for development of E-content, MOOCs, and Teacher's e-kit	Guru Angad Dev Teaching Learning Centre	1,200/-
Dr. Neha Mishra	FDP on Four Quadrant Model for development of E-content, MOOCs, and Teacher's e-kit	Guru Angad Dev Teaching Learning Centre	1,200/-
Dr. Kiran Sanap	FDP on Four Quadrant Model for development of E-content, MOOCs, and Teacher's e-kit	Guru Angad Dev Teaching Learning Centre	1,200/-
Dr. Lochan Jolly	Statistical Design of Experiments and data Analysis using Python	IITB CEP Program	5,000/-
	Technology Forecasting for strategic Decision making- An Introduction	NPTEL course	
Dr. Payel Saha	Introduction to Internet of Things	NPTEL course	1,000/-
Dr. Sangeeta Mishra	DICKENSIAN JOURNAL	Scopus Journal	4,000/-
Archana Deshpande	International Conference on Transformations in Engineering Education	Indo Universal Collaboration for Engineering Education (IUCEE) 2022 conference	1,000/- 2,000/-

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
	Journal of Engineering Education Transformations	Scopus Journal	
Dr Sujata Alegavi	FDP on "Advanced artificial intelligence and machine learning applications"		500/-
Mr Sumit Kumar	FDP on "Advanced artificial intelligence and machine learning applications"		1,100/-
	NPTEL course on "Python for data science"		500/-
Mr Sunil Khatri	FDP on "Advanced artificial intelligence and machine learning applications"		500/-

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
Advance Excel Programming and Power point presentation	ES&H	33, Teaching	11 to 14-10-2021
Faculty Training for Student Leadership	COMP	31, Teaching	23 & 24-11-2021
Dept FDP on Cyber-security & Digital Forensics	COMP	31, Teaching	26 & 27-08-2021
Dept FDP on LaTeX	COMP	34, Teaching	02 & 03-03-2022
ISTE Approved STTP on Cyber-security & AI	COMP	97, Teaching	06 to 11-06-2022
Online Institute industry Symposium on "Enhancing Employability and employment of Engineering Graduates through implementation of NEP 2020" at TCET	E&TC	25, Teaching	10-07-2021
Student Leadership Program	E&TC	25, Teaching	28-08-2021
Symposium on "Examination and Assessment"	E&TC	25, Teaching	18-09-2021
FDP on Latex	IT	23, Teaching	10 & 11-03-2022
One Week Short Term Training Programme (STTP)	IT	23, Teaching	27-06-2022 to 01-07-2022
FDP on IoT	IT	5, non-Teaching	08-03-2022
FDP on Enhancing Quality by Expanding Research Activities Base	ELEX	13, Teaching	23 to 26-08-2021
FDP on Data Structure and Algorithm	ELEX	12, Teaching	17 to 25-01-2022
STTP on Digital Transformation through Industry 4.0	AI&DS	5, Teaching	03 to 08/01/2022
FDP on Latex	AI&DS	6, Teaching	02 & 03/03/2022
Online FDP on Cyber Security & Digital Forensics	AI&DS	5, Teaching	26 & 27/08/2021
FDP on TV 2035	AI&DS	5, Teaching	22 to 24/06/2021
STTP on The Application Development Using Microservices for Cloud Computing	AI&DS	5, Teaching	21/06/2021 to 02/07/2021

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

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. In the AY 21-22 the institute was running in blended mode of teaching for which the preparedness of parents was checked through this meeting. Other than this, parents are encouraged to convey their issues related to students' progress or monitoring like they were facing problem in accessing ERP. Parent representatives are also a part of Advisory Committee of the dept. and their inputs are taken related to syllabus framing and other academic related activities. The parent-teacher meeting is conducted every year during the First-Year batch Induction Programme.

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.

TCET had secured 193rd position in NIRF 2019 (Engineering Category) and it was in 201-250 band in NIRF 2020.

2.4.6. Number of Quality Initiatives Undertaken during the Year

a) Specialization courses offered as part of curriculum, under Autonomous scheme.
b) Conduct of online TLP, doubt solving session, and evaluation assessment during COVID-19 pandemic situation done with use and integration of different online platforms- Microsoft Teams, Zoom and Google Classroom.
c) Employability Skills Development Programme for enhancing IT skills for students.
d) Agile Methodology is followed for developing application-based BE Projects.
e) Online conduct of in-house internship was successfully carried out.
f) Training programmes for GATE, GRE, GMAT, conducted at institute level for students to get into higher studies.
g) Innovative Examinations & Sessions on universal human values
h) Offline conduct of in-house internship was successfully carried out.
i) Bridge courses – GEPT.
j) Concept of blended learning and flipped classroom was used for the courses like Environmental Studies and Value Education.
k) Program Based Examination is carried out in odd and even semester based on the fundamental subjects and GATE exam format.
l) 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.
m) Display of Recent Articles on AI&DS and sectors identified by department posting on notice board (Student activity).
n) Online conduct of in-house internship (social and technical) was successfully carried out during the academic year 2021-22.
o) Hands-on workshop on Cloud Computing on Amazon Web Services, on weekends (25 hours course).
p) 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)

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 institute. 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.
- Details of Students partition in exchange programs is given in **Annexure IX**. List of partner colleges for student exchange program.
    - Maratha Vidya Prasarak Samaj's Karmaveer Baburao Ganpatrao Thakare College of Engineering, Nashik, Maharashtra
    - KLS Gogte Institute Of Technology, Belagavi, Karnataka
    - Lal Bahadur Shastri College of Engineering, Muliyar P O, Kasaragod, Kerala
    - Muthayammal Engineering College, Rasipuram, Namakkal, Tamilnadu
    - Vardhaman College of Engineering, Hydrabad (Telangana)
    - GIET UNIVERSITY, GUNUPUR, ODISHA
    - Government Engineering College Nawada, Bihar
    - Vikrant Institute of Technology and Management, Behind Veterinary College, Indore, Madhya Pradesh
    - Garden City University, Banguluru, Karnataka

- Finolex Academy of Management and Technology, Ratnagiri, Maharashtra
- IPS Academy, Institute of Engineering and Science, Indore, Madhya Pradesh
- Dr. Daulatrao Aher College of Engineering, Vidyanagar Extn. Banawadi, Satara, Karad, Maharashtra

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

The extension and outreach activities conducted in collaboration with NSS/ NCC/ Red Cross include activities like Yoga for Young Minds, International Yoga Day, Prashn Vidyarthyanche (Students' Questions), Awareness on Gender Equality, Kargil Vijay Diwas, Tree Plantation, Mask Making Activity, Awareness on Organ Donation, COVID Care Immunity, etc. to name a few. **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

The Extension Work Team (EWT) Programme is aimed to extend educational programmes and opportunities to the less privileged sections of the society with the aim to enhancing and improving their quality of life. The EWT work was conducted even during the COVID 19 pandemic situation. All the activities were conducted in online mode. Earlier only the students in slum area from Dahisar to Malad were taught and mentored. However, during the Pandemic situation, with the support of NGOS, the volunteers were able to reach out online and could teach/ mentor students staying at distant places, like Gujarat, Rajasthan, Bihar, and other places in Maharashtra.

Objectives:

- To gain career orientation and job orientation.
- To apply classroom knowledge for the benefit of the community.
- To interact with the community in which TCET EWT work.
- To make the students aware of the social problems in the community.
- To educate the volunteers about avoiding wastage of food.

Activities conducted:

a) Vidya Vikas Sabha
b) WCWW Teaching Activity
c) Resource Generation for Online Teaching Sessions
d) EWT Magazine Launch

Outcomes: Students were able to

a) Achieve career orientation and job orientation.
b) Apply classroom knowledge for the benefit of the community.
c) Better understanding of social problems in the community.
d) Interact with the community in which we work.
e) Understand the importance of saving food

Future Planning

- Proposal for increasing the strength of the students.
- Street children and orphanages to be targeted for benefits under NIOS.
- Educate and prepare the student for Disaster Management.

STEM - Promotion by F.E. Department

The knowledge-based economy that has characterised the 21st century has given rise to a wide range of interesting employment options for the top paying positions on the market. It is more crucial than ever for our country's kids to be equipped with the knowledge and skills necessary to solve issues in the real world, make sense of information, and be able to acquire and assess evidence for the decision-making process in an ever-changing, more complicated environment. These are the competencies that students gain in the STEM fields of science, technology, engineering, and mathematics. AC-STEM 2022 is an effort to show children that education incorporated with a STEM approach is enjoyable as well as dynamic and fruitful in the long run. AC-STEM 2022 was successful in fulfilling its goal by engaging the junior college students of Arts, Commerce and Science in activities that would help them in increasing their STEM aptitude as well as ensuring their holistic development.

Events:

a) Picture Perfect (A picture-based memory activity containing puzzles to test knowledge and accuracy)
b) Code Overload (An activity based on coding knowledge using C and HTML)
c) Da Vinci Code (Treasure Hunt)
d) ATSTEM (Aptitude Test in Science, Engineering, Technology and Mathematics)
e) STEM Syndicate (Ceremony to felicitate all the winners of AC-STEM 2022 and disclose the names of the participants selected for the final round of ATSTEM 4.0

Event Details:

AC-STEM 2022 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.

Feedback Analysis:

- Google document-based feedback forms were shared with all participants in all the events. Feedbacks were obtained on the following questions.

  Q1: Rate the event based on your satisfaction and liking
  Q2: Rate the flow of the event

	Picture Perfect		**Code Overload**		**Da Vinci Code**		**ATSTEM 4.0**	
Parameters	**Q1**	**Q2**	**Q1**	**Q2**	**Q1**	**Q2**	**Q1**	**Q2**
Excellent	52.5%	56%	60%	61%	63%	63%	55%	55%
Great	31.3%	26%	18%	18%	18%	21%	11%	13%
Very Good	13.8%	13%	18%	12%	11%	11%	21%	16%
Good	0%	3%	2%	5%	3%	0%	0%	5%
Average	2.5%	3%	2%	4%	5%	5%	13%	11%

Outcomes:

- Event was conducted as per the schedule.

- Total 1269 participants out of 1340 registered participants appeared for the entire AC-STEM 2022 event.
- AC-STEM 2022 has given a good platform for budding young minds to come up with talent.
- AC-STEM 2022 has emphasized critical thinking.
- Participants understood the important aspects of basics of Engineering course, such as Science, Technology, Engineering and Mathematics.
- The programme could help to increase the participant's interest in pursuing engineering courses.

3.2. 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. Deven Shah	APJ Abdul Kalam Award	AICTE, New Delhi	December 2021
Dr. Sandhya Save	WOMAN OF SUBSTANCE DIGITAL AWARDS 2022	Spiritual Konnect	March 2022
Dr. Sandhya Save	Mentor for students ATL Tinkerpreneur2021	AIM, NITI AAYOG	October 2021
Thakur College of Engineering & Technology (TCET) – EWT	Best college Award	KES BK Shroff college	March 2022
Noopur Divekar & Mansi Vaghasiya - 1 Prize	Debate Competition, D-Fest 2022	KES BK Shroff college	March 2022
2 Prize - Noopur Divekar	Cooking Competition, D-Fest 2022	KES BK Shroff college	March 2022
1 Prize- Mansi Vaghasiya	Poster making Competition, D-Fest 2022	KES BK Shroff college	March 2022
Gauri Singh	Ms. D-Fest, D-Fest 2022	KES BK Shroff college	March 2022
Utkarsh Jadhav	BESR manager award, D-Fest 2022	KES BK Shroff college	March 2022
Hariom Gupta	Research paper presentation	Dlle (d-fest) 2022	March 2022
Mr. Tanishq Suryavanshi	Mumbai University Fencing Trials	1st place	December - 2021
Mr. Tanishq Suryavanshi	All India Universe Fencing Championship	Top 8 position	January 2021
Mr. Tanishq Suryavanshi	Khelo India University Games	3rd Place	April - 2022

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

3.4. 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:	Checked by:	Verified by:	Reviewed and Recommended by:	Approved by:
Mr. Sanjay Rawat Lab. Asst.	Dr. Rajesh Bansode IQAC Co-ordinator	Dr. R. R. Sedamkar Director – IQAC	Dr. Kamal Shah Vice- Principal	Dr. B. K. Mishra Principal

4. 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: 26/9/22

Signature of Principal with seal:

4. 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: 21/9/22

Signature of Principal with seal:

External Peer Team

Prof. Anil Kumar Singh, Professor (Retd.),
Indian Institute of Technology Bombay, Mumbai.
Chairperson

Dr. Harivasudevan, Principal,
D. J. Sanghvi College of Engineering, Mumbai.
Member

Absent

Dr. P. P. Bhave, Associate Professor and Head,
Department of Civil Engineering, VJTI, Mumbai.
Member

Annexures

Annexure – I

Details of Internships undertaken during the academic year:

Sr. No.	Name of the Company	No. of Students
1	Codellion Solutions	3
2	The Sparks Foundation	5
3	Sunschool	1
4	The Sparks Foundation	133
5	Association for Information Systems	8
6	Sahu Technologies	63
7	Exposys Data Lab	2
8	LEONINE ENGINEERS PVT. LTD	1
9	Wellbee HealthCare	2
10	Pressbolt News	7
11	Newesome	1
12	Vinayak Hardware Mart	6
13	Pressboltnews	3
14	KSVS Solutions Pvt Ltd	1
15	Agastya Corporation	1
16	Bunnylead	1
17	Workforce Cloud Tech (India) Pvt. Ltd.	1
18	Bhaktivedanta Hospital	1
19	Manisha Creation	1
20	Isolpro	1
21	AVN Infotech	2
22	Bhairav Enterprise	1
23	SystemOnSilicon Corps	1
24	WellBee HealthCare Solutions	2
25	Internshala	16
26	wellBee Health Care solution	1
27	Suven consultants and Technology	3
28	WellBee Health Care	2
29	Saibex Network	3
30	BhaktiVedant Hospital	1
31	Codezee Solutions Private Limited	1
32	KP Webbate	2
33	wellbee health care solutions.	1
34	Digitopia	1
35	Well Be Health Caer Solution	1
36	Recruit CRM	1
37	gold field technologies	1
38	Radhakrishna	2
39	Locobuzz	3
40	Techsells	1
41	EDUFIED PTE LTD	2
42	MOS utility	1
43	Rotaract District Organisation, RID 3141	1
44	Multicon-IOTW / JP Morgan	1
45	Vertex II IT Solutions	2
46	Global edutech	1
47	Programmers Army	5
48	NAV TEXTILES	5
49	Prathamesh fashion trend	1
50	Exposys Data Labs	15
51	LEO9 STUDIO	1
52	Impex Industrial Corporation	1
53	EYUVA Technologies	4
54	RH Factor	1
55	BhaktiVedant Institute	1
56	UNIT TRUST OF INDIA INVESTMENT ADVISORY SERVICES LIMITED	1
57	Prathamesh Fashion Trends	1
58	Landmark Capital Advisors Pvt Ltd	1

Sr. No.	Name of the Company	No. of Students
59	Intern Academy	2
60	Picshort Private limited	1
61	The Intern Academy	1
62	Yash Enterprises	1
63	Spark Foundation	6
64	Dare2Compete	1
65	AttainU	1
66	Sparks Foundation	3
67	Codeplay Labs Pvt Ltd	1
68	Aditya Academy	1
69	Virash Technologies	1
70	iSchool Connect	1
71	ISLAM CONSTRUCTION	1
72	Yash Enterprise	1
73	Pixel Connect	1
74	Virtually Testing Foundation	1
75	Shree Graphics	1
76	Zenoholics Pvt. Ltd.	1
77	KoiReader Technologies Pvt.ltd	1
78	Molog Media and Advertising	1
79	Ashish Yawalkar	1
80	ScrapBikeBuyer	2
81	Oceanic computer solution	1
82	Internshala	1
83	DQUIP	1
84	Well Bee Health Care	1
85	Suven Consultants & Technology Pvt.Ltd	2
86	ZKTECO BIOMETRICS	3
87	Cillyfox	2
88	Dquip	2
89	BreachLock	1
90	CosmoCulture LLP	1
91	NVIDIA	1
92	Gustovalley Technovation	1
93	Factwise Tech	1
94	madmax	2
95	Data Science Wizards	3
96	Shine Project	1
97	Datametica	1
98	DocPlix Solutions	1
99	pepcoding	3
100	Guidona Softpedia Pvt. Ltd.	1
101	ischoolconnect -Mumbai	1
102	Sheetal creation	3
103	Rotaract club of bombay Kandivli	1
104	Suven consultancy	1
105	Pepcoind private limited	1
106	Gustovalley Technovations	5
107	Suven consultants	1
108	Pallavi Gems	1
109	the spark foundation	1
110	Ask in City	1
111	C.H Robinson	1
112	TCR Innovation	1
113	GustoValley	2
114	Yuvaa Pvt. Ltd.	1
115	Arbit Tech	1
116	Suven Consultants & Technology pvt. ltd	1
117	CRP electricals	1
118	Servon Solution LLP	1
119	InternshipStudio2) Servon Solution LLP	1
120	Slash RTC	1

Sr. No.	Name of the Company	No. of Students
121	Ace Overseas	2
122	Reboot Technologik	1
123	Analysed.in	1
124	i2e Consulting	1
125	NMRM INFOTECH Pvt Ltd	1
126	Little monk productions	1
127	Tummy Full INC.	1
128	Parle Biscuits PVT.LTD	1
129	Efcom infotech	1
130	iSchoolConnect	12
131	Virtually Testing Foundation	1
132	Shree Shankargiri Computer Education	1
133	Feynn Labs	1
134	Venue Monk	1
135	Tutelage Edutech	1
136	ShareKhanBNP	1
137	Future Ready Talent	3
138	Aces Digitale	2
139	Bhaktivedanta Hospital and Research Institute	1
140	Dayal Zippers	1
141	Dialabank	1
142	Techknocks Solutions	1
143	The Sparks FoundationGlobalshala	1
144	Internshipwala careers	1
145	Netcube	1
146	NetCom Learning	1
147	Mahindra and Mahindra	1
148	Skyquest Technology Group	1
149	iSchoolConnect Technologies Pvt. Ltd.	5
150	Virtually Testing Foundation	1
151	iSchoolConnect	1
152	School of Data and Buisness Intelligence(SDBI)	1
153	Dayal Zippers LLP	2
154	Suven Consultants and Technology PVT . LTD	1
155	Peacock solar	1
156	Raa Technocrates	2
157	Tare zameen foundation	2
158	Times Applaud	1
159	Madras Scientific Research Foundation	1
160	Across the Globe	1
161	EddyTools Techsolution	1
162	Uinsports Inc.	1
163	Uinsports Inc.	1
164	Suven Consultants Pvt. Ltd	1
165	Krishiv Enterprise (DGTLmart)	1
166	shellcode.pvt	1
167	shellcode.pvt	1
168	Bhaktivedanta Hospital and Research Institute	1
169	Mahindra & Mahindra	1
170	Rakesh enterprises	1
171	Suven Consultants & Technology Pvt Ltd	1
172	Vivefx Consultancy Limited (Young Butterfly)	1
173	HydroTek	1
174	iSchoolConnect Technologies Pvt.Ltd.	1
175	FRT	1
176	Microsoft future ready talent	1
177	Dhanvantri Medical Systems	1
178	DHANVANTARI	1
179	Suven Consultant & Technology PVT. LTD.	1
180	Future Ready Talent	2
181	HN Bending Works	2
182	Aces Digitale	1

Sr. No.	Name of the Company	No. of Students
183	Trusna exims	1
184	Constace	1
185	Suven Consultants Pvt. Ltd.	1
186	Static.int Educare	2
187	static.int.educare	1
188	EdVerb Learning Private Limited	1
189	Static.int Educare	1
190	Cognizant Technology Soluutions	1
191	Ace Overseas Consultant	2
192	YUSHO CORPORATION	2
193	DEC	1
194	Mepco Engineering Works.	1
195	Padhai One Forth Labs	2
196	Kundan Plastic Industries	2
197	Mahindra and Mahindra Ltd. [FARM DEPARTMENT]	1
198	Mechathon Engineering, Space Advancement and Research cell, Udemy	1
199	Customized Gift Adda	1
200	Allied globetech	1
201	RAP Fitness Equipments	2
202	JSW steel coated products ltd.	1
203	Mahindra and Mahindra Pvt Ltd	1
204	Kundan plastic industries	1
205	Entremax Global Solutions Pvt Ltd	1
206	Mechathon Engineering Pvt. Ltd., Udemy	1
207	Vijil Fabricators	1
208	E-census	1
209	Rotorcare Energy Solutions Pvt. Ltd.	1
210	VERZEO	1
211	Younity	1
212	A.B. AIRCON	1
213	AVMS Enterprises	1
214	Team Macericks	1
215	Team Mavericks Racing	3
216	Thakur College of Engineering & Technology	2
217	Mechathon Engineering	1
218	Adani Solar	1
219	Earth Energy EV	2
220	New Bharat Fire Protection System Pvt. Ltd.	1
221	Thakur College of Engineering and Technology	11
222	Indian railways	1
223	DesignShift (by Masai School)	1
224	Insys Technology	1
225	TWIST AND TOURS TRAVELS	1
226	JSW Steel Coated Products Limited	1
227	Space Advancement and Research Cell	2
228	NAIR HYDRAULIC WORKS	1
229	BuildINT	1
230	B cube pharmacy academy	1
231	Picshort	1
232	Insys technologies	1
233	Suven Consultants & Technology Pvt. Ltd.	2
234	Gemini engi-Fav Pvt.Ltd	1
235	Aditya Meta form	1
236	Carvengers.in and HistoryAllDay	1
237	Gayatri Arts, SM techno MEP & NPL training services, Coursera	1
238	Ligtforce BuildINT Pvt Ltd	1
239	Nogozo Pvt. Ltd.	1
240	Sai Cool Services	1
241	Ashok plastic industries	1
242	SAAR IT Resources pvt ltd	1
243	International Model United Nations	1
244	Kala Engineering, Amardeep Utensils India Pvt Ltd	1

Sr. No.	Name of the Company	No. of Students
245	Vignesh INC	1
246	Trans Accessories Forging Co	1
247	Dss Solidworks aakruti design competition	1
248	Gurukrupa Plastics Pvt. Ltd	1
249	COOL HOME REFRIGERATION	1
250	Alignze Exports Pvt Ltd, Linit Exports Pvt ltd, Coursera	1
251	Zestwanders (Trek Organization)	1
252	Parshva India	2
253	HN Bendings Pvt. Ltd.	1
254	Adani Dahanu Thermal Power Plant	1
255	Sandeep engineering work, Raj spring works	1
256	Nailwal Enterprises	1
257	Raj spring works	1
258	G.R Sales	1
259	SHIVSHAKTI ENTERPRISES	2
260	PRAKASH INDUSTRIES	1
261	Nantechnical Trading W.L.L	1
262	Nailwal	1
263	BEMCO PVT	1
264	Picshort company	1
265	Pichshort Private Limited	1
266	Aashman Foundation	2
267	Radhe developers, Krishna Developers	1
268	WESTSIDE AGRO FOOD PVT LTD	1
269	FEB- TECH ENGINEERING WORKS	1
270	Aphipra private limited	1
271	Abhipra Capital Limited.	1
272	Unschool, Abhipra pvt Ltd	1
273	Bakelite Electrical Mfg. Co. Pvt. Ltd	1
274	Mintifi	1
275	Milestone Institute of Technology	3
276	shivshakti enterprises	1
277	Google Play Academy	1
278	Futurz staffing solutions	1
279	Abhipra Pvt Ltd	1
280	BLDC Max Pvt. Ltd.	1
281	IMUN	1
282	New Age Firefighting Company Ltd	1
283	Elite Techno Groups	1
284	Uvik Auto mobile	1
285	Edvicer Pvt. Ltd.	1
286	SANSERA ENGINEERING	1
287	UVIK AUTOMOBILE	2
288	essar group	1
289	GAIL	1
290	Essar project	2
291	Sansera Engineering limited	1
292	Uvik Automobile	1
293	Siddhi Services	1
294	Edhub	1
295	HTSCHOOL	1
296	MHSSP	2
297	Radhe Developers & Krishna Developers	1
298	Xoance software and service pvt ltd	1
299	Sahu Technologies,The Sparks Foundation	1
300	Flamy Privated Limited,Sparks Foundation	1
301	Eyuva Technology	1
302	Techciti Pvt. Ltd	1
303	Sahu Technologies	3
304	Track RF Link Pvt. Ltd.	1
305	Sahu Technologies,iSchoolConnect Technologies Pvt.ltd	1
306	iSchoolConnect Technologies Pvt Ltd & The Sparks foundation	1

Sr. No.	Name of the Company	No. of Students
307	Byju's	1
308	iSchoolConnect Technologies Pvt Ltd	2
309	Eyuva Technologies	3
310	LetsUpgrade EdTech Pvt.Ltd	5
311	Vishal Trading CO.NX	1
312	Sahu Technologies & The Sparks Foundation	1
313	Supreme hero	1
314	Persistent Computer Services	1
315	EHS prints	1
316	Suven consultant	1
317	Suven Consultants & Technology Pvt Ltd.	1
318	Bright Industries	1
319	Rizzle / The spark foundation	1
320	Bright Industries	1
321	Yocket	2
322	Mathademy	1
323	Concept Research Media pvt. Ltd.	1
324	The Digital Man	1
325	Forage	2
326	ARC studio	1
327	Oops Info Solutions Pvt. Ltd.	1
328	Anlage Infotech	1
329	The Whiteboard Company	1
330	Expertrons Technologies Private Limited	2
331	Youth Empowerment Foundation	4
332	PathFoundIT	1
333	JEC Lighting Pvt. Ltd.	1
334	The White Board Company	1
335	Internship Studios	1
336	Ethics Infra Development Pvt. Ltd.	2
337	YESH ENGINEERING	1
338	Servilog LLP	2
339	Social Media Marketing Internship / Sparks Foundation	1
340	Youth Empowerment Foundation and	1
341	Brackets Infinity Pvt Ltd	1
342	Mahendra K Jain & Asscociates	1
343	Kala Paper	1
344	Aspire Infolabs	1
345	Yocket,LetsUpgrade,GeniusU Web Services Pvt Ltd	1
346	Nxt-Gen Vidya LLP	1
347	A&M Associate	1
348	A&M Asociates	1
349	Hemant Hi-Tech pvt. Ltd.	1
350	Sun Power System	1
351	UGOOCOMMUNTE LLP	1
352	Samriddh Industries	1
353	Global Printers	1
354	Star Tech	1
355	Coursera	38
356	L&T Infrastructure	1
357	K.N. Rai Engineers & Contractors	1
358	HAL-KO Infraprojects	1
359	Manas Agro industries and infrastructure ltd	1
360	Viral Fission	1
361	Sachin Gupta Buildcon Pvt. Ltd.	1
362	Hitarth Corporation	2
363	Manash Construction Company	1
364	Halko Infraprojects	1
365	Pralita Infraprojects	3
366	M/S MM GHAG	1
367	NA	5
368	DIVYA DEVELOPERS pvt.ltd	2

Sr. No.	Name of the Company	No. of Students
369	Dhanlaxmi Infratech	5
370	Avishkar Developers	1
371	Man Infra Construction Limited	1
372	Shivparvati Construction	1
373	ONGC	1
374	Swapnashilpa Construction	1
375	Punit Group	1
376	Projeto Interiors	1
377	Larsen & Toubro	1
378	Mauli Sai Developers Pvt. Ltd.	1
379	Larsen & Toubro Infrasrtructure	1
380	Ashraay associates	1
381	Larsen & Toubro Infrastructure	1
382	Prasanna Joshi & Associates	1
383	Sunrise Stone Industry	1
384	Man Infra Construction ltd	1
385	Archvshan Creations	1
386	J kumar Infra project ltd.	1
387	Noor Construction Bella Vista	1
388	Sun Shine Construction	1
389	Bekal Gupta Architects	1
390	Hitesh A. Gawali Constructions	3
391	Shapoorji Pallonji & Company Private Limited	1
392	Lassonde School of Engineering, York University, Toronto, Ontario, Canada	1
393	Varsha Enterprises	1
394	MS DEVELOPERS AND BUILDERS	4
395	ABS Enterprises	1
396	Siddhi Vinayak	1
397	Vrushali Swayam Sevak Sanstha Limited. Kolkewadi	1
398	ABS Enterprise	1
399	Shree Construction/BP Infra Projects	1
400	Shree S. Builders Pvt. Ltd.	1
401	G.K. Construction	1
402	Trident Enterprise	1
403	Kalpavruksha Constructions	1
404	Sunshine Construction	1
405	Silver Land Development Corporation	1
406	Shreeraj Enterprises	1
407	JPV REALTORS PVT LTD	1
408	Mohan Majoor Sahakari Sanstha	1
409	Jainam Infra Projects LLP, Engineers and Contractors	1
410	Dhristi homes	1
411	Shree Jagdish Petrol Service	1
412	Gammon Engineers And Contractors Pvt Ltd.	1
413	Nitin electrical	1
414	FEM Construction	2
415	AKASH ENTERPRISES	2
416	Tirupati Group Washim	1
417	Patel Trading Co.	1
418	Sai Darshan	1
419	Prathmesh Engineers And Contractors LLP	1
420	Sanghvi Realty	1
421	Civil Engineering Training Institute	1
422	Krupa Sindhu enterprises	1
423	SRM ENTERPRISE	1
424	Classic In Art Pvt Ltd	1
425	Civil Management Training	1
426	The design interior	1
427	Siddha sejal builders	1
428	Vinayak Hardware Mart	1
429	Bitcoin India	1
430	Dhiral construction company	2

Sr. No.	Name of the Company	No. of Students
431	K. Bissauwala Constructions	1
432	Oasis Realty	1
433	Unique Construction	1
434	AMANI ENTERPRISES	1
435	ABCI Infrastructures Pvt Ltd.	1
436	ABCI Infrastructures Pvt. Ltd.	1
437	True earth view	1
438	L&T Realty	1
439	Raj Academy	1
440	Prime Developers	1
441	P.Anjaiah Yadav	1
442	Navdeep construction company	1
443	BUILDCON DEVELOPERS	1
444	Shapoorji Pallonji and Company private limited	1
445	K.N. Patel & Associates	1
446	PRAGATI ENTERPRISES	1
447	KONARK STRUCTURAL ENGINEERS PVT LTD	1
448	Muskurahat foundation	1
449	Sparks	1
450	Riddhi Heatron	1
451	Sparks Well Bee	1
452	Sparks Foundation	1
453	Wellbee Healthcare	1
454	Mansi enterprise	1
455	spark	1
456	Vishal Trading Co.	2
457	AMSPL	1
458	SPARKS FOUNDATION & wellbee	1
459	Suven Consultants & Technology Pvt. Ltd.	3
460	Thonse Inc.	1
461	Exam18	1
462	Muskurahat	1
463	WellBee HealthCare	3
464	Airbus SAS Operations	1
465	Ami advertising	2
466	WellBee FitTree	1
467	Queleep Pvt. Ltd.	1
468	Swastik Enterprises	1
469	Potenzial Education	1
470	Sparks	1
471	Wellbee	1
472	Microsoft Azure, Sparks Foundation	1
473	Arteriors	1
474	Mobilgient	1
475	Petzilla pvt ltd	1
476	The sparks	1
477	Oriole Chemical	1
478	The Sparks	1
479	Wings Bionic	1
480	Petxtras	3
481	AMI Advertising	1
482	Ruhaan Skyscrapers	1
483	Tez Control	1
484	BuildINT	1
485	Sachi Enterprise	3
486	youth foundation	1
487	pathanwadi young bridge	1
488	Sachi Enterprises	1
489	Programming with Purpose	1
490	Aadox	1
491	Adore India	1
492	Ajay sitaram surve	1

Sr. No.	Name of the Company	No. of Students
493	Alma construction	1
494	Alpine diagnostic lab	3
495	Aman construction	1
496	Amit Engineering works	6
497	Anjana Decorators	5
498	AnsrCoach	1
499	Anz (Forage)	1
500	Apurva creations	2
501	Arcade group	1
502	Arka Leadership	1
503	Aryan Pumps & Enviro Solutions	2
504	ASHVA BUILDCON	1
505	Atish Dewani Tutorials	2
506	AutoCad Masterclass	5
507	Automobile company	1
508	AY Inerrnational	2
509	BALAJI INFOSYSTEMS	2
510	BALKAE LIFESTYLE PRIVATE LIMITED	1
511	BasketHunt Academy	2
512	BEMCO	1
513	Bennett, Coleman & Company Ltd	3
514	Bhakti vedant	5
515	BHEL	2
516	Bhojani enterprises	1
517	Big sky construction	1
518	Bitblue Technology	4
519	Bleam Technologies Private Limited	1
520	BP INFRA GROUP	1
521	Brani	1
522	BRIJAY ENGINEERING WORKS	10
523	Bucon Engineers & Infrastructure Pvt Ltd	2
524	BytesBrick Infosystems	4
525	CADEN	1
526	Cam-Pro Service	4
527	Cariesco Exports	1
528	Carriage workshop	1
529	Centre of excellence in Maritime & Shipbuilding	1
530	Chaitanya Group Developers	1
531	chase	1
532	CHETAN BHADANE	2
533	Chien Technologies Pvt Ltd	4
534	Cillyfox	1
535	Ciostik (Renting crew LLP)	1
536	Civil Art construction	1
537	CLIMBER KNOWLEDGE & Career pvt ltd.	2
538	Clone Futura	2
539	Coding Ninjas	4
540	Coin Market Live	2
541	Columbia University	1
542	Concord Ultrafine Sand & Aggregates	2
543	Corpusion Vision Technologies	2
544	Cosmic Technosolution	1
545	Courseera: UX Design	4
546	Desai architecture	3
547	Dev Town	2
548	Dhruvraj Infra Project Company	1
549	Empire residency	1
550	HARIYALI NGO	1
551	Industry:Vasai	2
552	Ketan Bricks	11
553	kind beings	1
554	Max Computer Pvt. Ltd	1

Sr. No.	Name of the Company	No. of Students
555	J.D Enterprises	1
556	JP MORGAN CHASE AND CO	1
557	Kalpataru	2
558	MECHDEL	1
559	Nirmaan Hyperloop	3
560	Patel Engineering	1
561	Star Orbitals	1
562	Upgrad	1
563	Valerius industries	1
564	DigiFabb Technologies	1
565	Digital Marketing	1
566	Digital Tycoons Pvt Ltd	3
567	Dongre Technoquip Pvt Ltd	1
568	Doxy Technologies	1
569	EMVOKE	1
570	FINACUS SOLUTIONS PVT LTD	1
571	Flocon Industries PVT. LTD. , Techno Crates	1
572	Forage	1
573	Forms + surfaces	1
574	Fubiq ventures pvt ltd	1
575	Future Ready Talent Intern	1
576	GD INTERIOR DESIGNER LTD	1
577	GirlScript Education Outreach Program	1
578	GoBabyGo	1
579	Goodspace	2
580	Google	2
581	Grasim industries private limited	1
582	GreenHorn	1
583	Gurukrupa lazer tech	1
584	Gustovalley Technovations	1
585	H.V. Constructions	1
586	Hamoye.com	1
587	Ineuron.ai	1
588	Infigon Futures	1
589	Innovat Technology	1
590	Innowrap Technologies	1
591	INS Hamla Project IT Dept	1
592	JMS INFRA corporation	1
593	Joglekar Computer Solution Pvt. Ltd.	1
594	JP MORGAN CHASE AND CO	4
595	Jyoti and amit engineering works	1
596	K C Shah Consultants	1
597	Kabra Developers	1
598	Kalltrip pvt ltd	2
599	Khushbu Enterprise	1
600	Kinematic Foodtech Pvt Ltd	1
601	kishor Auto Ancillary Pvt LTD	2
602	KothariTech	1
603	KP Webmate	10
604	Kwality airtech engineering	2
605	L.K Engineering	9
606	Lagozon EduTech	1
607	Leads and Sales	1
608	LEGASIS PRIVATE LIMITED	1
609	Lets Grow More	12
610	Luminar Media	1
611	Lumiq.ai	1
612	M/S Aron Enterprises	2
613	Madhuriya Art House	1
614	Magitt Consultancy	1
615	Mahendra First Choice	1
616	Mahindra & Mahindra Ltd.	3

Sr. No.	Name of the Company	No. of Students
617	Mahitech infraproject pvt ltd	1
618	Maitri & Siya group of companies	1
619	MAN INFRA CONSTRUCTION	1
620	Mangalmurti Constructions	1
621	Maruti Engineering & Technologies	1
622	Maruti Engineering and Technologies	8
623	Mauli Developers	1
624	Mavericks Racing	5
625	MD Transcon Pvt Ltd	1
626	MechDel limited	3
627	Megha Compusoft	1
628	Secops Solution	1
629	Upbringo Pvt. Ltd.	2
630	Upgrad	2
631	Abacus Educare Pvt. Ltd.	3
632	Accenture virtual internship	9
633	C.H. Robinson	1
634	Capgemini	2
635	CareerNinja	3
636	Chegg India Pvt. Ltd.	3
637	Egiyok	6
638	Esamyak	1
639	Exposys DataLabs	1
640	Mahindra and Mahindra Ltd	5
641	NSEIT	5
642	Suven Consultants and Technology Pvt Ltd	20
643	TechCiti Software Consulting Private Limited	4
644	Unschool	3
645	The Entrepreneurship Network	7
646	AAKRUTI 2021 shaping imagination	1
647	Akar Enterprise	1
648	Dani Developers	1
649	DiamNow LLP	1
650	Dipti Creation	1
651	DVN ITSOLUTIONS	1
652	Finezza Information Technologies Private Limited	1
653	Finlatics Pvt Ltd.	1
654	Hansa Cequity	1
655	Haridwar Syndicate	2
656	Hariom Ingots and power limited	1
657	Heritage Infra Mega Structure India Pvt Ltd.	5
658	IOTW-W TCET	1
659	ITdeation Technologies LLP	1
660	J Kumar Infrastructure Pvt Ltd	3
661	K.k enterprises (IIT BOMBAY)	2
662	Mera Mech Pvt Ltd	1
663	Microsoft corporation	2
664	Midas Construction	4
665	MK Industries	1
666	MobbyPark	1
667	Mumbai Metropolitan Region Development Authority	1
668	MUMBAI WEB DESIGN	1
669	MWD	1
670	Nagarjuna Construction Company (NCC)	1
671	Nakoda Construction	1
672	Naman Baranwal	1
673	Naresh construction Enterprises	1
674	National Engineering Olympiad	1
675	Navkar Estate & Homes Pvt. Ltd.	1
676	NbliK India Private Limited	1
677	Neodocto	1
678	New Kayson Engineers	4

Sr. No.	Name of the Company	No. of Students
679	Next Construction	1
680	Nirmaan hyperloop	6
681	NMC INDUSTRIES PRIVATE LIMITED	1
682	Nucsoft	1
683	NYX Wolves	1
684	OASIS Infobyte	16
685	Oddy Labs	1
686	Oeson	1
687	Offeteria	1
688	OM DIES AND TOOLS	1
689	Om sai surveyor	5
690	Omkar Realtors	1
691	Online Course	1
692	P. Anjaiah Yadav	1
693	Padantra Technologies LLP	2
694	Pal India Computer Education	1
695	Pantech Prolabs India Pvt Ltd	2
696	Parc Impex	5
697	Egiyok	1
698	Exposys Data Lab	1
699	Aashman Foundation	2
700	Db infratech	1
701	Eclipse Racing	1
702	EQHEAL TECHNOLOGIES PRIVATE LIMITED	1
703	Hindustan Unilever Limited	2
704	HIringTek Inc	2
705	Humans for Humanity	1
706	J. R. S. Infrastructures	1
707	J.Kumar (CRTG) JV	1
708	Jaago Bharat Trust	1
709	Jadwani estate	2
710	Patel Engineering	1
711	Pathrikar construction and plotting	1
712	Pentarch Ventures	2
713	PeppyChunk	2
714	Pick My Work	3
715	Pine Tree Pictures Pvt Ltd	2
716	POWER MECH PROJECTS	1
717	PressboltNews	2
718	Price Construction and Developers	1
719	Prodio DesignWorks	1
720	Quick Order Private Limited	3
721	Sharvari Construction	2
722	Sheth Construction Company	2
723	Startech Networks	6
724	Startup Story Private limited	1
725	Sunteck Reality Pvt ltd	9
726	SURAJ ENTERPRISES	3
727	Swastik enterprises	1
728	T bhimjyani Realty Pvt Ltd	1
729	Team Eclipse Racing	3
730	Dolphin RFID	1
731	Cover Karlo Pvt. Ltd.	4
732	DOCPLUS ONLINE	1
733	Hydrotek Farms	2
734	ICICI prudential	1
735	Ideal group	1
736	Ignitus	1
737	imperial builders and contractors	1
738	Impish entertainment	1
739	JAISWAL CONSTRUCTION & PILETECH Pvt.Ltd	1
740	Proficient in AutoCAD and CATIA	2

Sr. No.	Name of the Company	No. of Students
741	Projects 42 Labs	1
742	Quadb Technologies	2
743	RAA Technocrates	3
744	Railway Mechanical workshop	2
745	Raj Software Technology India	1
746	Raunak Infra	1
747	Razrcorp	2
748	Retrofi India	1
749	Rhythmsoft Robotics	3
750	shilpi construction	1
751	Shree Vallabh Packaging	1
752	Shyam Construction	5
753	Skill Vertex	1
754	Smartknower	1
755	Software Course	3
756	Space Technology and Aeronautical Rocketry	2
757	Team Everest	4
758	Team Technocrats	5
759	Times of india	1
760	Triumph, NGO	3
761	Trivia Software	1
762	Truerel Global Business LLP	1
763	Unico Global	2
764	V S Construction	4
765	V Satav Developers	2
766	Valerius industries	6
767	Verzeo Edutech	3
768	Virtually Testing Foundation	3
769	VISANKA TECHNOLOGIES	3
770	Volar Fashion Pvt Ltd	2
771	vs construction	2
772	VulcanTech software India pvt ltd	2
773	YBI FOUNDATION	4
774	AffableTechSolutions LLP	1
775	Blitz Jobs	1
776	Go Gaga Matchmaking Pvt. Ltd.	1
777	InTech Olympiad	1
778	Jio Platform	1
779	Nazareth Foundation	1
780	Nutronics India	1
781	NXT Gen Vidya LLP	8
782	Akshay Enterprises	1
783	Alliance Corporation and Boson Machines	1
784	Epsilon automotive pvt. ltd.	1
785	Incerno Technologies Private limited	1
786	Indian Railways	3
787	Internshala :AutoCAD	2
788	Internship Studio	1
789	Larsen & Toubro	1
790	Little Climbers	1
791	LOOK GAME (Manufacture of amusement rides)	1
792	LPV Weltweit Solution Private Limited	2
793	LueurTech Software Solutions Pvt. Ltd.	1
794	Sahu Technologies Ltd.	2
795	SEORAJA LLP	2
796	Sethia infrastructure pvt ltd.	3
797	Shanti Infotech	1
798	Speco infrastructure	1
799	Star Orbitals	5
800	TATA STEEL	2
801	Team Technocrats	1
802	Team Aeronix	3

Sr. No.	Name of the Company	No. of Students
803	Team Mavericks Racing	1
804	Tech Exordium	3
805	Techrupt Innovations	1
806	The hobby tribe	1
807	Twowaits Technology	3
808	Uday Electrical Industries	3
809	Udemy	3
810	Zero Designs Pvt.Ltd.	2
811	Ziozi Digital Pvt Ltd	6
812	AAKRUTI 2021 shaping imagination (Dassault systeme)	1
813	Akshay Enterprises ,Team Technocrats	1
814	Amit Engineering Works	2
815	Automobile company	1
816	BEMCO	1
817	BHEL	1
818	Brijay Engineering Works	2
819	Cam-Pro Services, Team Technocrates(Powertrain Domain)	1
820	Centre of excellence in Maritime & Shipbuilding	1
821	Computer Science: Programming with Purpose	1
822	Digifabb technology	1
823	Gemini Engifab	11
824	Jyoti and amit engineering works	1
825	Kwality airtech engineering	2
826	Mavericks Racing	1
827	MechDel limited	1
828	MechDel LTD.	1
829	New Kayson Engineers	1
830	Nirman Hyperloop	1
831	Online Course	1
832	RETROFIT INDIA	1
833	Rhythmsoft Robotics	1
834	Software Course	1
835	TATA STEEL	1
836	Team Aeronix - National Level competition Technoxian	1
837	Team Aeronix At National level competition - Technoxian	3
838	Team Eclipse Racing	2
839	Team Everest	1
840	Team Mvericks	1
841	Team Technocrats	6
842	Internshala-Ulektz	3
843	Grade Up (Internshala)	1
844	Hyperlocal corporation-Internshala	1
845	Perfectice Eduventure Ltd-Internshala	1
846	Ideal Village-Internshala	1
847	Internshala-Devego Auto Services Pvt/ Ltd/	1
848	Internshala/ Scholiverse Educare Pvt/ Ltd/	1
849	Internshala-Leap Beyond	1
850	Internshala-Taxvisor Technologies	1
851	Internshala-KSVS Solution Pvt/ Ltd/	1
852	Internshala-Cityfurnish	1
853	Internshala-India Redefined	1
854	Common Dove	1
855	Internshala Online Training Program	4
856	Anyboli Labs Private Limited	1
857	Cometa Intellect LLP	3
858	ExamRobot	1
859	Regex Software Services	1
860	Career kites	1
861	SkillSify	1
	Total	**1683**

Annexure – II

List of Expert/ Invited Talks Delivered During 2021-22

Sr. No.	Name of Speaker / Faculty	Talk title	Event	Organizing Institution and Date
1	Dr.Anand Khandare	Session on Quantum Machine Learning	ATAL FDP	VIT Pune 17-01-2022
2	Dr.Anand Khandare	Session on AI in Cyber Security	ISTE STTP	TCET Mumbai 11-06-2022
3	Dr.Anand Khandare	Session on Data warehousing	Corporate Training of Central Bank Officers	SPBT 01-01-2022
4	Dr.Anand Khandare	Session on Data warehousing	Corporate Training of Central Bank Officers	SPBT 08-01-2022
5	Dr.Zahir Alam	Recent Advancement MAI	AICTE-ATAL FDP	Amravati University 12-7-21 to 16-7-21
6	Dr.Megharani Patil	UXD based web development approach	Corporate training	Esamyak LTD 24-12-2021
7	Dr.Megharani Patil	Technical Paper Writing	Seminar at Partner Institute	Dr. Daulatrao Aher College of Engineering Karad 18-12-2021
8	Dr. Rashmi Thakur	Machine Learning	Session	HQ - WNC Tiger Gate, Mumbai (Indian Navy) 06-04-2022 & 07-04-2022
9	Dr. Manish Rana	Reinforcement Learning	Indian NAVY	Indian NAVY 08-04-2022
10	Mrs. Lydia Suganya	Session on Computer Networks	Corporate Training of Central Bank Officers	Sir Sorabji Pochkhanawala Bankers Training College 30-12-2021
11	Mrs. Ashwini Patil	Session on Language Processor	Corporate Training of Central Bank Officers	Sir Sorabji Pochkhanawala Bankers Training College 31-12-2021
12	Prof. Kamal Shah	Measures for Entrepreneurship Development Cell	Invited Talk	St.John's College of Engineering and Technology 07-07-2021
13	Prof. Kamal Shah	Outcome Based Academic Research –OBAR for better Po attainment	STTP on OBE sponsored by AICTE	SPIT, Mumbai 30-11-2020
14	Prof. Kamal Shah	Basics of Block Chain	Invited Talk for students and teachers	Sarvajanik College of Engineering and Technology, Surat 20-09-2019
15	Prof. Kamal Shah	Basics of Quantum Computing	Faculty Development Program	ATAL FDP at Tahkur College of Engineering and technology 22-01-2021
16	Prof. Kamal Shah	Basics of Block Chain with Hands on Tools	STTP	Sal College of Engineering and Technology, GTU, Gujarat 17-2-2021
16	Prof. Kamal Shah	Entrepreneurship Opportunities for Block chain start-ups	Talk for industry persons and start ups	TiE India 12-3-2021
17	Prof. Kamal Shah	NEP 2020 –Highlights for Higher Education	FDP	Shah and Anchor Kutcchi College of Engineering, Mumbai 23-4-2021
18	Prof. Kamal Shah	Strengthening Research culture in Campus	Invited talk	MH Sabusiddiki College of Engineering, Mumbai 16-4-2021
19	Prof. Kamal Shah	NEP 2020 implementation	Invited talk	ST. Francis Institute of Management Studies and research in international FDP 9-6-2021
20	Prof. Kamal Shah	Quality tools and Entrepreneurship	ATAL FDP	D Y Patil University, Pune 18-6-2021
21	Prof. Sangeeta Vhatkar	Recent Advancements in Artificial Intelligence	STTP	ATAL academy sponsored STTP 12-07-2021

Sr. No.	Name of Speaker / Faculty	Talk title	Event	Organizing Institution and Date
22	Mrs. Neha Kapadia	Time series Prediction	Seminar	SIES Eng. Institute, Navi Mumbai 08-10-2021
23	Mrs. Mary Margarate	Data Structures	FDP	TCET Mumbai 19-01-2022
24	Mr. Sandeep Bankar	Features of Blockchain basics and Ethereum hands on	STTP	NIT Nagpur 01-07-2021
25	Mr. Sandeep Bankar	Hyperledger Fabric	STTP	NIT Nagpur 30-06-2021
26	Mr. Sandeep Bankar	Blockchain and its Application and Ethereum Crypto Currency	STTP	St John College of Engineering Mumbai 6-4-2021
27	Mr. Sandeep Bankar	Hyperledger Fabric	STTP	MSC IT, Mumbai University 24-04-2021
28	Mrs Jyoti Kori	Life Management using Bhagwat Gita	Invited Talk	Amex Information Technology, Powai, Mumbai
29	Dr. Siddesh S.	Industrial Engineering	Mahindra and Mahindra training	TCET, Mumbai
30	Mr. Krishna Gaikwad	1. NBA Guidance Session at VCET & TPoly 2.CBDT Training	1.NBA Guidance 2.Training	1.VCET,Vasai on 08-09-2021 Thakur Polytechnic on 05-10-2021 2.CBDT on 01-01-2022
31	Mr. Rupesh D	NBA Guidance Session at VCET & TPoly	NBA Guidance	VCET,Vasai on 08-09-2021 Thakur Polytechnic on 05-10-2021
32	Mr. Vaibhav Madane	Automobile Engineering	Mahindra and Mahindra	TCET Mumbai
33	Mr.Pawan Tiwari	CBDT Training	Training	CBDT on 01-01-2022
34	Mr.Uddhav Nimbalkar	CBDT Training	Training	CBDT on 01-01-2022
35	Mr. Jitendra Chavan	Additive Manufacturing 3d Printing (Practical)	Mahindra and Mahindra	TCET Mumbai
36	Prof. Sheetal Rathi	Direct & Indirect Tools for Assessment	ATAL FDP on Outcome Based Education (OBE) and NBA Accreditation Process	Government Polytechnic, Pen. September 2021
37	Prof. Sheetal Rathi	Data Science	One day Webinar for Scientist from NASI	NASI October 2021
38	Prof. Sheetal Rathi	Impact measurement using Learning Analytics	IEEE sponsored one week FDP on " Education 4.0: Tools for effective NEP 2020 implementation	Thakur College of Engineering and Technology 27th June to 2nd July 2022
39	Dr Kamal Shah	US Malcom Baldridge Criteria for Performance Excellence	FDP	-
40	Dr Kamal Shah	SMT Leadership	Training program	Mahindra & Mahindra

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	Consensus of Feature Selection and Reduced Generalization Gap Model	Journal for Scientific Research	Sept, 2021	2277-8179
Dr R R Sedamkar	COMP	Adam optimized Logistic Regression Model to improve Heart Disease Diagnosis	ADBU-JET	2021	2348-7305
Dr R R Sedamkar	COMP	Re Imaging of Engineering Education Model to Re-Invent Next Gen Engineers	Journal of Engineering Education Transforms	Aug 2021	2394 – 1707
Dr. Sheetal Rathi	COMP	A Robust Deep Learning Approach to Enhance the Accuracy of Pomegranate Fruit Disease Detection under Real Field Conditions	Journal of Experimental Biology and Agricultural Sciences	Dec, 2021	2320 8694
Dr. Sheetal Rathi	COMP	Enhanced DSSM (Deep Semantic Structure Modelling) Technique for Job Recommendation	Journal of King Saud University, Elsevier	July 2021	1018-3647
Dr. Sheetal Rathi	COMP	Fostering Progressive Experiential Learning Approach to Make Engineering Students Future Ready	Journal of Engineering Education Transforms	January 2022	2394-1707
Dr. Harshali Patil	COMP	Teaching Learning Methods' shift and its impact during pandemic	Journal of Engineering Education Transforms	Aug, 2021	2394 – 1707
Dr. Anand Khandare	COMP	Telecom Customer Churn	Research Notes on Computing and Communication Sciences	April, 2022	9781774638361
Dr. Anand Khandare	COMP	Comparative Analysis of Clustering Algorithms	Research Notes on Computing and Communication Sciences	April, 2022	9781774638361
Dr. Anand Khandare	COMP	Strategies for engineering pedagogy to improve peer-based & autonomous-learning through technical student clubs	Journal of Engineering Education Transforms	Aug, 2021	2394 – 1707
Dr. Anand Khandare	COMP	Moving towards quality academic project development using program specific research activities in engineering education	Journal of Engineering Education Transforms	Aug, 2021	2394 – 1707
Dr. Rekha sharma	COMP	Student-Faculty Portal using ML and Cloud Services	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	Nov, 2021	2321- 9653
Dr. Megharani Patil	COMP	Implementing a Web Application to Provide Personalised Preliminary Treatment for Diabetes Based on History	Research Notes on Computing and Communication Sciences	April, 2022	9781774638361
Dr. Megharani Patil	COMP	Strategies for engineering pedagogy to improve peer-based & autonomous-learning through technical student clubs	Journal of Engineering Education Transforms	Aug, 2021	2394 – 1707

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. Megharani Patil	COMP	Moving towards quality academic project development using program specific research activities in engineering education	Journal of Engineering Education Transforms	Aug, 2021	2394 – 1707
Dr. Megharani Patil	COMP	Designing a UI Template for Student Connect Application Using Neumorphic Components	SN Computer Science Journal	Dec 21	
Mrs. Shiwani Gupta	COMP	Consensus of Feature Selection and Reduced Generalization Gap Model	Journal for Scientific Research	Sept, 2021	2277-8179
Mrs. Shiwani Gupta	COMP	Adam optimized Logistic Regression Model to improve Heart Disease Diagnosis	ADBU-JET	2021	2348-7305
Mrs. Shiwani Gupta	COMP	Re Imaging of Engineering Education Model to Re-Invent Next Gen Engineers	Journal of Engineering Education Transforms	Aug 2021	2394 – 1707
Mrs. Vaishali Nirgude	COMP	Fostering Progressive Experiential Learning Approach to Make Engineering Students Future Ready	Journal of Engineering Education Transforms	January 2022	2394-1707
Mrs. Vaishali Nirgude	COMP	A Robust Deep Learning Approach to Enhance the Accuracy of Pomegranate Fruit Disease Detection under Real Field Conditions	Journal of Experimental Biology and Agricultural Sciences	Dec, 2021	2320 8694
Dr. Lochan Jolly	E&TC	Innovation in Online Evaluation for Authentic Assessment	Journal of Engineering Education Transformations	August 2021	10.16920/jeet/2021/v35i0/167018
Dr. Sangeeta R. Mishra	E&TC	Exigency of A.I and M.L in genetic and tissue engineering	Journal of Chengdu University of Technology	Jul 2021	1671-9727
Dr. Sangeeta R. Mishra	E&TC	Efficaciousness of A.I and M.L of biomarkers in brain	International Journal of Chemical Studies	Oct 2021	P-ISSN:2349-8528, E-ISSN:2321-4902
Dr. Sangeeta R. Mishra	E&TC	Appraisal of antimicrobial activities of ZnO and Pb (No3)2 Nanoparticles	International Journal of Chemical Studies	Oct 2021	P-ISSN:2349-8528, E-ISSN:2321-4902
Dr. Sangeeta R. Mishra	E&TC	Assess on Effectiveness of Artificial Intelligence and Machine Learning in Respiratory Medicine and Covid-19	International Journal of Innovative Research in Science and Technology	November 2021	2349-6010
Dr. Sangeeta R. Mishra	E&TC	Breast implant for post-mastectomy reconstruction or aesthetic augmentation	Dickensian Journal	Apr 2022	0012-2440
Dr. Sangeeta R. Mishra	E&TC	Imperative role of Nanostructure surfaces in orthopaedic implants	Dickensian Journal	Apr 2022	0012-2440
Dr. Sangeeta R. Mishra	E&TC	Innovative curing measures of Covid-19 pandemic to endemic	Dickensian Journal	Apr 2022	0012-2440
Dr. Sangeeta R. Mishra	E&TC	Critiques of nanochemotherapy's effectiveness against cancer cells	Dickensian Journal	Apr 2022	0012-2440
Dr. Sangeeta R. Mishra	E&TC	Melanoma Cancer Detection using Deep Learning	International Journal of Scientific Research in Engineering and Management	Apr 2022	2582-3930
Ms. Archana Deshpande	E&TC	Design of Quizzy Car Game in an Engineering Education	Journal of Engineering Education Transformations	Jan 2022	eISSN 2394-1707

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. Deven Shah	IT	BlockBlend: Interoperable Decentralized Framework for Court Excellence	International Journal of Information Management	Jan 2022	
Dr. Deven Shah	IT	DevOpsChain : Framework to enhance DevOps using Blockchain	Springer	Feb 2022	
Dr. Deven Shah	IT	An efficient IoT based prediction system for classification of water using novel adaptive incremental learning framework	Journal of King Saud University-Computer and Information Sciences	March 2022	https://doi.org/10.1016/j.jksuci.2022.01.009
Dr. Deven Shah	IT	Improved IoT based Prediction system for Water-Related Diseases using a Novel JBO-SMOTE	Recent Advances in Electrical & Electronic Engineering	April 2022	
Dr. Rajesh Bansode	IT	Generation of Adversarial Mechanisms in Deep Neural Networks: A Survey of the State of the Art	International Journal of Ambient Computing and Intelligence (IJACI)	2022	13 (1)
Bhushan Nemade	IT	An efficient IoT based prediction system for classification of water using novel adaptive incremental learning framework	Journal of King Saud University-Computer and Information Sciences	March 2022	https://doi.org/10.1016/j.jksuci.2022.01.009
Lochan Jolly, Arpit Vyas, Swapnil Raut, B. K. Mishra	CIVIL	Innovation in Online Evaluation for Authentic Assessment	Journal of Engineering Education Transformations, Volume 35, Special Issue	August 2021	eISSN2394-1707
Seema Jagtap, Samriddhi Shelavale	CIVIL	Problem Formulation: Hydrological Modelling of Shahapur District by Using Q-GIS and SWAT	GIS SCIENCE JOURNAL, Volume 8 Issue 11	Nov 2021	ISSN1869-9391
Dr. Sheetal Rathi	AI&DS	Performance Analysis of Voice Recognition by using Feature Extraction and Gaussian Mixture Model	JASC	April-2022	1076-5131
Dr. Sheetal Rathi	AI&DS	Real time Object Detection for Visually Impaired using SSDNET Model	JASC	April-2022	1076-5131
Dr. Sheetal Rathi	AI&DS	Inductive Learning Approach in Job Recommendation	IJISAE	May 2022	2147-6799

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. Karuna Nikum	Planning of Hybrid Renewable Energy Systems, Electric Vehicles and Microgrid	Chapter 36: Policies and Prospects to Promote Microgrids for Rural Electrification in Present Indian Scenario: A Comprehensive Review	-	-	-		978-981-19-0978-8, 513428_1	TCET, Mumbai	Springer
Dr. R R Sedamkar			Implementation of an Efficient Scheme for Dynamic Channel Allocation Using Intelligent Agent in Mobile Communication	Novel Perspectives of Engineering Research	International	October, 2021	978-93-5547-166-6	TCET, Mumbai	
Dr. Sheetal Rathi			Inductive Learning Approach in Job Recommendation	Recent Advances in Electrical & Electronic Engineering	International	Nov, 2021	978-0-387-30164-8	TCET, Mumbai	Springer
Dr. Harshali Patil		A Comprehensive Study and possible Solutions on Hostel Management System	-	-	International	2022	9781003277217	TCET, Mumbai	Apple Academic Press (AAP)

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. Anand Khandare	Intelligent Computing and Networking, Proceedings of IC-ICN 2021				International		978-981-16-4863-2	TCET, Mumbai	Springer Singapore
Dr. Anand Khandare			Design and Development of Clustering Algorithm for Wireless Sensor Network	Intelligent Computing and Networking, Proceedings of IC-ICN 2021	International		978-981-16-4863-2	TCET, Mumbai	Springer Singapore
Dr. Megharani Patil		An End – End Framework for Autonomous Driving Cars in CARLASimulator	-	-	International	DEC, 2021	9788770227490	TCET, Mumbai	River Publishers
Dr. Megharani Patil		Automated Healthcare System using Gamification and AI based Chatbot	-	-	International	April, 202	978-3-11-070248-4	TCET, Mumbai	CVIP
Dr. Megharani Patil			Twitter Sentiment Analysis using Machine Learning and Deep Learning Techniques	International Conference on Communication, Computing, and Industry 4.0 (C2I4)	International	Dec, 2021	2169-3536	TCET, Mumbai	IEEE
Dr. Megharani Patil			Detection and Performance Evaluation of Online-Fraud Using Deep Learning Algorithms	Intelligent Computing and Networking. Lecture Notes in Networks and Systems	International	Feb, 2022	978-981-16-4863-2	TCET, Mumbai	Springer

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
Mrs. Shiwani Gupta		Computing and Communication Engineering in Real Time Application Development	-	-	International	April,2022	9781774638361	TCET, Mumbai	Apple Academic Press
Dr Sanjeev Ghosh	Digital Image Processing and Machine vision	-	-	-	National	January 2022	ISBN NO. 978-93-5583-003-6	Thakur College of Engineering & Technology	Tech-Neo Publications
Dr Sanjeev Ghosh	Image Processing	-	-	-	National	January 2022	ISBN NO. 978-93-91472-88-7	Thakur College of Engineering & Technology	Tech-Neo Publications
Megha Gupta, Lochan Jolly, Archana Belge, Sujata Alegavi	-	Skill Enhancement Through Holistic Development Activities (pages 21-37)			National	June 2022	DOI: 10.4018/978-1-6684-4210-4. ISBN13: 9781668442104, ISBN10: 1668442108, EISBN13: 9781668442111	Thakur College of Engineering & Technology	IGI Global
Ms. Sonali Singh	-	-	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Dr. Lochan Jolly	-	Design And Implementation Of Energy Efficient Lighting And Control Using Addressable System	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	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
Ms. Sonali Singh		Artificial Intelligence Enabled Internet Of Things	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Anvita Birje		Automated Switching Board Using Laser	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Mr. Niket Amoda		Aerial Surveillance Drone	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Dr. Payel Saha		Vehicle Identification System	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Dr. Sanjeev Ghosh		Design of UWB Non-Centric Fractal Antenna for High Data Rate Communication	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Dr. Sanjeev Ghosh		Public Place Recommendation System Using Machine Learning	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	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
Mr. Deepak S. Shete		Development of a Face Recognition Based Attendance System	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Dr. Vinitkumar Dongre		Indoor Navigation System for Smartphone using Wireless Hotspot	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Megha Gupta		Multimedia Audio Transfer System Using Laser	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Mr. Deepak S. Shete		Automatic Toll Collection Using Image Processing	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Dr. Payel Saha		Green Campus Using IoT	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	TCET Mumbai	-
Ms. Megha Gupta		Waste Segregation Using Image Processing	-	International Conference on Communication, Computing and Data Security	International	Feb 2022	-	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. BijithMarakarkandy	Digital Image Processing and Machine Vision	-	-	-	-	2022	ISBN-10 : 9355830033, ISBN-13 : 978-9355830036	TCET	Tech-Neo Publications
Dr. BijithMarakarkandy	Digital Image Processing and Machine Vision	-	-	-	-	2022	ISBN: 97893691472557	TCET	Tech-Neo Publications
Dr. Rajesh Bansode, A. Pavate	-	An Analysis of Derivative based optimizers on Deep Neural Network Model , Data Science & Data Analytics opportunities& Challenges	-	-	-	Aug 2021	ISBN: 9780367628826	TCET	Chapman /Hall/ CRC
Dr. Sangeeta Vhatkar	-	SN Springer Nature Journal Topical Issue, Intelligent Computing and Networking	-	-	-	2021	ISSN:2662999x(print)2661-8907(online)	TCET	Springer Publication
Dr Deven Shah Dr Kamal Shah Dr R Bansode	-	-	IC-BCT Proceedings on "Blockchain Technology" from Springer Book series	Blockchain Technology"	International	2021	Hardcover ISBN 978-981-15-4541-2 Series ISSN 2661-8338	TCET	Springer 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
Sujata Alegavi	-	Using Luong and Bahdanau Attention Mechanism on the Long Short Term Memory Networks - A COVID-19 Impact Prediction Case Study	-	-	-	January 2022	9780367741105	Thakur College of Engineering and Technology	CRC Press, Tylor, and Francis Group
Sujata Alegavi	-	Analysis of Long Short-Term Memory (LSTM) Networks in the Stateful and Stateless Mode for COVID-19 Impact Prediction	-	-	-	February 16, 2022	978-3-030-75656-7	Thakur College of Engineering and Technology	Springer
Hemant Kasturiwale ,Sandhya Save,et al		Machine Learning Approach for Prediction of Lung Cancer						Thakur College of Engineering and technology	Wiley-Scrivener (Accepted, Under publication)
Hemant Kasturiwale ,Sujata N. Kale ,et al		AI Based Identification and Prediction of Cardiac Disorder						Thakur College of Engineering and technology	Wiley-Scrivener (Accepted, Under publication)
Hemant Kasturiwale, Sujata N. Kale ,et. a		Machine Learning Approach for Medical Diagnosis based on Prediction Model						Thakur College of Engineering and technology	Wiley-Scrivener (Accepted, Under 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
Mr. Sunil Khatri, Shriyansh Singh, Shudhanshu Singh, Vishal Thakur, Vivek Tiwari			Automated Prescription Generation using Smart Extraction with the help of NLP	International Conference of Communication, Computing and Data Security - 2022	International	Feb 2022	978-1-7369640-1	Thakur College of Engineering and Technology	-
Mr. Hemant Kasturiwale, Mr. Shivang Bhargava, Ms. Manshi Mishra, Ms. Manvi Rankawat			Enhanced Myoelectric Prosthesis using Adaptive Deep Learning Technique	International Conference of Communication, Computing and Data Security - 2022	International	Feb 2022	978-1-7369640-1	Thakur College of Engineering and Technology	-
Mr. Sunil Khatri			Sparse Representation for Remotely Sensed Image Classification - A Review	International Conference of Communication, Computing and Data Security - 2022	International	Feb 2022	978-1-7369640-1	Thakur College of Engineering and Technology	-
Sumit Kumar			A Review of Image Classification Techniques and Methods	International Conference of Communication, Computing and Data Security - 2022	International	Feb 2022	978-1-7369640-1	Thakur College of Engineering and Technology	-
Dr. Sandhya Save, Abhishek Singh, Virendra Vishwakarma, Pawan Singh			Design and Development of Controlling System for Bionic Arm	International Conference of Communication, Computing and Data Security - 2022	International	Feb 2022	978-1-7369640-1	Thakur College of Engineering and Technology	-

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
Sunil Khatri , Hrishikesh indulkar, Shruti Bajoria , Ishika Phatke			Smart BMS Module	International Conference of Communication, Computing and Data Security - 2022	International	Feb 2022	978-1-7369640-1	Thakur College of Engineering and Technology	-
Leena Chakraborty , Vinay Chaurasiya, Vikas Gupta, Parth Bhattad			Design and Development of Human Following Robot with Navigation	International Conference of Communication, Computing and Data Security - 2022	International	Feb 2022	978-1-7369640-1	Thakur College of Engineering and Technology	-
Hemant Kasturiwale, Richa Mamtora , Shubham Kanaujia, Neha Salvi			IMPLEMENTATION OF ELECTRIC VEHICLE CHARGING SYSTEM USING SOLAR	International Conference of Communication, Computing and Data Security - 2022	International	Feb 2022	978-1-7369640-1	Thakur College of Engineering and Technology	-
Dr Hemant Kasturiwale, Pritika Gharat, Shantanu Kudav, Gaurang Vishwakarma			Port Arch Linux to ARM Instruction Set Architecture	International Conference of Communication, Computing and Data Security - 2022	International	Feb 2022	978-1-7369640-1	Thakur College of Engineering and Technology	-
Jyoti Kori, Yashvardhan Dwivedi, Vinay Manala, Om Pancholi			Decentralized Asset Tracking System	International Conference of Communication, Computing and Data Security - 2022	International	Feb 2022	978-1-7369640-1	Thakur College of Engineering and Technology	-

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 Sheetal Rathi			A survey on deep learning-based automatic text summarization models	Advances in Artificial Intelligence and Data Engineering		2021	978-981-15-3514-7		Springer, Singapore

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	Multicon-W ICHSTE-2022 Proceeding	Dr. Sunita Pachori Dr. Krishnakant Mishra Mr. Rohitkumar Singh Mr. Yogesh Bhalekar Dr. Karuna Nikum Mr. Shivram Poojari Mr. Karthik Sankararama Ms. Kshama Shukla	978-1-7369640-5-7	Published with 64 papers	2022
2	e-Conference on Data Science and Intelligent Computing (eC-DSIC 21)	Dr.Harshali Patil Dr.Anand Khandare	In process	Total papers = 23	2021
3	Proceedings of International Conference on Intelligent Computing and Networking - 2022 (IC-ICN)	Dr.Bijith.M Dr.Harshali Patil Dr.Sangeeta Vhatkar Dr.Anand Khandare	In process	Total papers received = 180 Presented = 153	2022
4	Proceedings of International Conference on Communication, Computing and Data Security	DR. S. C. Patil Dr. Payel Saha Dr. Hemant Kasturiwale Dr. Sanjeev Ghosh Ms. Jalpaben Bhatt Ms. Rutvi Thakar	978-1-7369640-7-1	Ready to print with 44 articles and will be published	2022
5	Proceedings of International conference on advances in Mechanical & civil engineering - 2022 (IC-AMCE)	Dr.Seema Jagtap Dr.Siddesh Sidappa Dr.Sanjiv Chaudhary Mr.Rajeswar Deshmukh Dr. Vaibhav Shinde Mr.Ghanshyam Pal	978-1-7369640-8-8	Publication in Process Proceedings=99 Transstellar Journal Publications and Research Consultancy Private Limited =02 Paper (External Paper) IJAEMA-UGC JOURNAL =01 Paper (External Paper)	2022

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	19-06-2021	Yoga for young minds (Ministry of Ayush-MU)	To make the volunteers understand the importance of yoga and all the eminent yoga traditions in India.	The volunteers understood the benefits of yoga and its traditions.	Health, society	57
2	20-06-2021 to 21-06-2021	Training sessions of yoga (MU)	To make conscious efforts to improve emotional and spiritual health of volunteers.	The volunteers understood the basic philosophy of yoga.	Health, society	63
3	21-06-2021	International yoga day (TCET)	To learn and practice the ancient science of health and healing through yoga.	The volunteers understood the importance of yoga in terms of physical, emotional, and spiritual well-being.	Health, society	60
4	26-06-2021	National symposium (TV-2035)	To provide directions for national initiatives in science and technology to make India a developed country by 2035.	The volunteers understood the importance and the growth of technology in the coming years.	Education, society	50
5	02-07-2021	Prashn Vidyarthyanch e (MU)	To make the volunteers aware about the importance of innovative practices in education system.	Volunteers understood about the various innovative practices used to educate under-privileged students.	Education, society	8
6	18-07-2021	Awareness on gender equality	To make the volunteers understand the equality between girls and boys, women, and men, of all culture and ethnic origins.	Volunteers then participated in group discussion where their thinking, listening, and speaking skills were improved.	Society	50
7	25-07-2021	Kargil vijay diwas	To make the volunteers understand the importance of kargil vijay diwas.	Volunteers understood the contribution of the Indian army and they also came to know about the brave soldiers who sacrificed their lives while fighting for the country.	Society	57
8	29-07-2021	Tree plantation (MU)	To highlight the importance of trees among the volunteers.	The volunteers realized the importance of trees and their impact on the environment & planted 300 plus saplings during the project.	Environment	57
9	01-08-2021	Webinar on nasha mukti	To make volunteers aware about the ill-effects of substance abuse & motivate them to spread the knowledge of ill effects of drugs among their family and friends.	As a result of this session, the volunteers became more aware about the ill effects of drug abuse.	Health, society	57
10	04-08-2021	Young warrior pledge taking activity	To raise awareness regarding risk factors related to covid-19 about the ways it can spread.	A sense of pride emerged in volunteers for spreading the word of awareness in society.	Education, society	62
11	15-08-2021	Independence day (Azadi Ka Amrit Mahotsav)	To make the volunteers understand the importance of contribution of our freedom fighters and their legacy.	As a result a sense of pride and responsibility emerged among the volunteers towards the country.	Society	55
12	21-08-2021	Mask making activity	To make the volunteers understand the importance of wearing masks during the covid-19 pandemic.	The volunteers made masks at their home and distributed them among the needy people around in their surroundings.	Health, society	115

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
13	29-08-2021	Organ donation webinar	To make the volunteers aware about importance of organ donation & motivate them to pledge to donate their organs after death.	As a result of this session, the volunteers became more aware about the importance of organ donation and ways to do it.	Health, society	118
14	31-08-2021 to 02-09-2021	Covid care immunity booster programme-art of living (MU)	To make the volunteers aware about mental health & teach volunteers different breathing exercises and meditation.	The volunteers learned various exercises which were helpful for them to take a break from their daily hectic schedule.	Health, society	116
15	04-09-2021	Tree plantation drive	To highlight the importance of trees among the volunteers.	The volunteers realized the importance of trees and their impact on the environment & planted 300 plus saplings during the project.	Environment	63
16	05-09-2021	Recycled paper making workshop	To make the volunteers understand the importance of the 3 r's namely reduce, reuse, and recycle.	The volunteers understood the importance of waste management & took up the responsibility of sharing this information among their friends and family.	Environment, society	76
17	08-09-2021 to 09-09-2021	Online first-aid training programme (MU)	To give the volunteers basic first-aid training.	Volunteers were made aware about the basic first-aid steps and measures to be taken.	Health, society	2
18	18-09-2021	Electricity conservation awareness	To spread awareness about saving electricity by using energy efficient devices and methods.	The volunteers spread awareness among families on how they can save electricity and keep the environment safe.	Society	104
19	24-09-2021	NSS foundation day	To make the volunteers aware about importance of NSS & brief them about opportunities that NSS provides.	The volunteers were more inspired and motivated for working as NSS volunteers.	Society	116
20	25-09-2021	Awareness project on government schemes	To spread awareness about government schemes with the help of skits/role play.	As a result of this session, the volunteers became more aware about the importance of various government schemes.	Society	124
21	25-09-2021	German language learning (MU)	To train the volunteers in German language.	Volunteers learnt basics of German language.	Education, society	8
22	26-09-2021	Fitness activity	To make the volunteers aware about physical fitness.	The volunteers learned new exercises which included breathing exercises, standing exercises, etc.	Health, society	79
23	27-09-2021	Hindi diwas	To make the volunteers understand the legacy and the importance of Hindi language.	The volunteers were enlightened about several scholars in Hindi language and understood their importance.	Society	121
24	28-09-2021	General mental health awareness webinar	To spread awareness about mental health among the volunteers.	The volunteers learnt different ways to stay mentally calm and composed.	Health, society	110
25	29-09-2021	Career guidance webinar on public and defence sector	To make the volunteers aware about career opportunities in public and defence sector.	The volunteers gained knowledge about different career opportunities which was less known to them.	Education	114

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
26	30-09-2021	Webinar on sustainable things in day-to-day life	To make the volunteers aware about sustainability.	The volunteers understood the need of sustainability & they learned how sustainability can help in tackling climate change.	Environment	108
27	01-10-2021	Quiz activity	To make the volunteers aware about current affairs of India.	The knowledge of volunteers regarding various important topics was enhanced after attempting the quizzes.	Education	111
28	02-10-2021	Swachhta Abhiyaan	To make the volunteers understand the importance of sanitation.	The volunteers came to know about the importance and essence of cleanliness.	Environment	97
29	03-10-2021	Poster making activity (social issue)	To spread awareness on several social issues by making and putting up posters related to them.	The volunteers made several posters on different social issues like water conservation, global warming etc.	Society	109
30	07-10-2021	Poster making on blood donation	To spread awareness about blood donation and eliminate misconceptions related to it.	The volunteers made handmade posters and spread awareness about donating blood.	Health, society	26
31	10-10-2021	Webinar on HIV & AIDS awareness	To clear misconceptions regarding HIV and aids among the volunteers.	The volunteers came to know about the preventive measures that can be undertaken to restrict the spread of HIV & AIDS	Health, society	108
32	16-10-2021 to 19-10-2021	Roadmap to engineering education	To guide the engineering aspirants towards the engineering education, it's path and its future scope.	The volunteers assisted the college management in the smooth conduct of the event.	Education	50
33	16-10-2021	Webinar on plastic waste upcycling awareness	To make the volunteers aware about plastic waste and its harmful effects on environment.	The volunteers learned how they can do upcycling of plastic waste at commercial and individual level.	Environment, society	102
34	17-10-2021	Online water conservation awareness program	To make the volunteers aware the importance of water conservation.	The volunteers developed the quality of teamwork and understood the need for water conservation.	Environment, society	52
35	23-10-2021	Technical workshop for underprivileged students	To conduct a technical workshop by making videos for underprivileged students by the volunteers.	The volunteers made videos on the basic technical aspects of engineering for the underprivileged students.	Education, society	57
36	28-10-2021	Vaccination drive	To help in the conduct of a vaccination drive organized by the institute.	The volunteers assisted the college management in the smooth conduct of the vaccination drive	Health, society	13
37	29-10-2021	Role of youth in stopping corruption (MU)	To make the volunteers aware about their role in stopping corruption.	Volunteers understood their social responsibility in preventing corruption and similar malpractices.	Society	10
38	30-10-2021	Webinar on tackling marine debris, circular economy & united nations SDG's awareness	To enlighten the volunteers about tackling marine debris, circular economy, and united nations SDG's	The volunteers came to know about united nations SDG's awareness.	Environment	102
39	31-10-2021	Rashtriya ekta diwas pledge taking activity	To learn about the various problems in the country and the need to take action on these problems.	Understood the various problems and pledged to make a change for the betterment of the country.	Society	111

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
40	31-10-2021	Webinar on road safety & traffic control	To enlighten the volunteers about the protocol to be followed when on road.	The volunteers revised the driving rules and learnt about how to drive safely.	Society	42
41	02-11-2021	Awareness webinar on marine pollution	To learn about the marine pollution and its harmful effects.	The volunteers understood the need of preserving marine life and learnt how they can contribute for the same.	Environment	46
42	06-11-2021	BMC school teaching material (digital literacy)	To teach the needy children who are deprived of education due to unavailability of resources.	The volunteers prepared study materials for the underprivileged students.	Education, society	54
43	07-11-2021	Paper and cloth bag making activity	To learn the importance of using cloth and paper bags instead of plastic bags as they are harmful for the environment.	The volunteers prepared several cloth and paper bags and distributed them in their locality.	Environment	40
44	13-11-2021	Street play on social cause	To learn how to convey a social message through a street play.	Understood the various problems in the society and convey the information to the society by a street play.	Society	68
45	14-11-2021 to 08-12-2021	Online voter id registration drive & awareness campaign (MU)	To keep the volunteers aware about the process of online voter id registration.	Volunteers helped in online voter id registration by spreading awareness in their locality.	Society	6
46	14-11-2021	Interaction with the elderly	To make volunteers spend quality time with their elders and also to awaken a sense of gratitude for those who cared for us.	The volunteers made various gift and some even prepared meal for the first time and learnt something new, also they spent some quality time with their elders.	Society	36
47	17-11-2021 to 21-12-2021	Online leadership training program (MU)	To make volunteers future ready to take leadership responsibilities in their future path and career.	Volunteers were thought about various aspects and qualities of leadership.	Education, society	4
48	25-11-2021	District level nic camp selections	To make volunteers understand the importance of national integration.	Two volunteers represented the unit at the district level selections.	Society	2
49	26-11-2021	Constitution awareness quiz activity	To make the volunteers aware about the significance of our constitution.	On the constitution day the volunteers completed a quiz activity on awareness of Indian constitution.	Education, society	93
50	18-12-2021	Homage ceremony	To pay homage to CDS general Bipin Rawat and the other security personnel who lost their lives in the helicopter crash.	Volunteers organized and managed the homage ceremony in the college premises and paid tribute to the departed souls.	Society	31
51	08-01-2022	Drug addiction awareness workshop (MU)	To raise awareness regarding drug addiction and thus preventing its spread among the youth	As a result of this session, the volunteers became more aware about the ill effects of drug abuse.	Health, society	15
52	15-01-2022	Electricity Conservation Awareness Project	To Spread Awareness In The Society For Conserving Electricity	The Volunteers Spread Awareness Among Families On How They Can Save Electricity And Keep The Environment Safe.	Education, Society	58
53	16-01-2022	Webinar On Personal Finance Literacy	To Increase Financial Awareness Among The Volunteers	Volunteers Learned The Importance Of Investments For Financial Planning And Retirement	Education	92

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
54	18-01-2022 to 19-01-2022	National conference on role and contribution of students and youth movements in nation building (MU)	To make the volunteers aware about the role of youth in Indian freedom struggle	The volunteers got patriotically motivated to serve their motherland	Education	2
55	22-01-2022	Parakram Diwas	To Highlight The Contribution Of Unsung Heroes In The Indian Freedom Struggle	The Volunteers Got To Know About The Contribution About Various Unsung Freedom Fighters Whose Roles Got Faded Away After Independence	Education, Society	57
56	23-01-2022	Cyber security workshop (MU)	To explain the volunteers the need for and importance of cyber security	The volunteers became aware about the cyber threats and came to know how to safeguard oneself and others from these threats	Education	4
57	23-01-2022	Smrutigandh Program (MU)	To highlight the notable contribution of Shri Balasaheb Thackeray for the development of the society	Volunteers got to know about the unsung contribution of Shri Balasaheb Thackeray	Society	5
58	23-01-2022	Webinar On Importance Of Mangrove Ecosystem	To Spread Awareness Regarding Conservation Of Mangroves Among The Volunteers	The Seeds Of Knowledge Regarding Mangroves Was Sprouted Among The Determined Minds Of The Volunteers	Education, Environment	95
59	26-01-2022	Republic day flag hoisting ceremony at TCET	To make the volunteers aware about the significance of republic day	As a result, a sense of pride and responsibility emerged among the volunteers towards the country.	Society	25
60	30-01-2022	Thematic Roleplay Activity	To Make The Volunteers Aware About Various Social Evils With The Help Of Various Role Plays	The Volunteers Convened And Broached Various Adverted Issues Through This Activity	Society	96
61	01-02-2022 to 11-02-2022	Soft Skill Development Program (MU)	To Demonstrate The Importance Of Incorporating Soft Skills Into Ones Professional Live	The Volunteer Got To Know About The Essence Of Soft Skill And How They Can Work Upon It	Education	6
62	04-02-2022	Anti-Addiction & Drug Abuse (MU)	To Raise Awareness Regarding Drug Addiction And Thus Preventing Its Spread Among The Youth	As A Result Of This Session, The Volunteers Got To Know About The Dark Side Of Drug Abuse	Education, Health	4
63	05-02-2022	Webinar On Cardiac Arrest	To Teach Volunteers Different Life Saving Techniques To Be Used In Situation Of Cardiac Arrest	The Volunteers Learnt Effective Ways To Quickly Respond In Emergency Cardiac Arrest Situation	Education, Society	99
64	06-02-2022	Webinar on PCOS & menstrual hygiene	To educate the volunteers regarding PCOS and importance of menstrual hygiene	The volunteers understood not to turn a blind eye in case of gynecological health	Education, health	38
65	18-02-2022	Blood Donation Camp	To Encourage People To Donate Blood And Contribute In A Good Cause	A Large Number Of People Actively Participated In This Drive And Donated Their Blood For A Nobel Cause	Health, Society	128
66	19-02-2022	Chhatrapati Shivaji Maharaj Jayanti (MU)	To celebrate the birth anniversary of the great king and his significant role in the nation building	The volunteers got to know about the crucial role of Chhatrapati Shivaji Maharaj in building Swarajya	Society	4

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
67	21-02-2022 to 24-02-2022	Mpower (Youth Mental Health First Aid)	To spread awareness of mental health among the volunteers and teaching them ways to stay mentally fit	The volunteers got to know about the significance of mental health	Education, health	21
68	26-02-2022	Degree certificate distribution ceremony	The volunteers were asked to maintain discipline and decorum of the program	The volunteers helped in the smooth conduct of the ceremony	Society	40
69	27-02-2022	Webinar on e-waste awareness	To teach volunteers the importance of treating and recycling e-waste	This session left the volunteers with lots of innovative ideas for recycling e-waste which can result in a cleaner and greener environment	Education, environment	116
70	28-02-2022	National science day	To ignite the curiosity regarding science and its phenomenon among the minds of the volunteers	The volunteers got motivated to work on vivid scientific projects which can be beneficial for the masses	Education	126
71	05-03-2022	Jeevan Doot Training Program	To Make The Volunteers Trained First Responders To Respond In Emergency Situation Of Road Accidents	The Volunteers Learnt Not To Hesitate In Panic Situations Like Road Accidents And Offer A Helping Hand Rather Than Being A Part Of The Crowd	Education, Society	50
72	06-03-2022	Webinar On Pocso Act Awareness	To Educate The Volunteers About The Laws Made By Government For Child Safety Against Sexual Abuse.	The Volunteers Understood What Pocso Is And How It Can Help Sexually Abused Victims To Get Justice.	Education, Society	2
73	08-03-2022	NSS LDP On Women Self Defence Training & Nirbhaya Squad Awareness (MU)	To Spread Awareness Among Women Regarding Self Defence And Teach Them Some Methods For The Same	The Participants Gained Confidence And Skills To Defend Themselves In Any Dangerous Situation	Education	5
74	08-03-2022	Women's Day Celebration (MU)	To Spotlight The Sacrifice And Unattainable Work Done By The Women	The Volunteers Got To Know About Their Civil Rights And Also Got Encouraged To Uplift The Society	Society	4
75	15-03-2022 to 16-03-2022	Medical camp for TCET faculty	To make sure that all the faculty members are healthy	The faculty members got conscious regarding their health	Health, society	36
76	17-03-2022	Patriotic run	To pay tribute to veterans of India who sacrificed their life for India	The volunteers ran the marathon with great enthusiasm keeping in mind the idea behind this event	Health	28
77	19-03-2022	Basic self-defence training workshop	To teach volunteers effective karate self-defence techniques	The volunteers learnt how they can protect themselves under various unforeseen circumstances	Education	69
78	19-03-2022	Poster Making Activity For Ashram Beautification	To Make Posters Highlighting The Importance Of Different Trees And Old Age Quotes	The Volunteers Prepared The Posters And Explained The Idea Behind It	Society	69
79	20-03-2022	Old age home visit	To bond with elders who stay away from their families	The volunteers spent quality time with people in the ashram and also helped them in cleaning premises	Society	74
80	26-03-2022	Awareness project on government schemes (Singh estate)	To spread awareness about government schemes with the help of poster/infographics, etc.	As a result of this session, the volunteers became more aware about the importance of various government schemes.	Society	50

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
81	27-03-2022	Traffic Management Project	To Make The People Aware About The Safety Norm To Be Followed On The Roads.	The Volunteers Worked Effortlessly To Encourage People To Obey The Traffic Rules.	Education, Society	2

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	19-06-2021	Yoga for young minds (Ministry of Ayush-MU)	To make the volunteers understand the importance of yoga and all the eminent yoga traditions in India.	The volunteers understood the benefits of yoga and its traditions.	Health, society	57
2	20-06-2021 to 21-06-2021	Training sessions of yoga (MU)	To make conscious efforts to improve emotional and spiritual health of volunteers.	The volunteers understood the basic philosophy of yoga.	Health, society	63
3	21-06-2021	International yoga day (TCET)	To learn and practice the ancient science of health and healing through yoga.	The volunteers understood the importance of yoga in terms of physical, emotional, and spiritual well-being.	Health, society	60
4	02-07-2021	Prashn Vidyarthyanch e (MU)	To make the volunteers aware about the importance of innovative practices in education system.	Volunteers understood about the various innovative practices used to educate under-privileged students.	Education, society	8
5	18-07-2021	Awareness on gender equality	To make the volunteers understand the equality between girls and boys, women, and men, of all culture and ethnic origins.	Volunteers then participated in group discussion where their thinking, listening, and speaking skills were improved.	Society	50
6	25-07-2021	Kargil vijay diwas	To make the volunteers understand the importance of kargil vijay diwas.	Volunteers understood the contribution of the Indian army and they also came to know about the brave soldiers who sacrificed their lives while fighting for the country.	Society	57
7	29-07-2021	Tree plantation (MU)	To highlight the importance of trees among the volunteers.	The volunteers realized the importance of trees and their impact on the environment & planted 300 plus saplings during the project.	Environment	57
8	01-08-2021	Webinar on nasha mukti	To make volunteers aware about the ill-effects of substance abuse & motivate them to spread the knowledge of ill effects of drugs among their family and friends.	As a result of this session, the volunteers became more aware about the ill effects of drug abuse.	Health, society	57
9	04-08-2021	Young warrior pledge taking activity	To raise awareness regarding risk factors related to covid-19 about the ways it can spread.	A sense of pride emerged in volunteers for spreading the word of awareness in society.	Education, society	62
10	15-08-2021	Independence Day (Azadi Ka Amrit Mahotsav)	To make the volunteers understand the importance of contribution of our freedom fighters and their legacy.	As a result, a sense of pride and responsibility emerged among the volunteers towards the country.	Society	55
11	21-08-2021	Mask making activity	To make the volunteers understand the importance of wearing masks during the covid-19 pandemic.	The volunteers made masks at their home and distributed them among the needy people around in their surroundings.	Health, society	115
12	29-08-2021	Organ donation webinar	To make the volunteers aware about importance of organ donation & motivate them to pledge to donate their organs after death.	As a result of this session, the volunteers became more aware about the importance of organ donation and ways to do it.	Health, society	118

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
13	31-08-2021 to 02-09-2021	Covid care immunity booster programme- art of living (MU)	To make the volunteers aware about mental health & teach volunteers different breathing exercises and meditation.	The volunteers learned various exercises which were helpful for them to take a break from their daily hectic schedule.	Health, society	116
14	04-09-2021	Tree plantation drive	To highlight the importance of trees among the volunteers.	The volunteers realized the importance of trees and their impact on the environment & planted 300 plus saplings during the project.	Environment	63
15	05-09-2021	Recycled paper making workshop	To make the volunteers understand the importance of the 3 r's namely reduce, reuse, and recycle.	The volunteers understood the importance of waste management & took up the responsibility of sharing this information among their friends and family.	Environment, society	76
16	08-09-2021 to 09-09-2021	Online first-aid training programme (MU)	To give the volunteers basic first-aid training.	Volunteers were made aware about the basic first-aid steps and measures to be taken.	Health, society	2
17	18-09-2021	Electricity conservation awareness	To spread awareness about saving electricity by using energy efficient devices and methods.	The volunteers spread awareness among families on how they can save electricity and keep the environment safe.	Society	104
18	25-09-2021	Awareness project on government schemes	To spread awareness about government schemes with the help of skits/role play.	As a result of this session, the volunteers became more aware about the importance of various government schemes.	Society	124
19	26-09-2021	Fitness activity	To make the volunteers aware about physical fitness.	The volunteers learned new exercises which included breathing exercises, standing exercises, etc.	Health, society	79
20	27-09-2021	Hindi diwas	To make the volunteers understand the legacy and the importance of Hindi language.	The volunteers were enlightened about several scholars in Hindi language and understood their importance.	Society	121
21	28-09-2021	General mental health awareness webinar	To spread awareness about mental health among the volunteers.	The volunteers learnt different ways to stay mentally calm and composed.	Health, society	110
22	29-09-2021	Career guidance webinar on public and defence sector	To make the volunteers aware about career opportunities in public and defence sector.	The volunteers gained knowledge about different career opportunities which was less known to them.	Education	114
23	30-09-2021	Webinar on sustainable things in day-to-day life	To make the volunteers aware about sustainability.	The volunteers understood the need of sustainability & they learned how sustainability can help in tackling climate change.	Environment	108
24	02-10-2021	Swachhta Abhiyan	To make the volunteers understand the importance of sanitation.	The volunteers came to know about the importance and essence of cleanliness.	Environment	97
25	03-10-2021	Poster making activity (social issue)	To spread awareness on several social issues by making and putting up posters related to them.	The volunteers made several posters on different social issues like water conservation, global warming etc.	Society	109

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
26	07-10-2021	Poster making on blood donation	To spread awareness about blood donation and eliminate misconceptions related to it.	The volunteers made handmade posters and spread awareness about donating blood.	Health, society	26
27	10-10-2021	Webinar on HIV & AIDS awareness	To clear misconceptions regarding HIV and aids among the volunteers.	The volunteers came to know about the preventive measures that can be undertaken to restrict the spread of HIV & AIDS	Health, society	108
28	16-10-2021	Webinar on plastic waste upcycling awareness	To make the volunteers aware about plastic waste and its harmful effects on environment.	The volunteers learned how they can do upcycling of plastic waste at commercial and individual level.	Environment, society	102
29	17-10-2021	Online water conservation awareness program	To make the volunteers aware the importance of water conservation.	The volunteers developed the quality of teamwork and understood the need for water conservation.	Environment, society	52
30	23-10-2021	Technical workshop for underprivileg ed students	To conduct a technical workshop by making videos for underprivileged students by the volunteers.	The volunteers made videos on the basic technical aspects of engineering for the underprivileged students.	Education, society	57
31	28-10-2021	Vaccination drive	To help in the conduct of a vaccination drive organized by the institute.	The volunteers assisted the college management in the smooth conduct of the vaccination drive	Health, society	13
32	29-10-2021	Role of youth in stopping corruption (MU)	To make the volunteers aware about their role in stopping corruption.	Volunteers understood their social responsibility in preventing corruption and similar malpractices.	Society	10
33	30-10-2021	Webinar on tackling marine debris, circular economy & united nations SDG's awareness	To enlighten the volunteers about tackling marine debris, circular economy, and united nations SDG's	The volunteers came to know about united nations SDG's awareness.	Environment	102
34	31-10-2021	Rashtriya ekta diwas pledge taking activity	To learn about the various problems in the country and the need to take action on these problems.	Understood the various problems and pledged to make a change for the betterment of the country.	Society	111
35	31-10-2021	Webinar on road safety & traffic control	To enlighten the volunteers about the protocol to be followed when on road.	The volunteers revised the driving rules and learnt about how to drive safely.	Society	42
36	02-11-2021	Awareness webinar on marine pollution	To learn about the marine pollution and its harmful effects.	The volunteers understood the need of preserving marine life and learnt how they can contribute for the same.	Environment	46
37	06-11-2021	BMC school teaching material (digital literacy)	To teach the needy children who are deprived of education due to unavailability of resources.	The volunteers prepared study materials for the underprivileged students.	Education, society	54
38	07-11-2021	Paper and cloth bag making activity	To learn the importance of using cloth and paper bags instead of plastic bags as they are harmful for the environment.	The volunteers prepared several cloth and paper bags and distributed them in their locality.	Environment	40
39	13-11-2021	Street play on social cause	To learn how to convey a social message through a street play.	Understood the various problems in the society and convey the information to the society by a street play.	Society	68

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
40	14-11-2021 to 08-12-2021	Online voter id registration drive & awareness campaign (MU)	To keep the volunteers aware about the process of online voter id registration.	Volunteers helped in online voter id registration by spreading awareness in their locality.	Society	6
41	14-11-2021	Interaction with the elderly	To make volunteers spend quality time with their elders and also to awaken a sense of gratitude for those who cared for us.	The volunteers made various gift and some even prepared meal for the first time and learnt something new, also they spent some quality time with their elders.	Society	36
42	17-11-2021 to 21-12-2021	Online leadership training program (MU)	To make volunteers future ready to take leadership responsibilities in their future path and career.	Volunteers were thought about various aspects and qualities of leadership.	Education, society	4
43	25-11-2021	District level nic camp selections	To make volunteers understand the importance of national integration.	Two volunteers represented the unit at the district level selections.	Society	2
44	18-12-2021	Homage ceremony	To pay homage to CDS general Bipin Rawat and the other security personnel who lost their lives in the helicopter crash.	Volunteers organized and managed the homage ceremony in the college premises and paid tribute to the departed souls.	Society	31
45	08-01-2022	Drug addiction awareness workshop (MU)	To raise awareness regarding drug addiction and thus preventing its spread among the youth	As a result of this session, the volunteers became more aware about the ill effects of drug abuse.	Health, society	15
46	15-01-2022	Electricity Conservation Awareness Project	To Spread Awareness in The Society For Conserving Electricity	The Volunteers Spread Awareness Among Families on How They Can Save Electricity And Keep The Environment Safe.	Education, Society	58
47	18-01-2022 to 19-01-2022	National conference on role and contribution of students and youth movements in nation building (MU)	To make the volunteers aware about the role of youth in Indian freedom struggle	The volunteers got patriotically motivated to serve their motherland	Education	2
48	22-01-2022	Parakram Diwas	To Highlight The Contribution Of Unsung Heroes In The Indian Freedom Struggle	The Volunteers Got To Know About The Contribution About Various Unsung Freedom Fighters Whose Roles Got Faded Away After Independence	Education, Society	57
49	23-01-2022	Cyber security workshop (MU)	To explain the volunteers the need and importance of cyber security	The volunteers became aware about the cyber threats and came to know how to safeguard oneself and others from these threats	Education	4
50	23-01-2022	Smrutigandh Program (MU)	To highlight the notable contribution of Shri Balasaheb Thackeray for the development of the society	Volunteers got to know about the unsung contribution of Shri Balasaheb Thackeray	Society	5
51	23-01-2022	Webinar On Importance of Mangrove Ecosystem	To Spread Awareness Regarding Conservation of Mangroves Among The Volunteers	The Seeds of Knowledge Regarding Mangroves Was Sprouted Among The Determined Minds Of The Volunteers	Education, Environment	95

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
52	26-01-2022	Republic day flag hoisting ceremony at TCET	To make the volunteers aware about the significance of republic day	As a result, a sense of pride and responsibility emerged among the volunteers towards the country.	Society	25
53	30-01-2022	Thematic Roleplay Activity	To Make the Volunteers Aware About Various Social Evils With The Help Of Various Role Plays	The Volunteers Convened and Broached Various Adverted Issues Through This Activity	Society	96
54	04-02-2022	Anti-Addiction & Drug Abuse (MU)	To Raise Awareness Regarding Drug Addiction and Thus Preventing Its Spread Among The Youth	As A Result of This Session, The Volunteers Got To Know About The Dark Side Of Drug Abuse	Education, Health	4
55	05-02-2022	Webinar On Cardiac Arrest	To Teach Volunteers Different Life Saving Techniques to Be Used In Situation Of Cardiac Arrest	The Volunteers Learnt Effective Ways to Quickly Respond In Emergency Cardiac Arrest Situation	Education, Society	99
56	06-02-2022	Webinar on PCOS & menstrual hygiene	To educate the volunteers regarding PCOS and importance of menstrual hygiene	The volunteers understood not to turn a blind eye in case of gynecological health	Education, health	38
57	18-02-2022	Blood Donation Camp	To Encourage People to Donate Blood And Contribute In An Good Cause	A Large Number of People Actively Participated In This Drive And Donated Their Blood For A Nobel Cause	Health, Society	128
58	19-02-2022	Chhatrapati Shivaji Maharaj Jayanti (MU)	To celebrate the birth anniversary of the great king and his significant role in the nation building	The volunteers got to know about the crucial role of Chhatrapati Shivaji Maharaj in building Swarajya	Society	4
59	21-02-2022 to 24-02-2022	Mpower (Youth Mental Health First Aid)	To spread awareness of mental health among the volunteers and teaching them ways to stay mentally fit	The volunteers got to know about the significance of mental health	Education, health	21
60	27-02-2022	Webinar on e-waste awareness	To teach volunteers the importance of treating and recycling e-waste	This session left the volunteers with lots of innovative ideas for recycling e-waste which can result in a cleaner and greener environment	Education, environment	116
61	05-03-2022	Jeevan Doot Training Program	To Make the Volunteers Trained First Responders To Respond In Emergency Situation Of Road Accidents	The Volunteers Learnt Not to Hesitate In Panic Situations Like Road Accidents And Offer A Helping Hand Rather Than Being A Part Of The Crowd	Education, Society	50
62	06-03-2022	Webinar On Pocso Act Awareness	To Educate the Volunteers About The Laws Made By Government For Child Safety Against Sexual Abuse.	The Volunteers Understood What Pocso Is and How It Can Help Sexually Abused Victims To Get Justice.	Education, Society	2
63	08-03-2022	NSS LDP On Women Self Defence Training & Nirbhaya Squad Awareness (MU)	To Spread Awareness Among Women Regarding Self Defence and Teach Them Some Methods For The Same	The Participants Gained Confidence and Skills To Defend Themselves In Any Dangerous Situation	Education	5
64	08-03-2022	Women's Day Celebration (MU)	To Spotlight the Sacrifice And Unattainable Work Done By The Women	The Volunteers Got to Know About Their Civil Rights And Also Got Encouraged To Uplift The Society	Society	4
65	15-03-2022 to 16-03-2022	Medical camp for TCET faculty	To make sure that all the faculty members are healthy	The faculty members got conscious regarding their health	Health, society	36

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
66	17-03-2022	Patriotic run	To pay tribute to veterans of India who sacrificed their life for India	The volunteers ran the marathon with great enthusiasm keeping in mind the idea behind this event	Health	28
67	19-03-2022	Basic self-defence training workshop	To teach volunteers effective karate self-defence techniques	The volunteers learnt how they can protect themselves under various unforeseen circumstances	Education	69
68	19-03-2022	Poster Making Activity for Ashram Beautification	To Make Posters Highlighting the Importance Of Different Trees And Old Age Quotes	The Volunteers Prepared the Posters And Explained The Idea Behind It	Society	69
69	20-03-2022	Old age home visit	To bond with elders who stay away from their families	The volunteers spent quality time with people in the ashram and also helped them in cleaning premises	Society	74
70	26-03-2022	Awareness project on government schemes (Singh estate)	To spread awareness about government schemes with the help of poster/infographics, etc.	As a result of this session, the volunteers became more aware about the importance of various government schemes.	Society	50
71	27-03-2022	Traffic Management Project	To Make the People Aware About The Safety Norm To Be Followed On The Roads.	The Volunteers Worked Effortlessly to Encourage People To Obey The Traffic Rules.	Education, Society	2

Annexure – VIII

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

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
1	19-06-2021	Yoga for young minds (Ministry of Ayush-MU)	To make the volunteers understand the importance of yoga and all the eminent yoga traditions in India.	The volunteers understood the benefits of yoga and its traditions.	Health, society	57
2	20-06-2021 to 21-06-2021	Training sessions of yoga (MU)	To make conscious efforts to improve emotional and spiritual health of volunteers.	The volunteers understood the basic philosophy of yoga.	Health, society	63
3	21-06-2021	International yoga day (TCET)	To learn and practice the ancient science of health and healing through yoga.	The volunteers understood the importance of yoga in terms of physical, emotional, and spiritual well-being.	Health, society	60
4	02-07-2021	Prashn Vidyarthyanch e (MU)	To make the volunteers aware about the importance of innovative practices in education system.	Volunteers understood about the various innovative practices used to educate under-privileged students.	Education, society	8
5	18-07-2021	Awareness on gender equality	To make the volunteers understand the equality between girls and boys, women, and men, of all culture and ethnic origins.	Volunteers then participated in group discussion where their thinking, listening, and speaking skills were improved.	Society	50
6	25-07-2021	Kargil vijay diwas	To make the volunteers understand the importance of kargil vijay diwas.	Volunteers understood the contribution of the Indian army and they also came to know about the brave soldiers who sacrificed their lives while fighting for the country.	Society	57
7	29-07-2021	Tree plantation (MU)	To highlight the importance of trees among the volunteers.	The volunteers realized the importance of trees and their impact on the environment & planted 300 plus saplings during the project.	Environment	57
8	01-08-2021	Webinar on nasha mukti	To make volunteers aware about the ill-effects of substance abuse & motivate them to spread the knowledge of ill effects of drugs among their family and friends.	As a result of this session, the volunteers became more aware about the ill effects of drug abuse.	Health, society	57
9	04-08-2021	Young warrior pledge taking activity	To raise awareness regarding risk factors related to covid-19 about the ways it can spread.	A sense of pride emerged in volunteers for spreading the word of awareness in society.	Education, society	62
10	15-08-2021	Independence Day (Azadi Ka Amrit Mahotsav)	To make the volunteers understand the importance of contribution of our freedom fighters and their legacy.	As a result, a sense of pride and responsibility emerged among the volunteers towards the country.	Society	55
11	21-08-2021	Mask making activity	To make the volunteers understand the importance of wearing masks during the covid-19 pandemic.	The volunteers made masks at their home and distributed them among the needy people around in their surroundings.	Health, society	115
12	29-08-2021	Organ donation webinar	To make the volunteers aware about importance of organ donation & motivate them to pledge to donate their organs after death.	As a result of this session, the volunteers became more aware about the importance of organ donation and ways to do it.	Health, society	118

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
13	31-08-2021 to 02-09-2021	Covid care immunity booster programme- art of living (MU)	To make the volunteers aware about mental health & teach volunteers different breathing exercises and meditation.	The volunteers learned various exercises which were helpful for them to take a break from their daily hectic schedule.	Health, society	116
14	04-09-2021	Tree plantation drive	To highlight the importance of trees among the volunteers.	The volunteers realized the importance of trees and their impact on the environment & planted 300 plus saplings during the project.	Environment	63
15	05-09-2021	Recycled paper making workshop	To make the volunteers understand the importance of the 3 r's namely reduce, reuse, and recycle.	The volunteers understood the importance of waste management & took up the responsibility of sharing this information among their friends and family.	Environment, society	76
16	08-09-2021 to 09-09-2021	Online first-aid training programme (MU)	To give the volunteers basic first-aid training.	Volunteers were made aware about the basic first-aid steps and measures to be taken.	Health, society	2
17	18-09-2021	Electricity conservation awareness	To spread awareness about saving electricity by using energy efficient devices and methods.	The volunteers spread awareness among families on how they can save electricity and keep the environment safe.	Society	104
18	25-09-2021	Awareness project on government schemes	To spread awareness about government schemes with the help of skits/role play.	As a result of this session, the volunteers became more aware about the importance of various government schemes.	Society	124
19	26-09-2021	Fitness activity	To make the volunteers aware about physical fitness.	The volunteers learned new exercises which included breathing exercises, standing exercises, etc.	Health, society	79
20	27-09-2021	Hindi diwas	To make the volunteers understand the legacy and the importance of Hindi language.	The volunteers were enlightened about several scholars in Hindi language and understood their importance.	Society	121
21	28-09-2021	General mental health awareness webinar	To spread awareness about mental health among the volunteers.	The volunteers learnt different ways to stay mentally calm and composed.	Health, society	110
22	29-09-2021	Career guidance webinar on public and defence sector	To make the volunteers aware about career opportunities in public and defence sector.	The volunteers gained knowledge about different career opportunities which was less known to them.	Education	114
23	30-09-2021	Webinar on sustainable things in day-to-day life	To make the volunteers aware about sustainability.	The volunteers understood the need of sustainability & they learned how sustainability can help in tackling climate change.	Environment	108
24	02-10-2021	Swachhta Abhiyan	To make the volunteers understand the importance of sanitation.	The volunteers came to know about the importance and essence of cleanliness.	Environment	97
25	03-10-2021	Poster making activity (social issue)	To spread awareness on several social issues by making and putting up posters related to them.	The volunteers made several posters on different social issues like water conservation, global warming etc.	Society	109

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
26	07-10-2021	Poster making on blood donation	To spread awareness about blood donation and eliminate misconceptions related to it.	The volunteers made handmade posters and spread awareness about donating blood.	Health, society	26
27	10-10-2021	Webinar on HIV & AIDS awareness	To clear misconceptions regarding HIV and aids among the volunteers.	The volunteers came to know about the preventive measures that can be undertaken to restrict the spread of HIV & AIDS	Health, society	108
28	16-10-2021	Webinar on plastic waste upcycling awareness	To make the volunteers aware about plastic waste and its harmful effects on environment.	The volunteers learned how they can do upcycling of plastic waste at commercial and individual level.	Environment, society	102
29	17-10-2021	Online water conservation awareness program	To make the volunteers aware the importance of water conservation.	The volunteers developed the quality of teamwork and understood the need for water conservation.	Environment, society	52
30	23-10-2021	Technical workshop for underprivileg ed students	To conduct a technical workshop by making videos for underprivileged students by the volunteers.	The volunteers made videos on the basic technical aspects of engineering for the underprivileged students.	Education, society	57
31	28-10-2021	Vaccination drive	To help in the conduct of a vaccination drive organized by the institute.	The volunteers assisted the college management in the smooth conduct of the vaccination drive	Health, society	13
32	29-10-2021	Role of youth in stopping corruption (MU)	To make the volunteers aware about their role in stopping corruption.	Volunteers understood their social responsibility in preventing corruption and similar malpractices.	Society	10
33	30-10-2021	Webinar on tackling marine debris, circular economy & united nations SDG's awareness	To enlighten the volunteers about tackling marine debris, circular economy, and united nations SDG's	The volunteers came to know about united nations SDG's awareness.	Environment	102
34	31-10-2021	Rashtriya ekta diwas pledge taking activity	To learn about the various problems in the country and the need to take action on these problems.	Understood the various problems and pledged to make a change for the betterment of the country.	Society	111
35	31-10-2021	Webinar on road safety & traffic control	To enlighten the volunteers about the protocol to be followed when on road.	The volunteers revised the driving rules and learnt about how to drive safely.	Society	42
36	02-11-2021	Awareness webinar on marine pollution	To learn about the marine pollution and its harmful effects.	The volunteers understood the need of preserving marine life and learnt how they can contribute for the same.	Environment	46
37	06-11-2021	BMC school teaching material (digital literacy)	To teach the needy children who are deprived of education due to unavailability of resources.	The volunteers prepared study materials for the underprivileged students.	Education, society	54
38	07-11-2021	Paper and cloth bag making activity	To learn the importance of using cloth and paper bags instead of plastic bags as they are harmful for the environment.	The volunteers prepared several cloth and paper bags and distributed them in their locality.	Environment	40
39	13-11-2021	Street play on social cause	To learn how to convey a social message through a street play.	Understood the various problems in the society and convey the information to the society by a street play.	Society	68

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
40	14-11-2021 to 08-12-2021	Online voter id registration drive & awareness campaign (MU)	To keep the volunteers aware about the process of online voter id registration.	Volunteers helped in online voter id registration by spreading awareness in their locality.	Society	6
41	14-11-2021	Interaction with the elderly	To make volunteers spend quality time with their elders and also to awaken a sense of gratitude for those who cared for us.	The volunteers made various gift and some even prepared meal for the first time and learnt something new, also they spent some quality time with their elders.	Society	36
42	17-11-2021 to 21-12-2021	Online leadership training program (MU)	To make volunteers future ready to take leadership responsibilities in their future path and career.	Volunteers were thought about various aspects and qualities of leadership.	Education, society	4
43	25-11-2021	District level nic camp selections	To make volunteers understand the importance of national integration.	Two volunteers represented the unit at the district level selections.	Society	2
44	18-12-2021	Homage ceremony	To pay homage to CDS general Bipin Rawat and the other security personnel who lost their lives in the helicopter crash.	Volunteers organized and managed the homage ceremony in the college premises and paid tribute to the departed souls.	Society	31
45	08-01-2022	Drug addiction awareness workshop (MU)	To raise awareness regarding drug addiction and thus preventing its spread among the youth	As a result of this session, the volunteers became more aware about the ill effects of drug abuse.	Health, society	15
46	15-01-2022	Electricity Conservation Awareness Project	To Spread Awareness in The Society For Conserving Electricity	The Volunteers Spread Awareness Among Families on How They Can Save Electricity And Keep The Environment Safe.	Education, Society	58
47	18-01-2022 to 19-01-2022	National conference on role and contribution of students and youth movements in nation building (MU)	To make the volunteers aware about the role of youth in Indian freedom struggle	The volunteers got patriotically motivated to serve their motherland	Education	2
48	22-01-2022	Parakram Diwas	To Highlight the Contribution Of Unsung Heroes In The Indian Freedom Struggle	The Volunteers Got to Know About The Contribution About Various Unsung Freedom Fighters Whose Roles Got Faded Away After Independence	Education, Society	57
49	23-01-2022	Cyber security workshop (MU)	To explain the volunteers the need for and importance of cyber security	The volunteers became aware about the cyber threats and came to know how to safeguard oneself and others from these threats	Education	4
50	23-01-2022	Smrutigandh Program (MU)	To highlight the notable contribution of Shri Balasaheb Thackeray for the development of the society	Volunteers got to know about the unsung contribution of Shri Balasaheb Thackeray	Society	5
51	23-01-2022	Webinar On Importance of Mangrove Ecosystem	To Spread Awareness Regarding Conservation of Mangroves Among The Volunteers	The Seeds of Knowledge Regarding Mangroves Was Sprouted Among The Determined Minds Of The Volunteers	Education, Environment	95

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
52	26-01-2022	Republic day flag hoisting ceremony at TCET	To make the volunteers aware about the significance of republic day	As a result, a sense of pride and responsibility emerged among the volunteers towards the country.	Society	25
53	30-01-2022	Thematic Roleplay Activity	To Make the Volunteers Aware About Various Social Evils With The Help Of Various Role Plays	The Volunteers Convened and Broached Various Adverted Issues Through This Activity	Society	96
54	04-02-2022	Anti-Addiction & Drug Abuse (MU)	To Raise Awareness Regarding Drug Addiction and Thus Preventing Its Spread Among The Youth	As A Result of This Session, The Volunteers Got To Know About The Dark Side Of Drug Abuse	Education, Health	4
55	05-02-2022	Webinar On Cardiac Arrest	To Teach Volunteers Different Life Saving Techniques to Be Used In Situation Of Cardiac Arrest	The Volunteers Learnt Effective Ways to Quickly Respond In Emergency Cardiac Arrest Situation	Education, Society	99
56	06-02-2022	Webinar on PCOS & menstrual hygiene	To educate the volunteers regarding PCOS and importance of menstrual hygiene	The volunteers understood not to turn a blind eye in case of gynecological health	Education, health	38
57	18-02-2022	Blood Donation Camp	To Encourage People to Donate Blood And Contribute In A Good Cause	A Large Number of People Actively Participated In This Drive And Donated Their Blood For A Nobel Cause	Health, Society	128
58	19-02-2022	Chhatrapati Shivaji Maharaj Jayanti (MU)	To celebrate the birth anniversary of the great king and his significant role in the nation building	The volunteers got to know about the crucial role of Chhatrapati Shivaji Maharaj in building Swarajya	Society	4
59	21-02-2022 to 24-02-2022	Mpower (Youth Mental Health First Aid)	To spread awareness of mental health among the volunteers and teaching them ways to stay mentally fit	The volunteers got to know about the significance of mental health	Education, health	21
60	27-02-2022	Webinar on e-waste awareness	To teach volunteers the importance of treating and recycling e-waste	This session left the volunteers with lots of innovative ideas for recycling e-waste which can result in a cleaner and greener environment	Education, environment	116
61	05-03-2022	Jeevan Doot Training Program	To Make the Volunteers Trained First Responders To Respond In Emergency Situation Of Road Accidents	The Volunteers Learnt Not to Hesitate In Panic Situations Like Road Accidents And Offer A Helping Hand Rather Than Being A Part Of The Crowd	Education, Society	50
62	06-03-2022	Webinar On Pocso Act Awareness	To Educate the Volunteers About The Laws Made By Government For Child Safety Against Sexual Abuse.	The Volunteers Understood What Pocso Is and How It Can Help Sexually Abused Victims To Get Justice.	Education, Society	2
63	08-03-2022	NSS LDP On Women Self Defence Training & Nirbhaya Squad Awareness (MU)	To Spread Awareness Among Women Regarding Self Defence and Teach Them Some Methods For The Same	The Participants Gained Confidence and Skills To Defend Themselves In Any Dangerous Situation	Education	5
64	08-03-2022	Women's Day Celebration (MU)	To Spotlight the Sacrifice And Unattainable Work Done By The Women	The Volunteers Got to Know About Their Civil Rights And Also Got Encouraged To Uplift The Society	Society	4
65	15-03-2022 to 16-03-2022	Medical camp for TCET faculty	To make sure that all the faculty members are healthy	The faculty members got conscious regarding their health	Health, society	36

Sr. No.	Date	Name of Activity	Objective	Outcome	Domain	Count of Volunteers
66	17-03-2022	Patriotic run	To pay tribute to veterans of India who sacrificed their life for India	The volunteers ran the marathon with great enthusiasm keeping in mind the idea behind this event	Health	28
67	19-03-2022	Basic self-defence training workshop	To teach volunteers effective karate self-defence techniques	The volunteers learnt how they can protect themselves under various unforeseen circumstances	Education	69
68	19-03-2022	Poster Making Activity for Ashram Beautification	To Make Posters Highlighting the Importance Of Different Trees And Old Age Quotes	The Volunteers Prepared the Posters And Explained The Idea Behind It	Society	69
69	20-03-2022	Old age home visit	To bond with elders who stay away from their families	The volunteers spent quality time with people in the ashram and also helped them in cleaning premises	Society	74
70	26-03-2022	Awareness project on government schemes (Singh estate)	To spread awareness about government schemes with the help of poster/infographics, etc.	As a result of this session, the volunteers became more aware about the importance of various government schemes.	Society	50
71	27-03-2022	Traffic Management Project	To Make the People Aware About The Safety Norm To Be Followed On The Roads.	The Volunteers Worked Effortlessly to Encourage People To Obey The Traffic Rules.	Education, Society	2

Annexure – IX

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

Sr.No	Activity Name	Duration	Outcome	No of participants (from host college and partner colleges)
1	Academic Exchange Program (Webinar for knowing emerging technology and building leadership ability for budding engineers) : · Artificial Intelligence and Machine Learning · Artificial Intelligence and Data Science · IOT · Leadership Development · (4 Parallel Tracks)	7th August 2021	Program Created awareness about emerging technology.	247
2	Debate Competition 1. Technical Topics 2. Non-Technical topics	18th September 2021	This helped students to improve communicating skills and dissolve stage fear.	18 groups (34 students)
3	Dissemination of information about paired state (1. Poster Making Competition 2. Essay writing Competition)	16th October 2021	This competition brought awareness about other state cultures, heritage and food habits etc.	16
4	Seminar on "Technical Paper Writing" at Dr. Daulatrao Aher College Of Engineering, Vidyanagar Extn. Banawadi, Satara, Karad, Maharashtra	18th Dec 2021	Seminar created awareness about paper writing among students.	75+
5	Student Exchange Program : Webinar on "Health and Hygiene" Under Azadi ka Amrut Mahotsav Ayush Ministry	5th March 2022	Webinar created awareness about Health and Hygiene	194
6	TSDW –NIP Cultural Event "online Sojourn:22"	9th April 2022	Program exhibited culture of state through various events.	120
7	Student Exchange Program : Preparing national level examiner list	Jan- March 2022	This is to bring diversity in conducting exams	82
8	Student Exchange Program : Collaborative Paper Writing	Initiated in AY 21-22 odd sem April 2022	This brought a collaborative research attitude among students.	10