



YEARLY STATUS REPORT - 2023-2024

Part A

Data of the Institution

1.Name of the Institution

Thiagrajar College of Engineering

- Name of the Head of the institution
- Designation
- Does the institution function from its own campus?

Dr L ASHOK KUMAR

Principal

Yes

- Phone No. of the Principal
- Alternate phone No.
- Mobile No. (Principal)
- Registered e-mail ID (Principal)
- Address
- City/Town
- State/UT
- Pin Code

04522482430

04522482240

9843281115

principal@tce.edu

Thiagarajar College of Engineering

Madurai

Tamil Nadu

625 015

2.Institutional status

- Autonomous Status (Provide the date of conferment of Autonomy)
- Type of Institution
- Location

01/06/1987

Co-education

Semi-Urban

- Financial Status

Grants-in aid

- Name of the IQAC Co-ordinator/Director **Dr. S.J.Thiruvengadam**
- Phone No. **04522482240**
- Mobile No: **9865079402**
- IQAC e-mail ID **directoraap@tce.edu**

3.Website address (Web link of the AQAR (Previous Academic Year)

<https://www.tce.edu/sites/default/files/naac/SSR-Cycle-II-Approved.pdf>

4.Was the Academic Calendar prepared for that year?

Yes

- if yes, whether it is uploaded in the Institutional website Web link:

<https://www.tce.edu/sites/default/files/PDF/Academic-Calendar-2023-24.pdf>

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A+	3.47	2019	29/03/2019	28/03/2024
Cycle 2	A++	3.56	2024	05/09/2024	04/09/2029

6.Date of Establishment of IQAC

01/08/2018

7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?

Institution/ Department/Faculty/School	Scheme	Funding Agency	Year of Award with Duration	Amount
Thiagarajar College of Engineering	Technology Business Incubator (TBI)	DST NST EDB	22/12/2014	17154666

8.Provide details regarding the composition of the IQAC:

- Upload the latest notification regarding the [View File](#)

composition of the IQAC by the HEI

9.No. of IQAC meetings held during the year 4

- Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website? **Yes**

- If No, please upload the minutes of the meeting(s) and Action Taken Report No File Uploaded

10.Did IQAC receive funding from any funding agency to support its activities during the year? **No**

- If yes, mention the amount

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

(1) Participation in NIRF Ranking, THE ranking (2) Preparation and submission NAAC Cycle 2 SSR submission, sensitizing Students and Staff about the NAAC A&A process (3) Faculty Conclave for sharing Best Practices in Teaching Learning Processes and Faculty training for Curriculum Design and new curriculum for all undergraduate engineering programmes (4) Interaction with Indo-Universal Collaboration for Engineering Education for Faculty Certification, National Education Policy (NEP) courses, Engineers without Border (EWB) student activities (5) Skill development programmes for Students

12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:

Plan of Action	Achievements/Outcomes
NAAC Cycle 2 Assessment and Accreditation	Secured A++ Grade with 3.56 score
Participation in National and International Rankings and Recognitions	NIRF 2024 Ranking: 101-150 Rank band in Engineering Category, 25th Rank in Architecture and Planning Category; 1201-1500 rank band in THE Ranking 2024.
Participation in NBA Compliance Audit	B Tech Information Technology and BE Mechatronics got further accreditation for 3 years, valid upto 30-June-2027
IPR Workshops	Number of Patents is 82
Sharing of Best Practices in Teaching Learning Process	Faculty Conclave 2024 organized and increased the number of Publications in Engineering Education Research (EER)

13. Was the AQAR placed before the statutory body? Yes

- Name of the statutory body

Name of the statutory body	Date of meeting(s)
IQAC	27/07/2024

14. Was the institutional data submitted to AISHE ? Yes

- Year

Part A**Data of the Institution**

1.Name of the Institution	Thiagrajar College of Engineering
• Name of the Head of the institution	Dr L ASHOK KUMAR
• Designation	Principal
• Does the institution function from its own campus?	Yes
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• Alternate phone No.	04522482240
• Mobile No. (Principal)	9843281115
• Registered e-mail ID (Principal)	principal@tce.edu
• Address	Thiagarjar College of Engineering
• City/Town	Madurai
• State/UT	Tamil Nadu
• Pin Code	625 015
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• Location	Semi-Urban
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Name of the statutory body	Date of meeting(s)
IQAC	27/07/2024
14.Was the institutional data submitted to AISHE ?	Yes
<ul style="list-style-type: none"> Year 	
Year	Date of Submission
2024	05/04/2024
15.Multidisciplinary / interdisciplinary	
Institution offers flexible and innovative curricula that includes credit-based courses and projects in the areas of	

community engagement and service, environmental education, and value-based towards the attainment of a holistic and multidisciplinary education in the Conceive-Design-Implement-Operate framework. The institute promotes interdisciplinary/ multidisciplinary learning among undergraduate students in the following ways:

1. Interdisciplinary projects: Interdisciplinary projects are encouraged in the courses on Design Thinking, System Thinking, Project Management and Engineering Design Project. Faculty Mentors are assigned across the departments to facilitate project completion. This is led to hackathons by Government and multinational companies
2. Interdisciplinary electives (3 to 6 credits): General electives are courses offered by different departments. These courses do not have any prerequisites and could be chosen as electives by students of any programme. Students should opt for the courses offered from other departments during their course of study.
3. Integration of Humanities and Science with STEM: Courses are offered by Science departments in the state-of-art technologies like nano technology, quantum physics, Graph Theory, Machine Learning to the students of engineering programme. Students should opt for these courses during their course of study. Further, the final semester projects are jointly guided by faculty members from Science and Engineering Departments.
4. TCE Massive Open Online Courses: A pool of 11 courses on the state-of-the-art technologies like Data Visualization, Cloud Computing, Predictive Analytics, Blockchain Technologies are offered in online mode (mooc.tce.edu). These courses are open to the students of all disciplines to enhance interdisciplinary learning. Further, demanding courses like Smart Grid, Placement preparation for DBMS and Data Structures are under development.
5. Usage of NPTEL, coursera and edX: Collaboration with coursera, NPTEL and edx enabled the students and faculty members to learn and earn certificates with reimbursement of fees for students and staff who perform well. This increases the interdisciplinary learning opportunities to the students and continuous knowledge update to the faculty.

16. Academic bank of credits (ABC):

The college has registered in the portal for Academic Bank of Credits. The necessary activities and the processes are followed as per the guidelines from the affiliating University, Anna University Chennai in the implementation of Academic Bank of Credits

17. Skill development:

Courses under Conceive Design Implement and Operate (CDIO) framework: A special stream of courses which includes Engineering Exploration, Design Thinking, Project Management, System Thinking, Engineering design Project are introduced in undergraduate curriculum in order to promote Conceive-Design-Implement-Operate skills among students. Mini projects in Practical / Theory Cum Practical Courses: Mini projects are encouraged in practical and theory cum practical courses. Problem statements from AICTE Smart India Hackathon are encouraged for building solutions through mini projects. The Institute organizes a series of events related to socially relevant activities mapped with United Nations Sustainable Development Goals (UNSDG). Encouraging student participation in UN-SDG projects provide them with an experiential learning to understand the societal needs

Industry Supported Courses: To promote exposure on industrial practices, industry supported courses are offered during every semester. Experts from industries handle the courses beyond regular academic hours. Joint Teaching and Adjunct Faculty Joint teaching programs with academic experts from higher learning institutions have been conducted in both offline and online mode to enable the students to interact with the professors of higher learning institutions like IIT/IISc/IMS/NIT. This created opportunities of internship with the professors. Industry experts serve as adjunct faculty to specific courses that demands industry exposure and the experts help in other activities like student internship, student project guidance and review.

Course on Research Practice: A course on research practice has been introduced to promote creativity and critical thinking skills. A student with minimum CGPA of 8.00 without history of arrear can register for the course on 'Research Practice'. The outcome of the course will be a publication in SCI/ SCI-expanded/ SCOPUS indexed Journal/ conference in Science and Technology. Number of Credits for this course is 3. A group of maximum two (2) students can register for this course at the beginning of the fifth semester of the programme.

Product Development Skill : TCE Association and clubs organize In-house and Industry supported Hackathons at regular intervals. T S Srinivasan Centre for Automotive Research (TSSCAR) and CDIO maker space have been established to promote product development skills. Association with Higher learning institutes like IITM Build club has been established for product development to meet the industrial and societal needs. VLCI is a part of Visionary Leaders for Manufacturing (VLFM) Programme launched in 2006 is a path breaking Programme jointly associated by: Confederation of Indian Industry (CII), National Manufacturing Competitiveness Council

(NMCC) Govt. of India, IIT-Kanpur, IITM-Chennai and Indian Institute of Management, Kolkata. The Objective of this programme is "Creating Next Generation of Manufacturing Change Leaders" by transforming the Engineering graduates into "Role Ready Engineers". This Programme consists of six modules where students are given with skill oriented training on observation, problem solving, presentation, communication, Team work, Time Management and leadership. Green Skill development programmes are organized by EIACP PC-RC resource centre of our institution.

18.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

The following courses have been included in the undergraduate curriculum in order to expose the learners towards the Indian culture, tradition and heritage Essence of Indian Knowledge Constitution of India Heritage of Tamils Tamils and Technology Resource persons with specialization in arts from neighbouring institutes were invited for the course offering. A Study on Keezhadi Templates, one of the archaeological excavation sites, was carried out by the Department of Architecture. A DST sponsored project was carried out by Department of Electronics and Communication Engineering on the Sculptures in Temples. Spoken Hindi classes were conducted for supporting staff and students.

19.Focus on Outcome based education (OBE):Focus on Outcome based education (OBE):

Our institution was granted autonomous status in the year 1987 by the University Grants Commission (UGC), New Delhi. This has given us the freedom to design and develop an innovative curriculum, content delivery and assessment methods in alignment with the guidelines of AICTE and Affiliating University. As a major initiative in the teaching and learning process, a competencybased curriculum, Blooms taxonomy based course learning outcomes assessment methodologies were introduced in 2008. As Outcome-Based Education (OBE) has been made mandatory for accrediting Engineering Programmes in India, the curriculum was suitably modified in the year 2014. Although the undergraduate program curriculum is designed based on the OBE framework, the hands-on practices, system/design thinking leading to product development, and interpersonal skills have not been much emphasized in the curriculum. Cognitive aspects are addressed to a greater extent than affective and psychomotor. In due course of time, due to rapid advancement in science and technology, engineering education drifted towards the teaching of engineering science than engineering practice. As a result, industries in

recent years have found that graduating students, while technically adept, lack many abilities required in realworld engineering situations. To address the increasing gap between scientific and practical engineering demand and to meet the global requirements of professional Engineers, the CDIO curriculum was introduced for effective implementation of OBE. After attending the 11th International CDIO conference at Chengdu, China, we realized that a CDIO based curriculum is organized around the disciplines, but with CDIO activities are interwoven. The CDIO activities include projects, internships in industry, and active learning in theory and practical courses in which modern state-of-art laboratories are considered as workspaces. CDIO framework has been implemented in many universities all over the world as it maps with the Washington Accord graduate attributes. It motivated us to introduce Engineering Design and Capstone courses in our OBE curriculum as an experimental basis to emphasize hands-on practices, system/design thinking, and interpersonal skills. These courses helped us to improve the attainment of graduate attributes/program outcomes and student engagement. However, we felt that the transition from the existing model to the CDIO framework would be more challenging. In the interaction with faculty members from various Universities at CDIO international conferences and Asian Regional meetings, we understood the challenges in implementing the CDIO framework first time in a country. This has given us the confidence to implement the CDIO curriculum first time in India, as we had strong support from the administration and commitment from the faculty members. With this motivation, we adapted the CDIO based OBE syllabus for all seven undergraduate engineering programs at our institution from the academic year 2018-19. The courses are, namely, Engineering Exploration, Lateral Thinking, Design Thinking, Project Management, System Thinking, Engineering Design Project, Capstone Design Project, and Major Project. The course outcomes of all the courses in the curriculum are articulated by combining the knowledge, skill, and attitude domains of learning.

20.Distance education/online education:

TCE Massive Open Online Courses: As a part of continuous improvement in Teaching Learning, the institute has launched 20 courses in online mode to enhance skill development on the state of the art technologies and to promote interdisciplinary learning (mooc.tce.edu). Academic credits under programme specific electives/ programme specific electives for expanded scope are awarded on successful completion. Applied Data Science

with Python Applied Statistics with Python Essentials of Blockchain Data Visualization Industrial Automation Android Mobile Application Development Modern Testing Practices: A Primer to Certification Predictive Analytics with regression: Simplified Discrete Time Signal Processing, Theory of Computation: TOC Made Easy, FPGA based Digital System Design Swayam – NPTEL: The institute offers a maximum of 6 academic credits for the successful completion of online courses in Swayam/ NPTEL platform. Students may be permitted to register for online courses (which are provided with certificate after evaluation of the performance), during fourth to seventh semester of his/her study. On successful completion of the course, he/she has to submit the copy of the certificate to the Head of the Department for exemption from registering for an elective course. Based on the recommendation by the team of faculty members nominated by the Head of the Department, the student will be awarded grade and credits in Programme Specific Elective or Programme Specific Elective for Expanded Scope sub-categories. The recommendation will be sent to The Controller of Examinations after the approval by the Head of the Department. Collaboration with coursera/edX: Collaboration of TCE with other online platforms like edX and Coursera provides opportunities to the learners to earn online certification and support to students learning.

Extended Profile

1.Programme

1.1 17

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.Student

2.1 4641

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	View File

2.2 1081

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.3 **4641**

Number of students who appeared for the examinations conducted by the institution during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.Academic

3.1 **780**

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.2 **257**

Number of full-time teachers during the year:

Extended Profile

1.Programme

1.1 17

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.Student

2.1 4641

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	View File

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File Description	Documents
Institutional Data in Prescribed Format	View File

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Institutional Data in Prescribed Format	View File

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3.1 780

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.2	257
Number of full-time teachers during the year:	
File Description	Documents
Institutional Data in Prescribed Format	View File
3.3	257
Number of sanctioned posts for the year:	
4.Institution	
4.1	1323
Number of seats earmarked for reserved categories as per GOI/State Government during the year:	
4.2	107
Total number of Classrooms and Seminar halls	
4.3	1873
Total number of computers on campus for academic purposes	
4.4	1333.79823
Total expenditure, excluding salary, during the year (INR in Lakhs):	

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

1. Local Needs: Courses on 'Engineering Exploration', 'Design Thinking' and ' System Thinking' are introduced to study and understand the local needs and provide possible solutions.

2. Regional Collaboration: TCE collaborates closely with regional industries, research institutions, and government bodies to identify emerging trends and demands, incorporating

relevant content into courses to meet regional job market needs. Curriculum for B.E. Mechanical and EEE Programmes have been designed in collaboration with TVS Motors. Curriculum for B.Tech. CSBS has been designed in collaboration with TCS. Courses on "Heritage of Tamils" and "Tamils and Technology" have been included.

3. National Alignment: TCE aligns with national policies and initiatives such as NEP 2020 by collaborating with academic forums like IUCEE to offer additional courses specified by NEP 2020. Courses offered by NPTEL-SWAYAM are permitted for credit transfer after an approval procedure followed by the departments. Further, courses namely "Essence of Indian Knowledge" and "Constitution of India" have been included in the curriculum.

4. Global Focus: TCE prepares students for the global arena by emphasizing international best practices through courses offered by IUCEE. Undergraduate programs are designed with the Conceive-Design-Implement-Operate (CDIO) framework, emphasizing engineering fundamentals and hands-on projects.

File Description	Documents
Upload additional information, if any	No File Uploaded
Link for additional information	https://www.tce.edu/sites/default/files/nac/criterion/c1/c1-1-1-1.pdf

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

12

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	View File
Details of syllabus revision during the year	View File
Any additional information	No File Uploaded

1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year

780

File Description	Documents
Curriculum / Syllabus of such courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	View File
MoUs with relevant organizations for these courses, if any	View File
Any additional information	No File Uploaded

1.2 - Academic Flexibility

1.2.1 - Number of new courses introduced across all programmes offered during the year

214

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	View File
Any additional information	No File Uploaded
Institutional data in prescribed format (Data Template)	View File

1.2.2 - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

17

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	View File
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	View File

1.3 - Curriculum Enrichment

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

The institute offers course on 'Environmental Science'

for addressing Environmental issues, courses 'Essence of Indian Knowledge' and 'Value Education' for Human values, Indian culture and Professional ethics, course on 'Constitution of India' for human rights, gender issue and duties and responsibilities.

Further, in the courses of Design Thinking, Systems Thinking and Engineering Design Project that supports CDIO framework, the students provide technology based solution to societal and enterprise issues considering the environment and sustainability in an ethical manner. Further, industry supporting courses like 'Green Construction', 'Green Data Centre', 'Six Sigma', 'Value Engineering and 'Environment compatibility design' are offered by industry experts on the contemporary Technologies to address cross cutting issues.

The institution integrates cross cutting issues relevant to gender, environment and sustainability, human values and ethics by introducing specific courses in the curriculum and various activities in the First Year Orientation Programmes.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	View File
Any additional information	No File Uploaded

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

24

File Description	Documents
List of value-added courses	View File
Brochure or any other document relating to value-added courses	View File
Any additional information	No File Uploaded

1.3.3 - Number of students enrolled in the courses under 1.3.2 above

146

File Description	Documents
List of students enrolled	View File
Any additional information	No File Uploaded

1.3.4 - Number of students undertaking field work/projects/ internships / student projects

1147

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	View File
Any additional information	No File Uploaded

1.4 - Feedback System

1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni

A. All 4 of the above

File Description	Documents
Provide the URL for stakeholders' feedback report	https://tce.edu/naac/criteria-14/feedback
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	View File
Any additional information	No File Uploaded

1.4.2 - The feedback system of the Institution comprises the following

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

File Description	Documents
Provide URL for stakeholders' feedback report	https://tce.edu/naac/criteria-14/feedback
Any additional information	No File Uploaded

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment of Students

2.1.1.1 - Number of students admitted (year-wise) during the year

1241

File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	View File

2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)

1206

File Description	Documents
Any additional information	No File Uploaded
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

The institute assess the students' academic performance at the end each continuous assessment tests and terminal examination. The students who have more than 8.0 CGPA is considered as advanced learners.

Support for advanced learners

- Advanced learners can register for more number of regular courses in a semester and industry supported courses under choice based credit system.
- Guided Study Course is offered to the students who do not have history of arrear.
- The institution encourages advanced learners to participate in competitions, workshops, e-courses like NPTEL, coursera, eDdX, guest-lectures, association and professional society activities.

- A course on 'Research Practice' is offered to promote research culture among students

Support for Low Performing Students:

- As the number of students from rural areas and vernacular medium are many, special classes are arranged with peers and faculty members. These classes are conducted without affecting the regular classes.
- Counseling sessions and parent teacher meetings are conducted to improve academic performance.
- Bridge Course and remedial classes are conducted every year for Lateral Entry Students.
- English Fluency Class is conducted for Second and third year Tamil medium and vocational students so that their soft and communication skills are improved.
- Soft Skill development programme for placement

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.tce.edu/sites/default/files/nac/criterion/c2/c2-2-2-1.pdf

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
31/05/2024	4641	257

File Description	Documents
Upload any additional information	No File Uploaded

2.3 - Teaching- Learning Process

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

Experiential Learning:

CDIO Framework: TCE adopts the CDIO framework, a globally recognized educational initiative aimed at enhancing product development skills. This framework focuses on nurturing the

affective and psychomotor domains of learning, ensuring that students not only grasp theoretical concepts but also gain practical experience in designing and implementing engineering solutions.

Participative Learning:

Interactive Classrooms: TCE's departments are equipped with state-of-the-art reconfigurable classrooms and interactive digital boards. These facilities facilitate active and collaborative learning, allowing students to engage with course material in dynamic ways and participate actively in discussions and activities.

Problem-Solving Methodologies:

Project Works: In final semester, students undertake exclusive project works based on recommendations from industries, research interests, and societal needs. Rigorous assessment criteria are employed to evaluate the quality and effectiveness of these projects, fostering a culture of innovation and problem-solving.

Internships: TCE encourages students to undertake internships in industries during their final semester. These internships serve as valuable opportunities for skill development and practical experience, bridging the gap between academic learning and professional practice.

Community Projects: TCE actively promotes community engagement through projects facilitated by organizations like NCC/NSS and professional societies like Engineers without Borders (EWB) and IUCEE EPICS.

File Description	Documents
Upload any additional information	No File Uploaded
Link for additional Information	https://www.tce.edu/sites/default/files/nac/criterion/c2/c2-2-3-1.pdf

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

- The necessary infrastructure like interactive digital boards, display boards, Plickers, Clickers, Lecture

Capturing Systems, TCE Digital Studio for recording have been established.

- Classroom lectures are recorded and made available for reference using Lecture Capturing Systems.
- The institute has provided digital creative pen tablets and digital cameras with audio support system to faculty members for promoting interaction in online classes.
- The institute has launched eleven online courses on futuristic technologies which can be accessed at <https://www.tce.edu/tce-mooc> to promote skill development and interdisciplinary learning.
- Students are awarded academic credits on successful completion of the NPTEL and TCE online courses.
- On understanding the need for providing resilient teaching approach to facilitate the learning experiences adaptable to unpredictable conditions and disruptions, the academic team organizes in-house pedagogical workshops and training on the tools like screen-cast-o-matic, Moodle as learning management system, interactive software like slido, peerdeck, H5P etc.
- The institution has set up a Moodle server at the Institute to support online and blended learning and a separate domain <https://exams.tce.edu/> has been setup exclusively for the conduct of terminal examinations.
- Digital library facility is used to carry out literature survey, refer relevant materials for research projects & consultancy and classroom preparation by the faculty members.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://tce.edu/tce-mooc
Upload any additional information	No File Uploaded

2.3.3 - Ratio of students to mentor for academic and other related issues

2.3.3.1 - Number of mentors

226

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	View File
Circulars with regard to assigning mentors to mentees	No File Uploaded

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

Preparation:

- Formulation of Academic Calendar Committee consisting of Dean (Academic Process), the Controller of Examinations (CoE) and Faculty-in- charge.
- Collection of proposed activities from all the Head of the Departments, Deans, Registrars and the CoE. The schedules for all academic activities are planned.

Adherence:

- All activities are conducted by the respective HoDs/Deans/CoE/ Registrar as per the academic calendar.
- The industry supported courses are conducted as per the availability of industry experts.
- Change in the academic calendar (if any) will be informed to the students and teachers through circulars well in advance.

Teaching Plans:

- Every faculty member prepares a teaching plan at the beginning of the every semester for every course handled.
- The teaching plan includes learning objectives, links to learning resources, formative and summative assessment plans, time plan for lecturing, plans for incorporating active and collaborative learning.
- The teaching plans are developed in course committee meetings and are submitted to the head of the department for approval.
- The teaching plans are also shared with the learners for followup. The templates for teaching plan of the institute can be accessed at <https://www.tce.edu/academics/process-format>

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	No File Uploaded

2.4 - Teacher Profile and Quality

2.4.1 - Number of full-time teachers against sanctioned posts during the year

257

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	View File
List of the faculty members authenticated by the Head of HEI	View File
Any additional information	No File Uploaded

2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

182

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	View File
Any additional information	No File Uploaded

2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

3321

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	View File
Any additional information	No File Uploaded

2.5 - Evaluation Process and Reforms

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

21

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	View File
Any additional information	No File Uploaded

2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

103

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	View File
Upload any additional information	No File Uploaded

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

- The institution has automated academic and examination process. Starting from course registration to publication of results is carried out digitally. The examination schedule is published in automated software and students can view it using mobile app also. All announcements are made using software so as to reach stakeholders instantly.
- The semester examination answer scripts are first assigned dummy numbers based on bar code. The examiners who evaluate the answer scripts do not know the identity of the students.
- The system of issuing hall tickets has been abolished as the students have valid ID card. This saves time and efforts required for printing and distributing hall tickets.
- After the publication of results, the students can go-

through their answer scripts and scheme of evaluation. If there is scope for additional marks, students can appeal. The appeals are examined by faculty during revaluation of the answer paper and verified by Head of the department for fairness.

- Periodically, academic audits are conducted to identify scope for improvement in the standard of questions.
- Private students can register arrear examinations through online.
- This facilitates ease of operation for both students and COE office. The adoption of IT in the entire chain leads to error free and faster operation.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/exams

2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

The competency based curriculum of the institute has been refined in alignment with the accreditation policy of National Board of Accreditation and implemented as Outcome Based Education (OBE) in 2014-18. Initially, the feedback from various stakeholders namely Alumni, Industry, Faculty, professional societies and parents were collected. Then, an initial draft of PEOs, POs and PSOs is prepared through brainstorming session at the department level committee constituted with HoD, Program Coordinator and Faculty representatives.

The articulated PEOs, POs and PSOs are placed in Board of Studies (BoS) for discussion. After incorporating the suggestions by the BoS, it is placed for approval in Academic Council Meeting (ACM). Final version of PEOs, POs and PSOs are published in

- College Website - Department Home Page Notice Boards, Class rooms and Laboratories Staff rooms Syllabus Book Department Magazine
- They are disseminated during First year Orientation Programs, Campus Placements, Alumni & Parent Teachers Meetings

- Weblinks are given as additional information document

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	View File
Upload any additional information	No File Uploaded
Link for additional Information	https://www.tce.edu/academics

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

Assessment Tools:

- Continuous Assessment Tests
- Terminal Examinations
- Assignments
- Projects
- Course Exit Surveys

Process for calculating Course Outcome (CO) Attainment

Expected Proficiency (EP) and Expected Level of Attainment (ELA) of all COs are fixed based on the average performance in end semester examinations for the respective set of students graduated in the previous three academic years and the cognitive level of the COs. For fixing ELA, 30% improvement is considered from the current level of achievement. TCE Proficiency scale which addresses cognitive, psychomotor and affective domains is used in writing COs. Assessment pattern is designed based on the proficiency scale of COs. The CO attainment is calculated at each stage and corrective actions are done as follow-up.

Attainment of Program Outcomes (PO) and Program Specific Outcomes (PSO)

POs and PSOs are assessed through

- Direct Assessment
- Curricular Component
- Indirect Assessment
- Co-curricular and Extracurricular Activities
- Program End Survey
- Employer Survey

In surveys, the attainment of PO/PSO is calculated by the average of responses with ratings greater than the target level for the questions mapped with every PO/PSO. The attainment of COs, POs, and PSOs are recorded and action plan for improvement is decided in the Programme Performance Assessment Committee (PPAC) meeting.

The process of CO, PO, and PSO attainment calculation has been automated in CAMU.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/sites/default/files/nac/criteria-2/2.6/2.6-Process-for-CO-and-PO-assessment.pdf

2.6.3 - Pass Percentage of students

2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

1081

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	View File
Upload any additional information	View File
Paste link for the annual report	Nil

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

<https://www.tce.edu/sites/default/files/PDF/SSS-Report-Analysis-2023-24.pdf>

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

To encourage interest and breakthroughs in cutting-edge fields of science, engineering, and technology, the institution has adopted a research policy. The promotion policy has developed a robust research and innovation ecosystem by providing travel grants to faculty and students to enable them to participate and present papers at national and international conferences, providing travel assistance for presentations of research and development projects, and periodically rewarding quality research publications with incentives.

The institute has five nodal research centers, an incubation center, and more than fifty well-established laboratories that enable faculty, students, and research scholars to conduct research and development. Agreements have been made to promote the culture of collaborative research with higher learning institutions and industries and seed money is also provided to faculty members.

Students, scholars, and faculty are regularly involved in awareness programs on 'Research Paper Writing', 'Quality Measure of Journals using SJR Values', and 'Web of Science'. Plagiarism checking tool 'Turnitin' has been purchased to submit articles with low similarity rates and feel more confident in publishing the research work.

Thiagarajar Research Fellowship has been introduced in order to attract research scholars to our institution. Course on 'Research Practice' has been introduced to inculcate research among UG students.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View File
Provide URL of policy document on promotion of research uploaded on the website	https://www.tce.edu/sites/default/files/PDF/Research-Policy_0.pdf
Any additional information	No File Uploaded

3.1.2 - The institution provides seed money to its teachers for research

3.1.2.1 - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

10

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	View File
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View File
List of teachers receiving grant and details of grant received	View File
Any additional information	No File Uploaded

3.1.3 - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

4

File Description	Documents
e-copies of the award letters of the teachers	View File
List of teachers and details of their international fellowship(s)	View File
Any additional information	No File Uploaded

3.2 - Resource Mobilization for Research

3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

81.16

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	View File
List of projects and grant details	View File
Any additional information	No File Uploaded

3.2.2 - Number of teachers having research projects during the year

10

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://tce.edu/research/sponsored-research
List of research projects during the year	View File

3.2.3 - Number of teachers recognised as research guides

107

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	No File Uploaded
Institutional data in Prescribed format	View File

3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year

2

File Description	Documents
Supporting document from Funding Agencies	View File
Paste link to funding agencies' website	https://tce.edu/research/sponsored-research
Any additional information	No File Uploaded

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

Entrepreneurship Development Cell: EDC organizes the work plan of the Entrepreneurship promotion activities. It is affiliated to Young Indians Students Chapter, Confederation of Indian Industry (CII) and Native Lead Foundation, who are funding the startups. TCE is empanelled under PM -YUVA and also a special elective course on "Entrepreneurship Development "is being taught for the last seven years. The E Cell conducts events such as ideathon to promote entrepreneurship thinking among the students.

Technology Business Incubator facilitates commercialization of R&D technologies, promotes faculty to incubate start-up companies in collaborative mode and facilitates alumni and local entrepreneurs to establish start-up venture. Currently 25 start up physical start-ups are in place and strong tie-up with Thiagarajar Entrepreneur Network.

IPR Cell: As part of its mission, the TCE aims to develop

intellectual capability to its maximum extent. TCE has a separate Intellectual Property Cell under R&D that facilitates, encourages, promotes, and safeguards intellectual property of its faculty, students, researchers, and staff. To provide guidance to inventors concerning the rules of the Institute regarding intellectual property, the IPR Cell has formulated its intellectual property policy. With the assistance of CII, NIPAM, and RGNIPM, the IPR cell organizes IPR awareness workshops and courses.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://tce.edu/research/ipr-cell/about-us

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

2

File Description	Documents
Report of the events	View File
List of workshops/seminars conducted during the year	View File
Any additional information	No File Uploaded

3.4 - Research Publications and Awards

3.4.1 - The Institution ensures implementation of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check through authenticated software

A. All of the above

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	View File
Any additional information	No File Uploaded

3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

3.4.2.1 - Number of PhD students registered during the year

70

File Description	Documents
URL to the research page on HEI website	https://tce.edu/research
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	View File
Any additional information	No File Uploaded

3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year

159

File Description	Documents
List of research papers by title, author, department, and year of publication	View File
Any additional information	No File Uploaded

3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

109

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

3.4.5.1 - Total number of Citations in Scopus during the year

3033

File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	View File

3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

3.4.6.1 - h-index of Scopus during the year

34

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View File
Any additional information	No File Uploaded

3.5 - Consultancy

3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

81.8004

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View File
List of consultants and revenue generated by them	View File
Any additional information	View File

3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

2510922

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	View File
List of training programmes, teachers and staff trained for undertaking consultancy	View File
List of facilities and staff available for undertaking consultancy	View File
Any additional information	No File Uploaded

3.6 - Extension Activities

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

Engineers without Borders (EWB) student chapter is an engineering-centered, multidisciplinary, community-based approach to design education. The primary goal of this program is to foster student and faculty engagement in developing meaningful engineering solutions to the problems of local communities thereby gaining service-learning experience. Conceptual prototypes of real-world location-specific community problems aware developed by the students as significant outcome of the design thinking course. Satisfaction index of the students is improved mainly because of experiential learning.

Use of the rubrics for periodic reviews served as an effective instrument for assessing personal and interpersonal skills of the students. Opportunities provided for promoting 21st -century skills namely creativity, critical thinking, collaboration and communication have motivated the students to take up the prototypes to next level of its implementation. The training programs on Design Thinking have enriched the faculty competence in mentoring the students with a human-centered approach to solve real community problems. The significant projects are:

Projects carried out by our students.

- Sustainable Development for Thangalacheri Village
- Treating Industrial Water - Dye Removal
- E-Waste Collection
- Shaping Early Adolescence
- Traceability of organic food products and paddy crop using blockchain
- 6. Distillation units for essential oils

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://tce.edu/student/professional-societies/ietsc

3.6.2 - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

5

File Description	Documents
Number of awards for extension activities in during the year	View File
e-copy of the award letters	View File
Any additional information	No File Uploaded

3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

9

File Description	Documents
Reports of the events organized	View File
Any additional information	No File Uploaded

3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

750

File Description	Documents
Reports of the events	View File
Any additional information	No File Uploaded

3.7 - Collaboration

3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

9

File Description	Documents
Copies of documents highlighting collaboration	View File
Any additional information	No File Uploaded

3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

33

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	View File
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	View File
Any additional information	No File Uploaded

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning, viz., classrooms, laboratories, computing equipments, etc.

Classrooms:

Number:92, Capacity 40-75

- Equipped with Multimedia Projector, Podium, Fan, Light, Table with chair, Glass board with good ambience, adequate lighting and good ventilation.
- Size is equal to or more than that stipulated by statutory bodies. One classroom of each department is equipped with Lecture Capturing System.
- Enabled with wi-fi facility to implement Active Learning strategies

Tutorial Rooms:

Number:16, Capacity 30-40

- Equipped with LCD Projector, Wi-fi, White Board, and chairs attached with writing pad.

Seminar Halls:

Number:7, Capacity 50-100

- Equipped with LCD Projector with Smart board facility, WiFi, Audio and Video facilities

Drawing Halls:

Number:3, Capacity 30-70

- Equipped with Drawing tables, Chairs, Fans, Light with good ventilation and ambience.

Laboratories:

Number:89,Capacity 30-60

- Equipped with state of the art facilities with adequate safety measures and periodic maintenance.

- Few of the Laboratories are established with Industries support

Computing Facility:

A Central Computing Centre (CCC) with 150 Desktop Computing Systems is functioning from 8.00 a.m to 10.00 p.m for Monday to Saturday and 8.00 a.m to 6.00 p.m on Sundays.

- A computing centre with 30 Desktop Computing systems is functioning in the Ladies and Gents Hostel by 24/7 mode

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

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

Physical Education Departments Facilities:

TCE has well equipped sports facilities cater for the sports and games requirements of the students. Every year around 500 students participate in all the sports and games event. TCE conducts ANNA University zonal tournaments, Inter zonal tournaments, Intra and Inter department tournaments and Intramural tournaments, TCE Marathon, Founder Memorial Hockey and KhoKho tournament and Dr. Radha Thiagarajan Memorial Chess tournament.

Indoor stadium:

TCE has well equipped and furnished Indoor stadium (Ground Floor and 1st floor) of size 23,674 square feet with seating capacity of 300.

- 4 Badminton Courts (13.40mX6.10m)
- 1 Basketball Court (28mX16m)
- 2 Volleyball Courts (18mX9m)
- 2 Judo halls (12mX11m)
- Chess Hall (5.90mX21.30m)
- Table Tennis (6mX21m)
- Gym Hall (13mX12m)

- Yoga Hall (12mX9m)

Outdoor Games:

- 2 Ball Badminton Courts (24mX12m)
- 1 Basket Ball Court (28mX16m)
- Football Field (90mX50m)
- Hockey Field (91.40mx55m)
- Kho-Kho Court (27mX16m)
- Kabaddi Court (13m X 10m)
- Tennis Court (23.76mX 10.97m)
- Volleyball Court (18m X 9 m)

Cultural Activities:

The College has three auditoriums, fully Air Conditioned Karumuttu Sundaram Auditorium with a seating capacity of 204 and fully air-conditioned Karumuttu Kannan Auditorium with a seating capacity of 800. An Open-air auditorium of seating capacity 2000 to conduct college cultural activities.

File Description	Documents
Geotagged pictures	View File
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

107

File Description	Documents
Upload any additional information	No File Uploaded
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)

546.64387

File Description	Documents
Upload audited utilization statements	View File
Details of Expenditure, excluding salary, during the years	View File
Any additional information	No File Uploaded

4.2 - Library as a Learning Resource

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

TCE library

- Completely automated by LIBSYS software from 2005 to 2013.
- Upgraded to Autolib software with features such as SMS for each transaction, Web OPAC and Mobile OPAC. This OPAC has been integrated with open access e-book, chat facility and auto renewal of books.
- Enabled with RFID system from 2018 with automatic issue / return using kiosk and drop box with RFID GATES for theft detection.
- Remote access was given to all Faculty, Research Scholars and Students through Mobile App. It was effectively used during the Covid-19 lockdown period

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.tce.edu/academics/library

4.2.2 - Institution has access to the following: e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources

A. Any 4 or more of the above

File Description	Documents
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership	View File
Upload any additional information	No File Uploaded

4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

37.28829

File Description	Documents
Audited statements of accounts	View File
Any additional information	No File Uploaded
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

4.2.4.1 - Number of teachers and students using the library per day during the year

450

File Description	Documents
Upload details of library usage by teachers and students	View File
Any additional information	No File Uploaded

4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

The Information Technology (IT) Resources Management and Users Access Policy of the College sets forth the central policies that govern the usage of all users of the IT resources of this institute. The IT Policy applies to all the users (faculty members, staff and students and other users such as guest/alumni).

Usage of Computers:

Computers provided to the users are meant for fulfilling the academic /research /administrative tasks and should not be used for personal. The Central Computing Center (CCC) allocates the necessary IP addresses, proxies, and email relays.

Network:

All users are informed about the network capacity. Physically tampering with network connections, equipments, sending disruptive signals, or making excessive use of network resources is strictly prohibited.

Security:

The intranet/internet services are accessed through the Firewall and are not allowed to bypass firewalls and access rules in place.

Open Source Asset:

The institute shall endeavour towards the promotion and effective usage of Open Source Software depending on the requirements.

Purchase:

The user understands that the Central Computing Centre (CCC) is responsible for procurement, installation, configuration of all IT equipment, after due approval from the Head of the Institution.

System Administration:

CCC supports the system maintenance activities periodically

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.tce.edu/sites/default/files/nac/criterion/c4/c4-4-3-1.pdf

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
4641	1873

File Description	Documents
Upload any additional information	No File Uploaded

4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus **A. 750 Mbps**

File Description	Documents
Details of bandwidth available in the Institution	View File
Upload any additional information	No File Uploaded

4.3.4 - Institution has facilities for e-content development: **A. All four of the above**
Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.tce.edu/sites/default/files/nac/criterion/c4/c4-4-3-3.pdf
List of facilities for e-content development (Data Template)	View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

663.68889

File Description	Documents
Audited statements of accounts	View File
Upload any additional information	View File

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

Estate Maintenance:

- Building related requests like building construction/modification/maintenance is passed to Estate Officer
- The classrooms, laboratory ambience, gardens, washrooms and student support facilities are maintained on day by day basis by third party contract and by college.

Laboratory Maintenance:

- The Laboratory in charge of respective laboratory is responsible for the Calibration of equipment
- Day to day electrical supply and electronics equipment is maintained by TCENET maintenance portal
- Laboratories are maintained as per 5S quality norms and is monitored by Department 5S coordinators.
- The obsolete equipment are condemned as per Government norms.
- Equipment in the laboratory are labeled by barcode and are maintained in Asset software

Library Maintenance:

- Library day to day activities is governed by the Librarian and Assistants.
- The overall monitoring of the Library is governed by a committee for the purchase of books, journals and software. Library follows the Government norms for weed out of worn out books, and stock verification is done yearly.
- Library is maintained as per 5S quality norms and is monitored by 5S coordinators.
- Every day, the returned books are re-shelved by the library assistants

Computer System Maintenance:

- Servers and desktop systems are checked once a week for new updates and upgraded accordingly.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year

1696

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	View File
Upload any additional information	No File Uploaded

5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

215

File Description	Documents
Upload any additional information	View File
Institutional data in prescribed format	View File

5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology A. All of the above

File Description	Documents
Link to Institutional website	https://www.tce.edu/student/capacity-development-and-skill-enhancement
Details of capability development and schemes	View File
Any additional information	No File Uploaded

5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

72

File Description	Documents
Any additional information	No File Uploaded
Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	View File
Details of student grievances including sexual harassment and ragging cases	No File Uploaded
Upload any additional information	No File Uploaded

5.2 - Student Progression

5.2.1 - Number of outgoing students who got placement during the year

669

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	No File Uploaded

5.2.2 - Number of outgoing students progressing to higher education

45

File Description	Documents
Upload supporting data for students/alumni	No File Uploaded
Details of students who went for higher education	View File
Any additional information	No File Uploaded

5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year

5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

72

File Description	Documents
Upload supporting data for students/alumni	View File
Any additional information	No File Uploaded

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

57

File Description	Documents
e-copies of award letters and certificates	View File
Any additional information	No File Uploaded

5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

- Students council meetings are conducted regularly for every academic year. The Principal and Deans attend the meetings along with Class Representatives of both Undergraduate and Postgraduate classes, Student coordinators for placement activities, Technical Club Coordinators, Department Association Secretaries, Special Interest Group Coordinators and Higher studies and Language Club Coordinators are the members of this council.
- In every meeting, important issues are discussed related to academic, co-curricular and extra-curricular activities.
- In every meeting, the Principal informs to the students about the action taken on the issues/concerns reported in the previous meeting. During the meeting, the queries from the students are answered by the respective Deans/Principal.
- All the specific representations are informed to the respective authorities to respond within the stipulated time.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

5.3.3 - Number of sports and cultural events / competitions organised by the institution

57

File Description	Documents
Report of the event	No File Uploaded
List of sports and cultural events / competitions organised per year	View File
Upload any additional information	No File Uploaded

5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

TCE Alumni Association (TCEAA) coordinates and supports the following activities:

Alumni Scholarships:

TCEAA provides financial support to needy students based on a merit cum means basis. The donations received from the alumni are deposited as corpus fund in TCE Alumni Charitable Trust and the interest earned from that is used for student scholarships. Donations are exempted under Section 80G of the Income Tax Act.

Reunion:

Reunion brings new opportunities for students as many alumni are entrepreneurs. This paves the way for increase in student placement count. Generally, Alumni reunion is scheduled as Silver Jubilee Reunions - conducted during December /July. Golden Jubilee Reunions -conducted during July/ December.

Personality Development Camps:

Every year, three-day residential personality development camps are organized to impart soft skills, yoga practice, teamwork, emotional intelligence, and health awareness to the young engineering students. Five personality development camp was organized in one academic year in the name of Pinnacle, Orchid, Blossom, Efflorescence, Zenith.

Mentorship Programs:

Prepare the next generation leaders & entrepreneurs, provide motivation and mentorship to guide in career path options,

establish a sustainable framework between College, Alumni and Students

Academic and Industrial Interaction:

Member in Board of Studies, Academic Council, experts for industry supported courses, guest lectures.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/alumni

5.4.2 - Alumni's financial contribution during the year

A. ? 15 Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

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

The Vision of the institute is 'World Class Quality Technical Education with strong ethical values'. In 2020-21, the leadership team launched an Institutional Transformation Initiative project namely 'Savitha' to achieve this vision with the involvement of all stakeholders, headed by two senior faculty members. There are 10 strands and each strand was headed by middle level faculty members. Each strand was supported by five Junior level faculty members. It led to the following activities/achievements.

- Launch of TCE Online courses Smart Classroom for active active and collaborative learning in classroom.
- Setting up of Research Council to promote research culture in the institute
- Launch of Thiagarajar Research Fellowship for full time research scholars
- Use of Plagiarism tool namely Urkund/Turnitin for effective documentation

- Webinars on contemporary technologies and Joint Teaching Programmes by reputed faculty from higher learning institutions and industry experts
- Providing solutions to societal issues and challenges by case study and product development through Ideathon contests, using appropriate technology, by Engineers Without Borders (EWB) chapter
- Interaction with reputed Universities for academic collaboration.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/sites/default/files/nac/criteria-6/6.1.1-SupportingDocument-DS.pdf

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

The Organizational structure consists of Principal, Deans, Registrar, Heads of the Departments (HoD), Controller of Examinations, Associate Deans, College and department level Coordinators under the leadership of Chairman for effective functioning, as follows:

- Principal Overall Administration, Alumni Interaction, International/National Collaborations
- IQAC Director: Assessment and Accreditations, Ranking Frameworks
- Dean (Academic Process): Curriculum Design, Content Delivery, Assessment, Automation of Academic Process, Regulations, Academic Calendar
- Dean (Research and Development): PhD Admissions, Academic and sponsored Research, Patents, Library
- Dean (Industry Institute Interaction): Consultancy, Placement/Internship
- Dean (Students): Mentoring, Counseling, women Development Cell, Professional Societies, Student Clubs, Career Guidance, Entrepreneurship
- Dean (Extra-curricular activities): NCC/NSS, Physical Education, Cultural, Technology based social work
- Registrar: Student Admission, Staff Recruitment, Infrastructure and Finance

- **Controller of Examinations: Exam related activities**

The academic and administrative activities are being carried out by the respective HoDs following the Standard Operating Procedure set by Senior administrators. The Principal and Deans along with HoDs, based on their own experience in academic and research activities, convert them into tangible actions. They are reviewed by the Governing Council of the institute. The Principal discusses the outcomes of Governing Council meetings with the Deans and HODs to evolve a consensus on the focus areas. The academic activities are approved by Academic Council.

File Description	Documents
Upload strategic plan and deployment documents on the website	View File
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/sites/default/files/nac/criteria-6/6.1.1-SupportingDocument-DS.pdf

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

The institutions' major objective is to enhance the institutes' competitiveness at a national and global level and improve its outlook across different stakeholder segments namely Students, Industry, Peers, and Regulators. Two senior faculty members were identified as project champions to implement the action plan in a systematic way. Subsequently, 10 strands were identified and middle level faculty members were assigned as Strand leaders. Each strand leader was assigned with five Junior faculty members in this process. The activities are monitored weekly and steering committee meetings are conducted at regular intervals of two months to align the progress in the right path by the Management. The strands are:

- Academics and Curriculum Online courses, smart classroom, Transition Rate
- Student Experience Tutor Ward System, Alumni Interaction, Career Guidance
- Research Excellence Academic Research, Sponsored Research

- Faculty Development Adjunct Faculty, Faculty Recruitment, Development Programmes
- Academic Collaborations Webinars, Joint Teaching, Research Internship
- Industry Collaborations Centre of Excellence, Consultancy, Patent
- Placement Training, Internship, Placement
- Process and Data Management Website Revamping, Management Information System
- Branding, Marketing and Outreach Infrastructure Management

The methodology adopted to implement strategic plan is:

- As-Is peer benchmarking Analysis
- Target setting from goal setting and stakeholder workshop
- Action plan and implementation roadmap.

File Description	Documents
Strategic Plan and deployment documents on the website	View File
Paste link for additional information	https://www.tce.edu/sites/default/files/nac/criteria-6/6.2.1-SupportingDocument-DS.pdf
Upload any additional information	No File Uploaded

6.2.2 - The functioning of the various institutional bodies is effective and efficient as visible from the policies, administrative set-up, appointment and service rules, procedures, etc.

- **Internal Quality Assurance Cell (IQAC):** provides benchmarks, proposes roadmaps and to monitor the institutional development activities
- **Governing Council :** The functions of Governing Council are to approve the academic, financial and administrative policies of the institution, to appoint faculty members and staff, to review the annual report & the audited accounts and budget estimates.
- **Academic Council:** reviews regulations, curriculum and academic processes.
- **Research Council:** reviews research project proposals
- **Student Council:** Meetings are conducted regularly with the representatives of students to improve the functioning of the institution.
- **Board of Studies:** reviews the curriculum and syllabus of

courses.

- **Standing Committee:** monitors and recommends the academic administrative and financial matters.
- **Finance Committee:** Reviews budget for the departments and college.
- **Malpractice Enquiry Committee:** handles disciplinary issues
- **Building committee:** scrutinizes and approves the design estimates, cost of building and other capital works, minor works, repair and maintenance
- **IPR Committee:** reviews patentable ideas for filing them as patents
- **Appeals and Grievances Committee:** Any grievances related to Academic matters are addressed by the concerned Tutor, HoD and Principal. When students are not satisfied with the outcome, they represent to the Appeals & Grievances Committee.
- **Women Development Cell:** Women empowerment activities

File Description	Documents
Paste link to Organogram on the institution webpage	https://tce.edu/about/organsational-structure
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/sites/default/files/nac/criteria-6/6.2.1-SupportingDocument-DS.pdf

6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Documen	View File
Screen shots of user interfaces	View File
Details of implementation of e-governance in areas of operation	View File
Any additional information	No File Uploaded

6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression

- The workforce is supported by the administration in respect of admission to the engineering programmes for their children, additional medical benefits on a case to case basis.
- Prescribed EPF is provided to teaching and non-teaching staff members.
- Faculty and staff have sports contest annually.

Teaching Staff Welfare Measures and Avenues for their career development/ Progression

- Sabbatical leave for post-doctoral studies and internship at industries.
- Increments in Basic Pay, on completion of Doctoral degree programme.
- Faculty are recognized with the remuneration for coordinating FDPs
- Faculty are given the financial assistance for attending workshops/seminars/conferences
- Promotion/career advancement for faculty members is offered as per norms.
- Maternity leave is sanctioned to women faculty members.
- Medical/Accidental claims are facilitated to workforce.
- Incentives are given for Research Publications
- Faculty members are facilitated for filing the Patents

Non-Teaching Staff Welfare Measures and Avenues for their career development/ Progression

- All the employees are covered with Health insurance (ESI).
- Awareness workshops on safety and health consciousness.
- Compensation for working on holidays and beyond working hours.
- Staff quarters are for non-teaching staff.
- Festival Advance for Staff members.
- Security personnel are provided with uniform allowance and washing allowance

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.tce.edu/sites/default/files/PDF/Hand-Book.pdf

6.3.2 - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

41

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

16

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	View File
Upload any additional information	No File Uploaded

6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

87

File Description	Documents
Summary of the IQAC report	View File
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View File
Upload any additional information	No File Uploaded

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

Internal and external auditing (Local fund audit and GST audit) of all financial transactions are carried out at periodic intervals in adherence to the guidelines of Government norms. Financial planning is carried out annually considering the budget proposals submitted by respective authorities in the College and income expenditure during the previous financial year. Budget allocation is done for every financial year for each department under various heads. The prepared budget proposal is placed before the Governing Council for approval. Financial activities are carried out by accounts manager. This process is scrutinized by the Management and Government auditors (Local Fund and Accountant General). Internal financial auditor has freedom to suggest and revise the formats of relevance based on the feedback from the students and faculty, in consultation with Registrar. Utilization is tracked periodically through internal and external finance audits. Further, as the college is supported by TEQIP – world bank initiative, budget is also allotted to new initiatives like infrastructure development, curriculum development, faculty development and industry interaction as per the guidelines by National Project Implementation Unit (NPIU). The college files GSTR1 & GSTR3B as per the guidelines of GST. The GST amount is remitted every month.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

6.4.2 - Funds / Grants received from non-government bodies, individuals, and

philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)**24.45032**

File Description	Documents
Annual statements of accounts	View File
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	View File
Any additional information	No File Uploaded

6.4.3 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources**Mobilization of Funds:**

- Salary Grant for Government Aided faculty and Supportstaff
- College fees for the students: (Tuition Fees, development Fees, Laboratory fees, Internet fees, skill development fees, Exam fees)
- Sponsored Research Projects from Government bodies/Organizations
- Consultancy projects from industries
- Corporate Social Responsibility
- Alumni Contribution towards students welfare
- Organizing Faculty Development Programmes/STTPs/Workshops/Seminars
- Establishment of Industry Supported Laboratories/Centre of Excellence

Optimal Utilization of Resources:

- Salary for the faculty and supporting staff member
- Establishment of Infrastructure for academic, research and industry collaboration activities
- Procurement of State of Art equipment, Softwaree Licensing, Library
- Infrastructure Internet and WiFi faciity
- Skill Development Programmes for the students
- Conduct of examinations
- Remuneration for coordinating FDPs
- Financial assistance for attending workshops/seminars/conferences
- Incentives for Research Publications
- Faculty Recognizion with Financial Assistance

- Thiagarajar Research Fellowship for Research scholars
- Financial support for filing Patents.
- Aid for needy students at the institutions.
- Scholarship from Trust and alumni contribution, Freeship for the students
- Institutional Transformation Initiatives Process
- Automation Adjunct Faculty Association, Professional society, co curricula and extracurricular activities
- Work place management
- Honorarium for Board of Studies, Academic Council, Governing Council and IQAC members
- Gratuity for retired faculty and support staff members

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

IQAC team of TCE has contributed significantly in the following quality initiatives/activities:

- NAAC Cycle 2 Assessment and Accreditation - Steering committee formation, SSR preparation and periodic reviews, SSR submission, facilitating PTV
- Participation in NIRF and THE rankings
- NBA Compliance audit to BTech Information Technology and BE Mechatronics programmes
- Academic and Administrative audits for all the departments including Course File Audit, Student Performance, Progression of Departments
- Development of TCE Online courses: 20 courses rolled out in two Phases in the Moodle platform to enable external participations
- Academic Collaborations - Organized webinars with National and International Institutes by all Departments, which in turn facilitated for Joint Teaching and Remote Internships
- Eminent Professors from Higher learning institutions/

Industry experts were appointed as adjunct faculty members to conduct state-of-art courses

- Thiagarajar Research Fellowship scheme was introduced to promote research publications.
- Library: Remote access has been given to students, faculty and research scholars through mobile app
- Implementation of 'Research Practice' Paper for UG Programmes
- Setting up of Smart Classroom - Impartus Lecture Capturing System, Interactive TV and online access
- Research Council meets periodically for policy formation and recommendations for research promotion

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://tce.edu/naac/naac-ssr

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

Programme Performance Assessment Committee (PPAC) Audit:

- PPAC of each programme conducts audit every semester in the following aspects
- Audit of the question papers of Continuous Assessment Tests.
- Setting and Revision of Targets for COs, POs, PSOs. Analysis of deviations in target and actual attainment of COs, POs, PSOs. If any deviation, corrective actions are proposed by PPAC. The corrective actions are implemented by the course coordinator. The effectiveness of the corrective actions is examined in the subsequent audit.
- Recommendations and Action plan for improvement

Course File Audit:

The Academics team of the College conducts Course File audit at every semester. The course file includes course contents, test question, question to CO mapping, scheme of evaluation, assignment questions, sample answer scripts, test performance analysis, course exit survey, CO attainment, and faculty reflective report. Syllabus coverage, content delivery methods, quality of assessment and rubrics used in courses are

audited. Comments and suggestions for improvement are provided for the course coordinators.

Terminal Examination: Question Paper Audit

The Controller of examinations office conducts question paper & answer script audit with external experts. Audit reports are submitted to respective Head of the Department for necessary actions.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.tce.edu/sites/default/files/nac/criteria-2/2.6/2.6.-PPAC-Index.pdf

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)

A. Any 4 or all of the above

File Description	Documents
Paste the web link of annual reports of the Institution	https://www.tce.edu/igac/reports
Upload e-copies of accreditations and certification	View File
Upload details of quality assurance initiatives of the institution	View File
Upload any additional information	No File Uploaded

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

- The institution provides equal opportunity to both boys & girls students and men & women staff. In the institution. 40% of the faculty members are women and 40% of the students are girls.
- Women staff represent various committees and decision making bodies. Five faculty members are at the level of Head of the Departments and Deans.
- Women Development cell (WDC) of the institution has organized webinars like 'A New Journey Ahead', Sustainable livelihood opportunities during Covid-19 pandemic', 'Art of Living', 'Healthy Living', etc. WDC of the Institute organized a webinar on 'Prevention of sexual harassment' on International Women day.
- Separate hostel facility is provided for girls and boys students.
- Bus facilities are provided for girl students and the women faculty.
- Security personnel have been deployed in adequate numbers on the campus round the clock.
- In case of any health issues, ladies waiting rooms are available for students and faculty to take rest.
- Awards are given separately for boys and girls in the following categories every academic year. Outgoing Student Excellence, Best outgoing student, Best Outgoing NCC cadet, Best Outgoing NSS volunteer, Best Outgoing sports person, and Best Outgoing Fine Arts student.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/wdc

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment

A. Any 4 or All of the above

File Description	Documents
Geotagged Photographs	View File
Any other relevant information	No File Uploaded

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

Solid Waste Management:

Biodegradable Waste:

- Converted in to manure by decomposition - new method for fast decomposition
- Bio gas conversion

Non biodegradable Waste- Plastics:

- Plastic Tar Road (This technology was also coded by the Indian Road Congress in 2013(IRC-SP-98-2013)
- PLASTONE blocks
- Roofing Sheets
- Plastics to fuel oil

Plastic waste Management Techniques:

- Collection of waste plastics and disposal
- Shredding of waste plastics in to required size of 2mm to 4mm
- Preparation of plastic coated aggregate
- Mixing of bitumen and the stone
- Laying of plastic tar road

Consultancy:

- Laying of plastic roads
- Waste management systems in industries

Liquid Waste Management:

Liquid Waste:

- Waste water from kitchen
- Waste water from industries
- Reject waste water from RO plants
- Distilleries waste

Management Techniques:

- Analysis of composition of waste water
- Removal of heavy metals and other hazardous impurities (R&

D)

- Reuse of waste water in gardening and washing
- Sewage treatment plant
- Individual houses
- Portable KIT to test as well as purify the waste water

Two sewage treatment plants with Effluent Treatment with the capacity of 7000 litres/day were established in the Campus.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	View File
Geotagged photographs of the facilities	View File
Any other relevant information	View File

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of the facilities	View File
Any other relevant information	No File Uploaded

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

A. Any 4 or All of the above

1. Restricted entry of automobiles
2. Use of bicycles/ Battery-powered vehicles
3. Pedestrian-friendly pathways
4. Ban on use of plastic
5. Landscaping

File Description	Documents
Geotagged photos / videos of the facilities	View File
Various policy documents / decisions circulated for implementation	View File
Any other relevant documents	No File Uploaded

7.1.6 - Quality audits on environment and energy undertaken by the institution

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:

A. Any 4 or all of the above

1. Green audit
2. Energy audit
- 3.Environment audit
- 4.Clean and green campus recognitions/awards
- 5.Beyond the campus environmental promotional activities

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	View File
Certification by the auditing agency	View File
Certificates of the awards received	No File Uploaded
Any other relevant information	No File Uploaded

**7.1.7 - The Institution has a disabled-friendly and barrier-free environment:
Ramps/lifts for easy access to classrooms and centres
Disabled-friendly washrooms
Signage including tactile path lights, display boards and signposts
Assistive technology and facilities for persons with disabilities:
accessible website, screen-reading software, mechanized equipment, etc.
Provision for enquiry and information: Human**

A. Any 4 or all of the above

assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

File Description	Documents
Geotagged photographs / videos of facilities	View File
Policy documents and brochures on the support to be provided	View File
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

The College believes in the oneness principle of the country and there is no space for intolerance on the campus.

Students from different states like Jammu & Kashmir, Manipur, Kerala, etc are admitted in UG, PG and PhD programmes. They mingle with all other students for any academic, co-curricular and extra-curricular activities. No discrimination or restriction are given to them for participation.

NSS camps to nearby villages are organized every year and this makes the students understand the societal needs challenges.

The College treats all students and staff equally without any discrimination in caste, region, language and socio-economic diversities.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View File

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

- The College website displays the core values of TCE and

insists the societal responsibility, citizenship and empowerment.

- In the curriculum, the courses namely Environmental Science, Constitution of India and Essence of Indian Traditional Knowledge are offered for undergraduate students. Value Education courses are offered for postgraduate students.
- Organized various programmes such as National Voter's day, Energy Conservation Day, Environment Day, etc to make the students and staff understand their duties and responsibilities
- Engineering Without Borders (EWB) Chapter organizes events for the students to understand the real time engineering problems in the nearby Villages and encourages them to solve those problems using technologies
- TCE National Service Scheme (NSS) team organizes Blood Donation Camp every year in collaboration with Madurai Government Rajaji Hospital.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	No File Uploaded
Any other relevant information	No File Uploaded

7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized

A. All of the above

File Description	Documents
Code of Ethics - policy document	View File
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	No File Uploaded
Any other relevant information	No File Uploaded

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The following national events are celebrated at the institution regularly:

- Independence Day
- Republic Day
- Yoga Day
- World Environment Day
- Energy Conservation Day
- Sadhbhavan Das
- Women's Day
- World Water Day

TCE celebrated Birth/Death Anniversaries of the great Indian Personalities:

- Founder's day
- Teacher's day
- Srinivasa Ramanujam Birth Anniversary is celebrated as Mathematics Day.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	No File Uploaded
Geotagged photographs of some of the events	No File Uploaded
Any other relevant information	No File Uploaded

7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Best Practice 1:Alumni Interaction

Objective:To improve Alumni linkageacross the globe

ContextAlumni Association plays a pivotal role in advancing the Institution's objectives by coordinating and supporting a spectrum of activities. These activities aim to foster the nexus between academia and industry, enhance placement and internship opportunities.

Practice

- Inclusion of Alumni inBoSmeetings
- Conduct of Reunions
- Alumni Chapters

Evidence of Success:

- More than 200 studentsbenefited by Scholarships

Problems Encountered and Resources Required

- Need more man power for the administrative support

Best Practice 2:Engineering Education Research (EER)

Objective:To improveglobal relevance of EER with focus on Faculty Development by integratingtechnologies.

ContextThe Academic Process team aims to set up a dynamic learning environment that equips faculty with contemporary skillsto meet evolving industry demands, thereby ensuring the global educational experience.

Practice

- Setting up of Teaching Learning Center (TLC) in Institute
- Conduct of Faculty Conclave annually to showcaseTeaching Learning practices
- Conversion of Best Practices into research paper in the

refereed journals and indexed conferences

Evidence of Success:

- Increase in the number of papers to Conferences/Journals
- Student achievements in hackathons

Problems Encountered and Resources Required

- Time management for academic, administrative and research oriented tasks

File Description	Documents
Best practices in the Institutional website	https://www.tce.edu/sites/default/files/PDF/AQAR-2023-24-BestPractices.pdf
Any other relevant information	Nil

7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

Title:

Promotion of Entrepreneurship Skills

Objective:

To promote entrepreneurial skills among students

Context

The Entrepreneurship Development Cell (EDC) is the gate way that promotes young entrepreneurs and startups to venture. It plays a vital role in connecting the fresh talents to resources by closely working with the Institute. The business incubation centre provides a healthy breeding ground for startups and has widened its scope by providing support to make the ideas to product to enterprise.

Practice

- Course offering in Design Thinking (Core) and Entrepreneurship Development (Open Elective) for students
- Establishment of MakerSpace to streamline their innovative ideas
- Conduct of ideathons / hackathons in-house contests and e-bazaar day for motivation
- Conduct of Patent Workshops
- Motivating the idea patent submissions
- Awards and recognitions to best ideas for further product development

Evidence of Success:

- 6 teams won First Prize in Smart India Hackathon (SIH) in the year 2022
- 4 patents granted and 6 patents published in the year 2022
- 11 Grants received from Government schemes
- 40 different ideas are at levels 3 to 7 for technology readiness
- 10 startups in TCE incubation center

Problems Encountered and Resources Required

Sources for Funding

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

1. Local Needs: Courses on 'Engineering Exploration', 'Design Thinking' and 'System Thinking' are introduced to study and understand the local needs and provide possible solutions.

2. Regional Collaboration: TCE collaborates closely with regional industries, research institutions, and government bodies to identify emerging trends and demands, incorporating relevant content into courses to meet regional job market needs. Curriculum for B.E. Mechanical and EEE Programmes have been designed in collaboration with TVS Motors. Curriculum for B.Tech. CSBS has been designed in collaboration with TCS. Courses on "Heritage of Tamils" and "Tamils and Technology" have been included.

3. National Alignment: TCE aligns with national policies and initiatives such as NEP 2020 by collaborating with academic forums like IUCEE to offer additional courses specified by NEP 2020. Courses offered by NPTEL-SWAYAM are permitted for credit transfer after an approval procedure followed by the departments. Further, courses namely "Essence of Indian Knowledge" and "Constitution of India" have been included in the curriculum.

4. Global Focus: TCE prepares students for the global arena by emphasizing international best practices through courses offered by IUCEE. Undergraduate programs are designed with the Conceive-Design-Implement-Operate (CDIO) framework, emphasizing engineering fundamentals and hands-on projects.

File Description	Documents
Upload additional information, if any	No File Uploaded
Link for additional information	https://www.tce.edu/sites/default/files/naac/criterion/c1/c1-1-1-1-1.pdf

1.1.2 - Number of Programmes where syllabus revision was carried out during the year**12**

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	View File
Details of syllabus revision during the year	View File
Any additional information	No File Uploaded

1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year**780**

File Description	Documents
Curriculum / Syllabus of such courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	View File
MoUs with relevant organizations for these courses, if any	View File
Any additional information	No File Uploaded

1.2 - Academic Flexibility**1.2.1 - Number of new courses introduced across all programmes offered during the year****214**

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	View File
Any additional information	No File Uploaded
Institutional data in prescribed format (Data Template)	View File

1.2.2 - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

17

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	View File
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	View File

1.3 - Curriculum Enrichment

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

The institute offers course on 'Environmental Science' for addressing Environmental issues, courses 'Essence of Indian Knowledge' and 'Value Education' for Human values, Indian culture and Professional ethics, course on 'Constitution of India' for human rights, gender issue and duties and responsibilities.

Further, in the courses of Design Thinking, Systems Thinking and Engineering Design Project that supports CDIO framework, the students provide technology based solution to societal and enterprise issues considering the environment and sustainability in an ethical manner. Further, industry supporting courses like 'Green Construction', 'Green Data Centre', 'Six Sigma', 'Value Engineering and 'Environment compatibility design' are offered by industry experts on the contemporary Technologies to address cross cutting issues.

The institution integrates cross cutting issues relevant to gender, environment and sustainability, human values and ethics by introducing specific courses in the curriculum and various activities in the First Year Orientation Programmes.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	View File
Any additional information	No File Uploaded

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

24

File Description	Documents
List of value-added courses	View File
Brochure or any other document relating to value-added courses	View File
Any additional information	No File Uploaded

1.3.3 - Number of students enrolled in the courses under 1.3.2 above

146

File Description	Documents
List of students enrolled	View File
Any additional information	No File Uploaded

1.3.4 - Number of students undertaking field work/projects/ internships / student projects

1147

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	View File
Any additional information	No File Uploaded

1.4 - Feedback System

1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni	A. All 4 of the above								
<table border="1"> <thead> <tr> <th>File Description</th><th>Documents</th></tr> </thead> <tbody> <tr> <td>Provide the URL for stakeholders' feedback report</td><td>https://tce.edu/naac/criteria-14/feedba ck</td></tr> <tr> <td>Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management</td><td>View File</td></tr> <tr> <td>Any additional information</td><td>No File Uploaded</td></tr> </tbody> </table>	File Description	Documents	Provide the URL for stakeholders' feedback report	https://tce.edu/naac/criteria-14/feedba ck	Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	View File	Any additional information	No File Uploaded	
File Description	Documents								
Provide the URL for stakeholders' feedback report	https://tce.edu/naac/criteria-14/feedba ck								
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	View File								
Any additional information	No File Uploaded								
1.4.2 - The feedback system of the Institution comprises the following	A. Feedback collected, analysed and action taken made available on the website								
<table border="1"> <thead> <tr> <th>File Description</th><th>Documents</th></tr> </thead> <tbody> <tr> <td>Provide URL for stakeholders' feedback report</td><td>https://tce.edu/naac/criteria-14/feedba ck</td></tr> <tr> <td>Any additional information</td><td>No File Uploaded</td></tr> </tbody> </table>	File Description	Documents	Provide URL for stakeholders' feedback report	https://tce.edu/naac/criteria-14/feedba ck	Any additional information	No File Uploaded			
File Description	Documents								
Provide URL for stakeholders' feedback report	https://tce.edu/naac/criteria-14/feedba ck								
Any additional information	No File Uploaded								
TEACHING-LEARNING AND EVALUATION									
2.1 - Student Enrollment and Profile									
2.1.1 - Enrolment of Students									
2.1.1.1 - Number of students admitted (year-wise) during the year									
1241									
<table border="1"> <thead> <tr> <th>File Description</th><th>Documents</th></tr> </thead> <tbody> <tr> <td>Any additional information</td><td>No File Uploaded</td></tr> <tr> <td>Institutional data in prescribed format</td><td>View File</td></tr> </tbody> </table>	File Description	Documents	Any additional information	No File Uploaded	Institutional data in prescribed format	View File			
File Description	Documents								
Any additional information	No File Uploaded								
Institutional data in prescribed format	View File								
2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)									

1206

File Description	Documents
Any additional information	No File Uploaded
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

The institute assess the students' academic performance at the end each continuous assessment tests and terminal examination. The students who have more than 8.0 CGPA is considered as advanced learners.

Support for advanced learners

- Advanced learners can register for more number of regular courses in a semester and industry supported courses under choice based credit system.
- Guided Study Course is offered to the students who do not have history of arrear.
- The institution encourages advanced learners to participate in competitions, workshops, e-courses like NPTEL, coursera, eDdX, guest-lectures, association and professional society activities.
- A course on 'Research Practice' is offered to promote research culture among students

Support for Low Performing Students:

- As the number of students from rural areas and vernacular medium are many, special classes are arranged with peers and faculty members. These classes are conducted without affecting the regular classes.
- Counseling sessions and parent teacher meetings are conducted to improve academic performance.
- Bridge Course and remedial classes are conducted every year for Lateral Entry Students.
- English Fluency Class is conducted for Second and third year Tamil medium and vocational students so that their soft and communication skills are improved.

- **Soft Skill development programme for placement**

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.tce.edu/sites/default/files/naac/criterion/c2/c2-2-2-1.pdf

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
31/05/2024	4641	257

File Description	Documents
Upload any additional information	No File Uploaded

2.3 - Teaching- Learning Process

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

Experiential Learning:

CDIO Framework:TCE adopts the CDIO framework, a globally recognized educational initiative aimed at enhancing product development skills. This framework focuses on nurturing the affective and psychomotor domains of learning, ensuring that students not only grasp theoretical concepts but also gain practical experience in designing and implementing engineering solutions.

Participative Learning:

Interactive Classrooms: TCE's departments are equipped with state-of-the-art reconfigurable classrooms and interactive digital boards. These facilities facilitate active and collaborative learning, allowing students to engage with course material in dynamic ways and participate actively in discussions and activities.

Problem-Solving Methodologies:

Project Works: In final semester, students undertake exclusive project works based on recommendations from industries, research interests, and societal needs. Rigorous assessment criteria are employed to evaluate the quality and effectiveness of these projects, fostering a culture of innovation and problem-solving.

Internships: TCE encourages students to undertake internships in industries during their final semester. These internships serve as valuable opportunities for skill development and practical experience, bridging the gap between academic learning and professional practice.

Community Projects: TCE actively promotes community engagement through projects facilitated by organizations like NCC/NSS and professional societies like Engineers without Borders (EWB) and IUCEE EPICS.

File Description	Documents
Upload any additional information	No File Uploaded
Link for additional Information	https://www.tce.edu/sites/default/files/naac/criterion/c2/c2-2-3-1.pdf

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

- The necessary infrastructure like interactive digital boards, display boards, Plickers, Clickers, Lecture Capturing Systems, TCE Digital Studio for recording have been established.
- Classroom lectures are recorded and made available for reference using Lecture Capturing Systems.
- The institute has provided digital creative pen tablets and digital cameras with audio support system to faculty members for promoting interaction in online classes.
- The institute has launched eleven online courses on futuristic technologies which can be accessed at <https://www.tce.edu/tce-mooc> to promote skill development and interdisciplinary learning.
- Students are awarded academic credits on successful completion of the NPTEL and TCE online courses.
- On understanding the need for providing resilient

teaching approach to facilitate the learning experiences adaptable to unpredictable conditions and disruptions, the academic team organizes in-house pedagogical workshops and training on the tools like screen-cast-o-matic, Moodle as learning management system, interactive software like slido, peerdeck, H5P etc.

- The institution has set up a Moodle server at the Institute to support online and blended learning and a separate domain <https://exams.tce.edu/> has been setup exclusively for the conduct of terminal examinations.
- Digital library facility is used to carry out literature survey, refer relevant materials for research projects & consultancy and classroom preparation by the faculty members.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://tce.edu/tce-mooc
Upload any additional information	No File Uploaded

2.3.3 - Ratio of students to mentor for academic and other related issues

2.3.3.1 - Number of mentors

226

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	View File
Circulars with regard to assigning mentors to mentees	No File Uploaded

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

Preparation:

- Formulation of Academic Calendar Committee consisting of Dean (Academic Process), the Controller of Examinations (CoE) and Faculty-in-charge.

- Collection of proposed activities from all the Head of the Departments, Deans, Registrars and the CoE. The schedules for all academic activities are planned.

Adherence:

- All activities are conducted by the respective HoDs/Deans/CoE/ Registrar as per the academic calendar.
- The industry supported courses are conducted as per the availability of industry experts.
- Change in the academic calendar (if any) will be informed to the students and teachers through circulars well in advance.

Teaching Plans:

- Every faculty member prepares a teaching plan at the beginning of the every semester for every course handled.
- The teaching plan includes learning objectives, links to learning resources, formative and summative assessment plans, time plan for lecturing, plans for incorporating active and collaborative learning.
- The teaching plans are developed in course committee meetings and are submitted to the head of the department for approval.
- The teaching plans are also shared with the learners for followup. The templates for teaching plan of the institute can be accessed at <https://www.tce.edu/academics/process-format>

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	No File Uploaded

2.4 - Teacher Profile and Quality

2.4.1 - Number of full-time teachers against sanctioned posts during the year

257

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	View File
List of the faculty members authenticated by the Head of HEI	View File
Any additional information	No File Uploaded

2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

182

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	View File
Any additional information	No File Uploaded

2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

3321

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	View File
Any additional information	No File Uploaded

2.5 - Evaluation Process and Reforms

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

21

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	View File
Any additional information	No File Uploaded

2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

103

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	View File
Upload any additional information	No File Uploaded

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

- The institution has automated academic and examination process. Starting from course registration to publication of results is carried out digitally. The examination schedule is published in automated software and students can view it using mobile app also. All announcements are made using software so as to reach stakeholders instantly.
- The semester examination answer scripts are first assigned dummy numbers based on bar code. The examiners who evaluate the answer scripts do not know the identity of the students.
- The system of issuing hall tickets has been abolished as the students have valid ID card. This saves time and efforts required for printing and distributing hall tickets.
- After the publication of results, the students can go-through their answer scripts and scheme of evaluation. If there is scope for additional marks, students can appeal. The appeals are examined by faculty during revaluation of the answer paper and verified by Head of

the department for fairness.

- Periodically, academic audits are conducted to identify scope for improvement in the standard of questions.
- Private students can register arrear examinations through online.
- This facilitates ease of operation for both students and COE office. The adoption of IT in the entire chain leads to error free and faster operation.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/exams

2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

The competency based curriculum of the institute has been refined in alignment with the accreditation policy of National Board of Accreditation and implemented as Outcome Based Education (OBE) in 2014-18. Initially, the feedback from various stakeholders namely Alumni, Industry, Faculty, professional societies and parents were collected. Then, an initial draft of PEOs, POs and PSOs is prepared through brainstorming session at the department level committee constituted with HoD, Program Coordinator and Faculty representatives.

The articulated PEOs, POs and PSOs are placed in Board of Studies (BoS) for discussion. After incorporating the suggestions by the BoS, it is placed for approval in Academic Council Meeting (ACM). Final version of PEOs, POs and PSOs are published in

- College Website - Department Home Page Notice Boards, Class rooms and Laboratories Staff rooms Syllabus Book Department Magazine
- They are disseminated during First year Orientation Programs, Campus Placements, Alumni & Parent Teachers Meetings
- Weblinks are given as additional information document

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	View File
Upload any additional information	No File Uploaded
Link for additional Information	https://www.tce.edu/academics

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

Assessment Tools:

- Continuous Assessment Tests
- Terminal Examinations
- Assignments
- Projects
- Course Exit Surveys

Process for calculating Course Outcome (CO) Attainment

Expected Proficiency (EP) and Expected Level of Attainment (ELA) of all COs are fixed based on the average performance in end semester examinations for the respective set of students graduated in the previous three academic years and the cognitive level of the COs. For fixing ELA, 30% improvement is considered from the current level of achievement. TCE Proficiency scale which addresses cognitive, psychomotor and affective domains is used in writing COs. Assessment pattern is designed based on the proficiency scale of COs. The CO attainment is calculated at each stage and corrective actions are done as follow-up.

Attainment of Program Outcomes (PO) and Program Specific Outcomes(PSO)

POs and PSOs are assessed through

- Direct Assessment
- Curricular Component
- Indirect Assessment
- Co-curricular and Extracurricular Activities
- Program End Survey

- **Employer Survey**

In surveys, the attainment of PO/PSO is calculated by the average of responses with ratings greater than the target level for the questions mapped with every PO/PSO. The attainment of COs, POs, and PSOs are recorded and action plan for improvement is decided in the Programme Performance Assessment Committee (PPAC) meeting.

The process of CO, PO, and PSO attainment calculation has been automated in CAMU.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/sites/default/files/naac/criteria-2/2.6/2.6-Process-for-CO-and-PO-assessment.pdf

2.6.3 - Pass Percentage of students

2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

1081

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	View File
Upload any additional information	View File
Paste link for the annual report	Nil

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

<https://www.tce.edu/sites/default/files/PDF/SSS-Report-Analysis-2023-24.pdf>

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

To encourage interest and breakthroughs in cutting-edge fields of science, engineering, and technology, the institution has adopted a research policy. The promotion policy has developed a robust research and innovation ecosystem by providing travel grants to faculty and students to enable them to participate and present papers at national and international conferences, providing travel assistance for presentations of research and development projects, and periodically rewarding quality research publications with incentives.

The institute has five nodal research centers, an incubation center, and more than fifty well-established laboratories that enable faculty, students, and research scholars to conduct research and development. Agreements have been made to promote the culture of collaborative research with higher learning institutions and industries and seed money is also provided to faculty members.

Students, scholars, and faculty are regularly involved in awareness programs on 'Research Paper Writing', 'Quality Measure of Journals using SJR Values', and 'Web of Science'. Plagiarism checking tool 'Turnitin' has been purchased to submit articles with low similarity rates and feel more confident in publishing the research work.

Thiagarajar Research Fellowship has been introduced in order to attract research scholars to our institution. Course on 'Research Practice' has been introduced to inculcate research among UG students.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View File
Provide URL of policy document on promotion of research uploaded on the website	https://www.tce.edu/sites/default/files/PDF/Research-Policy_0.pdf
Any additional information	No File Uploaded

3.1.2 - The institution provides seed money to its teachers for research

3.1.2.1 - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

10

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	View File
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View File
List of teachers receiving grant and details of grant received	View File
Any additional information	No File Uploaded

3.1.3 - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

4

File Description	Documents
e-copies of the award letters of the teachers	View File
List of teachers and details of their international fellowship(s)	View File
Any additional information	No File Uploaded

3.2 - Resource Mobilization for Research

3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

81.16

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	View File
List of projects and grant details	View File
Any additional information	No File Uploaded

3.2.2 - Number of teachers having research projects during the year

10

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://tce.edu/research/sponsored-research
List of research projects during the year	View File

3.2.3 - Number of teachers recognised as research guides

107

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	No File Uploaded
Institutional data in Prescribed format	View File

3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year

2

File Description	Documents
Supporting document from Funding Agencies	View File
Paste link to funding agencies' website	https://tce.edu/research/sponsored-research
Any additional information	No File Uploaded

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

Entrepreneurship Development Cell: EDC organizes the work plan of the Entrepreneurship promotion activities. It is affiliated to Young Indians Students Chapter, Confederation of Indian Industry (CII) and Native Lead Foundation, who are funding the startups. TCE is empanelled under PM -YUVA and also a special elective course on "Entrepreneurship Development" is being taught for the last seven years. The E Cell conducts events such as ideathon to promote entrepreneurship thinking among the students.

Technology Business Incubator facilitates commercialization of R&D technologies, promotes faculty to incubate start-up companies in collaborative mode and facilitates alumni and local entrepreneurs to establish start-up venture. Currently 25 start up physical start-ups are in place and strong tie-up with Thiagarajar Entrepreneur Network.

IPR Cell: As part of its mission, the TCE aims to develop

intellectual capability to its maximum extent. TCE has a separate Intellectual Property Cell under R&D that facilitates, encourages, promotes, and safeguards intellectual property of its faculty, students, researchers, and staff. To provide guidance to inventors concerning the rules of the Institute regarding intellectual property, the IPR Cell has formulated its intellectual property policy. With the assistance of CII, NIPAM, and RGNIIPM, the IPR cell organizes IPR awareness workshops and courses.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://tce.edu/research/ipr-cell/about-us

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

2

File Description	Documents
Report of the events	View File
List of workshops/seminars conducted during the year	View File
Any additional information	No File Uploaded

3.4 - Research Publications and Awards

3.4.1 - The Institution ensures implementation of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check through authenticated software

A. All of the above

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	View File
Any additional information	No File Uploaded

3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

3.4.2.1 - Number of PhD students registered during the year

70

File Description	Documents
URL to the research page on HEI website	https://tce.edu/research
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	View File
Any additional information	No File Uploaded

3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year

159

File Description	Documents
List of research papers by title, author, department, and year of publication	View File
Any additional information	No File Uploaded

3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

109

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

3.4.5.1 - Total number of Citations in Scopus during the year

3033

File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	View File

3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

3.4.6.1 - h-index of Scopus during the year

34

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View File
Any additional information	No File Uploaded

3.5 - Consultancy

3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

81.8004

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View File
List of consultants and revenue generated by them	View File
Any additional information	View File

3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

2510922

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	View File
List of training programmes, teachers and staff trained for undertaking consultancy	View File
List of facilities and staff available for undertaking consultancy	View File
Any additional information	No File Uploaded

3.6 - Extension Activities

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

Engineers without Borders (EWB) student chapter is an engineering-centered, multidisciplinary, community-based approach to design education. The primary goal of this program is to foster student and faculty engagement in developing meaningful engineering solutions to the problems of local communities thereby gaining service-learning experience. Conceptual prototypes of real-world location-specific community problems aware developed by the students as significant outcome of the design thinking course.

Satisfaction index of the students is improved mainly because of experiential learning. Use of the rubrics for periodic reviews served as an effective instrument for assessing personal and interpersonal skills of the students. Opportunities provided for promoting 21st -century skills namely creativity, critical thinking, collaboration and communication have motivated the students to take up the prototypes to next level of its implementation. The training programs on Design Thinking have enriched the faculty competence in mentoring the students with a human-centered approach to solve real community problems. The significant projects are:

Projects carried out by our students.

- Sustainable Development for Thangalacheri Village
- Treating Industrial Water - Dye Removal
- E-Waste Collection
- Shaping Early Adolescence
- Traceability of organic food products and paddy crop using blockchain
- 6. Distillation units for essential oils

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://tce.edu/student/professional-societies/ietsc

3.6.2 - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

5

File Description	Documents
Number of awards for extension activities in during the year	View File
e-copy of the award letters	View File
Any additional information	No File Uploaded

3.6.3 - Number of extension and outreach programmes conducted by the institution

through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

9

File Description	Documents
Reports of the events organized	View File
Any additional information	No File Uploaded

3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

750

File Description	Documents
Reports of the events	View File
Any additional information	No File Uploaded

3.7 - Collaboration

3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

9

File Description	Documents
Copies of documents highlighting collaboration	View File
Any additional information	No File Uploaded

3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

33

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	View File
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	View File
Any additional information	No File Uploaded

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning, viz., classrooms, laboratories, computing equipments, etc.

Classrooms:

Number:92, Capacity 40-75

- Equipped with Multimedia Projector, Podium, Fan, Light, Table with chair, Glass board with good ambience, adequate lighting and good ventilation.
- Size is equal to or more than that stipulated by statutory bodies. One classroom of each department is equipped with Lecture Capturing System.
- Enabled with wi-fi facility to implement Active Learning strategies

Tutorial Rooms:

Number:16, Capacity 30-40

- Equipped with LCD Projector, Wi-fi, White Board, and chairs attached with writing pad.

Seminar Halls:

Number:7, Capacity 50-100

- Equipped with LCD Projector with Smart board facility, WiFi, Audio and Video facilities

Drawing Halls:

Number:3, Capacity 30-70

- Equipped with Drawing tables, Chairs, Fans, Light with good ventilation and ambience.

Laboratories:

Number:89,Capacity 30-60

- Equipped with state of the art facilities with adequate safety measures and periodic maintenance.
- Few of the Laboratories are established with Industries support

Computing Facility:

A Central Computing Centre (CCC) with 150 Desktop Computing Systems is functioning from 8.00 a.m to 10.00 p.m for Monday to Saturday and 8.00 a.m to 6.00 p.m on Sundays.

- A computing centre with 30 Desktop Computing systems is functioning in the Ladies and Gents Hostel by 24/7 mode

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

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

Physical Education Departments Facilities:

TCE has well equipped sports facilities cater for the sports and games requirements of the students. Every year around 500 students participate in all the sports and games event. TCE conducts ANNA University zonal tournaments, Inter zonal tournaments, Intra and Inter department tournaments and Intramural tournaments, TCE Marathon, Founder Memorial Hockey and KhoKho tournament and Dr. Radha Thiagarajan Memorial Chess tournament.

Indoor stadium:

TCE has well equipped and furnished Indoor stadium (Ground Floor and 1st floor) of size 23,674 square feet with seating capacity of 300.

- 4 Badminton Courts (13.40mX6.10m)
- 1 Basketball Court (28mX16m)
- 2 Volleyball Courts (18mX9m)
- 2 Judo halls (12mX11m)
- Chess Hall (5.90mX21.30m)
- Table Tennis (6mX21m)
- Gym Hall (13mX12m)
- Yoga Hall (12mX9m)

Outdoor Games:

- 2 Ball Badminton Courts (24mX12m)
- 1 Basket Ball Court (28mX16m)
- Football Field (90mX50m)
- Hockey Field (91.40mx55m)
- Kho-Kho Court (27mX16m)
- Kabaddi Court (13m X 10m)
- Tennis Court (23.76mX 10.97m)
- Volleyball Court (18m X 9 m)

Cultural Activities:

The College has three auditoriums, fully Air Conditioned Karumuttu Sundaram Auditorium with a seating capacity of 204 and fully air-conditioned Karumuttu Kannan Auditorium with a seating capacity of 800. An Open-air auditorium of seating capacity 2000 to conduct college cultural activities.

File Description	Documents
Geotagged pictures	View File
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

107

File Description	Documents
Upload any additional information	No File Uploaded
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)

546.64387

File Description	Documents
Upload audited utilization statements	View File
Details of Expenditure, excluding salary, during the years	View File
Any additional information	No File Uploaded

4.2 - Library as a Learning Resource

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

TCE library

- Completely automated by LIBSYS software from 2005 to 2013.
- Upgraded to Autolib software with features such as SMS for each transaction, Web OPAC and Mobile OPAC. This OPAC has been integrated with open access e-book, chat facility and auto renewal of books.
- Enabled with RFID system from 2018 with automatic issue / return using kiosk and drop box with RFID GATES for theft detection.
- Remote access was given to all Faculty, Research Scholars and Students through Mobile App. It was effectively used during the Covid-19 lockdown period

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.tce.edu/academics/library

4.2.2 - Institution has access to the following: e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources

A. Any 4 or more of the above

File Description	Documents
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership	View File
Upload any additional information	No File Uploaded

4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

37.28829

File Description	Documents
Audited statements of accounts	View File
Any additional information	No File Uploaded
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

4.2.4.1 - Number of teachers and students using the library per day during the year

450

File Description	Documents
Upload details of library usage by teachers and students	View File
Any additional information	No File Uploaded

4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

The Information Technology (IT) Resources Management and Users Access Policy of the College sets forth the central policies that govern the usage of all users of the IT resources of this institute. The IT Policy applies to all the users (faculty members, staff and students and other users such as guest/alumni).

Usage of Computers:

Computers provided to the users are meant for fulfilling the academic /research /administrative tasks and should not be used for personal. The Central Computing Center (CCC) allocates the necessary IP addresses, proxies, and email relays.

Network:

All users are informed about the network capacity. Physically tampering with network connections, equipments, sending disruptive signals, or making excessive use of network resources is strictly prohibited.

Security:

The intranet/internet services are accessed through the Firewall and are not allowed to bypass firewalls and access rules in place.

Open Source Asset:

The institute shall endeavour towards the promotion and effective usage of Open Source Software depending on the requirements.

Purchase:

The user understands that the Central Computing Centre(CCC) is responsible for procurement, installation, configuration of all IT equipment,after due approval from theHead of the Institution.

System Administration:

CCC supports the system maintenance activities periodically

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.tce.edu/sites/default/files/naac/criterion/c4/c4-4-3-1.pdf

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
4641	1873

File Description	Documents
Upload any additional information	No File Uploaded

4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus

A. ?50 Mbps

File Description	Documents
Details of bandwidth available in the Institution	View File
Upload any additional information	No File Uploaded

**4.3.4 - Institution has facilities for e-content development:
Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS)
Mixing equipments and software for**

A. All four of the above

editing	
File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.tce.edu/sites/default/files/naac/criterion/c4/c4-4-3-3.pdf
List of facilities for e-content development (Data Template)	View File
4.4 - Maintenance of Campus Infrastructure	
4.4.1 - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)	
663.68889	
File Description	Documents
Audited statements of accounts	View File
Upload any additional information	View File
4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities – classrooms, laboratory, library, sports complex, computers, etc.	
Estate Maintenance: <ul style="list-style-type: none"> • Building related requests like building construction/modification/maintenance is passed to Estate Officer • The classrooms, laboratory ambience, gardens, washrooms and student support facilities are maintained on day by day basis by third party contract and by college. Laboratory Maintenance: <ul style="list-style-type: none"> • The Laboratory in charge of respective laboratory is responsible for the Calibration of equipment • Day to day electrical supply and electronics equipment is maintained by TCENET maintenance portal • Laboratories are maintained as per 5S quality norms and 	

is monitored by Department 5S coordinators.

- The obsolete equipment are condemned as per Government norms.
- Equipment in the laboratory are labeled by barcode and are maintained in Asset software

Library Maintenance:

- Library day to day activities is governed by the Librarian and Assistants.
- The overall monitoring of the Library is governed by a committee for the purchase of books, journals and software. Library follows the Government norms for weed out of worn out books, and stock verification is done yearly.
- Library is maintained as per 5S quality norms and is monitored by 5S coordinators.
- Every day, the returned books are re-shelved by the library assistants

Computer System Maintenance:

- Servers and desktop systems are checked once a week for new updates and upgraded accordingly.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year

1696

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	View File
Upload any additional information	No File Uploaded

5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

215

File Description	Documents
Upload any additional information	View File
Institutional data in prescribed format	View File

5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities
Soft Skills
Language and Communication Skills
Life Skills (Yoga, Physical fitness, Health and Hygiene)
Awareness of Trends in Technology

A. All of the above

File Description	Documents
Link to Institutional website	https://www.tce.edu/student/capacity-development-and-skill-enhancement
Details of capability development and schemes	View File
Any additional information	No File Uploaded

5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

72

File Description	Documents
Any additional information	No File Uploaded
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	View File
Details of student grievances including sexual harassment and ragging cases	No File Uploaded
Upload any additional information	No File Uploaded

5.2 - Student Progression

5.2.1 - Number of outgoing students who got placement during the year

669

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	No File Uploaded

5.2.2 - Number of outgoing students progressing to higher education

45

File Description	Documents
Upload supporting data for students/alumni	No File Uploaded
Details of students who went for higher education	View File
Any additional information	No File Uploaded

5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year

5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

72

File Description	Documents
Upload supporting data for students/alumni	View File
Any additional information	No File Uploaded

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

57

File Description	Documents
e-copies of award letters and certificates	View File
Any additional information	No File Uploaded

5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

- Students council meetings are conducted regularly for every academic year. The Principal and Deans attend the meetings along with Class Representatives of both Undergraduate and Postgraduate classes, Student coordinators for placement activities, Technical

Club Coordinators, Department Association Secretaries, Special Interest Group Coordinators and Higher studies and Language Club Coordinators are the members of this council.

- In every meeting, important issues are discussed related to academic, co-curricular and extra-curricular activities.
- In every meeting, the Principal informs to the students about the action taken on the issues/concerns reported in the previous meeting. During the meeting, the queries from the students are answered by the respective Deans/Principal.
- All the specific representations are informed to the respective authorities to respond within the stipulated time.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

5.3.3 - Number of sports and cultural events / competitions organised by the institution

57

File Description	Documents
Report of the event	No File Uploaded
List of sports and cultural events / competitions organised per year	View File
Upload any additional information	No File Uploaded

5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

TCE Alumni Association (TCEAA) coordinates and supports the following activities:

Alumni Scholarships:

TCEAA provides financial support to needy students based on a merit cum means basis. The donations received from the alumni are deposited as corpus fund in TCE Alumni Charitable Trust and the interest earned from that is used for student scholarships. Donations are exempted under Section 80G of the Income Tax Act.

Reunion:

Reunion brings new opportunities for students as many alumni are entrepreneurs. This paves the way for increase in student placement count. Generally, Alumni reunion is scheduled as Silver Jubilee Reunions - conducted during December /July. Golden Jubilee Reunions -conducted during July/ December.

Personality Development Camps:

Every year, three-day residential personality development camps are organized to impart soft skills, yoga practice, teamwork, emotional intelligence, and health awareness to the young engineering students. Five personality development camp was organized in one academic year in the name of Pinnacle, Orchid, Blossom, Efflorescence, Zenith.

Mentorship Programs:

Prepare the next generation leaders & entrepreneurs, provide motivation and mentorship to guide in career path options, establish a sustainable framework between College, Alumni and Students

Academic and Industrial Interaction:

Member in Board of Studies, Academic Council, experts for industry supported courses, guest lectures.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/alumni

5.4.2 - Alumni's financial contribution during the year

A. ? 15 Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

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

The Vision of the institute is 'World Class Quality Technical Education with strong ethical values'. In 2020-21, the leadership team launched an Institutional Transformation Initiative project namely 'Savitha' to achieve this vision with the involvement of all stakeholders, headed by two senior faculty members. There are 10 strands and each strand was headed by middle level faculty members. Each strand was supported by five Junior level faculty members. It led to the following activities/achievements.

- Launch of TCE Online courses Smart Classroom for active active and collaborative learning in classroom.
- Setting up of Research Council to promote research culture in the institute
- Launch of Thiagarajar Research Fellowship for full time research scholars
- Use of Plagiarism tool namely Urkund/Turnitin for effective documentation
- Webinars on contemporary technologies and Joint Teaching Programmes by reputed faculty from higher learning institutions and industry experts
- Providing solutions to societal issues and challenges by case study and product development through Ideathon contests, using appropriate technology, by Engineers Without Borders (EWB) chapter
- Interaction with reputed Universities for academic collaboration.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/sites/default/files/naac/criteria-6/6.1.1-SupportingDocument-DS.pdf

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

The Organizational structure consists of Principal, Deans, Registrar, Heads of the Departments (HoD), Controller of Examinations, Associate Deans, College and department level Coordinators under the leadership of Chairman for effective functioning, as follows:

- Principal Overall Administration, Alumni Interaction, International/National Collaborations
- IQAC Director: Assessment and Accreditations, Ranking Frameworks
- Dean (Academic Process): Curriculum Design, Content Delivery, Assessment, Automation of Academic Process, Regulations, Academic Calendar
- Dean (Research and Development): PhD Admissions, Academic and sponsored Research, Patents, Library
- Dean (Industry Institute Interaction): Consultancy, Placement/Internship
- Dean (Students): Mentoring, Counseling, women Development Cell, Professional Societies, Student Clubs, Career Guidance, Entrepreneurship
- Dean (Extra-curricular activities): NCC/NSS, Physical Education, Cultural, Technology based social work
- Registrar: Student Admission, Staff Recruitment, Infrastructure and Finance
- Controller of Examinations: Exam related activities

The academic and administrative activities are being carried out by the respective HoDs following the Standard Operating Procedure set by Senior administrators. The Principal and Deans along with HoDs, based on their own experience in academic and research activities, convert them into tangible actions. They are reviewed by the Governing Council of the institute. The Principal discusses the outcomes of Governing Council meetings with the Deans and HODs to evolve a

consensus on the focus areas. The academic activities are approved by Academic Council.

File Description	Documents
Upload strategic plan and deployment documents on the website	View File
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/sites/default/files/naac/criteria-6/6.1.1-SupportingDocument-DS.pdf

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

The institutions' major objective is to enhance the institutes' competitiveness at a national and global level and improve its outlook across different stakeholder segments namely Students, Industry, Peers, and Regulators. Two senior faculty members were identified as project champions to implement the action plan in a systematic way. Subsequently, 10 strands were identified and middle level faculty members were assigned as Strand leaders. Each strand leader was assigned with five Junior faculty members in this process. The activities are monitored weekly and steering committee meetings are conducted at regular intervals of two months to align the progress in the right path by the Management. The strands are:

- Academics and Curriculum Online courses, smart classroom, Transition Rate
- Student Experience Tutor Ward System, Alumni Interaction, Career Guidance
- Research Excellence Academic Research, Sponsored Research
- Faculty Development Adjunct Faculty, Faculty Recruitment, Development Programmes
- Academic Collaborations Webinars, Joint Teaching, Research Internship
- Industry Collaborations Centre of Excellence, Consultancy, Patent

- Placement Training, Internship, Placement
- Process and Data Management Website Revamping, Management Information System
- Branding, Marketing and Outreach Infrastructure Management

The methodology adopted to implement strategic plan is:

- As-Is peer benchmarking Analysis
- Target setting from goal setting and stakeholder workshop
- Action plan and implementation roadmap.

File Description	Documents
Strategic Plan and deployment documents on the website	View File
Paste link for additional information	https://www.tce.edu/sites/default/files/naac/criteria-6/6.2.1-SupportingDocument-DS.pdf
Upload any additional information	No File Uploaded

6.2.2 - The functioning of the various institutional bodies is effective and efficient as visible from the policies, administrative set-up, appointment and service rules, procedures, etc.

- **Internal Quality Assurance Cell (IQAC):** provides benchmarks, proposes roadmaps and to monitor the institutional development activities
- **Governing Council :** The functions of Governing Council are to approve the academic, financial and administrative policies of the institution, to appoint faculty members and staff, to review the annual report & the audited accounts and budget estimates.
- **Academic Council:** reviews regulations, curriculum and academic processes.
- **Research Council:** reviews research project proposals
- **Student Council:** Meetings are conducted regularly with the representatives of students to improve the functioning of the institution.
- **Board of Studies:** reviews the curriculum and syllabus of courses.
- **Standing Committee:** monitors and recommends the academic administrative and financial matters.

- **Finance Committee:** Reviews budget for the departments and college.
- **Malpractice Enquiry Committee:** handles disciplinary issues
- **Building committee:** scrutinizes and approves the design estimates, cost of building and other capital works, minor works, repair and maintenance
- **IPR Committee:** reviews patentable ideas for filing them as patents
- **Appeals and Grievances Committee:** Any grievances related to Academic matters are addressed by the concerned Tutor, HoD and Principal. When students are not satisfied with the outcome, they represent to the Appeals & Grievances Committee.
- **Women Development Cell:** Women empowerment activities

File Description	Documents
Paste link to Organogram on the institution webpage	https://tce.edu/about/organsational-structure
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/sites/default/files/naac/criteria-6/6.2.1-SupportingDocument-DS.pdf

6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Document	View File
Screen shots of user interfaces	View File
Details of implementation of e-governance in areas of operation	View File
Any additional information	No File Uploaded

6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression

- The workforce is supported by the administration in respect of admission to the engineering programmes for their children, additional medical benefits on a case to case basis.
- Prescribed EPF is provided to teaching and non-teaching staff members.
- Faculty and staff have sports contest annually.

Teaching Staff Welfare Measures and Avenues for their career development/ Progression

- Sabbatical leave for post-doctoral studies and internship at industries.
- Increments in Basic Pay, on completion of Doctoral degree programme.
- Faculty are recognized with the remuneration for coordinating FDPs
- Faculty are given the financial assistance for attending workshops/seminars/conferences
- Promotion/career advancement for faculty members is offered as per norms.
- Maternity leave is sanctioned to women faculty members.
- Medical/Accidental claims are facilitated to workforce.
- Incentives are given for Research Publications
- Faculty members are facilitated for filing the Patents

Non-Teaching Staff Welfare Measures and Avenues for their career development/ Progression

- All the employees are covered with Health insurance (ESI).
- Awareness workshops on safety and health consciousness.
- Compensation for working on holidays and beyond working hours.
- Staff quarters are for non-teaching staff.
- Festival Advance for Staff members.
- Security personnel are provided with uniform allowance and washing allowance

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.tce.edu/sites/default/files/PDF/Hand-Book.pdf

6.3.2 - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

41

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

16

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	View File
Upload any additional information	No File Uploaded

6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

87

File Description	Documents
Summary of the IQAC report	View File
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View File
Upload any additional information	No File Uploaded

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

Internal and external auditing (Local fund audit and GST audit) of all financial transactions are carried out at periodic intervals in adherence to the guidelines of Government norms. Financial planning is carried out annually considering the budget proposals submitted by respective authorities in the College and income expenditure during the previous financial year. Budget allocation is done for every financial year for each department under various heads. The prepared budget proposal is placed before the Governing Council for approval. Financial activities are carried out by accounts manager. This process is scrutinized by the Management and Government auditors (Local Fund and Accountant General). Internal financial auditor has freedom to suggest and revise the formats of relevance based on the feedback from the students and faculty, in consultation with Registrar. Utilization is tracked periodically through internal and external finance audits. Further, as the college is supported by TEQIP - world bank initiative, budget is also allotted to new initiatives like infrastructure development, curriculum development, faculty development and industry interaction as per the guidelines by National Project Implementation Unit (NPIU). The college files GSTR1 & GSTR3B as per the guidelines of GST. The GST amount is remitted every month.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)**24.45032**

File Description	Documents
Annual statements of accounts	View File
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	View File
Any additional information	No File Uploaded

6.4.3 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources**Mobilization of Funds:**

- Salary Grant for Government Aided faculty and Supportstaff
- College fees for the students: (Tuition Fees, development Fees, Laboratory fees, Internet fees, skill development fees, Exam fees)
- Sponsored Research Projects from Government bodies/Organizations
- Consultancy projects from industries
- Corporate Social Responsibility
- Alumni Contribution towards students welfare
- Organizing Faculty Development Programmes/STTPs/Workshops/Seminars
- Establishment of Industry Supported Laboratories/Centre of Excellence

Optimal Utilization of Resources:

- Salary for the faculty and supporting staff member
- Establishment of Infrastructure for academic, research and industry collaboration activities
- Procurement of State of Art equipment, Softwaree Licensing, Library
- Infrastructure Internet and WiFi faciity
- Skill Development Programmes for the students
- Conduct of examinations

- Remuneration for coordinating FDPs
- Financial assistance for attending workshops/seminars/conferences
- Incentives for Research Publications
- Faculty Recognition with Financial Assistance
- Thiagarajar Research Fellowship for Research scholars
- Financial support for filing Patents.
- Aid for needy students at the institutions.
- Scholarship from Trust and alumni contribution, Freeship for the students
- Institutional Transformation Initiatives Process
- Automation Adjunct Faculty Association, Professional society, co curricula and extracurricular activities
- Work place management
- Honorarium for Board of Studies, Academic Council, Governing Council and IQAC members
- Gratuity for retired faculty and support staff members

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

IQAC team of TCE has contributed significantly in the following quality initiatives/activities:

- NAAC Cycle 2 Assessment and Accreditation - Steering committee formation, SSR preparation and periodic reviews, SSR submission, facilitating PTV
- Participation in NIRF and THE rankings
- NBA Complianace audit to BTech Information Technology and BE Mechatronics programmes
- Academic and Administrative audits for all the departments including Course File Audit, Student Performance, Progression of Departments
- Development of TCE Online courses: 20 courses rolled out in two Phases in the Moodle platform to enable

external participations

- Academic Collaborations - Organized webinars with National and International Institutes by all Departments, which in turn facilitated for Joint Teaching and Remote Internships
- Eminent Professors from Higher learning institutions/ Industry experts were appointed as adjunct faculty members to conduct state-of-art courses
- Thiagarajar Research Fellowship scheme was introduced to promote research publications.
- Library: Remote access has been given to students, faculty and research scholars through mobile app
- Implementation of 'Research Practice' Paper for UG Programmes
- Setting up of Smart Classroom - Impartus Lecture Capturing System, Interactive TV and online access
- Research Council meets periodically for policy formation and recommendations for research promotion

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://tce.edu/naac/naac-ssr

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

Programme Performance Assessment Committee (PPAC) Audit:

- PPAC of each programme conducts audit every semester in the following aspects
- Audit of the question papers of Continuous Assessment Tests.
- Setting and Revision of Targets for COs, POs, PSOs. Analysis of deviations in target and actual attainment of COs, POs, PSOs. If any deviation, corrective actions are proposed by PPAC. The corrective actions are implemented by the course coordinator. The effectiveness of the corrective actions is examined in the subsequent audit.
- Recommendations and Action plan for improvement

Course File Audit:

The Academics team of the College conducts Course File audit at every semester. The course file includes course contents, test question, question to CO mapping, scheme of evaluation, assignment questions, sample answer scripts, test performance analysis, course exit survey, CO attainment, and faculty reflective report. Syllabus coverage, content delivery methods, quality of assessment and rubrics used in courses are audited. Comments and suggestions for improvement are provided for the course coordinators.

Terminal Examination: Question Paper Audit

The Controller of examinations office conducts question paper & answer script audit with external experts. Audit reports are submitted to respective Head of the Department for necessary actions.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.tce.edu/sites/default/files/naac/criteria-2/2.6/2.6.-PPAC-Index.pdf

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)

A. Any 4 or all of the above

File Description	Documents
Paste the web link of annual reports of the Institution	https://www.tce.edu/igac/reports
Upload e-copies of accreditations and certification	View File
Upload details of quality assurance initiatives of the institution	View File
Upload any additional information	No File Uploaded

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

- The institution provides equal opportunity to both boys & girls students and men & women staff. In the institution. 40% of the faculty members are women and 40% of the students are girls.
- Women staff represent various committees and decision making bodies. Five faculty members are at the level of Head of the Departments and Deans.
- Women Development cell (WDC) of the institution has organized webinars like 'A New Journey Ahead', Sustainable livelihood opportunities during Covid-19 pandemic", "Art of Living", "Healthy Living", etc. WDC of the Institute organized a webinar on "Prevention of sexual harassment" on International Women day.
- Separate hostel facility is provided for girls and boys students.
- Bus facilities are provided for girl students and the women faculty.
- Security personnel have been deployed in adequate numbers on the campus round the clock.
- In case of any health issues, ladies waiting rooms are available for students and faculty to take rest.
- Awards are given separately for boys and girls in the following categories every academic year. Outgoing Student Excellence, Best outgoing student, Best Outgoing NCC cadet, Best Outgoing NSS volunteer, Best Outgoing sports person, and Best Outgoing Fine Arts

student.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.tce.edu/wdc

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment

A. Any 4 or All of the above

File Description	Documents
Geotagged Photographs	View File
Any other relevant information	No File Uploaded

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

Solid Waste Management:

Biodegradable Waste:

- Converted in to manure by decomposition - new method for fast decomposition
- Bio gas conversion

Non biodegradable Waste- Plastics:

- Plastic Tar Road (This technology was also coded by the Indian Road Congress in 2013 (IRC-SP-98-2013))
- PLASTONE blocks
- Roofing Sheets
- Plastics to fuel oil

Plastic waste Management Techniques:

- Collection of waste plastics and disposal
- Shredding of waste plastics in to required size of 2mm to 4mm

- Preparation of plastic coated aggregate
- Mixing of bitumen and the stone
- Laying of plastic tar road

Consultancy:

- Laying of plastic roads
- Waste management systems in industries

Liquid Waste Management:**Liquid Waste:**

- Waste water from kitchen
- Waste water from industries
- Reject waste water from RO plants
- Distilleries waste

Management Techniques:

- Analysis of composition of waste water
- Removal of heavy metals and other hazardous impurities (R& D)
- Reuse of waste water in gardening and washing
- Sewage treatment plant
- Individual houses
- Portable KIT to test as well as purify the waste water

Two sewage treatment plants with Effluent Treatment with the capacity of 7000 litres/day were established in the Campus.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	View File
Geotagged photographs of the facilities	View File
Any other relevant information	View File

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste

A. Any 4 or all of the above

water recycling Maintenance of water bodies and distribution system in the campus	
File Description	Documents
Geotagged photographs / videos of the facilities	View File
Any other relevant information	No File Uploaded
7.1.5 - Green campus initiatives include	
7.1.5.1 - The institutional initiatives for greening the campus are as follows: <ol style="list-style-type: none"> 1.Restricted entry of automobiles 2.Use of bicycles/ Battery-powered vehicles 3.Pedestrian-friendly pathways 4.Ban on use of plastic 5.Landscaping 	A. Any 4 or All of the above
File Description	Documents
Geotagged photos / videos of the facilities	View File
Various policy documents / decisions circulated for implementation	View File
Any other relevant documents	No File Uploaded
7.1.6 - Quality audits on environment and energy undertaken by the institution	
7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following: <ol style="list-style-type: none"> 1. Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5.Beyond the campus environmental promotional activities 	A. Any 4 or all of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	View File
Certification by the auditing agency	View File
Certificates of the awards received	No File Uploaded
Any other relevant information	No File Uploaded

7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of facilities	View File
Policy documents and brochures on the support to be provided	View File
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

The College believes in the oneness principle of the country and there is no space for intolerance on the campus.

Students from different states like Jammu & Kashmir, Manipur, Kerala, etc are admitted in UG, PG and PhD programmes. They mingle with all other students for any academic, co-curricular and extra-curricular activities. No discrimination or restriction are given to them for participation.

NSS camps to nearby villages are organized every year and this makes the students understand the societal needs challenges.

The College treats all students and staff equally without any discrimination in caste, region, language and socio-economic diversities.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View File

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

- The College website displays the core values of TCE and insists the societal responsibility, citizenship and empowerment.
- In the curriculum, the courses namely Environmental Science, Constitution of India and Essence of Indian Traditional Knowledge are offered for undergraduate students. Value Education courses are offered for postgraduate students.
- Organized various programmes such as National Voter's day, Energy Conservation Day, Environment Day, etc to make the students and staff understand their duties and responsibilities
- Engineering Without Borders (EWB) Chapter organizes events for the students to understand the real time engineering problems in the nearby Villages and encourages them to solve those problems using technologies
- TCE National Service Scheme (NSS) team organizes Blood Donation Camp every year in collaboration with Madurai Government Rajaji Hospital.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	No File Uploaded
Any other relevant information	No File Uploaded

7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized

A. All of the above

File Description	Documents
Code of Ethics - policy document	View File
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	No File Uploaded
Any other relevant information	No File Uploaded

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The following national events are celebrated at the institution regularly:

- **Independence Day**
- **Republic Day**
- **Yoga Day**

- World Environment Day
- Energy Conservation Day
- Sadhbhavan Das
- Women's Day
- World Water Day

TCE celebrated Birth/Death Anniversaries of the great Indian Personalities:

- Founder's day
- Teacher's day
- Srinivasa Ramanujam Birth Anniversary is celebrated as Mathematics Day.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	No File Uploaded
Geotagged photographs of some of the events	No File Uploaded
Any other relevant information	No File Uploaded

7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Best Practice 1:Alumni Interaction

Objective:To improve Alumni linkage across the globe

ContextAlumni Association plays a pivotal role in advancing the Institution's objectives by coordinating and supporting a spectrum of activities. These activities aim to foster the nexus between academia and industry, enhance placement and internship opportunities.

Practice

- Inclusion of Alumni inBoSmeetings
- Conduct of Reunions
- Alumni Chapters

Evidence of Success:

- More than 200 students benefited by Scholarships

Problems Encountered and Resources Required

- Need more man power for the administrative support

Best Practice 2: Engineering Education Research (EER)

Objective: To improve global relevance of EER with focus on Faculty Development by integrating technologies.

Context: The Academic Process team aims to set up a dynamic learning environment that equips faculty with contemporary skills to meet evolving industry demands, thereby ensuring the global educational experience.

Practice

- Setting up of Teaching Learning Center (TLC) in Institute
- Conduct of Faculty Conclave annually to showcase Teaching Learning practices
- Conversion of Best Practices into research paper in the refereed journals and indexed conferences

Evidence of Success:

- Increase in the number of papers to Conferences/Journals
- Student achievements in hackathons

Problems Encountered and Resources Required

- Time management for academic, administrative and research oriented tasks

File Description	Documents
Best practices in the Institutional website	https://www.tce.edu/sites/default/files/PDF/AQAR-2023-24-BestPractices.pdf
Any other relevant information	Nil

7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

Title:

Promotion of Entrepreneurship Skills

Objective:

To promote entrepreneurial skills among students

Context

The Entrepreneurship Development Cell (EDC) is the gate way that promotes young entrepreneurs and startups to venture. It plays a vital role in connecting the fresh talents to resources by closely working with the Institute. The business incubation centre provides a healthy breeding ground for startups and has widened its scope by providing support to make the ideas to product to enterprise.

Practice

- Course offering in Design Thinking (Core) and Entrepreneurship Development (Open Elective) for students
- Establishment of MakerSpace to streamline their innovative ideas
- Conduct of ideathons / hackathons in-house contests and e-bazaar day for motivation
- Conduct of Patent Workshops
- Motivating the idea patent submissions
- Awards and recognitions to best ideas for further product development

Evidence of Success:

- 6 teams won First Prize in Smart India Hackathon (SIH) in the year 2022
- 4 patents granted and 6 patents published in the year 2022
- 11 Grants received from Government schemes
- 40 different ideas are at levels 3 to 7 for technology readiness

- 10 startups in TCE incubation center

Problems Encountered and Resources Required

Sources for Funding

File Description	Documents
Appropriate link in the institutional website	https://www.tce.edu/sites/default/files/PDF/AQAR-2023-24-Distinctiveness.pdf
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

Plan of action for the academic year 2024-25

- Participation in NBA Accreditation for BE Civil Engineering, BE Mechanical Engineering, BE Electrical and Electronics Engineering and BE Electronics and Communication Engineering
- Participation in NIRF and THE Rankings
- Conduct of academic and administrative audits
- Conduct of Faculty Conclave and Research Conclaves
- Conduct of OBE awareness sessions
- Center of Excellence in Advanced Manufacturing, 6G Wireless Technology, Global Research in Tamil AI
- Collaborative certification Programmes with Industry
- Startup Seed money through Corpus
- Resource Generation through Alumni
- TCE MOOC Courses - Open to all Students and Industry
- Strengthening Tutor Ward system
- Skill development programmes to improve Employability
- Preparation of Newsletter and communication to stakeholders