



YEARLY STATUS REPORT - 2020-2021

Part A

Data of the Institution

1.Name of the Institution		Thiagrajar College of Engineering
• Name of the Head of the institution	Dr. M. Palaninatha Raja	
• Designation	Principal in charge	
• Does the institution function from its own campus?	Yes	
• Phone No. of the Principal	04522482430	
• Alternate phone No.	04522482240	
• Mobile No. (Principal)	9894094155	
• Registered e-mail ID (Principal)	principal@tce.edu	
• Address	Thiagarjar College of Engineering	
• City/Town	Madurai	
• State/UT	TamilNadu	
• Pin Code	625015	
2.Institutional status		
• Autonomous Status (Provide the date of conferment of Autonomy)	01/06/1987	
• Type of Institution	Co-education	
• Location	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	deanacad@tce.edu				
3.Website address (Web link of the AQAR (Previous Academic Year))	https://www.tce.edu/naac/naac-aqar/2019-20				
4.Was the Academic Calendar prepared for that year?	Yes				
• if yes, whether it is uploaded in the Institutional website Web link:	https://tce.edu/academics/academics-calendar				
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
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	TEQIP III	NPIU, New Delhi	01/11/2017	84000000	
Thiagarajar College of Engineering	Technology Business Incubator (TBI)	DST NST EDB	22/12/2014	17154666	
Thiagarajar College of Engineering	EDI	Government of Tamil Nadu	22/06/2016	2299481	

8. Provide details regarding the composition of the IQAC:	
<ul style="list-style-type: none"> Upload the latest notification regarding the composition of the IQAC by the HEI 	View File
9.No. of IQAC meetings held during the year	4
<ul style="list-style-type: none"> Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website? 	Yes
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> If yes, mention the amount 	
11. Significant contributions made by IQAC during the current year (maximum five bullets)	
<p>1. Participation of National Institution Ranking Framework and got 71st Rank in Engineering Category 2. Accreditation of B.Tech. (Information Technology) and B.E. (Mechatronics) programmes by National Board of Accreditation (NBA) and submission of Compliance Reports for extending the accreditation period of B.E (Civil Engineering), B.E. (Mechanical Engineering), B.E.(Electrical and Electronics Engineering) and B.E. (Electronics and Communication Engineering) to National Board of Accreditation 3. Participation in FICCI Higher Education Excellence Awards 2020-21: One among the Top 5 in the Category: University of the Year (in existence more than 30 years) 4. Organization of training programmes for faculty members in conducting online classes in the pandemic period 5. Creation and launch of courses.tce.edu and exams.tce.edu for conducting online classes and online examinations respectively</p>	
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
Development of TCE Online courses	Eleven courses rolled out in Phase 1, mooc.tce.edu
Academic Collaborations - Webinars and Joint Teaching	Organized webinars with National and International Institutes by all Departments, which in turn facilitated for Joint Teaching and Remote Internships
Adjunct Faculty	11 Academic/Industry experts were appointed as adjunct faculty members
Thiagarajar Research Fellowship	3 full time research scholars have been selected for Thiagarajar Research Fellowship
Virtual Internship	First and Second year students were given exposure to industrial problems and expectations
Library Remote Access	Remote access has been given to all students, faculty members and research scholars through mobile app
Implementation of 'Research Practice' Paper for UG Programmes	Research Papers have been submitted to scopus indexed Journals for review and 14 teams were in preparation of research papers
Setting up of Smart Classroom	A model smart classroom (Hall A2) was set up with e-podium, sliding boards, Pin-up boards, flexible seating arrangements, Interactive TV and online access
Research Council	Research Council was established and the first meeting was conducted in May 2021

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	22/01/2022
14. Was the institutional data submitted to AISHE ?	Yes
<ul style="list-style-type: none"> Year 	
Year	Date of Submission
2021	24/03/2022
15. Multidisciplinary / interdisciplinary	
16. Academic bank of credits (ABC):	
17. Skill development:	
18. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)	
19. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):	
20. Distance education/online education:	

Extended Profile

1. Programme

1.1

18

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.Student

2.1 4314

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	View File

2.2 1147

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.3 4343

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

3.1 730

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.2 226

Number of full-time teachers during the year:

Extended Profile	
1.Programme	
1.1 Number of programmes offered during the year:	18
File Description	Documents
Institutional Data in Prescribed Format	View File
2.Student	
2.1 Total number of students during the year:	4314
File Description	Documents
Institutional data in Prescribed format	View File
2.2 Number of outgoing / final year students during the year:	1147
File Description	Documents
Institutional Data in Prescribed Format	View File
2.3 Number of students who appeared for the examinations conducted by the institution during the year:	4343
File Description	Documents
Institutional Data in Prescribed Format	View File
3.Academic	
3.1 Number of courses in all programmes during the year:	730
File Description	Documents
Institutional Data in Prescribed Format	View File

3.2	226
Number of full-time teachers during the year:	
File Description	Documents
Institutional Data in Prescribed Format	View File
3.3	221
Number of sanctioned posts for the year:	
4.Institution	
4.1	1344
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	935.82517
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.

Being an autonomous institute since 1987, TCE aims at academic excellence through innovation in curriculum, content delivery and assessment. Each department has chosen a specific theme area based on the state-of-the-art technologies, regional/global developmental needs, available infrastructure and faculty expertise. Special Interest Groups (SIGs) are formed to promote research and development pertaining to local, national and global

needs in the chosen theme area. TCE already had much of the system in place by implementing competency based curriculum since 2008. This led to a smooth transition to Outcome Based Education (OBE) in 2014. In 2018, Conceive-Design-Implement-Operate (CDIO) framework is adapted to implement OBE effectively in addressing the societal and enterprise context.

Curriculum at TCE is designed using guidelines of AICTE, Anna University Guidelines, Graduate Attributes of NBA, the requirements of Engineering Projects in Community Services (EPICS) and Professional Societies. Course outcomes are designed at SIGs based on Programme Outcomes (PO) and Programme Specific Outcomes (PSO) and internal & external stakeholders feedback. Subsequently, courses for each curricular component are identified. The course designers prepare the syllabus in the prescribed template consisting CO-PO-PSO mapping, assessment pattern, course plan and learning resources. The curriculum is reviewed by Board of Studies and approved by Academic Council.

File Description	Documents
Upload additional information, if any	View File
Link for additional information	Nil

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

8

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

627

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

131

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

19

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 namely Design Thinking, Systems Thinking and Engineering Design Project, 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

66

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	View File

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

4337

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://www.tce.edu/naac/criteria-1/1.4/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://www.tce.edu/naac/criteria-1/1.4/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	
1033	
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)	
942	
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.	
<p>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.</p> <p>Support for advanced learners</p> <ul style="list-style-type: none"> 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. The students are allowed to enroll in TCE online 	

courses.

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

Support for Slow Learners

- 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.

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

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
31/05/2021	4314	226

File Description	Documents
Upload any additional information	View File

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:

- The Academics team of the institute organizes in-house faculty development programmes on Pedagogy in association with higher learning institutes.
- The institute has adapted CDIO (Conceive-Design-Implement-Operate) framework to enhance product development skills. TCE proficiency scale has been developed to focus learning in

affective and psychomotor domain.

- A new set of courses namely Engineering Exploration, Lateral Thinking, Design Thinking, System Thinking, Engineering Design Project and Capstone Design Project has been introduced exclusively for promoting creativity, communication, collaboration among millennial learners.
- Seminar presentations, Mini Projects and Case Studies have been extensively used in practical and theory cum practical courses to enhance problem solving skills. Exclusive Rubrics have been developed for assessing the quality of project works.
- The institute has promoted online learning in collaboration with various platforms like edX and coursera. In-lab internships are offered every year to promote practical skills in particular domains like cyber security, Machine Learning, etc.,
- The institute periodically conducts industry supported courses every year in association with IBM, CDAC, Wipro Technologies, Texas Instruments, etc to promote skill building and to provide exposure on industrial practices.
- Every department is equipped with a classroom with reconfigurable seating arrangements and interactive digital boards to promote active and collaborative learning.

File Description	Documents
Upload any additional information	View File
Link for additional Information	Nil

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

- On understanding the need for providing resilient teaching approach to facilitate the learning experiences adaptable to unpredictable conditions and disruptions, the academic team organized a workshop on "Developing learner-centric online courses: Resilient teaching approach" was organized during 4- 5 August 2020. In the workshop, training was provided on creating videos using screen-cast-o-matic, usage of Moodle as learning management system, interactive softwares like slido, peerdeck, H5P etc.
- The institution has set up a Moodle server at the Institute to support online and blended learning. The URLs are <https://oldcourses.tce.edu/> (Academic Year: 2020-21 - Odd)

and <https://coursesevensem.tce.edu/> (Academic Year: 2020-21-Even) and a separate domain <https://exams.tce.edu/> has been setup exclusively for the conduct of terminal examinations.

- 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.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://courses.tce.edu/
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

178

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	View File

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

The process for the preparation of academic calendar is as follows:

- 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 schedule for the following activities are planned.
 - Course registration, preparation of class time table, commencement of classes, uploading course plan, continuous assessment tests, assignments, class committee meetings, project reviews, submission of synopsis, submission of project reports, viva voce, last date for mark entry, Board of Studies, Academic Council, industrial visits, parent teacher meetings, programme performance assessment committee meetings and faculty vacation.
 - Terminal examinations, publication of results, payment of examination and college fees

Once the draft copy is prepared, the Academic Calendar is placed in Standing Committee Meeting for approval. The approved calendar is circulated among all stakeholders.

Adherence to Academic Calendar:

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. A few activities are deviated due to some unavoidable circumstances like placement, declaration of holidays under negotiable instruments act by the Government.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	View File

2.4 - Teacher Profile and Quality

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

226

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

161

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)

3184

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

0

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	No File Uploaded
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 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	Nil

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	View File
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.

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

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

1147

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/academics/student-satisfaction-survey>

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

Research Policy

Thiagarajar College of Engineering (TCE) is committed to provide infrastructure to conduct state of art research on par with the national and international standards. TCE creates an open platform

to foster academic excellence and to pursue scholarly research activities.

Academic Research

- Research scholars should enroll and register at TCE on getting provisional registration letter. For full time scholars, every day attendance is preferred.
- Research scholars should present their progress once in six months.
- The faculty after the award of Ph.D. shall get the supervisorship within 3 years and guide maximum 8 scholars.
- Research scholars shall publish research works only in reputed/indexed conferences/ Journals and file patents
- Research scholars shall submit Thesis copy to the College Library.
- Plagiarism: Maximum of 10% of similarity is allowed for research reports.

Sponsored Research:

- The faculty shall apply for funding support from the Government/Industries, to carry out Sponsored/ Collaborative research based on the call for proposals from the agencies.
- The PIs shall procure equipment and appoint Project fellows as per the grant.
- The PIs shall prepare Project Completion Report and Utilization Certificate (UC) on completion of the project duration according to the guidelines of the funding agency.

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.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)**2.25**

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**9**

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)****111.65208**

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	View File

3.2.2 - Number of teachers having research projects during the year	
14	
File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil
List of research projects during the year	View File
3.2.3 - Number of teachers recognised as research guides	
95	
File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	View File
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	
5	
File Description	Documents
Supporting document from Funding Agencies	View File
Paste link to funding agencies' website	https://www.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: The institute comes under the ambit of Industry institute interaction. 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. It has an exclusive 1200 square feet area with 20 co-working space, one number of Rapid Prototyping machine with 3D Printer and system facilities. 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.

The institute has Lab to Market Model. Best projects in CDIO courses like Design Thinking, Engineering Design Project are identified and supported to make product, file patent and establish Startups at TBI. One of the examples is the establishment of TXR Solutions by Dr.A.TamilSelvi, Professor in IT Department.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.tce.edu/tbi

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

12

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
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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

23

File Description	Documents
URL to the research page on HEI website	https://www.tce.edu/research/academic_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

105

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**143**

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****510**

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****14**

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)****60.111512**

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

12812278

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	View File

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

- Our College Chairman & Correspondent Mr.Karumuttu T.Kannan donated Rs.1 crore to the Chief Minister's Public Relief Fund for supporting COVID-19 relief measures and has given an awareness talk on Corona Virus and its impact to the general public <https://www.facebook.com/TheOfficialTCEPage/videos/632522784282569/>
- NSS team supported the college in Covid actions by volunteering in social service to the common people after the training through Deeksha App.
- NCC cadets and officers helped Madurai police during lock-down period by creating the awareness on Covid-19 to the

public and involved protection work
(<https://youtu.be/czhnNUoBgAM>)

- Visual Arts Club created an awareness video for "wearing the mask" and published in TCE Facebook page (<https://www.facebook.com/TheOfficialTCEPage/videos/1616709735161122/>)
- TCE supported migrant workers by providing Men's Hostel Block to the Government for Covid-19 patients for quarantine. To accommodate these workers, 750 hostel beds were prepared and handed over to the government.
- Ms. Muthupriya, III year Mechatronics Engineering student, TCE from Tirunelveli district has participated in contact tracing with respect to covid-19, as a red-cross volunteer
- ENVIS (Environmental Information System) team, TCE organized various programs on World Environment Day. It organized webinars on the impact of Covid-19 in human life, bio-diversity management systems and the role of plastic

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.tce.edu/covid-19

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

8

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)

28

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

2223

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**

333

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)

12

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, Wi-Fi, 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	No File Uploaded
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 Intra moral tournaments, TCE Marathon, Founder Memorial Hockey and Kho-Kho 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 Karumuttu Manickavasagam Chettiar 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)

575.77839

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	View File
Paste link for additional information	https://www.tce.edu/academics/library/opac

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)**30.99**

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****212**

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 tasksand should not be used for personal.The Central Computing Center (CCC) allocates the necessary IP addresses, proxies, and email relays.

Network:Allusers areinformed about the network capacity. Physically tampering with network connections, equipments, sending disruptive signals, or making excessive use of network resources isstrictly 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 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/tce-data-center

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
4314	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

A. All four of the above

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://mooc.tce.edu/
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)

360.04678

File Description	Documents
Audited statements of accounts	View File
Upload any additional information	No File Uploaded

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 equipments are condemned as per Government

norms.

- Equipments 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 return 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

1156

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

247	
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/career_guidance_cell
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

2553

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

A. All of the above

with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

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	View File
Upload any additional information	No File Uploaded

5.2 - Student Progression

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

503

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File

5.2.2 - Number of outgoing students progressing to higher education

29

File Description	Documents
Upload supporting data for students/alumni	View File
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

67

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**

9

File Description	Documents
e-copies of award letters and certificates	View File
Any additional information	View File

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

20

File Description	Documents
Report of the event	View File
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	View File

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.

- Online in-house Faculty Development Programmes for effective use of ICT tools in online delivery and assessment during pandemic and beyond
- 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 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
- Strengthening alumni connect
- Start-up initiatives by Star(Up) Again @TCE programme
- Interaction with reputed Universities for academic collaboration.

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

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:

- Dean (Planning and Development): Quality Systems, Alumni Interaction, International/National Collaborations
- 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, Library
- Dean (Industry Institute Interaction): Consultancy, Patents, Entrepreneurship, Placement/Internship
- Dean (Students): Mentoring, Counseling, women Development Cell, Professional Societies, Student Clubs, Career Guidance
- 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	Nil

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/strategic-objectives.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.
- **Department Advisory Committee**: reviews andprovides direction for continuous improvement of department activities
- **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**: Woment empowerment activities

File Description	Documents
Paste link to Organogram on the institution webpage	https://www.tce.edu/about/organsational-structure
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

6.2.3 - Implementation of e-governance in

A. All of the above

**areas of operation: Administration Finance
and Accounts Student Admission and
Support Examination**

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.
- Coordinator honorarium are given to faculty who plans and organizes FDPs

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

66

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

21

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.)

109

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)

174.62187

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 Support staff
- 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 facility
- 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

- Development of TCE Online courses: Eleven courses rolled out in Phase 1 in the portal <https://mooc.tce.edu>
- Academic Collaborations - Organized webinars with National and International Institutes by all Departments, which in turn facilitated for Joint Teaching and Remote Internships
- Adjunct Faculty -11 Academic/Industry experts were appointed

- as adjunct faculty members to conduct state-of-art courses
- Thiagarajar Research Fellowship scheme was introduced to promote research publications. 3 Research Scholars were awarded the Fellowship
- Virtual Internship was conducted for First and Second year students in order to provide exposure to industrial perspective
- Library: Remote access has been given to students, faculty and research scholars through mobile app
- Implementation of 'Research Practice' Paper for UG Programmes - 14 teams have submitted Research Papers scopus indexed Journals.
- Setting up of Smart Classroom - A model smart classroom was set up with e-podium, sliding and Pin-up boards, flexible seating arrangements, Interactive TV and online access
- Research Council - Research Council was established and the first meeting was conducted in May 2021
- Participation in NIRF and AQAR report submissions for 2018-19 and 2019-20
- NBA Accreditation for B.Tech. IT and B.E. Mechatronics Programmes
- Internal Academic Audit was conducted.

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

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	View File
Paste link for additional information	Nil

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 girl and boy 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	View File
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	No File Uploaded

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: <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	View File
Any other relevant information	No File Uploaded

<p>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.</p>	<p>A. Any 4 or all of the above</p>
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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 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	View File
Any other relevant information	No File Uploaded

<p>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</p>	<p>A. All of the above</p>								
<table border="1"> <thead> <tr> <th data-bbox="86 658 539 716">File Description</th> <th data-bbox="539 658 1445 716">Documents</th> </tr> </thead> <tbody> <tr> <td data-bbox="86 716 539 819">Code of Ethics - policy document</td> <td data-bbox="539 716 1445 819" style="text-align: center;">View File</td> </tr> <tr> <td data-bbox="86 819 539 1115">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</td> <td data-bbox="539 819 1445 1115" style="text-align: center;">View File</td> </tr> <tr> <td data-bbox="86 1115 539 1182">Any other relevant information</td> <td data-bbox="539 1115 1445 1182" style="text-align: center;">No File Uploaded</td> </tr> </tbody> </table>	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	View File	Any other relevant information	No File Uploaded	
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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	View File								
Any other relevant information	No File Uploaded								
<p>7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals</p>									
<p>The following national events are celebrated at the institution regularly:</p> <ul style="list-style-type: none"> • Independence Day • Republic Day • Yoga Day • World Environment Day <p>TCE celebrated Birth/Death Anniversaries of the great Indian Personalities:</p> <ul style="list-style-type: none"> • 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	View File
Geotagged photographs of some of the events	View File
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

Title: Academic Collaborations

Objectives:

- To identify National/International institutions' willingness to collaborate and engage.
- To attract distinguished industry professionals to augment TCE faculty efforts in teaching, research and student graduation outcomes

Context

- As many students got placement in software companies, the thrust for higher studies is too low among the students.

Practice

- Detailed SoPs have been designed for academic collaboration and appointment of adjunct faculty members.

Evidence of Success:

- 44 Webinars and 2 Joint Teaching Programmes which resulted in remote/research internship and initiation of MoU with Taylor's University.
- 11 adjunct faculty members

Problems Encountered and Resources Required

- Timing Synchronization

- Hands-on experience/Demonstrations in Webinars

Best Practice 2**Title:** Digital Pedagogy**Objective:**

To improve learners experience and graduation outcomes through smart learning systems

Context

As in NEP 2020, impart the curricular material and provide learning experiences digitally

Practice

- In-house Training and knowledge sharing on digital pedagogy
- Online Assessment

Evidence of Success:

- Establishment of Smart Classroom
- Digital pedagogy Training programme was conducted for all faculty members in three batches. This resulted in improved student engagement.

Problems Encountered and Resources Required

- Usage of smart classroom during pandemic situation
- Overcoming the reluctance of a few faculty members in adopting digital pedagogy.

File Description	Documents
Best practices in the Institutional website	https://www.tce.edu/sites/default/files/PDF/AQAR-2020-21-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)

1. Title: TCE Online Courses

2. Objective of the Practice:

To promote interdisciplinary and self learning through in-house online courses

3. Context

Our institute is a member of Worldwide CDIO Initiative and has been practicing CDIO based curriculum since 2018-19. Creating an effective learner centric environment with opportunities for interdisciplinary learning, skill development on recent technologies and self-learning has been prime focus. Hence, under the new initiatives of the academic process in 2020-21, it was decided to develop online courses.

4. Practice

- The Standard Operating Procedure for the design and development of Online courses was developed.
- Capacity building workshops for course coordinators were organized at regular intervals to develop skill sets for making interactive videos and designing high quality assessments in online mode.
- The required infrastructure like digital studio was provided by the institute with technical support for recording and video editing for rapid development of the online courses.
- Course contents were periodically reviewed by the expert team, peers and alumni.

5. Evidence of Success:

In first phase, Eleven online courses were launched and 850 students enrolled for these courses

6. Problems Encountered and Resources Required

- Video Editing to suit to the needs of Online Courses
- Videos Storage Space

File Description	Documents
Appropriate link in the institutional website	https://www.tce.edu/sites/default/files/PDF/AQAR-2020-21-Distinctiveness.pdf
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

1. Scaling up of TCE Online Courses

2. Conduct of Faculty Conclave to share the best practices in teaching and learning process, among the faculty members

3. Incentives for Research Publications

4. Submission of SAR for B.E. Computer Science and Engineering Programme and Compliance reports for UG programmes to NBA for programme accreditation

5. Participation in Atal Ranking of Institutions on Innovation Achievements (ARIIA) and NIRF Ranking in Engineering, Architecture and Overall categories

6. Initiatives for the Design of New curriculum (2022 Regulations) for B.E./B.Tech. programmes.

7. Vaccination Drive for all the faculty, supporting staff and students.

8. Construction of Classrooms and Laboratories for B.Tech. CSBS programmes

9. Purchase of ICT Tools like Creative pen Tablets, High-Definition Webcam, Screen cast-Omatic

10. Conduct of Skill Development Programmes for students to improve employability and placement

11. Restructuring IQAC Composition

12. Conduct of Distinguished Lecture Series for the faculty members based on the need analysis

13. Implementation of Institutional Development Policy (IDP) through Institutional Transformation Project - Savitha

14. Revamping Institutional website

NAAC