



**THIAGARAJAR COLLEGE OF ENGINEERING  
MADURAI 625015**

**STUDENT SATISFACTION SURVEY  
2019-20**

## STUDENT SATISFACTION SURVEY

As a part of continuous improvement in Teaching and Learning Process at Thiagarajar College of Engineering, the student satisfaction survey is conducted by the end of every academic year. The voice of the students on the effectiveness of teaching learning process is recorded through the survey. The questionnaire has been designed with specific focus on curriculum, content delivery, assessment and support system/infrastructure. A google form with the link <https://forms.gle/HmRP7R5jN39MgnLb9> has been created and is circulated among all the students. The feedback is collected in anonymous mode. **1008 students** participated in the survey. The responses have been analysed and appropriate action plan is prepared by the academic process team members of the Institute to enhance the quality of Teaching Learning Process.

### QUESTIONNAIRE FOR STUDENT SATISFACTION SURVEY

#### CURRICULUM

1. The curriculum is well balanced, updated periodically and satisfies the present needs.
  - *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
2. Exposure to industrial practices is provided through industry supported courses/ seminars/ guest lectures/ field visits/ student internships.
  - *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
3. The curriculum facilitates interdisciplinary learning through foundation electives and general electives.
  - *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
4. The curriculum has adequate number of practical courses / theory cum practical courses/ Project works for skill development.
  - *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
5. The Special Interest Groups (SIG) and programme electives have helped you in specialization of your area of interest.
  - *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
6. The implementation of the Choice Based Credit System (CBCS) has enabled you to enroll in the courses and slots you opted for.
  - *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*

#### CONTENT DELIVERY

7. How much of the syllabus was covered in the class?

- *90 to 100%*    ▪ *80 to 89%*    ▪ *70 to 79%*    ▪ *60 to 69%*    ▪ *Less than 50%*
8. The instructors adopt active and collaborative learning strategies like Think Pair Share, Flipped Classroom, Problem Based Learning etc.,
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
9. The instructors use a variety of ICT Tools and Learning Management Systems like Moodle, Canvas, Google Classroom are effectively used for sharing of resource materials, conducting assignments, discussions and quizzes.
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
10. Instructors are readily available for clarification of doubts and for personal mentoring.
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
11. Laboratories are well equipped with appropriate hardware and software for the conduct of practical classes/project works.
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
12. The institute provides support for participation in online certification from NPTEL, Coursera, edX etc.,
- *Regularly*    ▪ *Often*    ▪ *Sometimes*    ▪ *Rarely*    ▪ *Never*

## ASSESSMENT

13. The assessment process (CAT / Assignments / Terminal Examinations / Review) at TCE is fair and unbiased.
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
14. The tasks given in assignments have helped in enhancing your problem solving and communication skills.
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
15. The assessments are designed and evaluated appropriately to assess higher order thinking skills.
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
16. The assessments provided the right level of challenge and an opportunity for collaborative/co-operative learning.
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
17. Communication, Critical thinking, Collaboration, Creativity are given importance in assessments.

- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*

#### **SUPPORT SYSTEM/INFRASTRUCTURE**

18. The institute takes active interest in promoting internships / student exchange programmes / field visits opportunities for students.
- *Regularly*    ▪ *Often*    ▪ *Sometimes*    ▪ *Rarely*    ▪ *Never*
19. Efforts are made by the institute/ teachers to inculcate soft skills, life skills and employability skills to make you ready for the world of work.
- *Regularly*    ▪ *Often*    ▪ *Sometimes*    ▪ *Rarely*    ▪ *Never*
20. The institute provides opportunities for cocurricular / extra curricular activities.
- *Regularly*    ▪ *Often*    ▪ *Sometimes*    ▪ *Rarely*    ▪ *Never*
21. Course enrollments, course feedback, tracking of attendance and grades are made easier with the in-house automation software for the academic process (TCENet Gen3).
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
22. In connection with the implementation of Outcome Based Education, Course Outcomes and Programme Outcomes are assessed periodically and subsequent actions are taken for continuous improvement.
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
23. A mentoring/tutor system is available to identify your strengths and weaknesses and encourage you with providing the right level of challenges.
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
24. Classrooms are well equipped with good Audio System/Multimedia Projectors/Digital Boards/Wi-Fi connectivity.
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
25. Library is digitized and includes sufficient count of reference and text books and access to international and national journals
- *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*
26. Record your suggestions for enhancing the quality of Teaching Learning process at TCE.

**STUDENTS PARTICIPATION – DEPARTMENT WISE**

<b>Department</b>	<b>Count of Responses</b>
Civil Engineering	180
Mechanical Engineering	179
Electrical and Electronics Engineering	76
Electronics and Communication Engineering	242
Computer Science and Engineering	108
Information Technology	184
Mechatronics	10
Architecture	29
<b>Total Responses</b>	<b>1008</b>

## ANALYSIS OF RESPONSES

S.No	Questions	Average
Q1	The curriculum is well balanced, updated periodically and satisfies the present needs.	3.08
Q2	Exposure to industrial practices is provided through industry supported courses/ seminars/ guest lectures/ field visits/ student internships	2.84
Q3	The curriculum facilitates interdisciplinary learning through foundation electives and general electives	3.2
Q4	The curriculum has adequate number of practical courses / theory cum practical courses/ Project works for skill development.	3.12
Q5	The Special Interest Groups (SIG) and programme electives have helped you in specialization of your area of interest.	2.84
Q6	The implementation of the Choice Based Credit System (CBCS) has enabled you to enroll in the courses and slots you opted for.	3.2
Q7	How much of the syllabus was covered in the class?	3.26
Q8	The instructors adopt active and collaborative learning strategies like Think Pair Share, Flipped Classroom, Problem Based Learning etc.,	3
Q9	The instructors use a variety of ICT Tools and Learning Management Systems like Moodle, Canvas, Google Classroom are effectively used for sharing of resource materials, conducting assignments, discussions and quizzes	3.32
Q10	Instructors are readily available for clarification of doubts and for personal mentoring.	3.22
Q11	Laboratories are well equipped with appropriate hardware and software for the conduct of practical classes/project works.	3.0
Q12	The institute provides support for participation in online certification from NPTEL, Coursera, edX etc.,	3.06
Q13	The assessment process (CAT / Assignments / Terminal Examinations / Review) at TCE is fair and unbiased.	3.2

S.No	Questions	Average
Q14	The tasks given in assignments have helped in enhancing your problem solving and communication skills.	3.14
Q15	The assessments are designed and evaluated appropriately to assess higher order thinking skills	3.14
Q16	The assessments provided the right level of challenge and an opportunity for collaborative/co-operative learning,	3.12
Q17	Communication, Critical thinking, Collaboration, Creativity are given importance in assessments	3.06
Q18	The institute takes active interest in promoting internships / student exchange programmes / field visits opportunities for students.	2.92
Q19	Efforts are made by the institute/ teachers to inculcate soft skills, life skills and employability skills to make you ready for the world of work.	3.02
Q20	The institute provides opportunities for cocurricular / extra curricular activities	3.0
Q21	Course enrollments, course feedback, tracking of attendance and grades are made easier with the in-house automation software for the academic process (TCENet Gen3).	3.36
Q22	In connection with the implementation of Outcome Based Education, Course Outcomes and Programme Outcomes are assessed periodically and subsequent actions are taken for continuous improvement	3.14
Q23	A mentoring/tutor system is available to identify your strengths and weaknesses and encourage you with providing the right level of challenges.	3.04
Q24	Classrooms are well equipped with good Audio System/Multimedia Projectors/Digital Boards/Wi-Fi connectivity.	2.9
Q25	Library is digitized and includes sufficient count of reference and text books and access to international and national journals	3.1

## DETAILED RESPONSES

S.No / Likert Scale	Count of Responses					Responses (%)				
	4	3	2	1	0	4	3	2	1	0
Q1	306	508	156	25	13	30.36	50.4	15.48	2.48	1.29
Q2	238	460	232	54	24	23.61	45.63	23.02	5.36	2.38
Q3	357	499	127	18	7	35.42	49.5	12.6	1.79	0.69
Q4	404	460	102	28	14	40.08	45.63	10.12	2.78	1.39
Q5	289	407	215	59	38	28.67	40.38	21.33	5.85	3.77
Q6	256	453	224	48	27	25.4	44.94	22.22	4.76	2.68
Q7	507	365	90	33	13	50.3	36.21	8.93	3.27	1.29
Q8	249	493	211	37	18	24.7	48.91	20.93	3.67	1.79
Q9	438	443	109	10	8	43.45	43.95	10.81	0.99	0.79
Q10	384	489	114	9	12	38.1	48.51	11.31	0.89	1.19
Q11	303	478	164	39	24	30.06	47.42	16.27	3.87	2.38
Q12	447	289	207	48	17	44.35	28.67	20.54	4.76	1.69
Q13	396	460	108	28	16	39.29	45.63	10.71	2.78	1.59
Q14	324	495	145	30	14	32.14	49.11	14.38	2.98	1.39
Q15	306	513	155	26	8	30.36	50.89	15.38	2.58	0.79
Q16	308	511	158	21	10	30.56	50.69	15.67	2.08	0.99
Q17	310	482	170	24	22	30.75	47.82	16.87	2.38	2.18
Q18	361	326	219	67	35	35.81	32.34	21.73	6.65	3.47
Q19	308	470	179	36	15	30.56	46.63	17.76	3.57	1.49
Q20	344	449	170	29	16	34.13	44.54	16.87	2.88	1.59
Q21	471	422	102	7	6	46.73	41.87	10.12	0.69	0.6
Q22	326	505	158	6	13	32.34	50.1	15.67	0.6	1.29
Q23	365	424	169	29	21	36.21	42.06	16.77	2.88	2.08
Q24	283	419	224	55	27	28.08	41.57	22.22	5.46	2.68
Q25	343	462	164	27	12	34.03	45.83	16.27	2.68	1.19



**DETAILED RESPONSES – QUALITATIVE FEEDBACK (Samples)**

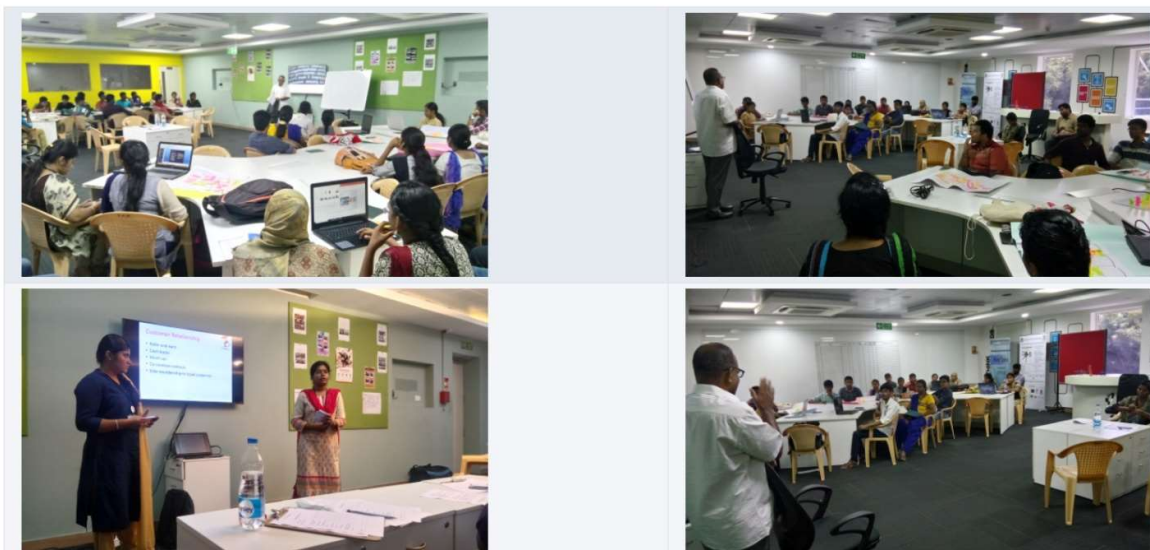
Record your suggestions for enhancing the quality of Teaching Learning process at TCE.

Keep going this skills are enough.
Every thing perfect.. Thanks TCE
The tutor could have additional session with the students and be interactive and get to now their problems because students may not be forthcoming with their issues
Apart from regular classes, different modes of teaching can be advised.
Good teaching
More references for the curriculum other than manual teaching can be promoted. References for a particular topic could be shared with the students for more understanding. (Such as an online course, videos, books, project, papers)
To teach a problem with more number of examples
Teaching and learning process is excellent in TCE
Everything is good.
There can be project submission at end of every semester so that students can have 5 projects at the end of 5th semester. It will be really useful during placement interviews. More emphasis can be given for Data structures and algorithms. There can be more practical sessions than theory for programming. More assignments can be given on programming. During 4th and 5th semester some assignments can be given on certain important placement topics so that students can get ready for placement.

**ACTION TAKEN FOR IMPROVEMENT OF TEACHING LEARNING PROCESS**

1. Analysis on the Implementation of CDIO courses
2. Establishment of T S Srinivasan Centre for Automotive Research
3. Setting up of Smart Digital Boards in the Classrooms
4. CDIO Orientation programmes for Students
5. CDIO Based Curriculum Design (three batches) for TCE faculty members by the TCE Academic Process team members
6. Workshop on Developing learner-centric online courses: Resilient Teaching Approach for TCE faculty members by the TCE Academic Process team members
7. Introduction of 'Research Practice' Course in the Undergraduate Curriculum
8. Exclusive Learning Management System (LMS) (courses.tce.edu)
9. Exclusive Examination Management Process (exams.tce.edu)
10. University programmes with coursera and edX for online certification for both students and faculty.
11. Sponsorship for B,E./B.Tech students for GATE (Training and Registration)
12. IUCEE-EWB- Students Leadership Course:
  - Emphasis on developing 21<sup>st</sup>-century skills: innovation, design thinking, critical thinking, analytical thinking, collaboration skills, presentation skills, and leadership skills.
  - Focus on UN Sustainable Development Goals ending with a project.
  - 20 students of II year - all the branches of engineering and technology
  - Recognition: 13 students - "Outstanding" Performance" - 7 students "Good" Performance
13. Students' Workshops in association with IUCEE
  - Course on Soft Skills
    - Dr, Manu Vora, Chairman, and President, Business Excellence Inc
  - Entrepreneurship Course:
    - Dr.Shalini Gopalkrishnan (Doctor of Business Administration, University of Florida), an international academician and entrepreneur
    - Dr.Ranji Vaidyanathan, Varnadow chaired Professor of materials science and engineering in the school of materials science and engineering at Oklahoma State University
    - Dr.Ashwin Mehta, Associate Teaching Professor, and Co-Director, Jack M. Wilson Center for Entrepreneurship
  - AI for everyone
    - Dr.RaoVemuri, University of California

14. Establishment of **CDIO maker space** to promote active and problem based learning.



CDIO maker space @TCE