



**THIAGARAJAR COLLEGE OF ENGINEERING  
MADURAI 625015**

**STUDENT SATISFACTION SURVEY  
2021-22**

## STUDENT SATISFACTION SURVEY

As a part of continuous improvement 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. Google form with the links <https://forms.gle/8dB4nNCZSdUFoVY48> has been circulated among all the students. The feedback was collected in anonymous mode. Around 1859 UG and 199 PG students have participated in the survey. The responses have been carefully analysed and appropriate action plan has been prepared by the academics team of the institute to enhance the quality of Teaching Learning Process.

### QUESTIONNAIRE FOR UNDERGRADUATE 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*
7. Adoption of Conceive, Design, Implement, Operate (CDIO) framework in TCE undergraduate curriculum has enriched the technical and professional skills.
  - *Strongly Agree*    ▪ *Agree*    ▪ *Neutral*    ▪ *Disagree*    ▪ *Strongly Disagree*

8. CDIO Skill based courses like Engineering Exploration, Lateral Thinking, Design Thinking, Project Management, System Thinking are facilitating participation in international contests / competitions

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

9. Audit courses like Environmental Sciences, Constitution of India, Professional Ethics etc., created social awareness

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

### **CONTENT DELIVERY**

10. 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%*

11. 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*

12. 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*

13. Instructors are readily available for clarification of doubts and for personal mentoring.

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

14. Laboratories are well equipped with appropriate hardware and software for the conduct of practical classes/project works.

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

15. The institute provides support for participation in online certification from NPTEL, Coursera, edX etc.,

- *Regularly*    ▪ *Often*    ▪ *Sometimes*    ▪ *Rarely*    ▪ *Never*

### **ASSESSMENT**

16. The assessment process (CAT / Assignments / Terminal Examinations / Review) at TCE is fair and unbiased.

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

17. The tasks given in assignments have helped in enhancing your problem solving and communication skills.

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

18. The assessments are designed and evaluated appropriately to assess higher order thinking skills.

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

19. The assessments provided the right level of challenge and an opportunity for collaborative/co-operative learning.

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

20. Communication, Critical thinking, Collaboration, Creativity are given importance in assessments.

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

### **SUPPORT SYSTEM/INFRASTRUCTURE**

21. The institute takes active interest in promoting internships / student exchange programmes / field visits opportunities for students.

- *Regularly*    ▪ *Often*    ▪ *Sometimes*    ▪ *Rarely*    ▪ *Never*

22. 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*

23. The institute provides opportunities for cocurricular / extra curricular activities.

- *Regularly*    ▪ *Often*    ▪ *Sometimes*    ▪ *Rarely*    ▪ *Never*

24. 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*

25. 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*

26. Classrooms are well equipped with good Audio System/Multimedia Projectors/Digital Boards/Wi-Fi connectivity.

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

27. 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*

28. The support systems like Hostel, Canteen, Bank, Post office, Stores and Clinic are functioning well and they cater to the need of the hour.

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

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

**STUDENTS PARTICIPATION – DEPARTMENT WISE**  
**UNDERGRADUATE PROGRAMMES**

Department	Count of Responses
Civil Engineering	308
Mechanical Engineering	241
Electrical and Electronics Engineering	249
Electronics and Communication Engineering	241
Computer Science and Engineering	259
Information Technology	203
Mechatronics	127
Architecture	165
Computer Science and Business Systems	66
<b>Total Responses</b>	<b>1859</b>

**POST GRADUATE PROGRAMMES**

Department	Count of Responses
Computer Applications	27
Applied Mathematics and Computational Sciences	84
Civil	48
Electronics and Communication Engineering	10
Computer Science and Engineering	8
Electrical and Electronics	17
Mechanical	3
Architecture	2
<b>Total Responses</b>	<b>199</b>

**ANALYSIS OF RESPONSES**  
**UNDER GRADUATE PROGRAMMES**

S.No	Questions	Average
Q1	The curriculum is well balanced, updated periodically and satisfies the present needs.	3.56
Q2	Exposure to industrial practices is provided through industry supported courses/ seminars/ guest lectures/ field visits/ student internships	3.24
Q3	The curriculum facilitates interdisciplinary learning through foundation electives and general electives	3.6
Q4	The curriculum has adequate number of practical courses / theory cum practical courses/ Project works for skill development.	3.64
Q5	The Special Interest Groups (SIG) and programme electives have helped you in specialization of your area of interest.	3.28
Q6	The implementation of the Choice Based Credit System (CBCS) has enabled you to enroll in the courses and slots you opted for.	3.44
Q7	Adoption of Conceive, Design, Implement, Operate (CDIO) framework in TCE undergraduate curriculum has enriched the technical and professional skills.	3.52
Q8	CDIO Skill based courses like Engineering Exploration, Lateral Thinking, Design Thinking, Project Management, System Thinking are facilitating participation in international contests / competitions	3.48
Q9	Audit courses like Environmental Sciences, Constitution of India, Professional Ethics etc., created social awareness	3.48
Q10	How much of the syllabus was covered in the class?	3.64
Q11	The instructors adopt active and collaborative learning strategies like Think Pair Share, Flipped Classroom, Problem Based Learning etc.,	3.32
Q12	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	3.52
Q13	Instructors are readily available for clarification of doubts and for personal mentoring.	3.6
Q14	Laboratories are well equipped with appropriate hardware and software for the conduct of practical classes/project works.	3.44

S.No	Questions	Average
Q15	The institute provides support for participation in online certification from NPTEL, Coursera, edX etc.,	3.2
Q16	The assessment process (CAT / Assignments / Terminal Examinations / Review) at TCE is fair and unbiased.	3.52
Q17	The tasks given in assignments have helped in enhancing your problem solving and communication skills.	3.52
Q18	The assessments are designed and evaluated appropriately to assess higher order thinking skills	3.52
Q19	The assessments provided the right level of challenge and an opportunity for collaborative/co-operative learning,	3.48
Q20	Communication, Critical thinking, Collaboration, Creativity are given importance in assessments	3.04
Q21	The institute takes active interest in promoting internships / student exchange programmes / field visits opportunities for students.	3.4
Q22	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.	3.4
Q23	The institute provides opportunities for co-curricular / extra-curricular activities	3.48
Q24	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	3.44
Q25	A mentoring/tutor system is available to identify your strengths and weaknesses and encourage you with providing the right level of challenges.	3.44
Q26	Classrooms are well equipped with good Audio System/Multimedia Projectors/Digital Boards/Wi-Fi connectivity.	2.96
Q27	Library is digitized and includes sufficient count of reference and text books and access to international and national journals	3.52
Q28	The support systems like Hostel, Canteen, Bank, Post office, Stores and Clinic are functioning well and they cater to the need of the hour.	2.32

## DETAILED RESPONSES – UNDER GRADUATE PROGRAMMES

S.No / Likert Scale	Count of Responses					Responses (%)				
	4	3	2	1	0	4	3	2	1	0
Q1	453	1002	330	52	22	24	54	18	3	1
Q2	371	824	451	160	53	20	44	24	9	3
Q3	499	1002	297	40	21	27	54	16	2	1
Q4	580	947	269	48	15	31	51	14	3	1
Q5	440	816	438	115	50	24	44	24	6	3
Q6	503	885	335	84	52	27	48	18	5	3
Q7	436	990	362	45	26	23	53	19	2	1
Q8	486	923	338	77	35	26	50	18	4	2
Q9	464	939	353	65	38	25	51	19	3	2
Q10	907	657	210	49	36	49	35	11	3	2
Q11	388	897	437	95	42	21	48	24	5	2
Q12	442	982	355	56	24	24	53	19	3	1
Q13	588	920	288	42	21	32	49	15	2	1
Q14	461	913	348	87	50	25	49	19	5	3
Q15	572	588	527	122	50	31	32	28	7	3
Q16	520	908	333	66	32	28	49	18	4	2
Q17	465	965	351	53	25	25	52	19	3	1
Q18	441	1001	340	57	20	24	54	18	3	1
Q19	424	1012	355	45	23	23	54	19	2	1
Q20	410	1009	356	54	30	22	54	19	3	2
Q21	567	487	523	208	74	31	26	28	11	4
Q22	425	903	410	88	33	23	49	22	5	2
Q23	457	878	392	90	42	25	47	21	5	2
Q24	422	984	390	42	21	23	53	21	2	1
Q25	504	871	377	71	36	27	47	20	4	2
Q26	333	704	481	205	136	18	38	26	11	7
Q27	532	912	329	51	35	29	49	18	3	2
Q28	143	536	543	250	387	8	29	29	13	21



## DETAILED RESPONSES – QUALITATIVE FEEDBACK (Samples)

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

- Can promote more industrial visits and hands on trainings
- It's good
- It's perfect the way it is
- Computer Hardware related courses practical labs must be conducted
- It will be better if wifi and cellular networks are made available in everywhere within campus. Also, it will be very helpful for students if you provide a desk and bench enabled with charging points so that students can use laptops in classrooms and can learn or code side by side
- It's going good
- Students who are not able to get enough performance and skills regarding both curriculum and placement training can be concentrated and trained. It would be very useful and encouraging building up both self-esteem and knowledge.
- Projector learning for mathematical subject is not advisable
- Everything is good at TCE.
- Need more industrial visit
- The tutor ward system need to improve a lot, because it focuses on some few students who are engaging with the staff. The software which are used in or college are very useful in real life conditions. But the company expectation which are coming for placement is expecting even more. This should be taken into consideration.
- Everything is good
- Mentor should be a person who is more approachable and takes on his responsibility as mentor. 2) Some teachers don't complete the syllabus. 3) Field trips or industrial visit are not organized.
- All good
- Only for rare cases projector can be used, not to teach complete syllabus through projector
- Update coursework, encourage research and promote higher studies than merely focusing on placements.
- Teaching process at TCE is always good and well.
- Teachings should be interactive. Many of the professors still engage in the old methods.
- New techs should be used and proper awareness should be given
- Please arrange 1 industrial visits must for all head of the departments for each semester. It provides exposure of industry for students. Needs to promote additional subjects rather than core subjects. Thank you
- CDIO subjects must include industry technologies training phase
- During placement activities, the trainings are only given for aptitude and coding. No training is given for the core company aspects. Also, the faculty members can give guidance for GATE exam preparation. There are faculties who demean the students for not opting for placements. There should be more encouragement for higher studies and other government and competitive exams. Thank you.
- Everything was well organized ....
- more doubt clearing sessions

## ANALYSIS OF RESPONSES

## POST GRADUATE PROGRAMMES

S.No	Questions	Average
Q1	The curriculum is well balanced, updated periodically and satisfies the present needs.	3.52
Q2	Exposure to industrial practices is provided through industry supported courses/ seminars/ guest lectures/ field visits/ student internships	3.32
Q3	The curriculum facilitates interdisciplinary learning through foundation electives and general electives	3.4
Q4	The curriculum has adequate number of practical courses / theory cum practical courses/ Project works for skill development.	3.64
Q5	The Special Interest Groups (SIG) and programme electives have helped you in specialization of your area of interest.	3.24
Q6	The implementation of the Choice Based Credit System (CBCS) has enabled you to enroll in the courses and slots you opted for.	3.28
Q7	Adoption of Conceive, Design, Implement, Operate (CDIO) framework in TCE undergraduate curriculum has enriched the technical and professional skills.	3.4
Q8	CDIO Skill based courses like Engineering Exploration, Lateral Thinking, Design Thinking, Project Management, System Thinking are facilitating participation in international contests / competitions	3.28
Q9	Audit courses like Environmental Sciences, Constitution of India, Professional Ethics etc., created social awareness	3.24
Q10	How much of the syllabus was covered in the class?	3.8
Q11	The instructors adopt active and collaborative learning strategies like Think Pair Share, Flipped Classroom, Problem Based Learning etc.,	3.48
Q12	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	3.64
Q13	Instructors are readily available for clarification of doubts and for personal mentoring.	3.72
Q14	Laboratories are well equipped with appropriate hardware and software for the conduct of practical classes/project works.	3.6

S.No	Questions	Average
Q15	The institute provides support for participation in online certification from NPTEL, Coursera, edX etc.,	3.44
Q16	The assessment process (CAT / Assignments / Terminal Examinations / Review) at TCE is fair and unbiased.	3.56
Q17	The tasks given in assignments have helped in enhancing your problem solving and communication skills.	3.56
Q18	The assessments are designed and evaluated appropriately to assess higher order thinking skills	3.56
Q19	The assessments provided the right level of challenge and an opportunity for collaborative/co-operative learning,	3.56
Q20	Communication, Critical thinking, Collaboration, Creativity are given importance in assessments	3.6
Q21	The institute takes active interest in promoting internships / student exchange programmes / field visits opportunities for students.	3.16
Q22	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.	3.44
Q23	The institute provides opportunities for cocurricular / extra curricular activities	3.28
Q24	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	3.52
Q25	A mentoring/tutor system is available to identify your strengths and weaknesses and encourage you with providing the right level of challenges.	3.52
Q26	Classrooms are well equipped with good Audio System/Multimedia Projectors/Digital Boards/Wi-Fi connectivity.	3.04
Q27	Library is digitized and includes sufficient count of reference and text books and access to international and national journals	3.6
Q28	The support systems like Hostel, Canteen, Bank, Post office, Stores and Clinic are functioning well and they cater to the need of the hour.	2.44

## DETAILED RESPONSES – POST GRADUATE PROGRAMMES

S.No / Likert Scale	Count of Responses					Responses (%)				
	4	3	2	1	0	4	3	2	1	0
Q1	49	104	37	8	1	25	52	19	4	1
Q2	39	94	44	20	2	20	47	22	10	1
Q3	36	106	50	6	1	18	53	25	3	1
Q4	51	111	33	4	0	26	56	17	2	0
Q5	33	97	48	16	5	17	49	24	8	3
Q6	37	97	47	10	8	19	49	24	5	4
Q7	33	108	46	10	2	17	54	23	5	1
Q8	32	99	51	15	2	16	50	26	8	1
Q9	34	94	52	13	6	17	47	26	7	3
Q10	114	67	13	2	3	57	34	7	1	2
Q11	47	102	39	8	3	24	51	20	4	2
Q12	62	101	30	6	0	31	51	15	3	0
Q13	63	108	24	3	1	32	54	12	2	1
Q14	57	106	30	4	2	29	53	15	2	1
Q15	77	66	43	12	1	39	33	22	6	1
Q16	57	101	28	10	3	29	51	14	5	2
Q17	53	104	34	8	0	27	52	17	4	0
Q18	46	108	40	5	0	23	54	20	3	0
Q19	48	109	38	3	1	24	55	19	2	1
Q20	47	113	29	9	1	24	57	15	5	1
Q21	63	58	52	21	5	32	29	26	11	3
Q22	38	109	39	11	2	19	55	20	6	1
Q23	37	98	49	7	8	19	49	25	4	4
Q24	39	111	44	5	0	20	56	22	3	0
Q25	51	105	35	5	3	26	53	18	3	2
Q26	32	88	46	18	15	16	44	23	9	8
Q27	51	110	30	6	2	26	55	15	3	1
Q28	10	70	55	26	38	5	35	28	13	19

### DETAILED RESPONSES – QUALITATIVE FEEDBACK (Samples)

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

- Happy with the college and education. So no suggestions
- Provide eDX subscription and NPTEL course credits
- Everything is fine already
- Good
- By promoting Industrial visit
- Nil
- More practice is required
- Excellent
- Good
- Suggesting the best way to approach a problem.
- It is good and systemized teaching
- Good enough
- Give more curricular activities
- Excellent
- Teaching is so good .. All staff is golden people , i am getting in knowledge & earn to software thank you so much..
- Good
- Good
- Extra care or time has to be taken for late blooming students.
- Everything is good
- Good
- Having a department library with sufficient number of books and provision of code books and other materials like record file is encouraged
- Give more notes
- Nil
- Teaching and communications are well and good. Encourage in-plant training for more knowledge
- good
- More industrial visits will help us learn and correlate to classroom teachings
- Being a PG student (M.E Structural Engineering), technical interactions with UG Civil and PG Infrastructure, Environmental, Construction Management and B.Arch and M.Arch shall be developed.
- Should conduct sympo dept wise and should take us to IV which gives us practical support

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

1. As a part of continuous improvement in Teaching Learning, the institute has planned to launch 20 courses in online mode to enhance skill development on the state of the art technologies and to promote interdisciplinary learning (mooc.tce.edu)
  - Applied Data Science with Python
  - Applied Statistics with Python
  - Essentials of Blockchain
  - Data Visualization
  - Industrial Automation
  - Android Mobile Application Development
  - Modern Testing Practices: A Primer to Certification
  - Predictive Analytics with regression: Simplified
  - Discrete Time Signal Processing
  - Theory of Computation: TOC Made Easy
  - FPGA based Digital System Design
  - Visual Arts - A tool of Creativity
  - Smart Grid Implementations and Feasibilities
  - Data Structures - Placement Bootcamp
  - C Programming - A Primer for Placement
  - Cloud Computing for Beginners
  - Big Data Tools and Techniques
  - Statistical Modelling and Analysis
  - Database Management Systems: Roadmap to Placement and GATE preparations
  - Programming in Java: A Practical Approach
2. The award of undergraduate degree with Minors and Honors will be implemented from the academic year 2022-23 onwards.
3. Faculty conclave shall be planned during March of every academic year for sharing of best practices in teaching learning.
4. Experts from industry/academia shall be utilized for problem formulation in CDIO skill based courses and review of project works
5. The tutor ward system shall be automated application, thereby the progress in the system shall be monitored easily.
6. In the course on Research practice, periodic monitoring and review shall be planned with the faculty mentors to facilitate publications in reputed journals.

7. Academic Collaboration with Professional societies like TRIZ shall be encouraged to increase the count of patents by the students.
8. Collaboration with MOOC platforms like edX shall be extended to provide exposure to a wide variety of assessment tools and techniques. Financial assistance for NPTEL courses shall be provided to meritorious students.
9. Remedial classes for Mathematics courses shall be conducted periodically.