THIAGARAJAR COLLEGE OF ENGINEERING

MADURAI

STUDENT SATISFACTION SURVEY

2022-23

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

UG Programme: https://forms.gle/FdMGE9hRRFqipNTd7
PG Programme: https://forms.gle/czytKkomUjXm4ha99
Architecture: https://forms.gle/nKdW9ySFtiuYwzTs5

 have been circulated among all the students. The feedback was collected in anonymous mode. Around 2186 UG, 245 PG students, 107 students from Architecture department 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 UNDER GRADUATE 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*

10. What are the inter-disciplinary courses (General Elective Course/Foundation Electives) do you prefer to study (courses offered by Departments other than yours)?

11. If you have gained Programming Knowledge at School level, what type of basic Programming courses do you wish to have in Sem 1 and/or Sem 2 in TCE ?

12. Do you wish to have Foreign Languages in Curriculum with credits?

CONTENT DELIVERY

13. 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%*

14. 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*

15. 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*

16. Instructors are readily available for clarification of doubts and for personal mentoring.
    - *Strongly Agree* ▪ *Agree* ▪ *Neutral* ▪ *Disagree* ▪ *Strongly Disagree*

17. Laboratories are well equipped with appropriate hardware and software for the conduct of practical classes/project works.
    - *Strongly Agree* ▪ *Agree* ▪ *Neutral* ▪ *Disagree* ▪ *Strongly Disagree*

18. The institute provides support for participation in online certification from NPTEL, Coursera, edX etc.,
    - *Regularly* ▪ *Often* ▪ *Sometimes* ▪ *Rarely* ▪ *Never*

19. You are aware of TCE MOOCs. What are the TCE Online Courses do you prefer to have?

ASSESSMENT

20. The assessment process (CAT / Assignments / Terminal Examinations / Review) at TCE is fair and unbiased.
    - *Strongly Agree* ▪ *Agree* ▪ *Neutral* ▪ *Disagree* ▪ *Strongly Disagree*

21. The tasks given in assignments have helped in enhancing your problem solving and communication skills.
    - *Strongly Agree* ▪ *Agree* ▪ *Neutral* ▪ *Disagree* ▪ *Strongly Disagree*

22. The assessments are designed and evaluated appropriately to assess higher order thinking skills.
    - *Strongly Agree* ▪ *Agree* ▪ *Neutral* ▪ *Disagree* ▪ *Strongly Disagree*

23. The assessments provided the right level of challenge and an opportunity for collaborative/co-operative learning.
    - *Strongly Agree* ▪ *Agree* ▪ *Neutral* ▪ *Disagree* ▪ *Strongly Disagree*

24. Communication, Critical thinking, Collaboration, Creativity are given importance in assessments.
    - *Strongly Agree* ▪ *Agree* ▪ *Neutral* ▪ *Disagree* ▪ *Strongly Disagree*

SUPPORT SYSTEM/INFRASTRUCTURE

25. The institute takes active interest in promoting internships / student exchange programmes / field visits opportunities for students.
    - *Regularly* ▪ *Often* ▪ *Sometimes* ▪ *Rarely* ▪ *Never*

26. 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*

27. The institute provides opportunities for cocurricular / extra curricular activities.
    - *Regularly* ▪ *Often* ▪ *Sometimes* ▪ *Rarely* ▪ *Never*

28. 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*

29. 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*

30. Classrooms are well equipped with good Audio System/Multimedia Projectors/Digital Boards/Wi-Fi connectivity.
    - *Strongly Agree* ▪ *Agree* ▪ *Neutral* ▪ *Disagree* ▪ *Strongly Disagree*

31. 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*

32. 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*

33. 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	205
Mechanical Engineering	303
Electrical and Electronics Engineering	361
Electronics and Communication Engineering	354
Computer Science and Engineering	343
Information Technology	311
Mechatronics	130
Computer Science and Business Systems	179
Total Responses	**2186**

POST GRADUATE PROOGRAMMES

Department	
Computer Applications	30
Applied Mathematics and Computational Sciences	154
Civil	36
Electronics and Communication Engineering	6
Computer Science and Engineering	5
Electrical and Electronics Engineering	14
Total Responses	**245**

DEPARTMENT OF ARCHITECTURE

Department	
Architecture	107

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	3.28
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.	3.68
Q5	The Special Interest Groups (SIG) and programme electives have helped you in specialization of your area of interest.	3.36
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.	3.56
Q8	CDIO Skill based courses like Engineering Exploration, Lateral Thinking, Design Thinking, Project Management, System Thinking are facilitating participation in international contests / competititions	3.56
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?	3.56
Q11	The instructors adopt active and collaborative learning strategies like Think Pair Share, Flipped Classroom, Problem Based Learning etc.,	3.44
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	3.56

Q13	Instructors are readily available for clarification of doubts and for personal mentoring.	**3.64**
Q14	Laboratories are well equipped with appropriate hardware and software for the conduct of practical classes/project works.	**3.4**
Q15	The institute provides support for participation in online certification from NPTEL, Coursera, edX etc.,	**3.32**
Q16	The assessment process (CAT / Assignments / Terminal Examinations / Review) at TCE is fair and unbiased.	**3.48**
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,	**3.52**
Q20	Communication, Critical thinking, Collaboration, Creativity are given importance in assessments	**3.52**
Q21	The institute takes active interest in promoting internships / student exchange programmes / field visits opportunities for students.	**3.08**
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	**3.44**
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.	**3.48**
Q26	Classrooms are well equipped with good Audio System/Multimedia Projectors/Digital Boards/Wi-Fi connectivity.	**3.0**
Q27	Library is digitized and includes sufficient count of reference and text books and access to international and national journals	**3.56**
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.	**2.08**

TCE

DETAILED RESPONSES – UNDER GRADUATE PROGRAMMES

S.No / Likert Scale	Count of Responses				
	4	3	2	1	0
Q1	811	902	389	58	26
Q2	694	795	472	153	72
Q3	865	899	367	34	21
Q4	914	937	298	23	14
Q5	757	795	475	101	58
Q6	872	827	379	73	35
Q7	773	937	416	39	21
Q8	886	865	354	49	32
Q9	837	840	372	87	50
Q10	1094	715	272	0	86
Q11	753	870	437	89	37
Q12	826	904	380	50	26
Q13	906	887	348	28	17
Q14	785	809	394	129	69
Q15	919	581	535	107	44
Q16	836	842	388	65	55
Q17	815	887	397	50	37
Q18	813	873	413	57	30
Q19	787	913	416	48	22
Q20	783	904	399	63	37
Q21	781	504	568	219	114
Q22	777	825	472	72	40
Q23	818	808	410	89	61
Q24	795	878	452	43	18
Q25	848	831	395	67	45
Q26	620	667	493	218	188
Q27	857	871	359	70	29
Q28	216	523	586	217	644

DETAILED RESPONSES – QUALITATIVE FEEDBACK (Samples)

What are the inter-disciplinary courses (General Elective Course/Foundation Electives) do you prefer to study (courses offered by Departments other than yours)?

- Artificial intelligence, Machine Learning
- Block chain
- Neural networks, Deep learning, AIML
- Data Structures and Algorithm
- Aerospace and Nano materials
- business knowledge
- Artificial Intelligence, Internet of Things
- Nanotechnology, Entrepreneurship Development, Linear Algebra, Telecommunication
- Assistive technology
- Space research
- Data visualisation
- Nanotechnology,Material science
- Networking, cryptography
- Ethical hacking
- Something related to biotechnology wish it could be hands on
- Augmented reality

If you have gained Programming Knowledge at School level, what type of basic Programming courses do you wish to have in Sem 1 and/or Sem 2 in TCE ?

- Java / python
- C,java
- Programming in javascript
- Python and C programming
- C#
- Java and Basic data structures
- HTML CSS JS

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

- It is already at it's best
- More number of elective subjects and industrial collaboration
- They can take us to industrial visit and explain how to apply the knowledge practical
- Nothing from my side.... it's well maintained
- It's always good
- Already it is at it's best
- Excellent
- Faculty's are enriching us with academic as well as behavioural skills
- It would be great if relative grading can be changed to the previous grading
- Permit for more industrial visit by which we can industries and gain knowledge
- Be interactive with students
- Excellent teaching
- Improve the placement activities before 5th semester.
- Expand Campus and improve infrastructure.
- It is good
- Open book exam for practicals. The reason is there is no use in mugging up formulas instead the student must be enhanced with clear concepts and working procedure of the experiment
- Record the classes and share the videos to students
- More practicals then theoretical subjects
- Currently available Chairs are not so it must be replaced with a comfortable new chairs
- Active participation in other colleges competition
- Ai oriented and management courses
- Nothing
- Need more practical experience rather than taking theoritical classes
- Improve relationship and understanding between faculty and students
- Different assignment for each individual
- Already at the best.
- Despite of having written terminal exams project based terminal exam will enhance quality of engineers
- May improve the infrastructure
- No suggestion it's already good
- More focus on extra and co-curricular activities
- Despite of having written terminal exams project based terminal exam will enhance quality of engineers
- Excellent Facilities.
- Daily quizzes can improve the student learning skills
- Encourage active learning methods, such as group discussions, case studies, and hands-on projects, to engage students more effectively
- Field visits, internships will be useful for applying our theory knowledge in practical field.

ANALYSIS OF RESPONSES

POST 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	3.44
Q4	The curriculum has adequate number of practical courses / theory cum practical courses/ Project works for skill development.	3.6
Q5	The Special Interest Groups (SIG) and programme electives have helped you in specialization of your area of interest.	3.2
Q10	How much of the syllabus was covered in the class?	3.56
Q11	The instructors adopt active and collaborative learning strategies like Think Pair Share, Flipped Classroom, Problem Based Learning etc.,	3.44
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	3.68
Q13	Instructors are readily available for clarification of doubts and for personal mentoring.	3.76
Q14	Laboratories are well equipped with appropriate hardware and software for the conduct of practical classes/project works.	3.64
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.	3.52
Q17	The tasks given in assignments have helped in enhancing your problem solving and communication skills.	3.6
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	3.52
Q21	The institute takes active interest in promoting internships / student exchange programmes / field visits opportunities for students.	3.2
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.	3.48
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	3.56
Q25	A mentoring/tutor system is available to identify your strengths and weaknesses and encourage you with providing the right level of challenges.	3.6
Q26	Classrooms are well equipped with good Audio System/Multimedia Projectors/Digital Boards/Wi-Fi connectivity.	2.88
Q27	Library is digitized and includes sufficient count of reference and text books and access to international and national journals	3.56
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 – POST GRADUATE PROGRAMMES

S.No / Likert Scale	Count of Responses				
	4	**3**	**2**	**1**	**0**
Q1	74	119	48	3	1
Q2	81	96	53	13	2
Q3	92	105	40	6	2
Q4	59	90	75	18	3
Q5	125	76	34	0	10
Q6	81	101	51	8	4
Q7	104	106	29	4	2
Q8	128	88	24	3	2
Q9	108	96	35	5	1
Q10	107	71	49	14	4
Q11	90	98	41	12	4
Q12	86	112	40	6	1
Q13	77	117	41	7	3
Q14	79	115	42	7	2
Q15	78	107	45	14	1
Q16	87	68	52	29	9
Q17	71	114	47	10	3
Q18	74	92	60	10	9
Q19	78	113	48	5	1
Q20	90	106	34	13	2
Q21	51	78	65	30	21
Q22	87	109	43	2	4
Q23	20	87	49	21	68
Q24	74	119	48	3	1
Q25	81	96	53	13	2
Q26	92	105	40	6	2
Q27	59	90	75	18	3
Q28	125	76	34	0	10

DETAILED RESPONSES – QUALITATIVE FEEDBACK (Samples)

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

No suggestions. Everything is good with the teaching learning process

update the syllabus also for the current batch before entering into that particular semester

Be more updated to real life happenings and also try to adapt all the new technologies.

all are fine and some things need to be updated

provide more additional exposure

Conduct more cultural events and don't let the students to stick to books.. allow them to explore more... need to improve in internet facility....Focus more on infrastructure....Need to update the syllabus ...sylaabus is not opt to the current trend...

remove the scrap away from department which causes the mosquito infectced disease

update the syllabus for current batches not only for juniors

restrict the syllabus upto which the domain taken by the students are.

Help students to learn not to study

 help students to learn pratically

Help Students to learn not to rote learn in fair and unbiased manner. Include some Hands-on session too.

college should balance the both teaching and co curricular activites ,they focus only on teaching on other activites

Can improve availability of wifi

Continuous professional development programs for faculty members to stay updated with the latest trends and technologies in their respective fields.

Implement student feedback mechanisms and take them seriously to address their concerns and suggestions

.Regularly review and update the curriculum to ensure it aligns with industry requirements and emerging trends.4.Invest in modern educational technology tools and platforms to facilitate online learning, blended learning, and virtual labs.5.Implement fair and transparent assessment practices.6.Encourage and support student research projects and innovation through funding and mentorship.7.Promote a diverse and inclusive learning environment that respects and values different perspectives and backgrounds.8.Pursue accreditation from relevant bodies to ensure adherence to quality standards in education.9.Foster partnerships with local communities and industries for experiential learning opportunities and projects.10.Provide

academic support services such as tutoring, counseling, and career guidance to help students succeed.

HELP STUDENT TO LEARN NOT TO STUDY AND ROTE LEARNING IN FAIR AND UNBAISED MANNER

 Encourage interactive and hands-on learning experiences to engage students actively. Utilize modern educational technologies and online resources for a blended learning approach. Diversify assessment methods, including projects, presentations, and peer evaluations, to assess different skills.

GIVE MORE MATERIALS FOR LEARNING,BRING IN HANDS ON TOOL ACTIVITES MORE

CONDUCT INTER DEPARTMENT EVENTS , INDUSTRY LEVEL PRACTICAL KNOWLEDGE ON DOMAIN IS LACKING

Everything is already good

everything is good already

all is well !

Wifi at some department are not working properly. Master degree course will need more faculties in civil engineering

None

More young staffs should be there who are up to date with this generation

Learning infrastructure has to be improved

Nothing

-

Nil

Good

Practical teaching methods can be increased

Yes

None

Teaching is good

Want Wifi, Open any medical shop in case of any urgency. Improve the infrastructure especially classroom desk and bench. Clean the classroom daily full of spider webs and dusts. Have to renovate Women's restroom mainly pipe is leaking not clean feeling very disgusting to use. Please renovate Women's restroom!!!

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 is to be facilitated 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 in myCAMU 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.