Established in the year 1957

Government Aided Institution
  Funded by State & Central Govts & Management

Approved by AICTE

Affiliated to Anna University

Offers 8 UG Programmes, 13 PG Programmes & Doctoral Programmes in Engineering, Sciences and Architecture

Granted autonomy by University Grants Commission in 1987


Number of Students: 4100; Number of Faculty: 280
# Strategic Plan – SWOT Analysis

## Strengths
- Philanthropic Management
- Qualified and Experienced Faculty
- Meritorious Students
- Contemporary Curriculum
- Sponsored Research – DRDO, ISRO
- Students Placements – TCS, CTS, Infosys, IBM

## Weakness
- Standard Operating Procedures
- Faculty Internship and Exchanges
- Innovative Student Projects
- Interdisciplinary Curriculum
- Collaborative Research
- Entrepreneurial Awareness

## Opportunities
- Strategic Plan – 5W 1H
- Student and Faculty Exchanges
- Innovative Teaching Methods
- Multi-disciplinary Programmes
- Collaboration with Industries
- Placement Opportunities in Domain Areas

## Threats
- Faculty Migration
- Sustaining the Quality Research
- Technology Obsolescence

**Mentors:**
- Dr. Saji Gopinath, Professor, IIM, Kozhikode
- Dr. Rishikesha T. Krishnan, Director, IIM Indore
- Dr. Gopal, Professor, IIM Trichy
Institutional Focus Areas

• Planning and Development
  • Quality Systems
  • Branding
  • Alumni
• Academic Process
  • Faculty Development
  • Teaching & Learning
  • Assessment
• Industry Institute Interface
  • Consultancy & Testing
  • Academic Support
  • Internship & Placement
  • Entrepreneurship
• Research and Development
  • Academic Research
  • Sponsored Research
  • Library
• Co-curricular
  • Regulations
  • Professional Societies
  • Innovation Clubs
  • Counselling
• Extra-Curricular
  • Sports
  • NSS
  • NCC
  • Cultural
• Administration
  • Amenities
  • Estate Maintenance
Curriculum Design

- Autonomy in 1987 – Syllabus Revision...
- Curriculum redesign - Competency based, Outcome Based, Choice Based
- Embedding innovation in the Curriculum
  - Theory cum practical courses, Engineering Design, Capstone courses, Interdisciplinary courses, Guided study courses
- Conceive – Design – Implement – Operate (CDIO) initiatives – Workspace

Content Delivery

- Faculty Development Programmes – Pedagogy Group ... Peer Level Training
- IUCEE IEECP - Faculty certification
  - Interface with Professors of Higher Learning Institutes
  - Flipped class rooms, One minute paper, Role Play... LMS
- Nodal Center
  - IIT Bombay – Online FDP, Blended MOOC programmes
  - IIT Madras – QEEE programme

Assessment

- Assessment templates – Attainment of Courses Outcome...
  - Rubrics for Projects, Assignments
  - Assessors from Industry
- Higher Level Bloom – Analyse, Create
Academic Research

- Theme Areas, Special Interest Groups
- 60% of faculty possess Ph.D – 168 / 280
- Students as part of Research Groups

Sponsored Research

- Projects with R&D organisations – DRDO, ISRO, DAE, DST...
- Infrastructure for Research – Thiagarajar Advanced Research Centre
- Benchmarking – Redefining Priorities – R&D in socially relevant areas, CleanTech
- Participation of UG, PG students in Research Projects – Scholarships
- Patents
  - US Patents - Antennas, Pattern Recognition, Medical Imaging
  - Indian Patents – Plastic Roads (IRC Code), Alternate Fuel, Energy
<table>
<thead>
<tr>
<th>Department</th>
<th>Theme Area</th>
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<tbody>
<tr>
<td>Civil engineering</td>
<td>Eco friendly structures</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Automation</td>
</tr>
<tr>
<td>Electrical &amp; Electronics</td>
<td>Power and Energy</td>
</tr>
<tr>
<td>Computer Science &amp; Engg.</td>
<td>Knowledge Engineering</td>
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<tr>
<td>Information Technology</td>
<td>Database Management</td>
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<tr>
<td>Computer Applications</td>
<td>Business Analytics</td>
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<td>Mathematics</td>
<td>Modelling</td>
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<td>Materials Science</td>
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<td>Chemistry</td>
<td>Green Chemistry</td>
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<tr>
<td>Architecture</td>
<td>Heritage</td>
</tr>
</tbody>
</table>
Continuous Quality Improvement - Industry Interaction

Academic Support

- Industry Participation in Teaching Learning Process
  - Co-created Curriculum for Mech, EEE – TVS Motors
- Industry supported One/Two Credit Courses
- Industry Sponsored Labs: Honeywell, Microsoft, IBM, Motorola, Agilent, Intel, NI, TI, Freescale, ...

Consultancy and Testing Services

- Open house for Industries
- Interdisciplinary Approach – Chemistry with other departments

Internship and Placement

- Faculty and Student Internship in Core Industries
- Alumni Supported Training on Industry Expectations

Entrepreneurship Initiatives

- Thiagarajar Entrepreneur Network (TEN)
- Technology Business Incubator
- Thiagarajar Telekom Solutions India – Incubated Company in the campus
Incubation Initiative – Thiagarajar Telekom Solutions

R&D on Theme areas

- CIVIL Eco friendly structures
- EEE Power & Energy
- Mechanical Automation
- CSE Knowledge Engg
- IT Database Mgmt
- Architecture Heritage
- Mathematics Modelling
- Physics Materials science
- Chemistry Green Chemistry

SIGs

- RF Devices
- Base band Processing
- Embedded VLSI
- Image processing

College III cell activities

Faculty Training & Orinetation

TIFAC-CORE in Wireless Technologies

Entrepreneurship awareness

EDP Initiatives

led to incubation of

THIAGARAJAR TELEKOM SOLUTIONS LIMITED
Barriers to Transformation – TCE’s Response

- Grade only Mindset of Students
  - Special Interest Groups
  - Innovation Clubs
  - Alumni Mentoring
- Poor Pedagogical Skills among Faculty
  - Peer Level Training Programmes
  - Orientation and Best Practices Sharing
- Teach only Mindset of Faculty
  - Interface with Institutes of Higher Learning
  - Sponsorship for Faculty to visit Industries
  - Creation of State-of-Art Test Facilities
- Performance Measures for faculty
  - Awards and Recognition
- Processes for Governance - Non-cohesiveness
  - Inclusive Administration
  - Goal Oriented Process - SOPs
Accolades and Recognition

IMC Ramkrishna Bajaj National Quality Performance Excellence Trophy 2013

Global Performance Excellence Award, 2015
Accolades and Recognition

- AICTE - CII Best Industry Linked Institutional National Survey 2014, 2015

- Sustainable Institute Industry partnership Award – SEED
- Quality Enhancement in Engineering Education (QEEE) Centre
- IBM Mentor Award for Academic Interface (One among 10 Colleges)
TCE has won Commendation Certificate as part of Rajiv Gandhi National Quality Award
Accolades and Recognition

The Prime Minister of India conferred SAFAIGRI Award 2015 instituted by M/s India Today on Dr.R.Vasudevan for his contribution towards Solid Waste Management
Our Chairman and Correspondent Mr. Karumuttu T. Kannan has been awarded the coveted “Perunthalaivar Kamarajar Award” instituted by Tamil Nadu government for his philanthropic service to the society in the area of education.
Accolades and Recognition

Thiagarajar College of Engineering
NIRF 2017
(National Institutional Ranking framework)

Among IITs, NITs, Universities and Engineering Colleges

37th Ranking in India

Ranking Among Engineering Colleges

4th in India
3rd in Tamil Nadu
1st in India for Research

4th in India for Teaching & Learning