About the TEDP Programme

In this present competitive environment, variety of career options are available based on one's skills and qualifications. In India, Government has taken steps for creating awareness and promoting start-ups in the technology field. For young potential entrepreneurs, numerous selfemployment opportunities exist in the technology domain. TEDP is a structured physical class based & technologyoriented training programme designed to motivate and develop entrepreneurs in specific Products/ technologies / processes developed by CSIR labs, R&D institutions, universities etc.

In these Entrepreneurship programmes, the target group potential entrepreneurs. degree/diploma (three years) in S&T are trained through a structured training programme of the specified duration. This programme provides class room & hands-on training on all fundamental aspects of entrepreneurship, motivation, and management areas. The TEDPs involve technologyoriented training in the specific technology areas besides the sessions on entrepreneurial inputs. The other main topics include Entrepreneurship concepts. **Employment opportunities, Business options in IT,** personality development, communication skills and market survey techniques etc

Organizing Committee

Chief Patron

Mr. K. Hari Thiagarajan, Chairman & Correspondent

Patron

Dr. L. Ashok Kumar,

Principal

Convener

Dr. S. Baskar

Professor & Head, Dept. of EEE

Coordinators

Dr. B. Ashok Kumar, Associate Professor, Dept. of EEE

Dr. P. S. Manoharan, Professor, Dept. of EEE

Dr. D. Kavitha, Associate Professor, Dept. of EEE

Mr. Sebin Sunny, CEO- TCE-TBI

About TCE

The Thiagarajar College of Engineering (TCE), established in 1957 by philanthropist Karumuttu Thiagarajan Chettiar, is a Government aided autonomous institution affiliated with Anna University, Chennai, and approved by AICTE.

TCE offers 11 Undergraduate, 7 Postgraduate, and Ph.D. programs in Engineering, Architecture, and Science. Nestled in a serene, eco-friendly campus, TCE is renowned for its top-tier infrastructure and commitment to academic excellence.

TCE has embraced reforms in its teaching learning process, including a Competency-Based Curriculum, Outcome-Based Education, and the CDIO framework since 2018, emphasizing hands-on training.

The launch of MOOCs in 2021 and the Thiagarajar Research Fellowship (TRF) for Ph.D. scholars underscore TCE's focus on research innovation. Industry collaborations with global leaders, such as TVS Motors, have enhanced curriculum design and established cutting-edge labs like the T. S. **Srinivasan Centre for Automotive research.**

TCE's participation in the Technical Education Quality Improvement Programme(TEQIP) under MHRD has driven faculty development, industry - supported research, and governance improvements, solidifying its reputation as a leader in technical education.

About The Centre for Continuing Education (CCE)

CCE will facilitate various departments of our college to conduct a range of seminars, workshops and faculty development programmes to enhance practical skills and encourage interdisciplinary learning thereby leading to knowledge upgradation for students, research scholars and faculty members of our college and other institutions as well. The establishment of the CCE will also enable us to leverage our existing academic resources to provide highquality, flexible education tailored to the needs of learners from different backgrounds.













Centre for Continuing Education

Tamilnadu State Council for Science and Technology (TNSCST) DOTE Campus, Chennai - 600 025 **Sponsored**

Technology based Entrepreneurship Development Programme (TEDP) on

> **Entrepreneurship Opportunities with Instrumentation Systems and its Applications**

> > 12.02.25 to 25.03.25



About the TEDP: Entrepreneurship Opportunity with Instrumentation Systems and Its Applications

Technology Based Entrepreneurship Development Programme (TEDP) significantly focuses on training and development need of S&T entrepreneurs in a specific technology area. This program primarily aims to equip participants with the application of instrumentation on various sectors like Healthcare, Wearables, Smart Cities, Smart Agriculture, Smart Pollution Control etc. along with Hands on training using the expertise, scheduled from 12.02.2025 to 25.03.2025.

- This programme will cover in detail about developing instrumentation Systems and Devices (from designing device, connecting sensors and actuators, communication protocols and APIs).
- In addition, the programme will deal with integrating instrumentation systems with applications running on the web and mobile platforms. As instrumentation system provides scope for a massive network of connected things and people all of which collect and share data about the way they are used and about the environment around them.
- This course is delivered in Physical Mode which enables participants through a variety of formats including: interactive videos, practice quizzes, presentations, assignments, and discussion forums.
- ●It provides many examples where instrumentation system is already transforming customer experience, operations and business models. It also explains the four key elements of leadership capability that make transformation possible through instrumentation system. Real-world case studies, senior executive interviews, self-assessments, and practical assignments will guide participants as they construct a personal roadmap to gain strategic advantage from IoT.

Programme Structure

There will be four sessions per day and content will be delivered through lectures/ presentations/case studies as well as interactive sessions. Guest Speakers would include eminent experts & practicing entrepreneurs. Industry visits are also organized as part of the program.

Contents: Entrepreneurship

- Introduction to Entrepreneurship & Startups
- Startup Schemes
- Fundraising journey of startups (experience sharing)
- Business Model Canvas, The perfect pitch deck
- Soft skill Development ,EVVI Solutions
- Motivation sessions, Case studies
- Business Plan Preparation,
- IPR & Case Studies
- Company registration and legal compliances
- Role of R&D organizations & HEIs in building startups, Role of ecosystem enablers
- Field visit: TCE TBI, Madurai Agribusiness Incubation Forum (MABIF), SNP Dairy, Kappalor SIPCOTI

Contents: Instrumentation system and its applications

- Instrumentation and measurement- The potential of IoT and its significance in real world applications
- Concept of Internet of Things (IoT), Understating IoT Technology, History of IoT
- Application of IoT technology, IoT Standards, different requirements for implementation.
- IoT architecture and challenges in IoT system implementation
- Major components in IoT implementation
- Hardware, sensors, Embedded Systems
- Software, Application software, Connectivity, Cloud, and security
- Introduction of ARM Platform for IoT implementation
- Getting started with ARM
- Sensors and sensor networks (Thermistors and Light intensity measurement)
- Interfacing Digital Devices and sensing Digital Sensors, Sensing analog quantities
- Communication over Ethernet or Internet, Ethernet interface using ARM
- IoT communicating with web based services
- Introduction to IoT web based Services and applications
- Cloud data logging and data visualization
- Project 1 Smart Device control and Data logging using loT Technology
- Project 2 Web based home automation.

Eligibility criteria

Graduates aged between 22 - 45 years, holding Degree or diploma in any branch of Science/Engineering / Technology

No. of seats: 20-25

Duration

Six weeks- Off line mode @ Thiagarajar College of Engineering

Registration

No Registration fee. Candidates will be selected based on the resume and interest towards entrepreneurship and strong commitment in attending all the sessions. Scan for registration.



https://forms.gle/ELK8JxB3Zg8iFnMC8

Contact Details

B Ashok Kumar

Mobile: 9095555066 E-mail- ashokudt@tce.edu

Important dates

Last Date for Receipt of Application: 08.02.25 Acceptance of Application / Interview: 10.02.25









