

## TARGET AUDIENCE

This five-day online FDP is deliberately designed for the faculty members of the AICTE approved institutions (Polytechnic Colleges and Engineering Colleges).

## RESOURCE PERSONS

The eminent faculty members from the leading institution (CSIR-SERC and State University) and experts will deliver the lectures.

## PARTICIPATION CERTIFICATE

E-Certificate will be issued based on the 70% attendance, 50% test score, submission of feedback and active participation in the programme.

## ADDRESS FOR CORRESPONDENCE

**Mrs. T. Suganya**

Lecturer/Instrumentation and Control Engg,  
Faculty Development Training Centre,  
Government College of Technology,  
Coimbatore -641 013  
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## OBJECTIVE

The objective of this proposal is to explore the integration of machine learning techniques in the field of Very Large-Scale Integration (VLSI) and its applications for cloud computing. This proposal is intended to target faculty and researchers in technical institutions working on machine learning and VLSI to disseminate the knowledge and insights gained from this FDP to the audience. This proposal aims to explore the potential benefits of combining machine learning algorithms with VLSI design principles to optimize the performance and power efficiency of cloud computing systems. This FDP will focus on the development of customized machine learning models and algorithms that are optimized for VLSI applications, as well as in machine learning and VLSI

## COURSE OUTLINE

### Following topics will be discussed during the FDP

- Design and optimization of customized machine learning models.
- Integration of machine learning techniques in VLSI design flow and tools.
- Development of low-power machine learning circuits.
- Exploration of hardware acceleration techniques.
- Investigation of the impact of machine learning on VLSI design metrics such as power, performance, and area.
- Analysis of the trade-offs between accuracy and hardware resources.
- Applications of machine learning in VLSI for cloud computing and edge computing systems.
- Investigation of machine learning-based techniques for fault detection and diagnosis in VLSI circuits.
- Exploration of machine learning-based techniques for performance prediction and optimization of VLSI systems.



**Tamil Nadu State Government**

**Sponsored Five Day Online**

**Faculty Development Programme**

**on**

**Enhancing VLSI Design**

**with Machine Learning**

**Opportunities and**

**Challenges**

**08-01-2024 to 12-01-2024**



**Organized by**

**Faculty Development Training Centre**

**Government College of Technology**

**Coimbatore - 641 013, Tamilnadu, India.**

**&**

**Thiagarajar College of Engineering**

**Madurai - 625 015, Tamilnadu, India.**

## ABOUT TCE, MADURAI

Thiagarajar College of Engineering (TCE), Madurai, an autonomous institution affiliated to Anna University, is one among the several educational and philanthropic institutions founded by the philanthropist and industrialist Late. Shri. Karumuttu Thiagarajan Chettiar

- TCE was established in the year 1957
- TCE is funded by Central and State governments and the Management
- The Programmes in TCE are approved by AICTE
- TCE was granted autonomy in 1987
- TCE has been accredited by NAAC with A+ grade
- TCE has secured 64th rank in NIRF 2020
- TCE offers 9 UG programmes, 10 PG programmes, and 5 years integrated MSc Data Science programme

## ABOUT THE FACULTY DEVELOPMENT TRAINING CENTRE

The Faculty Development Training Centre was established in the year of 2019 to provide technical trainings to Engineering and Polytechnic college faculty members by Tamil Nadu State Government. It is equipped with sophisticated smart class rooms and tutorial rooms. It provides boarding and lodging facilities to resource persons and participants during the training programme. The programmes are organized to enhance the teaching skills of faculty members.

## ABOUT THE INSTITUTION

Government College of Engineering, Srirangam, was started in the year 2013 with the notion of serving the students from marginalized family and rural areas across the state. It is one among the state owned AICTE approved institution providing quality Engineering education. The Anna University affiliated institution has five courses in various Engineering Disciplines. The institution comprises faculty of determination to educate the students, an intellectual student community, well supporting administrative, technical and non-technical staff, who are striving to progress in producing reputed engineers to serve the nation.

## ORGANIZING COMMITTEE

### PATRON

**Dr. K. Manonmani**

Principal, GCT, Coimbatore

### HOD / FDTC

**Dr. T. Purusothaman**

Professor / FDTC, GCT, Coimbatore

### CONVENORS

**Dr. S.Rajaram**

Professor, Head and Registrar

Thiagarajar College of Engineering,

Madurai – 625015

**Dr. C.Deisy**

Professor & Head

Department of Information Technology,

Thiagarajar College of Engineering,

Madurai – 625015

### COORDINATORS

**Dr.N.B.Balamurugan**, Prof, ECE

**Dr.D.Gracia Nirmala Rani**, Asso Prof, ECE

**Ms.C.V.Nisha Angeline**, Asst Prof, IT

Thiagarajar College of Engineering,

Madurai – 625015

### IMPORTANT DATE:

Last date for registration: **03-01-2024**

Intimation of selection: **05-01-2024**



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**Registration Link:**

<https://forms.gle/UQir1W8qT9pAa7GK9>

**QR Code:**



### REGISTRATION

- No Registration fees.
- Faculty members from AICTE approved institutions (Polytechnic Colleges and Engineering Colleges) are invited to participate in this Programme.
- Participants will be selected on first-come first-served basis.
- Selected candidates will be intimated by E-mail.