REGISTRATION FORM

TEQIP SPONSORED
One Week Faculty Development Programme (FDP) on
“Design, Modeling, Simulation and Analysis of Advanced Electronic Circuits”
(Nov 8-14, 2017)

Name:

Qualification:

Designation:

Address for Correspondence

E-mail ID:

Mobile Number:

Experience (if any):

Details of Demand Draft

Place: Signature of the Applicant

Date:

Participants:
This FDP Programme will be beneficial to faculty members of Polytechnic colleges and Engineering College of all discipline.

How to apply:
Interested participants should download and submit the complete application form in prescribed format given, which is available online and send it at coordinators mailing address. Filled in application form should be accompanied by a Demand Draft of drawn in favor of “The Principal, Thiagarajar College of Engineering”, payable at Madurai. The registration fee includes the course material, lunch and refreshments.

Registration Fees:
The total number of participants will be limited to 50. Selection of participants will be based on first come serve basis. The coordinators decision will be final in selection of participants.

Teaching Faculty: Rs.1500
Research Scholar: Rs.750

Last Date for Registration: 02.11.2017
Intimation through e-mail: 04.11.2017

Travel and Accommodation:
Participants are requested to make their own arrangements for travel and stay during the Programme. Hostel facility would be availed on payment with prior request.

Address for Correspondence:
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One Week Faculty Development Programme (FDP) on
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Organized by

Department of Electronics & Communication Engineering
Thiagarajar College of Engg.
Madurai 625015

Course Coordinators
Dr. S. Rajaram
Dr. N. B. Balamurugan
TCE:
Thiagarajar College of Engineering (TCE), Madurai, an ISO 9001:2000 certified institution, affiliated to Anna University, Chennai, is one among the several educational and philanthropic institutions founded by Late Shri Karumuttu Thiagarajan Chettiar, established in 1957. This Govt. aided institution was granted autonomy in 1987 and is accredited by National Board of Accreditation (NBA). TCE offers 7 undergraduate (UG), 13 postgraduate (PG) and Doctoral programmes in Engineering and Science.

ECE Department:
Department of Electronics and Communication Engineering offers an UG Programme in Electronics and Communication Engineering and PG Programmes on Communication Systems and Wireless Technologies. This DST FIST supported department has completed 14 research projects with research organizations like DRDL, RCI, DEAL, BrahMos Aerospace and ISRO and consultancy works for companies like Motorola, Honeywell, Texas Instruments, TVSICS, Amphenol Antel, in Wireless Communication system. The department has also established National Instruments Electronics system Design lab using Educational Laboratory Virtual Instrumentation suite. The laboratory facilities in this department include vector network analyzer, vector signal analyzer, NI IF RIO boards, NI RF and Communications platform, Speedy 33 DSP kits, ASIC prototyping boards and OMAP 1510 kit code compose studio.

TEQIP:
The World Bank supported Technical Education Quality Improvement Programme (TEQIP) is a long term Programme, being implemented in three phases for a systemic transformation of the Technical Education System in India. In its third phase (TEQIP III), around 200 engineering institutions spread across India have been competitively selected to implement the project enabling the institutions to improve the quality of Technical education through institutional reforms.

Theme:
The Remarkable progress in science, in communication technology and in many other wonderful amenities of modern society are permeated by and made possible by modern microelectronics. A driving force behind this fantastic progress is the long-term commitment to a steady downscaling of MOSFET/CMOS technology needed to meet the requirements on speed, complexity, circuit density, and power consumption posed by the many advanced applications relying on this technology.

Very important issues in this development are the increasing levels of complexity of the fabrication process and the many subtle mechanisms that govern the properties of deep sub micrometer FETs. These mechanisms, dictated by device physics, have to be described and implemented into circuit design tools to empower the circuit designers with the ability to fully utilize the potential of existing and future technologies. A deeper insight into these issues is therefore crucial for gaining the competitive edge needed to ensure first-time-right silicon and to reduce time-to-market for new products.

An electronic circuit is composed of individual electronic components, such as resistors, transistors, capacitors, inductors and diodes, connected by conductive wires or traces through which electric current can flow. The combination of components and wires allows various simple and complex operations to be performed: signals can be amplified, computations can be performed, and data can be moved from one place to another.

Course Outline:
- Advanced topics in Semiconductor theory.
- Carrier transport in modern semiconductor devices.
- Introduction to Compact Modeling of semiconductor devices.
- Advance nano electronic devices and various modeling approaches.
- Analysis and study of semiconductor devices and transistors in NI ELVIS Kit
- Modeling and simulation of advanced semiconductor devices in Synopsys TCAD.
- Overview of 3D IC Technology.
- Thermal aware Placement and routing.
- Power analysis of 3D IC Design.
- FPGA programming and Implementation using Altera Kit.
- Analog IC Design and analysis using Cadence.