#### **ABOUT NITT**

National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli is one among the premier Institutions of India and is well known for its high standards in teaching and research. It offers 10 undergraduate and 23 postgraduate programs in disciplines spanning engineering, science. architecture and management. It has been declared as an Institute of National Importance by the Government of India under NIT Act. According to the Ministry of Human Resources Development, NIRF 2017, NIT Trichy has been ranked as the 1<sup>st</sup>NIT among all the NITs and 11<sup>th</sup> among all the technical institutes in India. The Institute has signed MoUs with various Industries and Institutions both in India as well as in abroad to promote collaborative research and consultancy.

# **ABOUT THE DEPARTMENT**

The Electronics and Communication Engineering (ECE) Department was established in the year 1968. The vision of the department is to provide valuable resources for industry and society through excellence in technical education and research. The department offers Undergraduate, Post Graduate and Ph.D degree programs. Research in the department focuses on various discipline like Communication systems, Wireless networks, Signals and Image

Processing, RF MEMS, MIC, Microwave antennas, Optical communication, photonics and VLSI technologies.

# **OBJECTIVE OF THE COURSE**

The Objective of this short term course is to disseminate the basic knowledge of planar antenna, analog and digital communication techniques, and their analysis using CAD tools such as MATLAB, HFSS and CST microwave studio for the benefit of UG and PG students, Research scholars, and Faculty members.

# **RESOURCE PERSONS**

The resource persons are from NIT, Tiruchirappalli.

#### **COURSE CONTENT**

- Analog Communication:
  - Introduction, modulation, FoM of Analog communication systems
- Pulse modulation and PCM system
- Digital Communication
  - Introduction, modulation schemes
  - Error control coding schemes
  - Spread spectrum modulation
- Modeling of analog and digital communication system using MATLAB
- Design and analysis of Microstrip Patch Antenna using HFSS/CST microwave studio
- Design of and analysis of Metamaterial inspired antennas using HFSS
- Design and analysis of Low loss and high power substrate integrated waveguide for high speed application
- Design and analysis of SIW filter using CST microwave studi

#### **REGISTRATION DETAILS**

**Registration Fee:** 

UG/PG students: Rs 500 per Participant

Faculty/Research Scholars: Rs.1000 per participant

ACCOUNT DETAILS Account name : The Director , NIT Trichy Account no. : 10023883064 IFSC code : SBIN0001617 Payment at: NIT Trichy Mode of Delivery Online platform -Cisco WebEx E-certificate will be provided after successful completion of workshop.

#### **IMPORTANT DATES**

Complete Registration form should be mailed to the coordinator on or before October 03, 2021 to the email gunavathi@nitt.edu

# **Five Days Short Term Virtual**

Course on CAD Based modelling of Communication Techniques and Antenna Design

# 05<sup>th</sup> Oct - 09<sup>th</sup> Oct, 2021



# Organized by

Department of Electronics and Communication Engineering, National Institute of Technology, Tiruchirappalli, Tamil Nadu – 620015.

#### **COURSE COORDINATORS**

Dr. N. Gunavathi Dr.G.Thavasi Raja Dr.D.Sriram Kumar

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*Phone No:* 0431 – 250 3300 0431 – 250 3315

Mobile number: 9786967176

<b>REGISTRATION FORM</b>
FIVE DAYS SHORT
TERM VIRTUAL
COURSE ON
Communication Techniques and Antenna Design
05 <sup>th</sup> Oct – 09 <sup>th</sup> Oct, 2021
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