

**AICTE's Training and Learning  
Sponsored One Week**

**Faculty Development Programme  
(ATAL-FDP)**

**On**

**Next Gen Communications:  
Fundamentals and Future Perspective**

**(10.02.2025 to 15.02.2025)**

Registration Fee: Nil

Registration link: <https://atalacademy.aicte-india.org>

Eligibility:

The FDP is open for faculty members, PG student sand Research scholars of AICTE approved Polytechnic/Engineering Colleges /Universities and Industries.

The maximum 50 participants only allowed. Hence the selection process purely first come first serve base only.

**Attendees must be nominated by a college principal/director for better accountability to attend the registered FDP.**

**Important Dates:**

Last date for Registration: 07.02.2025

Intimation of acceptance: 08.02.2025(through Mail)

**A test shall be conducted at the end of the program and the certificate will be issued to those participants who have attended the program and qualified in the test.**

**MODE: Online**

**Venue:** Google Meet / Codetantra online

**Platform**

**Time:06:00 PM to 09:30 PM**

**CHIEFPATRON:**

Sri. B. Brahma Naidu, Chairman

Sri. Battina Nageswararao, Vice-Chairman

Sri. R. Satyanarayana, Secretary & Correspondent

Sri. D. Brammanandham, Treasurer

**CONVENER:**

Dr.Y.V.Narayana, Principal, TEC

**PROGRAMCOORDINATOR**

Dr.Kampa Kanthi Kumar, Professor

**PROGRAMCO-COORDINATOR**

Mr. T.Jagadeesh, Associate.Prof.

**ORGANIZINGCOMMITTEE:**

Dr. S.PAVAN

Mr. G.MALLIKARJUN RAO

Mrs.T L K PRASANNA

Mr.T.ANJIREDDY

Mrs.G.SUSEELAMMA

Mr.G.VENKATA HANUMAN

Mr.K. PRAKASH

Mrs.K.NAGA LAKSHMI

Ms.Sk.RIZWANA

Mrs.P.VARALAKSHMI

Mrs.I. PADMAJA

Mr.SD. RABBANI

Mrs.P. VENU KUMARI

Mrs.L. SARITHA

Mrs.K. SARADA

Mrs.SADIQUA KHAN

Mr.Y MALLIKHARJUNA REDDY

Mrs.J. PUSHPA RANI

Ms.RAMYA KRISHNA

Mrs.B. THRIVENI

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Coordinator:

**Dr. Kampa Kanthi Kumatr**

Professor,

Department of ECE

Organized by

**Tirumala Engineering College  
(Autonomous)**

An ISO 9001:2015 Certified Institution,

Accredited by NAAC & NBA,

Approved by AICTE & Affiliated to JNTUK,

Kakinada Jonnalagadda, Narasaraopet, Guntur Dist.,

Ph.No.08647-218221,219083.

URL:[www.tmcnrt.org](http://www.tmcnrt.org) Mail:[tecirt@gmail.com](mailto:tecirt@gmail.com)

## About College

Tirumala Engineering College was established in the year 2008, in Jonnalagadda (V) near Narasaraopet, Guntur District, under Venkata Ramana Charitable Trust formed by the Directors of Tirumala Milk Products Pvt. Ltd. The institute is approved by AICTE, New Delhi, affiliated to JNTUK, Kakinada and recognized by Govt of Andhra Pradesh. In a short span of 13 years institute has established its mark in academic excellence and emerged as one of the premier institutions in the State, imparting technical education in six disciplines of engineering viz., ECE, EEE, CSE, Mechanical, Civil, CSE - AIML and IT at UG Level.

## ABOUT DEPARTMENT:

The Department of Electronics and Communication Engineering was established in the year 2008 with an intake of 60 which was subsequently raised to 180 over a period of time. The department is presently offering 4 year B.Tech program in ECE. Since the inception, the founder Principal, Dr.Y.V.Narayana himself leads the department with his visionary administration. The department not only has highly qualified, experienced and dedicated staff members but also dedicated technical and non teaching team. In view of enhancing the teaching standards, the staff members are highly encouraged to participate in workshops, conferences and refresher courses. The department has student chapters of professional bodies like IEEE, IETE and college level ISTE, which conduct various student technical activities. The Department has been producing consistently illustrious Engineering graduates of higher caliber who occupies prestigious place in academic and industrial fields. They have been obtaining good scores in GATE, GRE & TOEFL. Students are maintaining impressive track record of placements in one of the best MNC'S like TCS, WIPRO, INFOSYS, NTTDATA, ACCENTURE, IVY COMPECH, CAPGEMINI, HCL, TVARANA and many.

## ABOUT THE WORKSHOP:

Faculty Development Programs (FDPs) on next-generation communications cover topics such as 5G and 6G wireless communication, and how to work with the latest technologies. This FDP aims to promote research and development to solve problems related to Next Gen Communications. It also provides an opportunity to learn about the ongoing technological development for next-generation communication systems

## COURSE CONTENT

- Introduction to ROS tools and ready-touse frameworks in ROS like Navstack, MoveIt, etc.
- Driving the Turtlesim with ROS commands
- Demo of ROS-based Mecanum wheel robot
- 3D model to URDF conversion for simulation in Gazebo
- Showcasing a fully finished Delivery robot- manufacturing & design process, building a GUI on top of ROS.
- Introduction to Software Defined Radio, GNU Radio software, installation
- Hands-on training with GNU Radio and USRP B210
- Overview on SDR setup for 5G applications
- Introduction and Overview of Labview Software
- Hands-on training with Labview and NI USRP

## EXPECTED OUTCOME:

The participants enrich their knowledge on the following:

- Participants discuss the various communication techniques, IOT and AI.
- Participants identify the challenges and ethical considerations involved in using Next Gen Communication applications.
- Participants Gain hands-on experience with basic techniques and various methodologies.
- Participants Critically evaluate the potential future directions of next gen communications and its impact on various communication specialties.

## RESOURCE PERSONS:

Session	Day	Session Time	Resource Person
Inauguration	Day 1	06:00 to 06:30 PM	Dr.Y.V.Narayana, Principal, TEC
Session 1	Day 1	06:30 to 08:00 PM	Dr. B. T Krishna, Professor, JNTUK
Session 2	Day 1	08:00 to 09:30 PM	Dr. B. T Krishna, Professor, JNTUK
Session 3	Day 2	06:00 to 07:30 PM	Mr. V. Govindarao, MD, Microlink Peripherals (P) Ltd,
Session 4	Day 2	07:30 to 09:00 PM	Mr. V .Govindarao, MD, Microlink Peripherals (P) Ltd,
Session 5	Day 3	06:00 to 07:30 PM	Dr. Allam Jaya Prakash, AI Lab, Abu Dhabi
Session 6	Day 3	07:30 to 09:00 PM	Dr. Allam Jaya Prakash, AI Lab, Abu Dhabi
Session 7	Day 4	06:00 to 07:30 PM	Dr.K.SrinivasaRao, KLU, AP
Session 8	Day 4	07:30 to 09:00 PM	Dr.K.SrinivasaRao, KLU, AP
Session 9	Day 5	06:00 to 07:30 PM	Dr.Rasheedul Haque, MAHSA University, Malaysia.
Session 10	Day 5	07:30 to 09:00 PM	Dr.Rasheedul Haque, MAHSA University, Malaysia.
Session 11	Day 6	02:00 to 03:30 PM	Dr.Saidaiah Bandi, Professor, NRIT
Session 12	Day 6	03:30 to 05:00 PM	Dr.Saidaiah Bandi, Professor, NRIT
Session 13	Day 6	05:00 to 06:30 PM	Mr.T.agadeesh, TEC, NRT
Online Test and Feedback	Day 6	06:30 to 07:30 PM	
Valedictory	Day 6	07:30 to 08:00 PM	