#### PROGRAMME HIGHLIGHTS

AICTE will do the certification of this program. Technical Sessions including hands on training will be handled by the experts from IIITDM, NIT, IIST, ISRO, BSNL and Affiliated Institutions. This programme will be considered for Career Advancement Schemes of AICTE.

#### HOW TO APPLY

The applicants should register at AICTE-ATAL web portal at the earliest.

Website:https://www.aicte-india.org/atal

## **ELIGIBILITY AND SELECTION**

Faculty members in the cadre of Associate Professors, Assistant Professors, Ph.D. Scholars and PG students from the Higher Education Institutions can register as participants. Selection is on "first come first serve" basis. Selection will be intimated through mail and selected participants should confirm their participation.

#### REGISTRATION

- ➤ No Registration Fee
- > TA/DA will be provided as per AICTE Norms
- Selected Participants should attend the program at ECE Department, GCE, Bodinayakkanur for the entire duration.

## **CHIEF PATRON**

**Dr.C.VASANTHANAYAKI,** B.E., M.E., Ph.D., PRINCIPAL

## Coordinator

Dr.T.JAYASREE
Associate Professor/ECE

## **Co-Coordinator**

Dr.R.SAROJINI Assistant Professor (Sl.Gr)/ECE

# **Organizing Committee**

Mr.M.Rajamadasamy,AP/ECE Mr. A. Selvin Charles, AP/ECE Dr. P. Kalaivani, AP/ECE Mr.N.Sugan,AP/ECE Mr.K.Thamizhmaran,AP/ECE

# **Address for Correspondence**

Dr.T.JAYASREE,
Coordinator, AICTE-ATALFDP,
Associate Professor,
Department of Electronics and
Communication Engineering,
Government College of Engineering,
Bodinayakkanur – 625 582.

Emailid:jayasree.rsch@gmail.com

Mobile No.: 9486324974







## One Week

# AICTE -Teaching and Learning (ATAL) Academy

Sponsored

**Faculty Development Programme** 

On

"Emerging Trends in Satellite Technology and Applications"

October 13-18, 2025

Coordinator
Dr.T.JAYASREE
Associate Professor & HOD (i/c)

Co-Coordinator Dr.R.SAROJINI Assistant Professor (Sl.Gr)

# Organized By

Department of Electronics and Communication Engineering, Government College of Engineering, Bodinayakkanur – 625582.

## **ABOUTTHEINSTITUTION**

Government College of Engineering, Bodinayakkanur, a spice valley of Tamil Nadu, affiliated to Anna University, Chennai is one of the esteemed institutions in India. It was founded in 2012 for the welfare of students in the western region of Tamil Nadu. It occupies 10.06 acres of space. GCE, Bodinayakkanur offers five undergraduate courses. More than fifty permanent faculty members provide them with excellent teaching and training. All departments have set up laboratories equipped with cutting edge technology to conduct research.

#### INSTITUTE VISION

To be a global, vibrant and innovative centre for Technical Education, to equip students with knowledge and skills in Engineering, expose hidden talents, opportunities to realize their full potential, inculcate national and human values and thus shape them into future professional engineers, entrepreneurs and above all good human beings.

## INSTITUTE MISSION

The mission of the College is to contribute to society through promotion of teaching, learning and knowledge by developing the personality of students in a holistic manner by combining skills and values and by assimilating global development in education and adopting the latest technology.

#### **ECEDEPARTMENT**

ECE Department was started since the commencement of the college. The department along with its highly qualified faculty members started functioning right from inception and engages actively in teaching Electronics and Communication Engineering Programme. State of the art experimental and computational facilities are available in the department.

#### **ABOUTTHECOURSE**

Satellite technology stands at the forefront of modern telecommunications, offering transformative capabilities that have revolutionized global connectivity and transmission. Over the decades. communications, advancements in electronics, miniaturization, and propulsion have propelled satellites into more complex roles, including Earth observation. navigation, and space exploration. Satellites also play a pivotal role in global navigation systems, facilitating precise positioning for and timing applications navigation worldwide. Hence it is essential for the academia to be aware of the technologies and developments in the thrust areas of Satellite Technology.

aims to impart This FDP knowledge and skills in the areas of Satellite launching Vehicle Technology, satellite remote sensing, 5G/6G wireless communications, antenna design methodologies for satellite communications, satellite navigations, satellite image compression standards, IOT based smart communications in satellite applications and innovations that are set to define the future of satellite technology. This FDP provides interactive forum for discussion and hands training on through simulation/hardware exercises

# **COURSECONTENTS**

Satellite launching Vehicle Technology and applications.

Artificial Intelligence based data processing methodologies in future satellite technologies.

Data Processing of Satellite imagery using Machine Learning and deep learning Algorithms

Exploring research trends in satellite remote sensing technology.

Emerging trends in 5G/6G technology for Satellite Communications.

Modern satellite applications Including navigation, weather forecasting, and military uses.

Antenna design methodologies for Satellite communications

Algorithms for satellite image compression standards.

IOT based smart communications in satellite applications.

Research Methodology