

## Learning Outcomes:

### Participants will

- ◆ Understand the role of fiber optics, antennas, and waveforms in 5G/6G.
- ◆ Gain insights into 6G vision, intelligent surfaces, and future trends.
- ◆ Analyze security and network convergence in 4G/5G systems.
- ◆ Apply strategies for effective time and stress management in academia.

### Objectives:

- ◆ Introduce key technologies behind 5G/6G communication systems.
- ◆ Explore advanced antenna, waveform, and fiber optic designs.
- ◆ Discuss 5G/6G network security and transport integration.
- ◆ Empower educators with time and stress management tools.



## Organizing Committee

### Patrons

Mr. Shimith P. R., Chairman, FISAT  
Dr. Jacob Thomas V., Principal, FISAT  
Dr. Mini P. R., Vice Principal, FISAT  
Dr. Unni Kartha G., Dean, Academics, FISAT

### Convenor

Dr. Bejoy Varghese  
HoD, ECE, FISAT

### Coordinator

Prof. (Dr.) Krishna Kumar S., Professor, FISAT  
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### Co-Coordinator

Ms. Aiswariya Raj, Assistant Professor, FISAT  
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## Registration

Target Audience - The FDP is open to faculty members, industry personnel and researchers from Electronics and Communication Engineering.

(Seats will be assigned on a first-come, first served basis)

Last date of registration : 15 June 2025

Link for Registration

<https://atalacademy.aicte-india.org/signup>



**Federal Institute of Science  
And Technology (FISAT)®**

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**Federal Institute of Science And  
Technology (FISAT)®**

**Department of Electronics and  
Communication Engineering**

**organizes**



**Six Day  
Faculty Development Program on  
Innovations in 5G and 6G:  
Advancing Intelligent Wireless  
Communication Systems**

**Offline Mode  
23-28 June, 2025**





## About FISAT

The Federal Institute of Science and Technology (FISAT) is a self-financing private engineering college established and promoted by the Federal Bank Officers' Association Educational Society (FBOAES). The FBOAES is an initiative of the Federal Bank Officers' Association (FBOA), the sole representative body of all Federal Bank officers. Federal Institute of Science and Technology (FISAT) occupies a unique position in South India's Professional Education Sector. FISAT has been designed and developed to become a "Centre of Excellence" in professional education, with the motto "Focus on Excellence." Established in 2002, the college has carved a niche for itself in the education sector, as evidenced by its students' outstanding performance in academics, placements, and extra-curricular and co-curricular activities. FISAT has launched an ambitious plan to improve the quality and value of education while also developing high-quality individuals. The institution is accredited by the National Assessment and Accreditation Council (NAAC) with an 'A+' grade in the 2nd cycle. The National Board of Accreditation (NBA) has accredited six B.Tech programmes. The institution is also ISO 9001:2015 certified. FISAT is located in Mookannoor, near Angamaly in Ernakulam District, Kerala. FISAT is affiliated with APJ Abdul Kalam Technological University (KTU) and is approved by the All India Council for Technical Education (AICTE), New Delhi. FISAT offers seven B.Tech engineering programmes, an MBA programme (with specialisations in Finance, Marketing, Human Resource Management, Information System, Production & Operations Management, and International Business), an MCA programme, five M.Tech programmes and PhD programmes.

### Vision

- ◆ To become a world-class professional institute with a focus on excellence, molding committed global professionals and technocrats who can meet the demands of business, industry and research.

### Mission

- ◆ To transform into an advanced center of technical education, which will, in turn, bring out professionals with superior skills and social commitment.
- ◆ To provide state-of-the-art facilities to mold brilliant young talents, enabling them to take up challenging assignments in the highly competitive global scenario.

## About the Department

Established in the year 2002, the Department of Electronics and Communication Engineering is committed to providing quality professional education to aspiring engineers and offers UG, PG and PhD programmes. B.Tech in Electronics and Communication Engineering is an NBA accredited programme with an annual sanctioned intake of 120 students. The department also offers M.Tech in VLSI and Embedded systems with an intake of 12 students and is an approved research center of APJ Abdul Kalam Technological University for its PhD program. The department has well experienced and dedicated faculty members and aims to impart sound knowledge and awareness in the latest developments in the field of Electronics and Communication Engineering.

### Vision

- ◆ To emerge as a centre of excellence in Electronics and Communication Engineering churning out informed, innovative, socially committed and quality conscious engineers for the society.

### Mission

- ◆ Foster an environment for multifaceted education rooted in science and contemporary technology. Facilitate quality research and development leading to innovations in the field of Electronics and Communication engineering.
- ◆ Develop competent young engineers to complement the virtues of the society.

## Course Contents:

- ◆ Fiber optic systems: the backbone of wireless communication
- ◆ Antennas in 5G Systems.
- ◆ Unveiling 6G: The Future of Cellular Communication Beyond 5G
- ◆ Waveform designs for 6G.
- ◆ Unveiling 6G: The Future of Cellular Communication Beyond 5G.
- ◆ Waveform Designs for Beyond 5G Communication Systems.

- ◆ Mastering Time and Stress: Strategies for Engineering Educators.
- ◆ Metasurfaces and Metagratings for Reconfigurable Intelligent Surfaces in 6G Communications.
- ◆ 5G Security.
- ◆ Converged Core Transport Network for Unified Access Services, Including 4G and 5G Technologies

## Resource Persons

**Dr. Srijith K**, IIITDM Kancheepuram

**Dr. Deepti Das Krishna**, CUSAT,

**Mr. Jose Martin S**, Vodafone Idea Limited

**Ms. Sofiya H S**, Vodafone Idea Limited

**Mr. Paul Wilson**, Vodafone Idea Limited

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**Dr. Ananth A**, IIIT Kottayam

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**Mr. Sukumaran N K**, Sr. GM, Ernakulam BSNL

