

Internet of Things (IoT)

20th – 24th July 2026

About the Programme

The Internet of Things (IoT) is transforming the way governments, industries and citizens interact with technology by enabling intelligent, connected and data-driven systems. IoT applications are increasingly being deployed across sectors such as smart cities, telecommunications, transportation, healthcare, agriculture, utilities and public service delivery.

This five-day Professional Level Programme is designed to provide DoT officers with a comprehensive understanding of IoT concepts, architectures, communication technologies, security considerations and emerging trends. The programme emphasizes practical learning through extensive hands-on laboratory sessions, enabling participants to design, develop and deploy IoT solutions using sensors, actuators, dashboards and data analytics tools.

Learning Objectives

Upon completion of the programme, participants will be able to:

- Understand the fundamentals and architecture of IoT systems.
- Explore real-world IoT applications and industry use cases.
- Understand IoT connectivity technologies, networks and communication protocols.
- Gain insights into Cellular IoT, Edge IoT and Industrial IoT ecosystems.
- Understand security challenges and solutions in IoT deployments.
- Develop practical skills in sensor and actuator interfacing.
- Build real-time monitoring and control dashboards using Python.
- Appreciate regulatory, policy and future technology considerations including 5G-enabled IoT.

Pedagogy

The programme will be delivered through a blend of expert lectures, demonstrations, laboratory sessions, project work, mentoring interactions and a field visit. More than 50% of the programme is devoted to hands-on practical exercises to ensure experiential learning.

Target Participants

Officers of the Department of Telecommunications.

Expected Outcome

Participants will acquire both conceptual understanding and practical skills required to evaluate, implement and manage IoT-based solutions in telecom, governance and smart infrastructure domains.