Modern ICT Technologies & Applications

Course Description

Modern ICT Technologies & Applications is a structured training course designed to give ICT professionals, decision-makers, and enterprise teams a clear, business-relevant view of the nine technology pillars that define today's digital economy: 5G-Advanced, Artificial Intelligence, Big Data, Cloud Computing, Cybersecurity, IPv6 Enhanced, Storage, Wi-Fi 7, and the Internet of Things. The course balances strategic context (concepts, trends, standards) with applied insight (key technologies, real-world deployments, industry use cases)equipping learners to navigate a fast-evolving technology landscape with clarity and confidence.

Each module is delivered in two focused parts: a first part on concepts, trends, and standards, and a second part on key technologies and real-world applications. By the end of the course, learners will have a coherent end-to-end map of how modern ICT technologies fit together and how to apply them to drive business value in their own organizations.

Target Audience

Network architects, ICT engineers, telecom and IT professionals, product managers, business strategists, consultants, and technology decision-makers seeking a structured, practical understanding of today's most strategic ICT technologies and their industry applications.

Duration

Total course duration: 6 hours, 9 modules of 40 minutes each

Course Objectives

By the end of this course, learners will be able to:

1. Build a clear, structured understanding of the nine pillars of modern ICT and how they connect.
2. Decode the key concepts, trends, and standards driving each technology forward.
3. Identify high-impact technologies and proven real-world applications across industries.
4. Translate ICT trends into actionable strategies for digital transformation and business growth.

Course Structure

Module 01 : 5G Advanced Technologies and Applications

- Part 1 — Concepts, Standards & Industry Trends
- Part 2 — Key Technologies & Vertical Applications

Module 02 : AI Technologies and Applications

- Part 1 — Concepts, Trends & Strategic Landscape
- Part 2 — Key Technologies & Industry Applications

Module 03 : Big Data Technologies and Applications

- Part 1 — Concepts, Trends & Modern Architectures
- Part 2 — Key Technologies & Industry Applications

Module 04 : Cloud Computing Technologies and Applications

- Part 1 — Concepts, Trends & Service Models
- Part 2 — Key Technologies & Applications

Module 05 : Cybersecurity Technologies and Applications

- Part 1 — Concepts, Threat Landscape & Trends
- Part 2 — Key Technologies & Real-World Defense

Module 06 : IPv6 Enhanced Technologies and Applications

- Part 1 — Concepts, Drivers & Industry Trends
- Part 2 — Key Technologies & Applications

Module 07 : Storage Technologies and Applications

Part 1 — Concepts, Trends & Modern Architectures

Part 2 — Key Technologies & Real-World Applications

Module 08 : Wi-Fi 7 Technologies and Applications

Part 1 — Concepts, Trends & Standards

Part 2 — Key Technologies & Applications

Module 09 : IoT Technologies and Applications

Part 1 — Concepts, Trends & Connectivity Landscape

Part 2 — Key Technologies & Real-World Applications