CERTIFICATE IN OPTICAL NETWORKING TECHNOLOGY

This training is designed for professionals, researchers, executives, m-commerce application architects/designers, and graduate and postgraduate students in information and communications technology (ICT) and business areas who have strong interest in optical network technology.

This training is a rich, informative introduction for understanding architectural issues and solutions regarding mobile business applications and services.

- Overview of Optical Communication
- What is the different type of fiber optics?
- What are the differences between SONET/SDH and WDM/DWDM?
- What is a all-optical network?
- Will optical networks mean the end of the existing telecom structure?
- What does the future hold for photonic switching?
- Will we ever have the photonic equivalent of the Pentium chip?

Optical Network Principles

- Light Sources
- Introduction to Fiber Optic Systems
- Propagation of Signals in Optical Fiber
- Optical Network Breakthroughs
- Modulation and Demodulation
- Transmission System Engineering

Photonic Networks

- First-Generation Optical Networks
- Second-Generation Optical Networks
- Wavelength Routing Networks
- Optical Core Networks Technology Trends
- Optoelectronic Devices
- Optical Components
- Optical Amplification
- Optical Transmitters
- Tunable Lasers
- Multiplexers and Filters
- Modulators
- Optical Switches, Routers, Cross-Connects and Processors
- Wavelength Division Multiplexing/Dense Wavelength Division Multiplexing
- Optical Networks and the Optical Layer

The All-Optical Network

- Control and Management Configuration, Fault and Performance
- Management Protection Concepts, Deployment Considerations
- IP, ATM, DWDM and the Future of SONET/SDH

> REQUIREMENTS:

- o Personal computer
- o Safety Ware
- o Smartphone

MODULE COST: 300000UGx(78USD)