Certificate Course in Wireless Network Administration

Course Objective

This course will enable the participants to Install, configure and support wireless NICs, access points, wireless bridges, workgroup bridges, wireless gateways and WLAN antennas from Cisco Systems, Analyze and troubleshoot WLAN problems

Course Outcomes

On completion of this course the participants will be able to:

- Excel on LAN,MAN,WAN & IP technologies
- Expertise on IEEE 802.11 standards & Procedures
- Excel on WiMax, IEEE 802.16, OFDM & MIMO
- Install, configure, troubleshoot and support wireless NICs, access points, wireless bridges, workgroup bridges, wireless gateways and WLAN antennas from Cisco Systems
- Excel on Wireless security issues

Target Audience

Officials from IT Departments of all Ministries, Govt Departments, Banks, Telecom Companies, Universities, NGOs, Colleges, ICT organizations, etc.

Teaching Methodology

This course is based on both theoretical lessons and practical exercises

Prerequisites

Graduates / Engineers / Diploma holders in electronics / electrical / communications / telecom or equivalent with general Knowledge of wireless telecommunication is desirable

Duration : 10 Weeks (5 days a week , 4 - 6 hours per day)

Batch 1 – 05-03-2018 to 12-05-2018

Course Outline

Radio Frequency Fundamentals

- Electromagnetic Spectrum, RF Systems, Modulation, Multiple Access Schemes, RF Measurements, Fading, Link Budget

Network Essentials

- Introduction to Networking, LAN, MAN, WAN, TCP/IP, Configuring IP address, IPv4, IPv6 Concepts.

Wireless Generations

- 1G, 2G, 3G & 4G Technologies

Overview of 802.11

- ISM, UNII bands, IEEE 802.11 Standards, Spread Spectrum Technology, FHSS, DSSS, Bluetooth, Zigbee, RFID concepts.

802.11 WLAN Architecture

- Service Set Identifier, Beacons, Scanning, Service sets, Roaming, 802.11 Physical Layer (PHY) Operations and MAC Layer
- RF Power Output Regulations, WLAN Deployment, Site Surveying, Next Generation Technologies
- Overview of 802.11 Security, Encryption Ciphers and Methods
- Enterprise 802.11 Layer 2 Authentication Methods
- Robust Security Network (RSN), SOHO 802.11 Security, 802.11 Fast Secure Roaming
- Wireless Security Risks & Policies, Wireless LAN Security Auditing, Wireless Security Monitoring
- VPNs, Remote Access, and Guest Access Services
- WLAN Security Infrastructure.

For more details and procedure to apply for scholarship : **http://www.utltraining.com/itec-scaap/**