



## **DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

### **Cisco Module 1 &2 Certificate Course**

#### **COURSE CONTENT:**

##### **Network Fundamentals**

1. Computer Basics
2. The OSI Models
3. Local- Area Networks
4. Layer 1 : Electronics and signals
5. Layer 1: Media, connections and Collisions
6. Layer 2: Concepts
7. Layer 2: Technologies
8. Design and Documentations
9. Structured Cabling Project
10. Layer 3 : Routing and Addressing
11. Layer 3 : Protocols
12. Layer 4 :The Transport layer
13. Layer 5 :The Session layer
14. Layer 6 :The Presentation Layer
15. Layer 7 : Application Layer
16. WANs and Routers
17. Router CLI
18. Router Components
19. Router Startup and Setup
20. Router Configuration 1
21. IOS Images
22. Router Configuration 2
23. TCP/IP
24. IP Addressing
25. Routing
26. Routing Protocols
27. Network Troubleshooting
28. Introduction to network Security
29. Network Management
30. Introduction to Residential Network



## **Routing and Switches**

1. Introduction
2. Review: The OSI Reference Model and Routing
3. LAN Switching
4. VLANs
5. LAN Design
6. Routing Protocols : IGRP
7. ACLs
8. Novell IPX
9. Network Management, Part-I
10. WANs
11. WAN Design
12. PPP
13. ISDN
14. Frame Relay
15. Network Management, Part-II
16. Network + Certification Exam Review
17. CCNA Certification Exam Review
18. Remote Access Technologies
19. Virtual Private networks
20. Developing Network Security and network Management strategies