OMNITECHIT	COURSE SPECIFICATION	STC – Course Specification *Model: SRA-r1*

Title of Course: ***Advanced Networking***

Code: ***NA***

COURSE DESCRIPTION	Supply advanced knowledge on Networking and its Security
COURSE RECIPIENTS	• ICT Personnel • Senior Systems Analysts and Administrators
EDUCATIONAL GOALS	The Course delves deeper into the theme of the Base Networking course, consolidating and facing at a technical level the main aspects of web management and all related issues.
ADMISSION REQUIREMENTS	Base knowledge in computer science, including routing and switching, protocols TCP/UDP
COURSE PROGRAM	**DAY 1: NETWORKING BASICS REVIEW** • Networking Fundamentals, Networking Media, Cable Testing, Cabling LANs and WANs, Ethernet Fundamentals, Ethernet Switching, TCP/IP Protocol Suite and IP Addressing, Routing Fundamentals and Subnets, TCP/IP Transport and Application Layer, Structured Cabling, Exam and Feedback **DAY 2: ROUTER AND ROUTING BASICS** • WANs and Routers, Introduction to Router, Configuring a Router, Learning about Other Devices, Managing Cisco IOS Software, Routing and Routing Protocols, Distance Vector Routing Protocols, TCP/IP Suite Error and Control Messages, Basic Router Troubleshooting, Intermediate TCP/IP, Access Control Lists (ACLs), Routing, Exam and Feedback **DAY 3: SWITCHING BASICS - INTERMEDIATE ROUTING - WAN TECNOLOGIES** • Introduction to Classless Routing, Single-Area OSPF, EIGRP, Switching Concepts, Switches, Switch Configuration, Spanning Tree Protocol, Virtual LANs, Virtual Trunking Protocol, Access Control Lists (ACLs), Exam and Feedback, Scaling IP Addresses, WAN Technologies, PPP, ISDN and DDR, Frame Relay, Introduction to Network Administration, Optical Networking Fundamentals, WANs, Exam and Feedback