

Module Code	ACCA6022 LON
Title	Switching, Routing and Wireless
Date	06/01/2020
Level	6
Credits	20
Pre-Requisites	None

AIM(S)

To study the technical issues related to routing and switching techniques, to have an in-depth knowledge of architecture, components, and operations of routers and switches in a larger and more complex network.

LEARNING OUTCOMES

Upon the successful completion of this module, the student should be able to:

1. Demonstrate a detailed understanding of theoretical and practical knowledge relating to routing and switching concepts.
2. Implement routing and switching techniques within a network infrastructure, configure routing protocols, VLANs and perform network maintenance.

INDICATIVE CONTENT

- Switching concepts – layer 2 & 3
- Routing concepts – Static and dynamic, implementation and troubleshooting
- Routing Information Protocol v1 & v2
- Virtual Local Area Networks (VLANs)
- Inter VLAN routing
- Spanning tree protocols
- VLAN Trunking protocols and Dynamic Trunking protocols
- LAN Security concepts and implementation
- Wireless LAN

STUDY TIME ALLOCATION

The study time for the module is divided as follows:

Activity type	Hours	Percentage
Scheduled learning	48	24%
Independent learning	152	76%
Placement learning	0	0%
TOTAL	200	100%

ASSESSMENT

Assessment Component 1

☐ Written exam ☐ Coursework ☒ Practical

Mode of assessment	Volume	Weighting
Practical portfolio	Students will complete practical works as an in-class tests or as a workshop journal	75%

Assessment Component 2

☒ Written exam ☐ Coursework ☐ Practical

Mode of assessment	Volume	Weighting
Exam (eg online)	1 hours	25%

Assessment Summary

Activity type	Percentage
Written exam	25%
Coursework	0%
Practical	75%
TOTAL	100%

INDICATIVE READING LIST

Module Code	ACCA6XXX	
Module Title	Switching, Routing and Wireless	
Classification	Reading List entry	Electronic*
Essential	www.netacad.com username and password is required	☒
Essential	Connecting Networks v6 Companion Guide by Cisco Networking Academy, Cisco Press. Published Sep 11 2017	☒
Essential	Scaling Networks Essentials v6 Companion Guide by Cisco Networking Academy, Cisco Press. Published Aug 3, 2017	☒
Further	W Odom (2019) CCNA 200-301 Official Cert Guide Library, Cisco Press part of the Official Cert Guide series	☐