



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Wales Institute of Science and Art

Applied Computing

Enterprise Networking, Security, and Automation (ENSA) (ACCA6023)

MILESTONE - Academic Year 2021-22 (Jan 2022)

Lecturer: Dr. Nitheesh Murugan Kaliyamurthy

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To acquire detailed knowledge on advanced routing protocols, switching techniques and the fundamental technical principles underlying autonomous systems within network infrastructure

Week	Topic	Additional	Labs	Assessments
Week 1 (25-01-22)	OSPF concepts and configurations. (Single Area and Multiarea)		Lab 1 - Configure Multi-Area OSPFv2	
Week 2 (01-02-22)	Network Security Concepts		Lab 2 - Explore DNS Traffic	
Week 3 (08-02-22)	Access Control Lists	ACL Implementation Challenge	Lab 3 - Configure and Verify Extended IPv4 ACLs	
Week 4 (15-02-22)	NAT for IPv4		Lab 4 - Configure NAT for IPv4	
Week 5 (22-02-22)	WAN Concepts		Lab 5 - WAN Concepts	
Week 6 (01-03-22)	VPN and IPSec Concepts		Lab 6 Troubleshoot Enterprise Network	
Week 7 (08-03-22)	QoS Concepts		-	

Week 8 (15-03-22)	Network Management and Troubleshooting		Lab 7 Configure CDP, LLDP, and NTP	
Week 9 (22-03-22)	Network Management and Troubleshooting	Troubleshooting Challenge 1	-	
Week 10 (29-03-22)	Network Virtualization and Automation			Online Test
EASTER BREAK				
Week 11 (26-04-22)	Revision/ Theoretical Concepts and Tutorials	Troubleshooting Challenge 2		
Assessment				
	Outcome	Date/ Deadline		
Component 1 75%	An ability to design, deploy and troubleshoot enterprise networks, security measures and automation techniques	3rd May 2022	Practical Exam	
Component 2 25%	Demonstrate a conceptual understanding of WAN technologies and protocols used in enterprise networks	29th March 2022	MCQ - Online Test	
Readings				
Book	Scaling Networks v6 Companion Guide by Cisco Networking Academy, Cisco Press. Published Aug 3 2017			
Book	Routing and Switching Essentials v6 Companion Guide by Cisco Networking Academy, Cisco Press. Published Dec 7, 2016			
Book	W Odom (2019) CCNA 200-301 Official Cert Guide Library, Cisco Press part of the Official Cert Guide series			
Book	Enterprise Networking, Security, and Automation Labs and Study Guide (CCNAv7) By Allan Johnson, Cisco Networking Academy Published Sep 17, 2020 by Cisco Press. Part of the Lab Companion series.			
Resources	ENSA Course (CCNA - 3 v7)	01-02-2022to 31-05-2022		
Resources	www.netacad.com (User Login Required)			