

PROG C7Z25: Introduction to Networking

Module Details	
Module Code:	PROG C7Z25
Full Title:	Introduction to Networking APPROVED
Valid From:	Semester 1 - 2019/20 (June 2019)
Language of Instruction:	English
Duration:	1 Semester
Credits:	5
Module Owner::	Paula Keane
Departments:	Unknown
Module Description:	The aim of this module is to introduce students to the fundamentals of data communications and networking.

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	Module Learning Outcome Description
MLO1	Show how components communicate and exchange data.
MLO2	Identify network components and topologies.
MLO3	Explain the fundamentals of networking and the OSI 7 layer model.
MLO4	Discuss guided and unguided media types. Apply the requirements of network structured cabling.
MLO5	Discuss the Ethernet protocol.
MLO6	Configure a Local Area Network and exchange data.
Pre-requisite learning	
<p>Module Recommendations <i>This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named DkIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).</i></p>	
No recommendations listed	

Module Indicative Content
Media Guided and Unguided media, coaxial, UTP, Fibre, radio waves, micro waves, wireless, terminating UTP cables, Structured Cabling.
Network Protocols and Standards OSI and TCP/IP model.
Layer two protocols Ethernet.
Networking Networking fundamentals, topologies, types, switching. Configure a LAN.
Data communications Data communications components, data representation and flow.

Module Assessment

Assessment Breakdown	%
Course Work	50.00%
Final Examination	50.00%

Module Special Regulation

Assessments

Full Time

Course Work			
Assessment Type	Written Report	% of Total Mark	30
Marks Out Of	100	Pass Mark	40
Timing	Every Second Week	Learning Outcome	1,2,3,4,5,6
Duration in minutes	120		
Assessment Description 6 reports, each worth 5%, covering what is completed in practical.			
Assessment Type	Class Test	% of Total Mark	20
Marks Out Of	100	Pass Mark	40
Timing	Every Second Week	Learning Outcome	1,2,3,4,5
Duration in minutes	120		
Assessment Description 4 MCQ tests based on lectures and labs, each worth 5%, starting in week 4			

No Project

No Practical

Final Examination			
Assessment Type	Formal Exam	% of Total Mark	50
Marks Out Of	100	Pass Mark	40
Timing	End-of-Semester	Learning Outcome	2,4,5
Duration in minutes	120		
Assessment Description End of semester final exam			

Part Time

Course Work			
Assessment Type	Written Report	% of Total Mark	30
Marks Out Of	100	Pass Mark	40
Timing	Every Second Week	Learning Outcome	1,2,3,4,5,6
Duration in minutes	120		
Assessment Description 6 reports, each worth 5%, covering what is completed in practical.			
Assessment Type	Class Test	% of Total Mark	20
Marks Out Of	100	Pass Mark	40
Timing	Every Second Week	Learning Outcome	1,2,3,4,5
Duration in minutes	60		
Assessment Description 4 mcq tests each worth 5 % starting in week 4			
No Project			
No Practical			
Final Examination			
Assessment Type	Formal Exam	% of Total Mark	50
Marks Out Of	100	Pass Mark	40
Timing	End-of-Semester	Learning Outcome	2,4,5
Duration in minutes	0		
Assessment Description Final exam			
Reassessment Requirement			
A repeat examination <i>Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element.</i>			

Module Workload

Workload: Full Time					
<i>Workload Type</i>	<i>Contact Type</i>	<i>Workload Description</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>	<i>Hours</i>
Tutorial	Contact	No Description	Every Week	1.00	1
Practical	Contact	No Description	Every Week	2.00	2
Lecture	Contact	A lecture discussing the fundamentals of data communications and networking	Every Week	1.00	1
Directed Reading	Non Contact	No Description	Every Week	2.00	2
Independent Study	Non Contact	No Description	Every Week	2.00	2
Total Weekly Learner Workload					8.00
Total Weekly Contact Hours					4.00
Workload: Part Time					
<i>Workload Type</i>	<i>Contact Type</i>	<i>Workload Description</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>	<i>Hours</i>
Practical	Contact	One practical per week of three hours duration	Every Week	3.00	3
Directed Reading	Non Contact	No Description	Every Week	2.00	2
Independent Study	Non Contact	No Description	Every Week	3.00	3
Total Weekly Learner Workload					8.00
Total Weekly Contact Hours					3.00

Module Resources

Recommended Book Resources

Behrouz A Forouzan. (2012), Data Communications and Networking, Global Edition (Asia Higher Education Engineering/Computer Science Computer) Paperback – 16, 5. McGraw-Hill Education;; [ISBN: 978-981457751].

This module does not have any article/paper resources

This module does not have any other resources