ROBERT GORDON UNIVERSITY ABERDEEN

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MODULE DESCRIPTOR

Module Title

Virtual Systems Support

Reference	CM4118	Version	1
Created	May 2019	SCQF Level	SCQF 10
Approved	May 2019	SCQF Points	15
Amended		ECTS Points	7.5

Aims of Module

To provide the student with the ability to understand the practicalities surrounding the implementation and management of virtual computer systems.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Define the architectural principles used when implementing virtualisation technologies.
2	Discuss the commercial and environmental benefits of virtualisation.
3	Describe the security issues affecting virtual systems.
4	Compare different virtualisation technologies.
5	Install and configure different virtualisation systems.

Indicative Module Content

This module will expose students to not only the benefits but also the issues involved when deploying a virtualised system into an enterprise environment. Cloud computing: Virtual Storage, Software and Hardware, VMware, Xen Server, Virtual Storage, Virtual Networks, Cloud Computing, Containers, Privacy and Security Issues, Hypervisors, Docker.

Module Delivery

This module is based on a series of lectures supplemented by guest speakers and student research.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	33	N/A
Non-Contact Hours	117	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4, 5
Description:	A written report.				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The calculation of the overall grade for this module is based on 100% weighing of C1. An overall minimum grade D is required to pass the module.

Module Grade	Minimum Requirements to achieve Module Grade:
A	The student needs to achieve an A in C1.
B	The student needs to achieve a B in C1.
C	The student needs to achieve a C in C1.
D	The student needs to achieve a D in C1.
E	The student needs to achieve an E in C1.
F	The student needs to achieve an F in C1.
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

1 ABHILASH, G. B., 2019. VMware vSphere 6.7 Cookbook: practical recipes to deploy, configure, and manage VMware vSphere 6.7 components, 4th Ed. Packt Publishing

2 GAVANDA, M., MAURO, A., VALSECCHI, P., NOVAK, K., 2019. Mastering VMware VSphere 6.7: effectively deploy, manage, and monitor your virtual datacenter with VMware VSphere 6. 7, 2nd Ed. Packt Publishing.

3 von OVEN, P. COOMBS, B., 2019. Mastering VMware Horizon 7.8: master desktop virtualization to optimize your end user experience, 3rd Ed. Packt Publishing

4 BUELTA, J., 2019. Hands-on Docker for Microservices with Python : design, deploy, and operate a complex system with multiple microservices using docker and Kubernetes. Packt Publishing

5 KUNDAN, A. P., 2019. Intelligent automation with VMware: apply machine learning techniques to VMware virtualization and networking. Packt Publishing