



Course Specification

— (Bachelor)

Course Title: Cloud Operations *Enter Course Title.*

Course Code: IT477

Program: B.Sc. Information Technology

Department: INFORMATION TECHNOLOGY

College: CCIS

Institution: MAJMAAH UNIVERSITY

Version: *Course Specification Version Number*

Last Revision Date: *Pick Revision Date.*



Table of Contents

A. General information about the course:	3
B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods	4
C. Course Content	4
D. Students Assessment Activities	5
E. Learning Resources and Facilities	5
F. Assessment of Course Quality	6
G. Specification Approval	6



A. General information about the course:

1. Course Identification

1. Credit hours: 3 (2,2,0)

2. Course type

A. University College Department Track Others
 B. Required Elective

3. Level/year at which this course is offered: 8

4. Course general Description:

This Course prepares students to Understand the Cloud infrastructure and its operations, such as the global infrastructure, core services, and account security. At the end the course students will be able to build a virtual private networks with Amazon Virtual Private Cloud (Amazon VPC), Configure and manage storage options by using the storage services offered with AWS, Monitor the health of infrastructure with services such as Amazon CloudWatch, AWS CloudTrail, and AWS Config and finally Manage resource consumption in an AWS account by using tags, Amazon CloudWatch, and AWS Trusted Advisor.

5. Pre-requirements for this course (if any):

6. Co-requisites for this course (if any):

7. Course Main Objective(s):

1.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	100%
2	E-learning		
3	Hybrid <ul style="list-style-type: none"> • Traditional classroom • E-learning 		





No	Mode of Instruction	Contact Hours	Percentage
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	30
3.	Field	
4.	Tutorial	
5.	Others (specify)	
Total		60

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1				
2.0	Skills			
2.1	Build virtual private networks with Amazon Virtual Private Cloud (Amazon VPC).	S2	Mini Project, Lab Exercises	Lab Based Assignments, MiniProject
2.2	Configure and manage storage options by using the storage services offered with AWS.	S3	Oral /Written Communication, Seminar	Group Assignments, Mini Project
2.3	Monitor the health of your infrastructure with services such as Amazon CloudWatch, AWS CloudTrail, and AWS Config.	S4	Mini Project, Graduation Project, Lab Exercises	Case Study Implementation/ Laboratory /Mini project
3.0	Values, autonomy, and responsibility			
3.1				

C. Course Content

No	List of Topics	Contact Hours
1.	Understanding Systems Operations on AWS	4



2.	Tooling and Automation	4
3.	Computing Servers	4
4.	Computing, Scaling, and Name Resolution	4
5.	Computing, Containers,	4
6.	Serverless Cloud Computing	4
7.	Computing Database Services	4
8.	Networking	4
9.	Storing in the cloud	4
10.	Archiving in the cloud	4
11.	Monitoring in the cloud	4
12.	Security in the cloud	4
13.	Managing Resource Consumption	4
14.	Creating Automated and Repeatable Deployments	4
15.	Archiving in the cloud	4
Total		60

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz 1,2	Week 4 and 12	10%
2.	Mid Exam	Week 8	20%
3.	Exercise	Every Week	15%
4.	Project	Week 13	15%
5.	Final Exam	Week 16	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	"Cloud Operations A Complete Guide - 2019 Edition Paperback – June 26, 2021 by Gerardus Blokdyk (Author) ISBN-10- 0655838074 & ISBN-13- 978-0655838074
Supportive References	
Electronic Materials	
Other Learning Materials	

2. Required Facilities and equipment





Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Class Room, PC
Technology equipment (projector, smart board, software)	LCD Projector, VM
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Faculty	Direct
Effectiveness of Students assessment	Students	Indirect
Quality of learning resources		
The extent to which CLOs have been achieved		
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	

