

## Unit Outline (Higher Education)

Institute / School: Global Professional School

Unit Title: AZURE DEVOPS INITIATIVE

Unit ID: GPSIT1012

Credit Points: 15.00

Prerequisite(s): Nil

Co-requisite(s): Nil

Exclusion(s): Nil

**ASCED:** 029901

## **Description of the Unit:**

This team-based project unit is designed to enable a student to get acquainted with the DevOps methodology using the Azure Services platform. The Azure DevOps platform can provide speed and agility to the management of projects including software development, testing, and deployment. Working in small teams, students will assess an industry problem and perform research on the capabilities of Azure DevOps Services. As a result, students will attempt to configure an Azure DevOps services environment for the project and learn how to migrate existing projects into the platform. During this process, the team will collaborate and manage the project using an agile sprint methodology. The learning from the project could be applied to job roles that focus on project management, software development, QA and testing, and product management and ownership.

**Grade Scheme:** Ungraded (S, UN)

#### **Work Experience:**

No work experience: Student is not undertaking work experience in industry.

**Placement Component:** No

**Supplementary Assessment: No** 

Supplementary assessment is not available to students who gain a fail in this Unit.

#### **Course Level:**

Level of Unit in Course	AQF Level of Course					
Level of Offic in Course	5	6	7	8	9	10
Introductory			V			
Intermediate						

Level of Unit in Course	AQF Level of Course					
Level of Offic in Course	5	6	7	8	9	10
Advanced						

#### **Learning Outcomes:**

## **Knowledge:**

- **K1.** K1. Understand the range of available Azure DevOps services and their associated benefits to a project.
- **K2.** Describe the project management and collaboration capabilities of Azure DevOps Services.
- **K3.** Illustrate the concepts of Agile and SCRUM methodologies regarding project management.
- **K4.** Identify a range of ways to manage data within the Azure DevOps environment.

#### **Skills:**

- **S1.** Select appropriate Azure DevOps Services for a project.
- **S2.** Configure Azure DevOps Services for project management capability.
- **S3.** Communicate different Azure DevOps Service plans and services options to stakeholders.
- **S4.** Work effectively in a team.

### Application of knowledge and skills:

- **A1.** A1. Administer a project in Azure DevOps with a focus on security.
- **A2.** Create and manage Azure DevOps Boards (including Epics, Features, Product Backlog items, tasks, bugs and POAP) using an agile methodology within timelines and task workload.
- **A3.** Communicate with confidence to key stakeholders project recommendations and findings.

## **Unit Content:**

Working in small teams, students will assess an industry problem and perform research on the capabilities of Azure DevOps Services.

#### Topics may include:

- Sprint 1 (2 weeks) Evaluate status and requirements, research and decide on the optimal Azure DevOps
  Services pricing plan for this workload. Create a presentation of the findings and a plan on a page (POAP) of
  your workload.
- Sprint 2 (2 weeks) Set up and configure Azure DevOps Services, by creating organizations, projects, teams and permissions using Git version control and SCRUM work item process to allow an Agile SCRUM team to collaborate.
- Sprint 3 (2 weeks) Evaluate options for user requirements/work item data migration from third-party sources and various solutions.
- Sprint 4 (2 weeks) Migrate/Import and organize data into its respective work item types and assign product backlog items and tasks to team members.
- Sprint 5 (2 weeks) Run a sprint session with team members using the Azure DevOps Sprints component, using the backlog items/user stories assigned to the team.
- Sprint 6 (2 weeks) Prepare a demo/show-and-tell video celebrating the team's work and what has been learned through the completion of the project.

### **FEDTASKS**

Federation University Federation recognises that students require key transferable employability skills to prepare them for their future workplace and society. FEDTASKS (**T**ransferable **A**ttributes **S**kills and **K**nowledge)

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provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are be embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Cooperative Learning opportunities. One or more FEDTASK, transferable Attributes, Skills or Knowledge must be evident in the specified learning outcomes and assessment for each FedUni Unit, and all must be directly assessed in each Course.

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit		
		Learning Outcomes (KSA)	Assessment task (AT#)	
	Students will demonstrate the ability to effectively communicate, inter-act and work with others both individually and in groups. Students will be required to display skills inperson and/or online in:	K1 S1 A1-A3	AT1 - AT6	
FEDTASK 1	Using effective verbal and non-verbal communication			
Interpersonal	Listening for meaning and influencing via active listening			
	Showing empathy for others			
	Negotiating and demonstrating conflict resolution skills			
	Working respectfully in cross-cultural and diverse teams.			
	Students will demonstrate the ability to apply professional skills and behaviours in leading others. Students will be required to display skills in:	K1-K3 S1-S3 A3	AT1 AT3 AT4	
	Creating a collegial environment			
FEDTASK 2 Leadership	Showing self -awareness and the ability to self-reflect			
	Inspiring and convincing others			
	Making informed decisions			
	Displaying initiative			
FEDTASK 3 Critical Thinking and Creativity	Students will demonstrate an ability to work in complexity and ambiguity using the imagination to create new ideas. Students will be required to display skills in:	K1-K4 S1-S3 A1- A3	AT1 AT3 AT5 AT6	
	Reflecting critically			
	Evaluating ideas, concepts and information			
	Considering alternative perspectives to refine ideas			
	Challenging conventional thinking to clarify concepts			
	Forming creative solutions in problem solving.			



FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit		
		Learning Outcomes (KSA)	Assessment task (AT#)	
FEDTASK 4 Digital Literacy	Students will demonstrate the ability to work fluently across a range of tools, platforms and applications to achieve a range of tasks. Students will be required to display skills in:	K1-K3 S1-S3 A1- A2	AT1-AT4	
	Finding, evaluating, managing, curating, organising and sharing digital information			
	Collating, managing, accessing and using digital data securely			
	Receiving and responding to messages in a range of digital media			
	Contributing actively to digital teams and working groups			
	Participating in and benefiting from digital learning opportunities.			
FEDTASK 5 Sustainable and Ethical Mindset	Students will demonstrate the ability to consider and assess the consequences and impact of ideas and actions in enacting ethical and sustainable decisions. Students will be required to display skills in:	K2- K4 S1-S4 A2- A3	AT2-AT6	
	Making informed judgments that consider the impact of devising solutions in global economic environmental and societal contexts			
	Committing to social responsibility as a professional and a citizen			
	Evaluating ethical, socially responsible and/or sustainable challenges and generating and articulating responses			
	Embracing lifelong, life-wide and life-deep learning to be open to diverse others			
	<ul> <li>Implementing required actions to foster sustainability in their professional and personal life.</li> </ul>			

## **Learning Task and Assessment:**

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1-K2 S1 A1-A3	Sprint 1 discovery findings and potential solution	Team Presentation and Plan on a Page (POAP)	S/U
K2-K4 S2-S3	Complete setup of Azure DevOps Services and components for this workload	Video presentation talking through setting up Azure DevOps Services for this workload	S/U
K2- K4 A1 S1	Evaluate options for integrating/migrating data into Azure DevOps services	Present solution options and recommendations for data migration/integration	S/U
K4 A1 S1	Identify appropriate methods and integrate or migrate data from other sources into Azure DevOps	Present solution implemented for migration/integration of data	S/U



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Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1-K3 A1-A3	Sprint session: - Create Product backlog Perform sprint planning sessions Create Sprint backlog Run sprints completing each task from the sprint backlog Run a sprint review session.	Perform a sprint retrospective session and talk through sprint session tasks handled during the 10 days of sprint session with key stakeholders of this workload	S/U
K1-K4 S1-S4 A1- A3	Produce a video session with each team member presenting their experience working on this workload, and what they learned throughout.	Show & tell video	S/U

## **Adopted Reference Style:**

APA

Refer to the <u>library website</u> for more information

Fed Cite - referencing tool