Unit Outline (Higher Education)

Institute / School: Global Professional School

Unit Title: ROBOTIC PROCESS AUTOMATION: BUSINESS ANALYST DEVELOPER

Unit ID: HENAG1009

Credit Points: 15.00

Prerequisite(s): Nil

Co-requisite(s): Nil

Exclusion(s): Nil

ASCED: 029999

Description of the Unit:
This team-based project unit aims to prepare students to understand the role and function of Process Automation Experts who can play various roles such as Robotic Process Automation Developers and associated Business Analysts. AI-driven Robotic Process Automation, an important foundation in the journey of Digital Transformation, is being adopted by many organisations globally regardless of their size or domain. This has created an immense shortage in the supply of Process Automation experts. On successful completion of the course, a student will be equipped to: analyse a range of automation use cases; configure and develop Process Automation solutions using low/no code tools and platforms; and utilise device Process Automation Road mapping to accelerate the pace of Digital Transformation.

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					
	5	6	7	8	9	10
Introductory			✔			
Intermediate						

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

Learning Outcomes:

Knowledge:

K1. Understand how Artificial Intelligence/Machine Learning components in conjunction with Robotic Process Automation platforms could automate Repetitive and Rule Based processes dealing with structured and semi-structured data.

K2. Understand Business Analytics from the perspective of Robotic Process Automation.

K3. Design Use Cases across various functional areas for automation possibilities.

Skills:

S1. Analyse Use Cases across functional areas for automation possibilities.

S2. Use Robotic Process Automation Platforms to develop a range of automation scenarios including the elements of UiPath activities, Variables, Arguments, Excel, PDF, Email Automation to interact with UI Elements.

S3. Work effectively in a team.

Application of knowledge and skills:

A1. Create documents including a Process Definition Document and/or a Process Automation Roadmap.

A2. Advise stakeholders regarding Business Process Management.

A3. Configure basic Industrial As-Is Repetitive and Rule Based processes for automation.

Unit Content:

Topics may include:

- Sprint 1 (2 weeks)
  Explore basic ideas of automation using Audio Visual Contents available with UiPath Academy and undertake a deep dive study of the AS-IS Process Flows of a Use Case - Accounts Payable Process Automation for Supplier Invoice to suggest the Automated TO-BE Process Flow.
- Sprint 2 (2 weeks)
  Learn UiPath Control Flow, Variables, Arguments and UiPath Activities, Excel, PDF, Email Automation scenarios to use these concepts to be able to automate Industrial AS-IS Repetitive, Rule Based processes that may qualify for automation.
- Sprint 3 (2 weeks)
  Learn UiPath Selectors to be able to automate the interaction of UiPath Bot with various Ui Elements on Portals and Web-based applications.
- Sprint 4 (2 weeks)
  The goal of this Sprint is to enable the students to use the Orchestrator required for the configuration of Unattended Automation scenarios and handling Queues.
- Sprint 5 (2 weeks)
  The goal is to enable the students to handle errors and exceptions during the automation of the suggested TO-BE Scenario.
- Sprint 6 (2 weeks)
  Implement automation for scenarios involving reading and extraction of data from PDFs besides downloading and storing them in the folder in a specified path; automating sending and receiving of emails; to automate

scenarios involving Excel File activities.

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) 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 Co-operative 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#)**
FEDTASK 1 Interpersonal	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 in-person and/or online in: • Using effective verbal and non-verbal communication • 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.	K1-K2 S2 A1-A2	AT1
FEDTASK 2 Leadership	Students will demonstrate the ability to apply professional skills and behaviours in leading others. Students will be required to display skills in: • Creating a collegial environment • Showing self -awareness and the ability to self-reflect • Inspiring and convincing others • Making informed decisions • Displaying initiative	K1 S2 A1-A3	AT1-AT2
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: • 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.	K1-K3 S1-S3 A1-A3	AT2-AT3 AT5-AT6

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: • 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.	K1, K3 S1-S2 A2-A3	AT3, AT5, AT6
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: • 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 • Implementing required actions to foster sustainability in their professional and personal life.	A1-A3 S1-S3 K1-K3	AT2, AT3, AT4, AT5, AT6

Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1 S1 A1	Create a Process Definition Document (PDD) for the Accounts Payable (AP) Process Automation for Supplier Invoice	Team presentation	N/A
K2, K3 S1-S3 A1	In-depth exploration of Control Flow, Variables, Arguments, and UiPath Activities using Audio Visual Contents available with UiPath Academy	Team presentation	N/A
K2, K3 S3 A2-A3	In-depth exploration of UiPath Selector using Audio Visual Contents available with UiPath Academy	Team presentation	N/A
K2-K3 S1-S3 A1-A3	Install Orchestrator, publish, install, and update libraries and templates in Orchestrator, create resources in Orchestrator, and populate and consume Orchestrator queues.	Team presentation	N/A

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K2, K3 S2, S3 A1-A3	Configure UiPath Studio to demonstrate how exceptions (System.IO.IOException) have been handled in Excel Activities; include KillProcess activity to close all Excel files that are open.	Team presentation	N/A
K1-K3 S1-S3 A1-A3	1)PDF Automation Tasks - Get Text activity toextract data from invoice files, 2) Extract UIElements (Invoice Total) from the invoice, 3) Usea variable to store the extracted value, 4)Alternatively use UiPath Recorder to copy theElement in the invoice//Email Automation Tasks -1)Automate the interaction with emails by filteringand downloading attachments, 2) Use thedifferent 'Send Email' activities.	Team presentation	N/A

Adopted Reference Style:

APA

Refer to the library website for more information

Fed Cite - referencing tool