

# Course Outline (Higher Education)

<b>School:</b>	School of Engineering, Information Technology and Physical Sciences
<b>Course Title:</b>	EMERGENT INTELLIGENT WORKFLOWS
<b>Course ID:</b>	ITECH7303
<b>Credit Points:</b>	15.00
<b>Prerequisite(s):</b>	ITECH7301, ITECH7302
<b>Co-requisite(s):</b>	ITECH7302
<b>Exclusion(s):</b>	Nil
<b>ASCED:</b>	029999

## Description of the Course:

For a business to be successful within future operating environments, it needs to show and implement agility. This can be achieved by embracing the Cognitive Enterprise through its implementation and use of complementary and Exponential Technologies. This course will teach students the strategies required when using the Cognitive Enterprise to resolve business challenges associated with implementing information systems services and intelligent workflows within an ever-progressing technological world. Students will also be required to apply their professional communications skills by participating within, critically analysing and reflecting upon pseudo-client environment case studies.

Students will gain a broad understanding of the IT industry, its research foundations and its place in servicing society. We therefore provide unique opportunities for students to engage in authentic learning through engagement with their local IT community and to develop clearer direction for personal career goals. Student's attendance and participation in events such as seminars, workshops, expos and discussion forums will therefore be mandatory to demonstrate their skills and knowledge in developing and pitching cognitive enterprise solutions.

**Grade Scheme:** Graded (HD, D, C, P, MF, F, XF)

## Work Experience:

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

**Placement Component:** No

**Supplementary Assessment:** Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a final mark of 45 per cent or above and submitted all major assessment tasks.

### Program Level:

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Introductory	■	■	■	■	■	■
Intermediate	■	■	■	■	✓	■
Advanced	■	■	■	■	■	■

### Learning Outcomes:

#### Knowledge:

- K1.** Explain what an "Intelligent Workflow" is and which types of businesses/industries are exploring Intelligent Workflows and why.
- K2.** Identify various business processes to which different Exponential Technologies can be applied.
- K3.** Analyse how Exponential Technologies can be applied to a range of business processes.
- K4.** Identify and investigate the complexity associated with implementing different Exponential Technologies.
- K5.** Identify the Australian Computer Society`s (ACS) Core Body of Knowledge (CBOK) and where it is represented in industry practice
- K6.** Discuss the Skills Framework for the Information Age (SFIA) and how it is reflected in industry practice.

#### Skills:

- S1.** Apply Exponential Technology selection techniques to relevant business scenarios.
- S2.** Identify business challenges that modern companies are facing in ever-changing business environments.
- S3.** Develop Intelligent Workflow concepts and provide a step change in business performance.
- S4.** Working as a team to resolve a consulting challenge, through technology.
- S5.** Analyse and link the ACS`s CBOK and SFIA to industry practice.

#### Application of knowledge and skills:

- A1.** Communicate professionally to present exponential technology-based solution to clients, and deal with client feedback from operational level to executive level.
- A2.** Design a system solution using exponential technologies according to client`s requirements and business challenges.
- A3.** Critique research and industry practice and determine your place in the spectrum of career possibilities.

### Course Content:

Topics could include:

- An overview of multiple emerging and eExponential Technologies (e.g. RPA, Blockchain, AI, Process Mining, Edge Computing, Connected Devices etc).
- The application of Exponential Technologies within industrial scenarios.
- The business benefits and challenges associated with Exponential Technology implementation.
- The context of data within an exponential technology.
- The different technologies which lie within categories of Exponential Technologies.

- Planning to implement exponential technologies.
- Communicating exponential technology selections, implementations, and benefits.

**Values:**

- V1.** Explain the impact of Exponential technology from a business perspective in building an Intelligent workflow.
- V2.** Appreciate the role that different technologies can play in realising business outcomes.
- V3.** Appreciate the challenges clients face in implementing Exponential technologies and their responsibility to communicate resulting process enhancements.

**Graduate Attributes**

The Federation University FedUni graduate attributes (GA) are entrenched in the [Higher Education Graduate Attributes Policy](#) (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni programs. Graduate attribute attainment typically follows an incremental development process mapped through program progression. **One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni course, and all attributes must be directly assessed in each program**

Graduate attribute and descriptor		Development and acquisition of GAs in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
GA 1 Thinkers	Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking and creating new solutions.	K1, K2, K3, K4, S2	AT1 & AT2
GA 2 Innovators	Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change.	S1, S3, A1, A2	AT1 & AT2
GA 3 Citizens	Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately.	A1	AT1 & AT2
GA 4 Communicators	Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand.	S4, A1, A2	AT1 & AT2
GA 5 Leaders	Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices.	K5, K6, S4, S5, A3	Hurdle Task

**Learning Task and Assessment:**

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1, K2, K3, K4, K5, K6 S1, S2, S3, S4, S5, A1, A2, A3	To assess the knowledge and skills in the analysis and practical application of the introduced content via presentations and/or assignments covering a range of taught topics. May include self-reflective journals.	Assignment(s) and/or Presentation(s) and/or Journal(s)	70% - 80%

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K3, S1, S2, S3, A1, A2	Review and practice of skills and knowledge.	Examination(s) and/or Test(s)	20% - 30%
K5, K6, S5, A3	Artifacts demonstrating a community engagement activity. This report will describe the activity and relate it to the course's learning outcomes, CBOK & SFIA.	Hurdle	Hurdle

**Adopted Reference Style:**

APA

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)