Unit Outline (Higher Education)

Institute / School:	Institute of Innovation, Science & Sustainability
Unit Title:	PROJECT 1
Unit ID:	ITECH3208
Credit Points:	15.00
Prerequisite(s):	(ITECH2002 and ITECH2250)
Co-requisite(s):	(ITECH2003 or ITECH2309)
Exclusion(s):	Nil
ASCED:	029999

Description of the Unit:

This is the first of two IT capstone project unit. This unit is an opportunity to apply and develop your skills and knoweldge to work on an authentic industry IT project. You will work in teams, meet with clients, develop a project vision and produce deliverables that result in value and benefit your client. The project will be continued into ITECH3209 Project 2.

Students must demonstrate an understanding of the IT industry, and particular processes, methods and techniques that can be applied to create their project outcomes. Students will reflect on their own development as a emerging IT professional and the skills they have developed during their project.

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

Work Experience:

Not wholly work experience: Student is not undertaking work experience in industry or student is undertaking work experience in industry where learning and performance is directed by the provider.

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						
Advanced			✔			

Learning Outcomes:

Knowledge:

K1. Conduct agile project management ceremonies and adopt processes and methodologies to define and address a particular IT problem.

K2. Ascertain stakeholder needs and maintain effective client relationship management through appropriate communication with all stakeholders.

K3. Work collaboratively as a team member by defining and adopting roles and responsibilities based on industry procedures and standards.

K4. Identify and reference relevant industry frameworks such as the Australian Computer Society`s (ACS) Core Body of Knowledge (CBOK) and the Skills Framework for the Information Age

Skills:

S1. Consult with a client to establish requirements, discuss, propose and evaluate alternative solutions for an IT project.

S2. Apply advanced problem solving skills in the analysis, design and development of a solution to an IT project.

S3. Evaluate industry resources and select appropriate techniques to develop the project deliverables

S4. Work collaboratively as a team member on an IT project to devise and deliver solutions to your client.

S5. Research and develop relevant skills from ACS`s CBOK and SFIA standards as applicable to your industry project

Application of knowledge and skills:

A1. Conduct a problem analysis to define project requirements and deliverables in consultation with clients

A2. Research, evaluate and propose technical solutions to clients

A3. Undertake agile project methodology processes to address a particular problem and monitor and track project deliverables

A4. Select and create appropriate artefacts and/or models based on industry practice to deliver project outcomes following an agile development methodology

A5. Research and apply relevant ACS`s CBOK, SFIA and ethical standards to the project

A6. Coordinate and collaborate with team members using effective communication adopting industry-recognised organisational tools and techniques

A7. Review self and team performance with a view to improvement and reflect on your personal career goals. Offer feedback to others in a thoughtful way.

A8. Present interim project progress reports to your client and other relevant stakeholders

Unit Content:

This unit provides students with an opportunity to work on an industry-based project of significant size, based on their prior study in Information Technology. Students will work on projects in teams of four to five students, although the unit coordinator may make adjustments to team size based on enrolments or other exceptional circumstances. Each project will have a client and an allocated supervisor. In this unit, students will adopt agile

industry practices and procedures to coordinate work together toward outcomes that deliver value to their client and work toward realising the project vision. The supervisor and unit coordinator will provide guidance in terms of major milestones to help students plan and manage their project. The unit coordinator will approve the project scope. Each individual student is responsible for aligning their individual skills and career goals to their project work.

Topics may include:

- Introduction to agile practices and roles
- Agile project management techniques, ceremonies and artefacts
- Client Liaison. Eliciting requirements and presenting these as user stories.
- Techniques and tools for collaboration, project planning, task tracking and code sharing.

- Working effectively in teams.

- Communication with various stakeholders and presentations demonstrating progress

- Estimating tasks and monitoring progress.

- IT and related industry activity and research developments in the local community, and around the globe; ACS's CBOK, SFIA and their relationship with industry; Career pathways.

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, K3, S1, S4, A6, A7, A8	AT2, AT4, AT5, AT6

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit	
		Learning Outcomes (KSA)	Assessment task (AT#)
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	Not applicable	Not applicable
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.	S2, A1, A4	AT5
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, K2, K3, S1, S4, A4, A6	AT2, AT3, AT4, AT5, AT6

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit	
		Learning Outcomes (KSA)	Assessment task (AT#)
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.	Not applicable	Not applicable

Learning Task and Assessment:

Students will engage in project activities that align with their enrolled study stream.

Assessment tasks are designed to measure the learning outcomes of the capstone project courses, however, successful projects will require application of additional project-dependent skills not explicitly listed in this course outline. If students study a specialised stream then these additional learning outcomes will align with the learning outcomes identified by the stream of study at the program level.

Each study specialisation stream identifies with the corresponding ACS CBoK knowledge areas and the SFIA skills that will be assessed (these are in addition to those identified in the ACS and SFIA sections of this outline) if students are enrolled in that study stream. *Please Note: Professional Practice students enrolled in CI5 will be considered depending on the their registered focus area.*

Students will negotiate and complete a project in an area related to their stream specialisation/electives completed.
Wherever possible, assessment tasks are generic to all projects and will not be specific to individual projects. Assessment in this course aims to replicate many of the types of scenarios that students would face in a professional setting, including writing appropriate documentation, giving presentations to technical and non-technical audiences, and critical self reflection.

Typically, if all team members have worked equally in the project, the same grade will be awarded to all team members for team submissions. In cases where it can be demonstrated that one or more team members have not participated equally, the supervisor and course coordinator will alter individual grades and/or request additional assessment tasks to be completed.

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K4, S5	Reflect on your individual career goals and identify SFIA and CBOK skills that can be developed in a project. Create a project proposal or submit a bid for a project aligning with your individual goals.	Individual project selection proposal	Hurdle
K3, S1, S3, A1, A2, A6	Collaborate with others to establish a project vision, team charter and project roadmap	Team documents or project room artefacts	5-10%
K1, K2, K3, A1, A3, A4	Create industry recognised artefacts and use appropriate tools to identify plan, manage and monitor work and track progress in your project.	Artefacts and project information radiators. Evidence of appropriate use of tools.	15-30%
K1, K3, S4, A1, A4, A7	Engage in agile ceremonies to coordinate work in your project team and reflect on team processes	Individual report demonstrating evidence of engagement, contribution and reflections on outcomes from ceremonies conducted	10-15%
S1, S2, S3, S4, A1, A4	Using industry tools and practices, each student contributes to work collaboratively in a team to create and deliver outcomes that deliver value to your client as part of solving an IT related problem	Project deliverables : technical reports or products with supporting documentation. Assessed based on individual contribution.	20-30%
K2, K3, A3, A7, A8	Consult with a client, report on progress, give presentations to share organisation, plans, justify approach and demonstrate work completed to a variety of stakeholders. Review and provide feedback to peers.	Presentations	20-30%
K4, S3, S5, A5, A7	Engage with industry resources to investigate an issue relating to your project and deliver your findings to your team. Reflect on ethics, sustainability and industry practices, individual career goals and your own development of SFIA and CBOK skills in the project work completed.	Individual research report and project journal. The student may also be requested to attend an interview to discuss this further.	10-20%

Adopted Reference Style:

APA

Refer to the library website for more information

Fed Cite - referencing tool