# Federation UNIVERSITY AUSTRALIA

# **Course Outline (Higher Education)**

**School:** School of Science, Engineering and Information Technology

Course Title: PROJECT

Course ID: ITECH3602

Credit Points: 15.00

**Prerequisite(s):** (ITECH2106 or ITECH3201) (ITECH2250 or ITECH3213)

Co-requisite(s): Nil

**Exclusion(s):** (CP783 and ITECH3208)

**ASCED Code:** 029999

## **Description of the Course:**

The project course will give the student experience in the development of a component for an information technology system. This course includes a requirements analysis and systems design, as well as the actual documentation and implementation of an information technology system.

**Grade Scheme:** Graded (HD, D, C, etc.)

# **Work Experience:**

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

Placement Component: No

#### **Program Level:**

AQF Level of Program							
	5	6	7	8	9	10	
Level							
Introductory							
Intermediate							
Advanced			<b>&gt;</b>				

# **Learning Outcomes:**

# **Knowledge:**

- **K1.** adapt the processes and methodologies for project management and planning to a particular problem;
- **K2.** define roles, responsibilities, procedures and standards to clearly define collaborative team work;
- **K3.** recognize the importance of client contact and clear documentation of expected work in a project;
- **K4.** translate technical knowledge into appropriate formats to suit variety of stakeholders;
- **K5.** distinguish between different stakeholder needs and communication requirements;

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**K6.** demonstrate how to critically review a product in order to improve on its quality;

#### **Skills:**

- **S1.** consult with a client with a view to develop and implement an information communication and technology (ICT) application;
- **S2.** demonstrate advanced problem solving skills in the analysis and design of an IT system;
- **S3.** work as part of a team in managing the development of a prototype solution;
- **S4.** conduct a critical review of work completed by their peers for a quality assurance task;
- **S5.** plan and deliver a technical presentation on a software product;
- **S6.** show how to choose and apply appropriate analysis and design techniques to solve a particular problem;

# Application of knowledge and skills:

- **A1.** develop, use, monitor and maintain a project plan;
- A2. analyse, design and implement application with appropriate documentation;
- **A3.** apply analysis and design techniques to a particular problem;
- **A4.** create technical documentation detailing verification and validation of an implemented system;
- **A5.** apply quality assurance process, including documentation reviews;
- **A6.** develop and test software product based on the technical specification;

#### **Course Content:**

This course will provide students with an opportunity to undertake a significant project of work based on their prior study in Information Communication Technology or Mathematics. Usually a project will be done by two or more students (pairings or groups to be nominated on selection of project). In special circumstances, a project may be done by one student. In some cases, several students may each work on the same (or a very closely related) topic. The project may also take the form of a case study. Each project will normally have an allocated supervisor and a client. It will be the client's responsibility to advise on the scope, purpose and broad definition of the project and the supervisor's responsibility to oversee the conduct of the project and provide assistance where possible. The supervisor will also be responsible to give advice where the scope of the project is likely to exceed the requirements of the project unit(s). Most projects will involve the analysis and design of information technology systems, and the learning of skills beyond those acquired already in other units. The satisfactory completion of a project will normally require a committed and consistent effort over the entire duration of the project. Students may propose their own topic and client with the agreement of the Course Coordinator, provided the project can be completed within the scope of this unit. They must also be able to show that they can talk about and demonstrate their work in the expected way.

# Values:

- **V1.** appreciate the need for appropriate documentation to support a project development;
- **V2.** value regular communication within a team to foster good team dynamic and collaboration.
- **V3.** appreciate the need for professionalism in relating to clients;

#### **Graduate Attributes:**

FedUni graduate attributes statement. To have graduates with knowledge, skills and competence that enable them to stand out as critical, creative and enquiring learners who are capable, flexible and work ready, and responsible, ethical and engaged citizens.

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Attribute	Brief Description	Focus
Knowledge, skills and competence	Demonstrate the ability to adapt different development methodologies as well as various development tools that are capable of producing a software product.	High
Critical, creative and enquiring learners	Capacity to self-manage the pace of design and development using estimation techniques and also have ability to take responsibilities of different roles when needed within the development team.	High
Capable, flexible and work ready	Show the need for collaborative team work in developing a software product for various economic and social environment.	Medium
Responsible, ethical and engaged citizens	Appraise the ethics and privacy for both developed software as well as for the users involved in the project	Medium

# **Learning Task and Assessment:**

Students will regularly consult with their project supervisor and carry out guided reading to support the analysis and design of their system. Learning tasks will include: [1] consultation with client and supervisor; [2] regular progress reports to supervisor and/or peers; [3] production and review of documentation throughout the life of the project requirements analysis; [4] analysis, design and implementation of an ICT system (including the gaining of new skills); [5] negotiating a client relationship, managing and controlling change requests; and preparation of technical presentations. Assessment will comprise the following tasks:

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K4, K5, S3, S5	Prepare and deliver a presentation	Presentation/s to supervisor, client and/or other students	15 - 20%
K1, K3, K4, S2, S3, S6, A2, A3, A4, A5, A6	Written report and documentation	Project technical documentation, including prototype and demonstration if applicable;	50 - 70%
K2, K6, S1, S3, S4, A1, A2, A5, A6	Work as a team to plan and manage the project	Planning, management documentation, appropriate individual contribution and processes including team work.	20 - 30%

## **Adopted Reference Style:**

APA