

# Course Outline

**Title:** RESEARCH PROJECT & THESIS

**Code:** ITECH7610

**Formerly:** CP937

**Faculty / Portfolio:** Faculty of Science and Technology

**Level:** Advanced

**Pre-requisites:** Nil

**Co-requisites:** Nil

**Exclusions:** Nil

**Credit Points:** 60

**ASCED Code:** 020199

## Objectives:

- conduct both directed and independent research, through assimilating information at the research level using scholarly reading material and through participation in seminars;
- demonstrate critical understanding of major research directions, literature searching methodologies, information sources and multi-disciplinary research approaches influencing research in the field of computing, telecommunication and information technology;
- investigate and apply a range of research strategies and independent research skills to locate, retrieve, store, critically analyse, evaluate, and use information effectively for research;
- communicate the results of research in an appropriate scholarly manner.

After successfully completing this course, students should be able to:

## Knowledge:

- K1.** Investigate how information is structured and communicated in the fields of computing, computer science, communication and information technology.
- K2.** Investigate the nature and purpose of the literature review and literature surveys.
- K3.** Learn how research findings can be effectively communicated to different audiences.
- K4.** Understand how to communicate results in an appropriate academic manner.
- K5.** Understand issues of intellectual property and the prevention of plagiarism.

## Skills:

- S1.** Identify personal information needs and to translate these into research and problem solving strategies that are appropriate for the particular piece of research.
- S2.** Critically assess the accuracy, reliability and relevance and importance of knowledge claims and arguments - by applying the processes associated with: critical reading, interpretation, analysis and evaluation of information sources.
- S3.** Investigate available strategies and adopt suitable strategies to enable the student to become well-informed and to keep being well-informed.

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## ITECH7610 RESEARCH PROJECT & THESIS

- S4.** Investigate strategies and adopt suitable strategies for managing research.
- S5.** Prepare and present written and oral reports to various types of audiences.
- S6.** Apply appropriate referencing conventions in the presentation of academic work.
- S7.** Produce a formatted, well written, technical report on research results.
- S8.** Write a formatted, well written, paper in a format suitable for publication in either conference proceedings or in a journal.

### Values:

- V1.** Pursue and value knowledge.
- V2.** Value scholarship and creativity.
- V3.** Communicate new ideas.
- V4.** Explore and critically reflect on personal learning.
- V5.** Value the contribution and application of knowledge in the information and communication technology to the wider community.

### Content:

Information at an advanced level will be provided on the objective and critical reading of research and scholarly papers, on the writing of papers, on choosing a research topic, on the preparation of projects and theses, and on the preparation and delivery of seminars.

Students will complete a research project and communicate the results as directed by the Course Coordinator. Much of this work will be of an independent nature, although regular communications with the supervisor are required.

### Assessment:

Assessment Task	Assessment Type	Weighting
Planning of the project including the goals and strategies for completion	Written report on the initial outline of the project	10 - 15%
Conducting research for the project, making progressive progress self-assessment	Written report on the project, including a critical self-assessment of the outcomes	10 - 25%
Producing outcomes such as research papers, conference presentations, developed software	Written thesis presenting final project outcomes	65 - 80%

### Adopted Reference Style:

APA

### Presentation of Academic Work: