**HANDBOOK**

This paper is an introduction to research. Competence in doing research is developed through completing a practical research project within a supervisory relationship. A successful student will develop habits of self-directed learning and play an active role in the supervision. The paper is useful to developing a career in industry or academia.

# TEACHING TEAM

**Lecturer and project supervisor**: Philip Carter [pcarter@aut.ac.nz](mailto:pcarter@aut.ac.nz)

**Lecturer and project supervisor**: Russel Pears [rpears@aut.ac.nz](mailto:rpears@aut.ac.nz)

# LEARNING OBJECTIVES

1. Carry out a literature review in a topic from the computing, information or mathematical sciences
2. Critically review, evaluate and synthesize an existing research paper
3. Formulate a research question and/or hypothesis
4. Apply methods of analysis to answer a research question
5. Critically evaluate the evidence and/or data from a research investigation
6. Undertake a small-scale research project under supervision

# TIMETABLE

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | WS222 6-8pm | Lecture Topic | Due item |
| 1 | March 5th | Introduction and research overview |  |
| 2 | March 12th | Research question and literature review |  |
| 3 | March 19th | Experimentation |  |
| 4 | March 26th | Phenomenology |  |
| 5 | April 2nd | Methods and pilot testing |  |
|  |  | mid semester study break | Proposal |
| 6 | April 23rd | Design Science & experimental design |  |
| 7 | April 30th | Qualitative approaches |  |
| 8 | May 7th | Quantitative data collection & analysis |  |
| 9 | May 14th | Qualitative data collection & analysis |  |
| 10 | May 21st | Report writing – abstract & future work |  |
| 11 | May 28th | Review of research process | Research Report |
| 12 | June 4th | Handback and review |  |

In order to gain adequate proficiency for completing the different sections of the research report, you need to come to the corresponding lectures. A register of lecture attendance will be kept to assist the supervisor to better assess your commitment and work.

150 hours of student study time is expected in total. This consists of the times tabled above plus approximately 130 hours of independent study time.

**ASSESSMENTS**

The Research Report. It is worth 100%.