

INFO 6003 POSTGRADUATE RESEARCH PROJECT

Credit Points 10

Coordinator Jianhua Yang (<https://directory.westernsydney.edu.au/search/name/Jianhua Yang/>)

Description This project-based subject provides students with opportunities to develop comprehensive research and project management skills. Students are matched with a supervisor to explore an area of research interest. Working closely with their supervisor, each student will identify their individual research topic then engage in theoretical and practical research investigations. Each student is expected to develop their skills to work independently as a researcher to manage their research project as well as produce and deliver a comprehensive research report on their findings. This subject provides students with the skills necessary to move on to higher academic research levels or pursue career opportunities in industry-based research.

School Computer, Data & Math Sciences

Discipline Information Technology, Not Elsewhere Classified.

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Postgraduate Coursework Level 6 subject

Equivalent Subjects INFO 7017

Restrictions

Students must be enrolled in a postgraduate program and have successfully completed at least 60 credit points of postgraduate subjects.

Learning Outcomes

After successful completion of this subject, students will be able to:

1. Critically analyse the relevant literature to identify potential research problems.
2. Generate research questions and hypothesis based on literature review.
3. Justify the research proposal in relation to its significance in literature and its anticipated impact.
4. Construct a plan and methodology to conduct research on an identified question/issue/problem.
5. Articulate research aims and findings in professional, formal and informal formats and contexts.
6. Apply self-management skills in planning and executing research.
7. Demonstrate research ethics in synthesising complex information from a range of sources and referencing appropriately.

Subject Content

There are no formal lecture sessions for this unit. The unit content covers typical activities in carrying out a research project. The unit content may also be recommended by the unit coordinator/project supervisor for a specific research project.

•Question formulation: develop research question(s) or hypotheses. The end result of the students' initial reading should be well-defined

research question(s). The research question(s) will help the students to focus on the scope of their work.

•Problem identification: identify a problem in a relevant field, such as information communications and technology, data science, artificial intelligence, information governance, at a general or fundamental, technical, or regulatory or philosophical level that needs investigation. It is important that the students examine the assumptions that underlies the problem.

•Literature review: critically review and appraise current literature related to the students' study topics are an essential first step.

Extensive reading and referencing the key papers and other sources are seen as a part of the problem-solving process. The students must read widely and compare the opinions of the many authors in their reports.

•Definition of objectives: define what intends to achieve, scopes, and results expected.

•Methodology: establish research methodology for the investigation of the research issue.

•Planning: prepare a research plan for carrying out the research.

•Proposal: write detailed description of a series of activities aimed at solving certain research problem, including project justification, research objectives, methodology, implementation timeline, resources needed to execute the project.

•Constructing: implement logical framework, methods, models, systems, or algorithms in contexts.

•Analysis and discussion: conduct detailed quantitative and qualitative analyses of the data collected and discuss the results.

•Reporting: produce a comprehensive report and present the outcomes and deliverables clearly stating the student's own original contribution to the project.

•Presentation: introduce the project with motivation and ideas. Explain methodologies and research process. Demonstrate and discuss findings/outcomes.

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

| Type | Length | Percent | Threshold | Individual/ Group Task | Mandatory |
|-------------------|--|---------|-----------|------------------------|-----------|
| Learning Contract | 1-2 pages | S/U | Y | Individual | Y |
| Proposal | 1500 - 2500 words | 25 | N | Individual | Y |
| Report | 5000 - 7500 words (includes figures, formulas, tables) | 60 | N | Individual | Y |
| Presentation | 15 - 20 minutes | 15 | N | Individual | N |

Teaching Periods

Spring (2025)

Parramatta - Victoria Rd

On-site

Subject Contact Jianhua Yang (<https://directory.westernsydney.edu.au/search/name/Jianhua Yang/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=INFO6003_25-SPR_PS_1#subjects)