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# NATS 7053 MSC RESEARCH PROJECT (EXTENDED)

#### Credit Points 20

Legacy Code 301372

Coordinator Mark Williams (https://directory.westernsydney.edu.au/ search/name/Mark Williams/)

**Description** This subject extends the research project undertaken in 401156 MSc Research Project into a substantial piece of research work. This subject provides a further opportunity for students to demonstrate that they can consolidate the knowledge acquired through their course of study, understand how existing evidence/information relates to research topics, and how their own work adds to this body of knowledge. The finding of the project will be presented in a thesis and in an oral presentation. On completion of the MSc with this subject, the student should have sufficient research project work to qualify for entry into a PhD program.

School Science

Discipline Natural and Physical Sciences, Not Elsewhere Classified.

Student Contribution Band HECS Band 2 20cp

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

Level Postgraduate Coursework Level 7 subject

Co-requisite(s) NATS 7033

#### Restrictions

Student must be enrolled in postgraduate program Students must have completed at least 60 credit points of postgraduate study (level 5 or 6 ) in program 3749 (Master of Science)

## Learning Outcomes

On successful completion of this subject, students should be able to:

- 1. Propose an investigation into a problem relevant to a scientific discipline and develop research aims
- 2. Critique peer-reviewed literature pertinent to the investigation and evaluate the strengths and weakness of this work
- 3. Design and conduct experiments within a project framework to test project aims
- 4. Analyse the data from experiments and formulate conclusions
- 5. Justify results and conclusions using oral and written communication
- 6. Devise possible areas of inquiry for future research or development.

# Subject Content

- 1. Critical literature appraisal on a selected paper from literature.
- 2. Experimental design and Project management skills.
- 3. Analysis of data, using appropriate statistical methods where required.
- 4. Report writing in the scientific format of a thesis.
- 5. Critical evaluation of data to judge its significance and develop conclusions from these results.
- 6. Development of an oral talk for presentation of results and conclusions of research project.

# **Special Requirements**

Essential equipment

Students must supply standard Personal Protective Equipment (PPE) as appropriate to their discipline and use PPE and engineering requirements as specified by their risk assessment.

### 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.

Туре	Length	Percent	Threshold	Individual/ Group Task	Mandatory
Portfolio	1000 words	30	Ν	Individual	Ν
Report	5000 words	50	Ν	Individual	Ν
Presentation 5 mins		20	Ν	Individual	Ν

**Teaching Periods** 

### **Spring (2025)** Parramatta - Victoria Rd

### **On-site**

Subject Contact Mark Williams (https:// directory.westernsydney.edu.au/search/name/Mark Williams/)

View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject\_code=NATS7053\_25-SPR\_PS\_1#subjects)