

NATS 7033 MSC RESEARCH PROJECT

Credit Points 20

Legacy Code 401156

Coordinator Vijay Jayasena (<https://directory.westernsydney.edu.au/search/name/Vijay Jayasena/>)

Description Science Research Project is a capstone subject that gives students the opportunity to conduct scientific research, while extending their knowledge and practical skills. Each student undertakes a research project supervised by an academic staff member which has as its central focus the scientific analysis and resolution of a complex problem. The research project is conducted in an area of relevance to professional discipline, and students can choose from a range of approved research designs. Students must undertake a review of the relevant literature, formulation of a research question, design of an appropriate method, collection and analysis of data, interpretation of findings, the production of a research report and presentation of these findings.

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

Restrictions

Students must be enrolled in postgraduate program

Students must have completed at least 60 credit points of postgraduate study (level 7) in program 3749 (Master of Science) or other postgraduate course in Science

Learning Outcomes

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

1. Propose and investigate a topic area relevant to a scientific discipline.
2. Critique peer-reviewed literature pertinent to the proposed topic and identify gaps in knowledge.
3. Develop research aims and design and conduct experiments within a project framework to test these aims.
4. Analyse the data from these experiments and formulate conclusions.
5. Justify the results and conclusions of the project by oral and written communication.
6. Devise possible areas of inquiry for future research or development.
7. Reflect on indigenous perspectives as they relate to professional activities within a discipline of science

Subject Content

1. Project-based learning relevant to individual professional goals and available expertise within industry, academia or other relevant body.
2. Critical literature appraisal on topics relevant to the student's project.
3. Experimental design and Project management skills.

4. Analysis of data, using appropriate statistical methods where required.
5. Report writing in the scientific format of a thesis.
6. Critical evaluation of data to judge its significance and develop conclusions from these results.
7. Development of poster for presentation of results and conclusions of research project.
8. Indigenous Australia – Cultural Awareness and Contribution to a discipline in science

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
Portfolio	500 words	20	N	Individual	N
Report	5000 Words	50	N	Individual	N
Presentation	1,000 words or equivalent	20	N	Individual	N
Reflection	1 hour	10	N	Individual	N

Teaching Periods

Autumn (2025)

Parramatta - Victoria Rd

On-site

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

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7033_25-AUT_PS_1#subjects)

Spring (2025)

Parramatta - Victoria Rd

Hybrid

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View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7033_25-SPR_PS_3#subjects)