

NATS 7057 RESEARCH PREPARATION IN POST GRADUATE STUDIES

Credit Points 10

Legacy Code 301387

Coordinator Rodrigo Neves Calheiros ([https://directory.westernsydney.edu.au/search/name/Rodrigo Neves Calheiros/](https://directory.westernsydney.edu.au/search/name/Rodrigo%20Neves%20Calheiros/))

Description Life is research! This subject introduces students to the nature of research and why it is essential to today's way of living. What are the current and big questions in research? How to prepare for conducting a research in various areas? What are the differences between study, investigation and research? In this subject, the main emphasis will be on different types of modern research and their methods/methodologies with special emphasis on Science, Technology, Engineering & Mathematics (STEM). This subject will also encompass various advanced tools that support research, its writing styles, publication channels and research ethics. Key elements of good research design are also introduced as well as the concepts of intellectual property and commercialisation.

School Computer, Data & Math Sciences

Discipline Other Natural And Physical Sciences

Student Contribution Band HECS Band 2 10cp

Level Postgraduate Coursework Level 7 subject

Equivalent Subjects ENGR 7018 - Research Preparation in Post Graduate Studies

Restrictions

Students must have successfully completed 30 credit points of post graduate subjects before enrolling in this subject.

Learning Outcomes

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

1. Identify potential STEM research projects
2. Implement the steps in research methodology to formulate a research question or hypothesis and to select an appropriate research methodology
3. Critically evaluate research literature synthesising a broad range ideas and concepts
4. Justify the role of ethics-related documents, such as the Australian Code for the Responsible Conduct of Research, in research practice
5. Work independently to design and deliver research project outcomes
6. Communicate research to a diverse audience in a range of formats

Subject Content

1. What is Research
2. How to conduct a Research project
3. Essential Tools to Support Research
4. Research writing styles and publication channels
5. Literature Review

6. Research Methodologies and methods

7. Ethics

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
Literature Review	2,000 words	30	N	Individual
Proposal	2,000 words	40	N	Individual
Presentation	15 minutes	30	N	Individual

Prescribed Texts

- Ranjit, Kumar (2014). Research Methodology, A Step-by-Step Guide for Beginners (4th ed.). Los Angeles: SAGE.

Teaching Periods

Autumn (2022)

Online

Online

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS7057_22-AUT_ON_0#subjects)

Parramatta - Victoria Rd

Day

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Sydney City Campus - Term 3 (2022)

Sydney City

Day

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Autumn (2023)

Parramatta - Victoria Rd

Hybrid

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Sydney City Campus - Term 2 (2023)

Sydney City

On-site

Subject Contact Mahsa Razavi ([https://directory.westernsydney.edu.au/search/name/Mahsa Razavi/](https://directory.westernsydney.edu.au/search/name/Mahsa%20Razavi/))

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7057_23-SC2_SC_1#subjects)