UNSW Course Outline

ZEIT8298 Project Report - Engineering Science Part-Time - 2024

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General Course Information

Course Code : ZEIT8298
Year : 2024
Term : Semester 2
Teaching Period : Z2
Is a multi-term course? : No
Faculty : UNSW Canberra
Academic Unit : School of Engineering and Technology
Delivery Mode : Online
Delivery Format : Standard
Delivery Location : UNSW Canberra at ADFA
Campus : UNSW Canberra
Study Level : Postgraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

In this course students undertake a research project focused on space engineering or

operations. This project should represent a meaningful contribution to a specialised research area. The project is evaluated based on research records, oral presentations, a written thesis, and agreed deliverables.

This course provides postgraduate research students in the latter half of their degree with an opportunity to integrate the knowledge and skills developed through their program to produce an original body of research. A project is undertaken over two semesters, with students enrolling in this course for each. Program coordinator approval is required and depends on prior marks, a suitable research topic, and supervision arrangements.

Course Aims

The primary aim of this course is to allow students to undertake in-depth research on a space engineering or operations topic of interest to them. It thereby cultivates research skills and experience alongside strong knowledge of a particular space research topic.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Demonstrate specialised knowledge relevant to an active research topic in space engineering or operations.
CLO2 : Derive and justify a relevant research question based on a thorough analysis of the academic literature.
CLO3 : Design a rigorous methodology to address a research topic by applying critical thinking, analysis, and reflection.
CLO4 : Evaluate the results of a novel investigation into a research topic and draw meaningful conclusions.
CLO5 : Communicate research in verbal and written forms clearly, accurately, and effectively.
CLO6 : Plan and manage a small research project with a high degree of independence.
CLO7 : Understand the broader importance and context of a research topic in space engineering or operations.

Course Learning Outcomes	Assessment Item
CLO1 : Demonstrate specialised knowledge relevant to an active research topic in space engineering or operations.	• Midyear Presentation • Final Presentation • Thesis and Project Deliverables
CLO2 : Derive and justify a relevant research question based on a thorough analysis of the academic literature.	• Research Notebook • Midyear Presentation • Final Presentation • Thesis and Project Deliverables
CLO3 : Design a rigorous methodology to address a research topic by applying critical thinking, analysis, and reflection.	• Research Notebook • Midyear Presentation • Final Presentation • Thesis and Project Deliverables
CLO4 : Evaluate the results of a novel investigation into a research topic and draw meaningful conclusions.	• Research Notebook • Midyear Presentation • Final Presentation • Thesis and Project Deliverables
CLO5 : Communicate research in verbal and written forms clearly, accurately, and effectively.	• Midyear Presentation • Final Presentation • Thesis and Project Deliverables
CLO6 : Plan and manage a small research project with a high degree of independence.	• Research Notebook • Midyear Presentation
CLO7 : Understand the broader importance and context of a research topic in space engineering or operations.	• Final Presentation • Thesis and Project Deliverables • Midyear Presentation

Learning and Teaching Technologies

Moodle - Learning Management System | Microsoft Teams

Learning and Teaching in this course

This course is undertaken under the supervision of a member of UNSW Canberra SET academic staff with expertise in the project area. Supervision may be shared with other qualified internal or external supervisors. It is expected that the student and supervisor(s) will arrange to meet regularly to discuss progress on the project. However, students are expected to demonstratee a high-degree of independence in planning and carrying out the research project.

The Learning Management System

Moodle is the Learning Management System used at UNSW Canberra. All courses have a Moodle site which will become available to students at least one week before the start of semester. Please find all help and documentation (including Blackboard Collaborate) at the Moodle Support page.

UNSW Moodle supports the following web browsers:

» Google Chrome 50+
» Safari 10+
** Internet Explorer is not recommended

** Addons and Toolbars can affect any browser's performance.

Operating systems recommended are:

Windows 7, 10, Mac OSX Sierra, iPad IOS10

For further details about system requirements click here.

Log in to Moodle here.

If you need further assistance with Moodle:

For enrolment and login issues please contact:
IT Service Centre
Email: itservicecentre@unsw.edu.au

Phone: (02) 9385-1333
International: +61 2 9385 1333

For all other Moodle issues please contact:
External TELT Support
Email: externalteltsupport@unsw.edu.au
Phone: (02) 9385-3331
International: +61 2 938 53331

Opening hours:
Monday – Friday 7:30am – 9:30 pm
Saturday & Sunday 8:30 am – 4:30pm

Additional Course Information

Academic Integrity and Plagiarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW staff and students have a responsibility to adhere to this principle of academic integrity. All students are expected to adhere to UNSW's Student Code of Conduct https://www.gs.unsw.edu.au/policy/documents/studentcodepolicy.pdf

Plagiarism undermines academic integrity and is not tolerated at UNSW. *It is defined as using the words or ideas of others and passing them off as your own, and* can take many forms, from deliberate cheating to accidental copying from a source without acknowledgement.

For more information, please refer to the following:

https://student.unsw.edu.au/plagiarism

Referencing

In this course, students are required to reference following the APA 7 / Chicago NB referencing style. Information about referencing styles is available at: https://guides.lib.unsw.adfa.edu.au/c.php?g=472948&p=3246720

Study at UNSW Canberra

https://www.unsw.adfa.edu.au/study

Study at UNSW Canberra has lots of useful information regarding:

- Where to get help
- Administrative matters
- Getting your passwords set up
- How to log on to Moodle
- Accessing the Library and other areas.

Additional Information as required

CRICOS Provider no. 00098G

The University of New South Wales Canberra.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Research Proposal Assessment Format: Individual	10%	Start Date: Not Applicable Due Date: Not Applicable
Midyear Presentation Assessment Format: Individual	15%	Start Date: Not Applicable Due Date: Not Applicable
Final Presentation Assessment Format: Individual	15%	Start Date: Not Applicable Due Date: Week 11: 07 October - 11 October, Week 12: 14 October - 18 October, Week 13: 21 October - 25 October
Thesis and Project Deliverables Assessment Format: Individual	50%	Start Date: Not Applicable Due Date: 27/10/2024 11:59 PM
Research Notebook Assessment Format: Individual	10%	Start Date: Not Applicable Due Date: 27/10/2024 11:59 PM

Assessment Details

Research Proposal

Assessment Overview

A short document outlining the research question and justification. It should identify a feasible plan for addressing this question with the time and resources available to the project.

Assessment Length

2 pages

Assignment submission Turnitin type

This is not a Turnitin assignment

Midyear Presentation

Assessment Overview

An approximately 30 minute oral presentation on the research question, context/justification of value, proposed methodology, deliverables, and timeline. This will occur near the end of the first semester of study.

Course Learning Outcomes

- CLO1 : Demonstrate specialised knowledge relevant to an active research topic in space engineering or operations.
- CLO2 : Derive and justify a relevant research question based on a thorough analysis of the academic literature.
- CLO3 : Design a rigorous methodology to address a research topic by applying critical thinking, analysis, and reflection.
- CLO4 : Evaluate the results of a novel investigation into a research topic and draw meaningful conclusions.
- CLO5 : Communicate research in verbal and written forms clearly, accurately, and effectively.
- CLO6 : Plan and manage a small research project with a high degree of independence.
- CLO7 : Understand the broader importance and context of a research topic in space engineering or operations.

Detailed Assessment Description

The presentation wil be made to a panel of academics with expertise in various areas of space engineering. Grades will consider both the presentation and responses to follow-up questions on the research topic afterwards. The presentation can be delivered online if required.

Assessment Length

30 minutes + questions

Assignment submission Turnitin type

Not Applicable

Final Presentation

Assessment Overview

An approximately 30 minute oral presentation on the research question, context/justification of value, methodology, deliverables, results, and conclusions. This will occur near the end of the second semester of study.

Course Learning Outcomes

- CLO1 : Demonstrate specialised knowledge relevant to an active research topic in space engineering or operations.
- CLO2 : Derive and justify a relevant research question based on a thorough analysis of the academic literature.
- CLO3 : Design a rigorous methodology to address a research topic by applying critical thinking, analysis, and reflection.
- CLO4 : Evaluate the results of a novel investigation into a research topic and draw meaningful conclusions.
- CLO5 : Communicate research in verbal and written forms clearly, accurately, and effectively.
- CLO7 : Understand the broader importance and context of a research topic in space engineering or operations.

Detailed Assessment Description

The presentation wil be made to a panel of academics with expertise in various areas of space engineering. Grades will consider both the presentation and responses to follow-up questions on the research topic afterwards. The presentation can be delivered online if required.

Assessment Length

30 minutes + questions

Assessment information

The presentations will be scheduled some time in Week 11-13, depending on availability of students and assessors. No less than 2 weeks notice will be provided of the presentation date and time.

Assignment submission Turnitin type

Not Applicable

Thesis and Project Deliverables

Assessment Overview

A thesis detailing the research undertaken throughout the project. This document should detail the project aim, methodology, results, and conclusions. The document should be approximately 40-pages in length (excluding front matter, references, and appendices), unless otherwise agreed with the supervisor.

The thesis may be assessed in combination with a set of deliverables specific to the project. These deliverables may account for up to 50% of the mark for this assessment. The form and weighting of the deliverables should be detailed in writing at the beginning of the project. Common examples of such deliverables include code or hardware.

Course Learning Outcomes

- CLO1 : Demonstrate specialised knowledge relevant to an active research topic in space engineering or operations.
- CLO2 : Derive and justify a relevant research question based on a thorough analysis of the academic literature.
- CLO3 : Design a rigorous methodology to address a research topic by applying critical thinking, analysis, and reflection.
- CLO4 : Evaluate the results of a novel investigation into a research topic and draw meaningful conclusions.
- CLO5 : Communicate research in verbal and written forms clearly, accurately, and effectively.
- CLO7 : Understand the broader importance and context of a research topic in space engineering or operations.

Assessment Length

Approximately 40 pages

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Research Notebook

Assessment Overview

A record of continual progress throughout the project. For example, this may include notes from meeting with supervisor, thoughts/ideas/successes/frustrations, refinement of research question and methods, and preliminary results.

Course Learning Outcomes

- CLO2 : Derive and justify a relevant research question based on a thorough analysis of the academic literature.
- CLO3 : Design a rigorous methodology to address a research topic by applying critical thinking, analysis, and reflection.
- CLO4 : Evaluate the results of a novel investigation into a research topic and draw meaningful conclusions.
- CLO6 : Plan and manage a small research project with a high degree of independence.

Detailed Assessment Description

The notebook will be assessed as evidence that the project was undertaken diligently and that appropriate records were kept to document the research. Presentation, format, spelling, and grammar will not be assessed. This document should be provided to the supervisor concurrently with the final thesis.

Assignment submission Turnitin type

This is not a Turnitin assignment

General Assessment Information

All marks obtained for assessment items during the session are provisional. The final mark as published by the university following the assessment review group meeting is *the only official mark*.

Early Feedback

Feedback will be provided to students based on the Research Proposal in the first semester of the research project. The supervisor will provide individual, written feedback on this work prior to the census date.

Late Submission of Assessment

Unless a formal application for special consideration is submitted, a penalty of 5% of the total available mark for the assessment will apply for each day (or part thereof) that an assessment item is late up to a maximum of 5 days (120 hours) after which an assessment can no longer be submitted and a grade of 0 will be applied.

Use of Generative AI in Assessments

For assessment tasks in this course, you may use standard editing and referencing software, but not Generative AI. You are permitted to use the full capabilities of the standard software (such as Microsoft Office or Grammarly) to address the assessment task. If the use of generative AI such as ChatGPT is detected, it will be regarded as serious academic misconduct and subject to the standard penalties, which may include 00FL, suspension and exclusion.

Grading Basis

Standard

Requirements to pass course

Overall passing mark is set at 50%. Students are not required to pass any one particular assessment item.

Course Schedule

Attendance Requirements

Not Applicable - as no class attendance is required

Course Resources

Course Evaluation and Development

One of the key priorities in the 2025 Strategy for UNSW is a drive for academic excellence in education. One of the ways of determining how well UNSW is progressing towards this goal is by listening to our own students. Students will be asked to complete the myExperience survey towards the end of this course.

Students can also provide feedback during the semester via: direct contact with the lecturer, the "On-going Student Feedback" link in Moodle, Student-Staff Liaison Committee meetings in schools, informal feedback conducted by staff, and focus groups. Student opinions really do make a difference. Refer to the Moodle site for this course to see how the feedback from previous students has contributed to the course development.

Important note: Students are reminded that any feedback provided should be constructive and professional and that they are bound by the Student Code of Conduct Policy

https://www.gs.unsw.edu.au/policy/documents/studentcodepolicy.pdf

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Melrose B rown		Room 222, Building 16	+61 2 5114 5129	You are welcome to seek consultation during normal working hours. Please email first to make an appointment for an inperson, or virtual meeting. Appointments outside of normal working hours can be made in special circumstances. The email subject line shou	No	Yes
Postgraduate coordinator	George B owden		Room 212, Building 16	+61 2 5114 5285	You are welcome to seek consultation during normal working hours. Please email first to make an appointment for an inperson, or virtual meeting. Appointments outside of normal working hours can be made in special circumstances. The email subject line shou	No	No