# Final Year Project -Introduction

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Course coordinator
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## Course Coordinator



#### Dr Behnam Akhavan

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**Student consultation**: Tuesday 2 – 3 pm; Or email me to schedule a time

# What is a Final Year Project (FYP)?



"The aims of this course are to provide a vehicle for students to consolidate, enhance and demonstrate the knowledge and skills gained from coursework studies ..."



Learning Outcomes

- On successful completion of this course, students will be able to:
  - Demonstrate a sound technical knowledge of their selected project topic.
  - Undertake problem identification, formulation and solution.
  - **Design engineering solutions** to complex problems utilising a systematic approach.
  - Conduct an **engineering project**.
  - Communicate with engineers and the community at large in written and oral forms.
  - Demonstrate the **knowledge**, **skills** and **attitudes** of a **professional engineer**.

#### Course Content

- Perform a literature search to review current knowledge and developments in the chosen technical area.
- Undertake detailed technical work in the chosen area using one or more of:
  - Theoretical studies
  - Experimental studies
  - Computer simulations
  - Hardware construction
- Produce progress reports or maintain a professional journal to establish work completed, and to schedule additional work within the time frame specified for the project.
- Deliver a seminar on the general area of work being undertaken and specific contributions to that field.
- Prepare an interim report describing the work undertaken and results obtained so far.
- Present the work in a forum involving poster presentations and demonstrations of operational hardware and software.
- Prepare a final report (or thesis) detailing the work completed during the project.

#### **Professional Journal**

 "A professional journal is to be kept by every student. Professional notebook or diary in which is recorded all activities, sketches, rough workings, proofs and notes made during discussions with supervisors, colleagues and technical staff."





Supervisor

- A supervisor supervises your project. They are not going to do your project.
- Meet regularly (suggest weekly or biweekly) with your supervisor.
- Be pro-active, come with an agenda
  - What have you done?
  - Are there any questions / problems?
  - What do you plan to do next?



## Workload

- 10 units equates to 120 140 hours work
- 30 units equates to approximately **400 hrs** work
- Work consistently ... You cannot complete a final year project in week 13



# Laboratory and Workshop Support

- Laboratory Manager
   Tom Rabbit (EC- G10)
- Workshop Manager
   Lachlan Barrell (EC-111)

OH&S
Bench allocation
Equipment

## Enrolment

	Part A ELEC4840A / ELEC6840A / MENG4800A	Part B ELEC4840B / ELEC6840B / MENG4800B	Combined version Part A + Part B (ELEC4840)	ELEC6840 MPE Thesis
Unit	10	20	30	20
Semester	Two semesters: Part A Part B	Two semesters: Part A Part B	One semester	One semester
Assessment items	<ul> <li>3 items:</li> <li>*WH&amp;S requirements</li> <li>*Interim report</li> <li>*Seminar presentation</li> </ul>	<ul><li>2 items:</li><li>Final report</li><li>Demonstration (Open day)</li></ul>	<ul> <li>4 items:</li> <li>*WH&amp;S requirements</li> <li>*Seminar presentation</li> <li>Final report</li> <li>Demonstration (Open day)</li> </ul>	<ul> <li>3 items:</li> <li>*WH&amp;S requirements</li> <li>Thesis</li> <li>Demonstration (Open day)</li> </ul>

• Check that you are enrolled in the correct course on the University system.

# Project Allocations



ELEC4840B / ELEC6840B

MENG4800B

You are continuing with the same project / supervisor from previous semester.



ELEC4840 / ELEC4840A ELEC6840 / ELEC6840A MENG4800A

- Available on Canvas (under the **Project Allocations** tab).
- Contact your supervisor and discuss your project ASAP.



	Part A ELEC4840A, ELEC6840A MENG4800A	Part B ELEC4840B, ELEC6840B, MENG4800B	Combined version Part A + Part B (ELEC4840)	ELEC6840 MPE Thesis
Assessment items	3 items:  • *WH&S requirements  • Lab induction  • Lab access quiz  • Risk Assessment  • *Interim report  • *Seminar presentation	<ul><li>2 items:</li><li>Final report</li><li>Demonstration (Open day)</li></ul>	4 items:      *WH&S requirements     Lab induction     Lab access quiz     Risk Assessment      *Seminar presentation     Final report     Demonstration (Open day)	3 items:  *WH&S requirements  Lab induction  Lab access quiz  Risk Assessment  Thesis  Demonstration (Open day)

#### \* Compulsory Course Components

- Satisfactory completion of WH&S requirements: Lab induction, Lab access quiz, Risk assessment.
- Interim report must be passed (mark ≥ 50%) to progress to Part B.
- You must present an appropriate level seminar (mark  $\geq$  50%) to progress to Part B.
- Refer to the marking forms on Canvas under the "Course Resources" tab for assessment criteria.



	Part A ELEC4840A, ELEC6840A MENG4800A	Part B ELEC4840B, ELEC6840B, MENG4800B	Combined version Part A + Part B (ELEC4840)	ELEC6840 MPE Thesis
Assessment items	3 items:  *WH&S requirements  Lab induction,  Lab access quiz  Risk Assessment  *Interim report  *Seminar presentation	<ul><li>2 items:</li><li>Final report</li><li>Demonstration (Open day)</li></ul>	4 items:      *WH&S requirements     Lab induction     Lab access quiz     Risk Assessment      *Seminar presentation     Final report     Demonstration (Open day)	3 items:      *WH&S requirements     Lab induction     Lab access quiz     Risk Assessment  Thesis  Demonstration (Open day)

#### Deadlines (ELEC4840A / ELEC6840A, MENG4800A)

- \*Lab induction and lab access quiz: 5 pm Friday, Week 3.
- \*Risk assessment: 5 pm Friday, Week 4 (Submission via Canvas)
- \*Interim Report: 5 pm Friday, Week 13
- \*Seminar: TBA (Within the exam period).
- See Assessment Overview on Canvas

\*Have to pass Interim Report and Seminar to proceed to Part B.

Grade will be recorded as NA (Not Awarded).



	Part A ELEC4840A, ELEC6840A MENG4800A	Part B ELEC4840B, ELEC6840B, MENG4800B	Combined version Part A + Part B (ELEC4840)	ELEC6840 MPE Thesis
Assessment items	3 items:  • *WH&S requirements  • *Interim report  • *Seminar presentation	<ul><li>2 items:</li><li>Final report</li><li>Demonstration (Open day)</li></ul>	4 items:      *WH&S requirements     *Seminar presentation     Final report     Demonstration (Open day)	<ul> <li>*WH&amp;S requirements</li> <li>Thesis</li> <li>Demonstration (Open day)</li> </ul>

#### Deadlines (ELEC4840B / ELEC6840B, MENG4800B)

- Final Report (50%): 5 pm Friday, Week 13
- Project Demo (50%): TBA (Within the exam period)
- See Assessment Overview on Canvas

Check the marking criteria.

Marking forms can be
downloaded from Canvas.

Final Grade will be recorded as HD, D, C, or FF.



	Part A ELEC4840A, ELEC6840A MENG4800A	Part B ELEC4840B, ELEC6840B, MENG4800B	Combined version Part A + Part B (ELEC4840)	ELEC6840 MPE Thesis
Assessment items	3 items:  • *WH&S requirements  • *Interim report  • *Seminar presentation	<ul><li>2 items:</li><li>Final report</li><li>Demonstration (Open day)</li></ul>	4 items:  • *WH&S requirements  • Lab induction • Lab access quiz • Risk Assessment • *Seminar presentation • Final report • Demonstration (Open day)	<ul> <li>3 items:</li> <li>*WH&amp;S requirements</li> <li>Thesis</li> <li>Demonstration (Open day)</li> </ul>

#### Deadlines (ELEC4840)

- \*Lab induction and lab access quiz: 5 pm Friday, Week 3.
- \*Risk assessment: 5 pm Friday, Week 4 (Submission via Canvas)
- \*Seminar: TBA (on Canvas)
- Final Report (50%): 5 pm Friday, Week 13
- Project Demo (50%): TBA (Within the exam period)
- See Assessment Overview on Canvas

One semester.

Final Grade will be recorded as HD, D, C, or FF



	Part A ELEC4840A / ELEC6840A	Part B ELEC4840B, ELEC6840B, MENG4800B	Combined version Part A + Part B (ELEC4840)	ELEC6840 MPE Thesis
Assessment items	3 items:  • *WH&S requirements  • *Interim report  • *Seminar presentation	<ul><li>2 items:</li><li>Final report</li><li>Demonstration (Open day)</li></ul>	<ul> <li>4 items:</li> <li>*WH&amp;S requirements</li> <li>*Seminar presentation</li> <li>Final report</li> <li>Demonstration (Open day)</li> </ul>	3 items:  • *WH&S requirements  • Lab induction • Lab access quiz • Risk Assessment • Thesis • Demonstration (Open day)

#### Deadlines (ELEC6840)

- \*Lab induction and lab access quiz: 5 pm Friday, Week 3.
- \*Risk assessment: 5 pm Friday, Week 4 (Submission via Canvas)
- Thesis (50%): 5 pm, Friday Week 13
- Project Demo (50%): TBA (Within the exam period)
- See Assessment Overview on Canvas

One semester.

Final Grade will be recorded as HD, D, C, or FF

# Grades

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic ability; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Very Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic ability; reasonable development of skills*; and achievement of all assessment objectives.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic ability; satisfactory development of skills*; and achievement of most assessment objectives.
0-49	Fail (FF)	Failure to satisfactorily achieve assessment objectives or compulsory course requirements. A fail grade may also be awarded following disciplinary action.

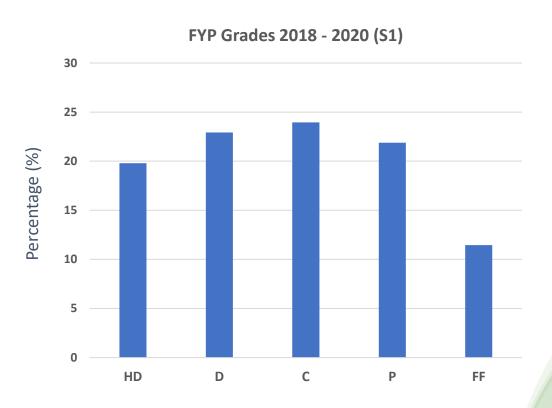
## **Honours**

• The current requirements for determining honours are:

WAM	Class Awarded
77 – 100	Class I
72 – 76	Class II Division 1
67 – 71	Class II Division 2
< 67	Ungraded

- WAM calculation does not include 1000 level courses.
- 4000 level and above courses weighed at 4.

## Historical grade Distribution



## How To Fail Your FYP?

1

Don't meet with your supervisor

2

Don't work regularly on your project

3

Don't set clear goals and plans

4

Don't write as you go

5

Leave everything to Week 13

# **Seminar Lectures**

	Topic	Week#	Presenter
1	Introduction	1	Behnam Akhavan
2	Safety (OH&S)	2	Tom Rabbit
3	Search strategies and finding information for FYPs	4	Nicole Gammie
4	Reference and information management	5	Nicole Gammie
5	Guest Lecturer from Industry (ResTech)	ТВА	Pierre Gouhier
6	Advice on Seminar, Report, Final Demo	10	Behnam Akhavan

## Reimbursement



- Each project is allocated with a budget \$300.
- Do not have a spending spree over \$300 without pre-approval.
- If claim reimbursement, you have to return the purchased goods / prototypes to the School.
- Procedures for reimbursement:
  - Keep your receipts.
  - Fill in the reimbursement form with your supervisor's signature.
  - Follow the instructions in the reimbursement form, go to the online UoN website below, fill in the online form and also upload the reimbursement form.
    - https://www.newcastle.edu.au/current-staff/workinghere/finance/claiming-reimbursements-andrefunds/student-visitor-and-conjoint-expensereimbursement-form
- Reimbursement form is available on Canvas under the "Course Materials" tab for download.
- Last day to submit the reimbursement form by the end of the examination period.
- Details available on Canvas under the "Project Reimbursement" tab



# **Initial Tasks**

- Contact your supervisor and arrange a regular meeting time.
- Complete your lab induction and access quiz (due Friday Week 3).
- Define your project scope and a project plan.
  - This may be obvious or may require some initial background reading.
  - Think where do you want examiners to give you marks.
  - Look at the marking criteria.
  - What is the sensible order for tasks.
- Complete risk assessment (due Friday Week 4)
- Write your report as you go.



Good luck with your FYPs!