



**UNSW**  
AUSTRALIA

1 2016

Never Stand Still

Engineering

Mechanical and Manufacturing Engineering

**MMAN9002**

**PROJECT B**

**MASTER OF ENGINEERING SCIENCE**

## **Cb**

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All academic staff together with some senior engineers from industry act as supervisors to the students undertaking PG thesis work. Support is also provided by the workshop and laboratory staff.

**Ca** **h**

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It is recommended you email to make a specific appointment if you need to discuss any important issues, particularly if you want to discuss extensions, supervisor issues, etc. Always consult the course Moodle first in case your questions have already been answered, or in the event that others may benefit from reading what you are asking and the response.

**Ca** **h**

Contact Kane directly, cc'ing Danielle, if you have issues relating to your enrolment, progress, or other administrative queries of a technical nature.

Mr Kane Murdoch

For a standard 24 UoC in the semester, this means 600 hours, spread over an effective 15 weeks of the semester (thirteen weeks plus stuvac plus one effective exam week), or 40 hours per week, for an average student aiming for a credit grade. Various factors, such as your own ability, your target grade, etc., will influence the time needed in your case.

Some students spend much more than 40 h/w, but you should aim for not less than 40 h/w on coursework for 24 UoC.

This means that you should aim to spend not less than about 10 h/w on this course, including consultation with supervisor and workshop/laboratory staff and library/internet search. However, most students spend more time on their thesis work.

### **ConH**

There are no set contact hours for this course.

### **Sp                    hce**

PG Thesis is usually completed in two consecutive semesters during the last academic year. This is the only course where the students have complete freedom to work on his/her chosen thesis projects from the initiation to the end – the project contains a large amount of original research and/or novel design work or analysis. It is not the responsibility of the supervisor to tell the student what to do, nor should it be assumed that the supervisor is an expert in all areas of engineering. They are there to offer guidance and advice, as are laboratory staff, workshop staff, and others in the school that may have expertise in the area of your project. The successful execution of the project is solely the responsibility of the student.

### **Aib                    hce**

Thesis B is to be taken in the last semester required for the completion of all requirements for the award of the degree, i.e. in the semester immediately following that in which MMAN9001 Project A is taken. This course, together with MMAN9001 Project A, requires each student to demonstrate managerial, technical and professional skills in planning, executing and reporting on an approved engineering project within a stipulated time limit. Each student is also required to report on their project work at a thesis conference. The project, on which each student works, will be a direct continuation of the project on which that student worked in MMAN9001 Project A. Each student is guided by a supervisor, but successfully completing the project, writing the thesis and submitting two hard copies together uploading a PDF file by specified deadlines are the sole responsibility of each student.

### **Lb                    pfa                    f**

The laboratories are the responsibility of the staff-in-charge and you must operate within the accepted practices of the laboratory concerned. You should not expect laboratory staff to





Margins must be not less than 30 mm at the left and right edge (before binding), 30 mm at the upper edge, and 20 mm at the lower edge.

The thesis must include a title sheet headed:

UNSW AUSTRALIA

SCHOOL OF MECHANICAL AND MANUFACTURING ENGINEERING

(The above are not to be abbreviated. Do not insert the UNSW crest — this is not an official UNSW publication, and so is not entitled to use the crest.)

Title of Thesis

Name of Author

Student ID

Bachelor of Engineering (or other degree for which the thesis is submitted)

<b>Lig Otæn</b>	<b>EA Stg el Cpe</b>
1. Develop a design or a process or investigate a hypothesis following industry and professional engineering standards.	PE2.1, PE2.2, PE2.3, PE2.4
2. Critically reflect on a specialist body of knowledge related to their thesis topic.	PE1.3
3. Apply scientific and engineering methods to solve an engineering problem.	PE2.1
4. Analyse data objectively using quantitative and mathematical methods.	PE1.2, PE2.1, P2.2
5. Demonstrate oral and written communication in professional and lay domains.	PE3.2

### 3. **h**

There is no formal teaching but the students learn from both internal and external sources. The supervisor, other academics and laboratory/workshop staff are the internal sources, whereas the Library, internet and industry mentors are the external sources.

### 4. **h**

There are no set lectures for this course.

### 5. **h**

The Thesis B grade will be made up from

<b>Aæn</b>	<b>Wg ht</b>	<b>Lg tæ n el</b>
Thesis Conference	10%	1 - 5
Thesis Conference extended abstract / poster	5%	1 – 5
Thesis Report	85%	1 - 5

For calculation of Honours, Thesis A is worth 25% and Thesis B is worth 75% of the total 12 unit course credit.

It is your responsibility to keep your project details (supervision, title, working abstract) up to date in the “your project details” section of Moodle.

**Thesis B grade will be made up from**



Please submit your 2 hard copies in person to the Student Services Office (Ainsworth, Level 1), and your PDF copy through the Moodle Thesis B submission portal.

If you Fail in Thesis B, you have two options:

re-enrol for Thesis A & B again with a new project and supervisor

re-enrol for Thesis B again with the same project (needs consent of an appropriate supervisor & student)

### **Late**

In all cases, applications for late submission can be applied for before the due date. This is at the discretion of the thesis coordinator, but should only be granted in exceptional circumstances. As per normal, students can also apply through myUNSW for special consideration.

For all other components beside thesis document – zero (0) mark is awarded

For thesis document – 5 marks off the thesis for every day late.

Any thesis not turned in within 6 weeks after the deadline will be finalised at zero (0) marks.

### **Disputing**

Thesis marks will be provided by the two assessors independently, without collusion or knowledge of the other mark.

For any mark difference less than or equal to 10 marks, the unweighted average.

For any mark difference of 11-15 marks, the Thesis Coordinator discusses with the

15 marks (about which they gave the 5 mark) and assists the (sworn) (to 0.00 (0) 8.9 (1) 16.5 (1) B

## 7. Feedback and Improvements

Feedback on the course is gathered periodically using various means, including the Course and Teaching Evaluation and Improvement (CATEI) process, informal discussion in the final class for the course, and the School's Student/Staff meetings. Your feedback is taken seriously, and continual improvements are made to the course based, in part, on such feedback.

In this course, recent improvements resulting from student feedback include revised marking schemes, Faculty-wide marking guidelines and Faculty templates.

## 8. Academic Integrity

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. *Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.*

Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. UNSW has produced a website with a wealth of resources to support students to understand and avoid plagiarism: <https://student.unsw.edu.au/plagiarism> The Learning Centre assists students with understanding academic integrity and how not to plagiarise. They also hold workshops and can help students one-on-one.

You are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow



	<b>Programme Objectives</b>
<b>PE1: Knowledge</b>	PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals
	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing
	PE1.3 In-depth understanding of specialist bodies of knowledge
	PE1.4 Discernment of knowledge development and research directions
	PE1.5 Knowledge of engineering design practice
	PE1.6 Understanding of scope, principles, norms, accountabilities of sustainable engineering practice
<b>PE2: Engineering</b>	PE2.1 Application of established engineering methods to complex problem solving
	PE2.2 Fluent application of engineering techniques, tools and resources
	PE2.3 Application of systematic engineering synthesis and design processes
	PE2.4 Application of systematic approaches to the conduct and management of engineering projects
<b>PE3: Professional</b>	PE3.1 Ethical conduct and professional accountability
	PE3.2 Effective oral and written communication (professional and lay domains)
	PE3.3 Creative, innovative and pro-active demeanour
	PE3.4 Professional use and management of information
	PE3.5 Orderly management of self, and professional conduct
	PE3.6 Effective team membership and team leadership