



UNSW Course Outline

MANF6860 Strategic Manufacturing Management - 2024

Published on the 14 Feb 2024

General Course Information

Course Code : MANF6860

Year : 2024

Term : Term 1

Teaching Period : T1

Is a multi-term course? : No

Faculty : Faculty of Engineering

Academic Unit : School of Mechanical and Manufacturing Engineering

Delivery Mode : In Person

Delivery Format : Standard

Delivery Location : Kensington

Campus : Sydney

Study Level : Undergraduate, Postgraduate

Units of Credit : 6

Useful Links

[Handbook Class Timetable](#)

Course Details & Outcomes

Course Description

This course focuses on the links between both manufacturing strategies as well as operational performance and effective supply chain strategies for companies that operate globally with emphasis on how to plan and integrate supply chain components into a coordinated system. It

covers thoroughly the fundamentals of strategic manufacturing management by introducing students to the key concepts of global supply chain and logistics management. Accordingly, the course introduces and utilizes key issues such as risk pooling and inventory placement, international capacity planning, global manufacturing, integrated planning and collaboration, lean production systems, managerial accounting system in manufacturing applications, financial strategy and information sharing in a network consisting of multi- suppliers, manufacturers, distributors, and customers. Several of these factors are evaluated so that the overall performance of the chain is optimised.

Course Aims

Students examine the primary importance of manufacturing, operations and accounting in the formulation and implementation of business and corporate strategy in companies. Using case studies, the course looks at strategic manufacturing decisions and how they influence the achievement of the firm's goals specifically at the role decision-makers of operations play in integrating those decisions with overall business and corporate strategies. Students develop a managerial point of view and gain understanding in "state of the art" strategic management thinking. The course is designed to produce graduates with the ability to use quantitative and analytical techniques to add value in a business environment. This involves building models of business problems and analysing business data. These analytical skills are sought after in all areas of business, for example in operations, in marketing and in finance.

Course Learning Outcomes

Course Learning Outcomes
CL01 : Understand the nature of manufacturing strategy and its relation to corporate strategy
CL02 : Develop a systematic plan for strategy implementation
CL03 : Understand the different types of globalised manufacturing and their implications
CL04 : Appreciate the importance of linking performance monitoring to manufacturing strategy

Course Learning Outcomes	Assessment Item
CL01 : Understand the nature of manufacturing strategy and its relation to corporate strategy	<ul style="list-style-type: none">• Assignment 1• Assignment 2• Group Assignment
CL02 : Develop a systematic plan for strategy implementation	<ul style="list-style-type: none">• Assignment 1• Assignment 2• Group Assignment
CL03 : Understand the different types of globalised manufacturing and their implications	<ul style="list-style-type: none">• Assignment 1• Assignment 2• Group Assignment
CL04 : Appreciate the importance of linking performance monitoring to manufacturing strategy	<ul style="list-style-type: none">• Assignment 1• Assignment 2• Group Assignment

Learning and Teaching Technologies

Moodle - Learning Management System | Microsoft Teams

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Assignment 1 Assessment Format: Individual	30%	Start Date: 26/02/2024 12:00 AM Due Date: 11/03/2024 12:00 AM
Assignment 2 Assessment Format: Individual	30%	Start Date: 18/03/2024 12:00 AM Due Date: 01/04/2024 12:00 AM
Group Assignment Assessment Format: Group	40%	Start Date: 01/04/2024 12:00 AM Due Date: 22/04/2024 12:00 AM

Assessment Details

Assignment 1

Assessment Overview

This is an individual assignment that allows students to demonstrate applied knowledge by using Porter's model for a given industry case covered in Units 1-4.

A detailed description of the assignment and a marking rubric will be provided. Written feedback will be provided on the assignment paper.

Course Learning Outcomes

- CL01 : Understand the nature of manufacturing strategy and its relation to corporate strategy
- CL02 : Develop a systematic plan for strategy implementation
- CL03 : Understand the different types of globalised manufacturing and their implications
- CL04 : Appreciate the importance of linking performance monitoring to manufacturing strategy

Submission notes

This is an individual assignment that allows students to demonstrate applied knowledge by using Porter's model for a given industry case covered in Units 1-4.

Assessment information

A detailed description of the assignment and a marking rubric will be uploaded on Moodle.

Assignment submission Turnitin type

Not Applicable

Assignment 2

Assessment Overview

Assessment length: Maximum 4000 words

This is an individual assignment that allows students to demonstrate applied knowledge in the light of the relevant material covered in Units 5-8 (specifically, core competency, capacity strategy, and the experience curve).

A detailed description of the assignment and a marking rubric will be provided. Written feedback will be provided on the assignment paper.

Course Learning Outcomes

- CL01 : Understand the nature of manufacturing strategy and its relation to corporate strategy

- CLO2 : Develop a systematic plan for strategy implementation
- CLO3 : Understand the different types of globalised manufacturing and their implications
- CLO4 : Appreciate the importance of linking performance monitoring to manufacturing strategy

Assessment Length

Maximum 4000 words

Assessment information

A detailed description of the assignment and a marking rubric will be uploaded on Moodle.

Assignment submission Turnitin type

Not Applicable

Group Assignment

Assessment Overview

This is a group assignment that allows students to demonstrate applied knowledge in the light of entire material covered in Units 1-10 in order to develop a strategic plan. This will be worth 30% and remaining 10% will be given for presentation of findings and contribution to the group assignment. Written will be feedback provided on the assignment paper.

Course Learning Outcomes

- CLO1 : Understand the nature of manufacturing strategy and its relation to corporate strategy
- CLO2 : Develop a systematic plan for strategy implementation
- CLO3 : Understand the different types of globalised manufacturing and their implications
- CLO4 : Appreciate the importance of linking performance monitoring to manufacturing strategy

Assessment information

A detailed description of the assignment and a marking rubric will be uploaded on Moodle.

Assignment submission Turnitin type

Not Applicable

General Assessment Information

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 0 : 5 February - 11 February	Other	Students should read the course outline and the course requirements to prepare themselves for the term. It is strongly recommended to have access to the reading materials and lecture notes
Week 1 : 12 February - 18 February	Lecture	The nature and role of manufacturing strategy
Week 2 : 19 February - 25 February	Lecture	Porter's Model and the Value Chain
Week 3 : 26 February - 3 March	Lecture	Competitive Positioning
Week 4 : 4 March - 10 March	Lecture	Product Technology and Process Choice
Week 5 : 11 March - 17 March	Lecture	Process Positioning and Core Competencies
Week 6 : 18 March - 24 March	Lecture	Capacity Strategies
Week 7 : 25 March - 31 March	Lecture	Focused Manufacturing
Week 8 : 1 April - 7 April	Lecture	Experience Curve, Efficiency and Productivity
Week 9 : 8 April - 14 April	Lecture	Global Manufacturing and the Extended Enterprise
Week 10 : 15 April - 21 April	Lecture	Strategy Formulation, Implementation, and Linking Performance to Manufacturing Strategy

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Course Resources

Prescribed Resources

- Lecture slides and reading handouts.

Recommended Resources

Relevant readings are provided at the end of each unit on Moodle. However, further readings can be found in journals such as Harvard Business Review, Long Range Planning, Management Decision, Management Review, Journal of Management Studies, Californian Management Review, Sloan Management Review. These can be accessed via the UNSW Library <https://www.library.unsw.edu.au/>

UNSW Library website: <https://www.library.unsw.edu.au/>

Moodle: <https://moodle.telt.unsw.edu.au/login/index.php>

Course Evaluation and Development

Feedback on the course is gathered periodically using various means, including the UNSW myExperience 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 changing the assessment structure, designing new assessment criteria and rubric. In addition, marking will be done by the lecturer.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Sami Kara		Ainsworth Building, 301A			No	Yes
Lecturer	Bernard Kornfeld		Ainsworth Building, 301	407600268		No	No

Other Useful Information

Academic Information

I. Special consideration and supplementary assessment

If you have experienced an illness or misadventure beyond your control that will interfere with your assessment performance, you are eligible to apply for Special Consideration prior to, or within 3 working days of, submitting an assessment or sitting an exam.

Please note that UNSW has a Fit to Sit rule, which means that if you sit an exam, you are declaring yourself fit enough to do so and cannot later apply for Special Consideration.

For details of applying for Special Consideration and conditions for the award of supplementary assessment, please see the information on UNSW's [Special Consideration page](#).

II. Administrative matters and links

All students are expected to read and be familiar with UNSW guidelines and policies. In particular, students should be familiar with the following:

- [Attendance](#)
- [UNSW Email Address](#)
- [Special Consideration](#)
- [Exams](#)
- [Approved Calculators](#)

- [Academic Honesty and Plagiarism](#)
- [Equitable Learning Services](#)

III. Equity and diversity

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course convener prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equitable Learning Services. Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

IV. Professional Outcomes and Program Design

Students are able to review the relevant professional outcomes and program designs for their streams by going to the following link: <https://www.unsw.edu.au/engineering/student-life/student-resources/program-design>.

Note: This course outline sets out the description of classes at the date the Course Outline is published. The nature of classes may change during the Term after the Course Outline is published. Moodle or your primary learning management system (LMS) should be consulted for the up-to-date class descriptions. If there is any inconsistency in the description of activities between the University timetable and the Course Outline/Moodle/LMS, the description in the Course Outline/Moodle/LMS applies.

Academic Honesty and Plagiarism

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, visit: 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 sufficient time for research, drafting and the proper referencing of sources in preparing all assessment tasks.

Repeated plagiarism (even in first year), plagiarism after first year, or serious instances, may also be investigated under the Student Misconduct Procedures. The penalties under the procedures can include a reduction in marks, failing a course or for the most serious matters (like plagiarism in an honours thesis or contract cheating) even suspension from the university. The Student Misconduct Procedures are available here:

www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf

Submission of Assessment Tasks

Work submitted late without an approved extension by the course coordinator or delegated authority is subject to a late penalty of five percent (5%) of the maximum mark possible for that assessment item, per calendar day.

The late penalty is applied per calendar day (including weekends and public holidays) that the assessment is overdue. There is no pro-rata of the late penalty for submissions made part way through a day. This is for all assessments where a penalty applies.

Work submitted after five days (120 hours) will not be accepted and a mark of zero will be awarded for that assessment item.

For some assessment items, a late penalty may not be appropriate. These will be clearly indicated in the course outline, and such assessments will receive a mark of zero if not completed by the specified date. Examples include:

- Weekly online tests or laboratory work worth a small proportion of the subject mark;
- Exams, peer feedback and team evaluation surveys;
- Online quizzes where answers are released to students on completion;
- Professional assessment tasks, where the intention is to create an authentic assessment that has an absolute submission date; and,
- Pass/Fail assessment tasks.

Faculty-specific Information

[Engineering Student Support Services](#) – The Nucleus - enrolment, progression checks, clash

requests, course issues or program-related queries

[Engineering Industrial Training](#) – Industrial training questions

[UNSW Study Abroad](#) – study abroad student enquiries (for inbound students)

[UNSW Exchange](#) – student exchange enquiries (for inbound students)

[UNSW Future Students](#) – potential student enquiries e.g. admissions, fees, programs, credit transfer

Phone

(+61 2) 9385 8500 – Nucleus Student Hub

(+61 2) 9385 7661 – Engineering Industrial Training

(+61 2) 9385 3179 – UNSW Study Abroad and UNSW Exchange (for inbound students)

School-specific Information

Short Extensions

Short extensions are not currently applicable to Mechanical and Manufacturing Engineering Courses.

Review of Results

The purpose of a review of results is if there was a marking error. Review of results is for when you have cause to believe that there is a marking error. Review of Results cannot be used to get feedback. If you would like feedback for assessments prior to the final exam, you are welcome to contact the course convenor directly. No feedback will be provided on final exams.

Use of AI

The use of AI is prohibited unless explicitly permitted by the course convenor. Please respect this and be aware that penalties will apply when unauthorised use is detected, such as through Turnitin. If the use of generative AI, such as ChatGPT, is allowed in a specific assessment, they must be properly credited, and your submissions must be substantially your own work.

School Contact Information

Location

UNSW Mechanical and Manufacturing Engineering

Ainsworth building J17, Level 1

Above Coffee on Campus

Hours

9:00–5:00pm, Monday–Friday*

*Closed on public holidays, School scheduled events and University Shutdown

Web

[School of Mechanical and Manufacturing Engineering](#)

[Engineering Student Support Services](#)

[Engineering Industrial Training](#)

[UNSW Study Abroad and Exchange](#) (for inbound students)

[UNSW Future Students](#)

Phone

(+61 2) 9385 8500 – Nucleus Student Hub

(+61 2) 9385 7661 – Engineering Industrial Training

(+61 2) 9385 3179 – UNSW Study Abroad and UNSW Exchange (for inbound students)

(+61 2) 9385 4097 – School Office**

**Please note that the School Office will not know when/if your course convenor is on campus or available

Email

[Engineering Student Support Services](#) – current student enquiries

- e.g. enrolment, progression, clash requests, course issues or program-related queries

[Engineering Industrial Training](#) – Industrial training questions

[UNSW Study Abroad](#) – study abroad student enquiries (for inbound students)

[UNSW Exchange](#) – student exchange enquiries (for inbound students)

[UNSW Future Students](#) – potential student enquiries

- e.g. admissions, fees, programs, credit transfer

[School Office](#) – School general office administration enquiries

- NB: the relevant teams listed above must be contacted for all student enquiries. The School will only be able to refer students on to the relevant team if contacted

Important Links

- [Student Wellbeing](#)
- [Urgent Mental Health & Support](#)
- [Equitable Learning Services](#)
- [Faculty Transitional Arrangements for COVID-19](#)
- [Moodle](#)
- [Lab Access](#)
- [Computing Facilities](#)
- [Student Resources](#)
- [Course Outlines](#)
- [Makerspace](#)
- [UNSW Timetable](#)
- [UNSW Handbook](#)