

COURSE DELIVERY PLAN 2024

Bachelor of Engineering (Honours) (Mechanical Engineering)

COURSE CODE: NHEM

CAMPUS	Footscray Park (FP)
COLLEGE	College of Sport, Health and Engineering
STUDY MODE	Full Time or Part Time
DURATION	4 years Full Time or Part Time equivalent
FEE TYPE	For information on course fees, refer to http://vu.edu.au/fees
APPLICATION METHOD	VTAC - https://vtac.edu.au Direct Application - https://gotovu.custhelp.com/app/landing
TIMETABLE	https://vu.edu.au/timetables
COURSE REQUIREMENTS	<p>To attain the Bachelor of Engineering (Honours) (Mechanical Engineering), students will be required to complete 384 credit points, consisting of:</p> <ul style="list-style-type: none">• 96 credit points of First Year Core studies;• 288 credit points of Core Mechanical Engineering studies. <p>Students are required to produce documented evidence of the completion of 12 weeks professional experience.</p> <p>Accreditation: This program is accredited by Engineers Australia and graduates are eligible to apply for graduate membership.</p> <p>First Class Honours: To be eligible for completion with First Class Honours, students must achieve:</p> <ul style="list-style-type: none">• A minimum weighted average of 60% over year levels 1 to 3;• A minimum weighted average of 80% in year level 4;• An average HD grade for the final year units, NEF4101 Research Project 1 and NEF4201 Research Project 2
FURTHER INFORMATION	Unit and course information is available from the University course search site at http://vu.edu.au/course-search or go to https://askvu.vu.edu.au or Phone VUHQ on 03 9919 6100
COURSE CHAIR	Matthew Lamb
COURSE ADVICE	AskCUA



VICTORIA UNIVERSITY

For further course information phone 1300 VICUNI/vu.edu.au
Victoria University CRICOS Provider No. 00124K (Melbourne), 02475D (Sydney and Brisbane)

COURSE DELIVERY PLAN 2024

Note: Students are required to enrol in all units for semester 1 and 2, and are not permitted to enrol in more than 48 credit points per semester as a full-time load.

Core/Elective Core (a unit that must be completed) & Elective (you have some choice in what you select).

Prerequisites A number of units within the degree have 'prerequisites'. These prerequisites must be met before enrolment in the unit is permitted. Generally these prerequisites require the successful completion of a unit or units taken at an earlier stage in the course. Students should pay particular attention to these prerequisite requirements as failure to meet these can seriously hinder progression through the course.

Date of Publication: This information is current at the publication date October 24, 2023. It is provided as information only and does not form part of a contract between any person and Victoria University.

Winter Unit Offerings:

For Winter (July 2024) please refer to the below link:

<https://www.vu.edu.au/current-students/your-course/timetables-calendars/summer-winter-school-study>

(You will need to wait for this information to be updated if it is still showing 2023)

Double Block only students in their final year or semester will be approved to Double Block and for extenuating circumstances. You are required to seek approval via AskCUA.



VICTORIA UNIVERSITY

For further course information phone 1300 VICUNI/vu.edu.au
Victoria University CRICOS Provider No. 00124K (Melbourne), 02475D (Sydney and Brisbane)

COURSE DELIVERY PLAN 2024

YEAR 1

UNIT CODE	UNIT TITLE	UNIT TYPE	SEM	CREDIT POINTS	CAMPUS	PRE-REQUISITES
NEF1103	Engineering and the Community	Core	1B1	12	FP	
NEF1105	Mathematics for Engineering and Science	Core	1B2	12	FP	
NEF1102	Engineering Physics 1	Core	1B3	12	FP	
NEF1104	Problem Solving for Engineers	Core	1B4	12	FP	
NEF1201	Engineering Mathematics 2	Core	2B1	12	FP	NEF1105
NEF1204	Introduction to Engineering Design	Core	2B2	12	FP	
NEF1202	Engineering Physics 2	Core	2B3	12	FP	NEF1102
NEF1205	Engineering Fundamentals	Core	2B4	12	FP	

Students must adhere to the above sequence pattern when enrolling units. Pre-requisite units must also be adhered to when requesting a manual enrolment.

Students commencing in **Semester 2, Block 1 (2B1)** should enrol as per the below sequence pattern:

2B1 - NEF1103 - Engineering and the Community
2B2 - NEF1105 - Mathematics for Engineering and Science
2B3 - NEF1102 - Engineering Physics 1
2B4 - NEF1204 - Introduction to Engineering Design

In 2025, you enrol:

1B1 – NEF1201 - Engineering Mathematics 2
1B2 – NEF1202 - Engineering Physics 2
1B3 – NEF1205 - Engineering Fundamentals
1B4 – NEF1104 - Problem Solving for Engineers

Students commencing in **Semester 2, Block 3 (2B3)** should enrol as per the below sequence pattern:

NEF1102 - Engineering Physics 1
NEF1204 - Introduction to Engineering Design

In 2025, you enrol:

NEF1103 - Engineering and the Community
NEF1105 - Mathematics for Engineering and Science
NEF1204 - Introduction to Engineering Design
NEF1104 - Problem Solving for Engineers



VICTORIA UNIVERSITY

For further course information phone 1300 VICUNI/vu.edu.au
Victoria University CRICOS Provider No. 00124K (Melbourne), 02475D (Sydney and Brisbane)

COURSE DELIVERY PLAN 2024

YEAR 2

UNIT CODE	UNIT TITLE	UNIT TYPE	SEM	CREDIT POINTS	CAMPUS	PRE-REQUISITES
NEC2102	Solid Mechanics	Core	1B1, 2B1	12	FP	NEF1102, NEF1205, NEM1001
NEF2101	Fluid Mechanics 1	Core	1B2	12	FP	NEM1001
NEM2102	Introduction to Engineering Materials	Core	1B3	12	FP	
NEM2101	Mechanical Engineering Design	Core	1B4	12	FP	NEF1204, NEF1205, NEC2102
NEM2201	Thermodynamics 1	Core	WB1 Moved from 2B4	12	FP	NEF1202
NEM2104	Numerical Modelling of Mechanical Systems	Core	2B1	12	FP	NEF1201, NEF1104, NEF1205
NEM2202	Dynamics	Core	2B3	12	FP	NEF1202, NEM1001
NEF2251	Fundamentals of Electrical and Electronic Engineering	Core	2B4 Moved from 2B2	12	FP	NEF1205

YEAR 3

UNIT CODE	UNIT TITLE	UNIT TYPE	SEM	CREDIT POINTS	CAMPUS	PRE-REQUISITES
NEM3203	Stress Analysis	Core	1B1	12	FP	NEC2102, NEM2101
NEM3101	Engineering Analysis and Modelling	Core	1B2	12	FP	NEM2104
NEM3103	Thermodynamics 2	Core	1B3	12	FP	NEM2201
NEF3101	Project Management	Core	1B4	12	FP	Completion of at least 96 Credit Points
NEM3102	Design of Mechanical Systems	Core	2B1	12	FP	NEM2101, NEM3203
NEF3202	Research Methods	Core	2B2	12	FP	Completion of 192 credit points
NEM3201	Manufacturing Materials	Core	2B3	12	FP	NEM2102
NEM3202	Fluid Mechanics 2	Core	2B4	12	FP	NEF2101

Students must adhere to the above sequence pattern when enrolling units. Pre-requisite units must also be adhered to when requesting a manual enrolment.



VICTORIA UNIVERSITY

For further course information phone 1300 VICUNI/vu.edu.au
Victoria University CRICOS Provider No. 00124K (Melbourne), 02475D (Sydney and Brisbane)

COURSE DELIVERY PLAN 2024

YEAR 4

UNIT CODE	UNIT TITLE	UNIT TYPE	SEM	CREDIT POINTS	CAMPUS	PRE-REQUISITES
NEF4105	Professional Engineering Practice	Core	1B1	12	FP	Completion of 288 credit points
NEF4001	Computational Heat and Fluid Flows	Core	1B2	12	FP	NEF1201; and NEF1202; and 240 credit points
NEM4101	Mechanical Vibrations	Core	1B3	12	FP	NEM3101
NEF4101	Research Project 1	Core	1B4, 2B4	12	FP	NEF3202 and Completion of at least 288 credit points
NEF4206	Advanced Engineering Design	Core	WB1	12	FP	NEF3101, Completion of 288 credit points and NEM3102.
NEF4205	Sustainable Energy Systems	Core	2B2	12	FP	
NEM4202	Advanced Engineering Analysis	Core	2B3	12	FP	NEM3101
NEF4201	Research Project 2	Core	2B4	12	FP	NEF4101

Students must adhere to the above sequence pattern when enrolling units. Pre-requisite units must also be adhered to when requesting a manual enrolment.



VICTORIA UNIVERSITY

For further course information phone 1300 VICUNI/vu.edu.au
Victoria University CRICOS Provider No. 00124K (Melbourne), 02475D (Sydney and Brisbane)