## **Master of Engineering** COURSECODE: NMEN

CAMPUS	Footscray Park (FP)					
COLLEGE	College of Engineering and Science					
STUDY MODE	Full Time or Part Time					
DURATION	2 years Full Time or Part Time equivalent					
FEE TYPE	For information on course fees, refer to http://vu.edu.au/fees					
<b>APPLICATION METHOD</b>	Direct Application - https://gotovu.custhelp.com/app/landing					
TIMETABLE	vu.edu.au/timetables					
COURSE REQUIREMENTS	<ul> <li>To be eligible for the M aster of Engineering, students are required to complete 192 credit points in total, consisting of.</li> <li>48 credit points of Common Interdisciplinary studies;</li> <li>48 credit points of Research studies;</li> <li>96 credit points of Core Specialisation studies.</li> </ul>					
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					
COURSECHAIR	Horace King Nitin Muttil					
COURSEADVICE	AskVU https://askvu.vu.edu.au/app/askcua					

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 mustbe completed) & Elective (you have somechoice 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: 23/11/2022. It is provided as information only and does not form part of a contract between any person and Victoria University.



### **Common Interdisciplinary Units**

### Choose any 48 Credit Points (4 units) worth of any Common Interdisciplinary Units listed below

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UNIT CODE	UNIT TITLE	UNIT Type	SEM	C REDIT POINTS	CAMPUS	PRE-REQUISITES
EPM 5600	Principles of Project Management	Other	8WB1	12	ORT	
EPM 5610	Project Planning and Control	Other	8WB3	12	ORT	
EPM 5630	Project M anagementand People	Other	8WB3	12	FP	
EPM 5730	Project Stakeholder Management	Other	8WB4	12	FP	
EPM 5740	Project Risk M anagement	Other	8WB2	12	FP	
BM 06511	Strategic M anagement and Business Policy	Other	8WB1, 8WB2, 8WB3	12	CC	
BM 06506	Work and Organisation Systems	Other	8WB1, 8WB2, 8WB3, 8WB4, 8WB5	12	CC	
BM 06050	Art and Practice of Leadership	Other	8WB3	12	CC	
NIT5081	Fundamentals of Cyber Security	Other	8WB1	12	CC	
NIT5150	Advanced Object Oriented Programming	Other	8WB1, 8WB3	12	CC	
NIT5130	Database Analysis and Design	Other	8WB2	12	CC	
NIT5110	Networking Systems	Other	8WB2, 8WB4	12	CC	
NIT5083	Enterprise Security Management	Other		12	FP	
NIT5082	Cloud Security	Other	8WB3	12	CC	
			8WB1		ORT	

### **Research Studies**

#### You must complete 48 Credit Points (both units) worth of Research Thesis Units listed below

NEF6101	Research Thesis 1	Core	2	24	CC , FP	
			1		ORT	
NEF6102	Research Thesis 2	Core	2	24	CC	NEF6101
			1, 2		FP	



### **Core Specialisation Units**

Choose any 96 Credit Points (8 units) worth of any Core Specialisation Units listed, across any of the three Specialisation choices below

#### **Electrical Power NSPELE**

The Master of Engineering specialisation in Electrical Power comprises coursework, design exercises and research projects designed to enable students to acquire specialised skills and expertise in the field of Power Systems, specifically catering for the contemporary Smart electricity system. Making the electricity grid Smart compliant is a global priority. Upgrading electricity grids to 21st century standards requires incorporating power engineering with the latest digital communications systems and information technology areas (including sensors, electronics, controls and wireless devices). The course will enhance students' academic experience through work-related learning. Active learning, strong contextualisation and industry relevance characterise the design, development and delivery of resources and course materials.

UNIT CODE	UNIT TITLE	UNIT TYPE	SEM	C REDIT POINTS	CAMPUS	PRE-REQUISITES
NNM 6002	Electric Energy Systems Protection and Communication	Specialisation	8WB1	12	FP	
NNM 6003	Overhead and Underground Power Line Design	Specialisation	8WB2	12	FP	
NNM 6005	Alternate Energy Systems	Specialisation	8WB3	12	FP	
NNM 7005	Power Quality and Harmonics	Specialisation	8WB4	12	FP	

#### **Telecommunication NSPTEL**

The M aster of Engineering Telecommunications specialisation is supported by coursework, design exercises and research projects designed to enable the development of specialised skills and expertise in the telecommunications field, specifically wireless and network engineering. Graduates will meet employment demand in the telecommunications industry within Australia and overseas. Particular emphasis on wireless and networking within the course will provide job



opportunities in the areas of mobile broadband and fibre to the premises - the current growth drivers of the global telecommunications industry. Students in this specialisation will benefit from the College's strong research outputs, capabilities and facilities which were major contributors to the Australian Research Council's 2018 (Excellence in Research Australia) ERA=5(well above world standard) ranking in electrical engineering and contributed to the Engagement and Impact Outcomes rating of HIGH for Engineering impact.

UNIT CODE	UNIT TITLE	UNIT TYPE	SEM	C REDIT POINTS	CAMPUS	PRE-REQUISITES
NIT5110	Networking Systems	Specialisation	8WB2, 8WB4	12	CC	
NIT6120	M obile Applications	Specialisation	8WB4	12	CC	
NNT6501	Advanced Communication System Design 1	Specialisation		12	FP	
NNT6502	Advanced Communication System Design 2	Specialisation		12	FP	
NNT6510	Communication Theory	Specialisation		12	FP	
NNT6531	Radio Frequency Engineering	Specialisation		12	FP	
NNT6532	Satellite Network Design	Specialisation		12	FP	
NNT6542	M obile Network Design	Specialisation		12	FP	

#### **Civil Engineering NSPCIV**

This M asters builds upon the highly successful and industry renowned Bachelor of Engineering (Civil Engineering, Honours), NHEC. Full-time employment in NHEC (and EBDC) is 87% (GOS 2019) which is well above the national average of 82.4% for undergraduate Engineering degrees according to GOS 2019 data. The M asters in Civil Engineering will further fulfil the growing demand for professionals with advanced knowledge, problem solving skills and research ability in Civil Engineering. This M asters will be technical in nature and will be aimed at enhancing students' ability to gain employment in both the private and public sector in positions of planning, designing, constructing and management of essential community infrastructure. Graduates will have a wide range of career opportunities in a variety of organisations including: construction companies, transportation authorities and organisations, water utility providers, mining, as well as defence, local councils and other government departments.

UNIT CODE	UNIT TITLE	UNIT TYPE	SEM	C REDIT POINTS	CAMPUS	PRE-REQUISITES
NNC6001	Advanced Transportation Engineering	Specialisation	8WB1	12	FP	
NNC6002	Sustainable Design and Development	Specialisation	8WB3	12	FP	
NNC7001	Advanced Structures	Specialisation	8WB4	12	FP	
NNC7006	Soil Mechanics and Foundation Engineering	Specialisation	8WB2	12	FP	



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

