

ENGINEERING & SCIENCE POSTGRADUATE COURSE GUIDE

2021



DISHANA
Performance Based Building & Fire Codes



**VICTORIA
UNIVERSITY**

CONTENTS

COURSE AREAS

5
ENGINEERING

5
PROJECT
MANAGEMENT

6
BUILDING
& FIRE CODES

7
INFORMATION
TECHNOLOGY

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This course guide is relevant to Australian citizens, Australian permanent residents and New Zealand citizens. International students and New Zealand permanent residents should contact:
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Produced by Marketing and Communications.
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Design: OMG Creative.
Photography: Paul Philipson (cover, pg 6), Dulitha Sameera (pg 4), Sharon Walker On Location Photography (pg 7).

THE NEW WAY TO DO UNI

VU is leading an education revolution.

The New Way To Do Uni is creative, practical, informed and connected; so you get the most out of not only your education, but your whole study experience.

DESIGN YOUR CAREER SUCCESS

Whether you're entering the next stage – or a whole new phase – of your career, our postgraduate courses in **engineering, project management, fire safety** and **information technology** offer career-focused learning for the leaders of tomorrow.

Our partnerships with industry and world-class research both inform our curriculum and provide extensive networking opportunities; while our lecturers are professional experts, who are ready to share current practices with you.

We are all about practical learning that leads to real career outcomes, and supporting you throughout your study journey.

STUDY YOUR WAY

If you're busy juggling work or family commitments, we can help you achieve success on your terms.

You have the opportunity to apply based on your life experience, not just your academic qualifications – and in many cases, receive credits towards your course.

With flexible entry and exit points into our courses and the option of full and part-time studies, we make education accessible for everyone.

RESEARCH EXCELLENCE

VU offers world-class research opportunities. Our researchers work across multidisciplinary research focus areas to develop new technologies and solve real world problems.

Research is supported by our partnerships with industry and our research institutes and centres to provide beneficial outcomes to organisations, governments and communities. Eleven of our engineering and science research topic areas are ranked above or well above world standard (Excellence in Research for Australia 2018).

MASTERS BY RESEARCH

In addition to our postdoctoral research (PhDs), VU offers Masters by Research degrees across our Institute for Sustainable Industries & Liveable Cities, and Institute for Health & Sport. These vary in length from one to two years and have different prerequisites, outcomes and pathways depending on your individual goals. We offer supervision across all Engineering, Science & IT disciplines.

Visit the website to find out more and to contact us.
vu.edu.au/research



“ I WANTED TO DO MY MASTERS IN PROJECT MANAGEMENT BECAUSE OF ITS DEMAND IN THE CONSTRUCTION, ENGINEERING AND ENGINEERING INDUSTRIES. ”

“The lecturers always used current industry examples and our classes were at night, which suited many students who were already working.”

I'm now working as a Project Engineer in Regional Roads Victoria (VicRoads) – looking after the \$40m Princes Highway Upgrades Project Colac to SA Border, and the \$40m Green Triangle Project.”

Dulitha Sameera
Master of Project Management

TOP 2%
UNIVERSITIES
WORLDWIDE

GAIN A WORLD-CLASS EDUCATION FROM A GLOBAL LEADER

Based on our learning, teaching and research strengths, VU is now ranked in the top 2% of universities worldwide (*Times Higher Education World University Rankings*, 2019).

WISE
WOMEN IN SCIENCE
& ENGINEERING

CHALLENGING THE STEM GENDER GAP

Our Women in Science & Engineering (WiSE) program supports female students and inspires future generations of women to choose science, technology, engineering and mathematics (STEM) careers.

INDUSTRY
CONNECTED

NETWORKS AND COLLABORATIONS

We have thousands of industry connections with leading organisations including Australian Defence Force, Engineers Australia, Melbourne Water, AMP Capital Investors and many more.

ENGINEERING

| COURSE/CODE | OVERVIEW | ADMISSION CRITERIA | CAREER OUTCOMES |
|---|---|---|---|
| ENGINEERING | | | |
| MASTER OF ENGINEERING CODE:NMEN DURATION: 2 YEARS CAMPUS: FOOTSCRAY PARK vu.edu.au/courses/nmen | Prepare for a specialised career in the fast-growing electrical power and telecommunications industries. This course has a strong emphasis on real-world problem-solving and international trends. You will acquire specialised skills through a combination of coursework, design exercises and research, with the opportunity to develop and implement innovative telecommunication and power distribution solutions. | Completion of an Australian Bachelor degree (or equivalent) in a similar discipline, or Graduate Diploma (or equivalent) in a similar discipline. If you don't meet the entry requirements, you may be admitted to the Graduate Diploma based on approved work experience. Once completed, you may be eligible for admission to this course. | Positions managing, designing or developing telecommunication network systems or electrical power for a wide range of organisations, including telecommunications operators and equipment manufacturers, information technology companies, specialised test and measurement companies, microelectronic and electronic equipment design companies; installation and operations for a range of organisations. |

PROJECT MANAGEMENT

| COURSE/CODE | OVERVIEW | ADMISSION CRITERIA | CAREER OUTCOMES |
|--|---|--|--|
| PROJECT MANAGEMENT | | | |
| GRADUATE CERTIFICATE IN PROJECT MANAGEMENT CODE:NTPM DURATION: 0.5 YEARS CAMPUS: FOOTSCRAY PARK vu.edu.au/courses/ntpm | Equip yourself with advanced project management principles and techniques, enabling you to assume the role of project manager and become an effective member of project management teams. You can specialise in specific project management tasks across a number of sectors including engineering, business, information technology, and administration. | Completion of an Australian Bachelor degree (or equivalent) in a similar discipline. A minimum five (5) years approved work experience will be considered for admission to this course. | Project management careers in any sector including engineering, construction, business, information technology and administration. |
| GRADUATE DIPLOMA IN PROJECT MANAGEMENT CODE:NGPM DURATION: 1 YEAR CAMPUS: FOOTSCRAY PARK vu.edu.au/courses/ngpm | Designed to meet the needs of current or potential project managers in industry, this course will equip you with specialised skills and techniques, enabling you to assume the role of project manager and become an effective project management team member. You can also focus on specific project management sectors, including engineering, business, information technology and administration. | Completion of an Australian Bachelor degree (or equivalent) in any discipline, or Graduate Certificate (or equivalent) in a similar discipline. A minimum three (3) years approved work experience will be considered for admission to this course. | Project management careers in any sector including engineering, construction, business, information technology and administration. |
| MASTER OF PROJECT MANAGEMENT CODE:NMPM DURATION: 2 YEARS CAMPUS: FOOTSCRAY PARK vu.edu.au/courses/nmpm | Designed to meet the needs of potential managers, this course will enable you to take on the role of an effective project manager. Authentic, work-based scenarios and projects, as well as opportunities for research, ensure relevance for those concurrently employed and wanting to broaden their professional expertise, or wanting to pursue higher level, applied scholarship. | Completion of an Australian Bachelor degree (or equivalent) in any discipline, or Graduate Diploma (or equivalent) in a similar discipline. If you don't meet the entry requirements, you may be admitted to the Graduate Diploma based on approved work experience. Once completed, you may be eligible for admission to this course. | Project management careers in any sector including engineering, construction, business, information technology and administration. |

WANT TO KNOW MORE ABOUT YOUR COURSE UNITS, STRUCTURE, TIMETABLE, FEES OR HOW TO APPLY?
Visit the URL listed with your course or browse vu.edu.au/courses

BUILDING & FIRE CODES

| COURSE/CODE | OVERVIEW | ADMISSION CRITERIA | CAREER OUTCOMES |
|---|--|---|--|
| BUILDING & FIRE CODES | | | |
| GRADUATE CERTIFICATE IN PERFORMANCE-BASED BUILDING AND FIRE CODES CODE: ETQB DURATION: 0.5 YEARS CAMPUS: CITY FLINDERS vu.edu.au/courses/etqb | Gain an in-depth understanding of key concepts and alternative frameworks for performance-based building in fire codes. You will further your knowledge through the assessment of performance-based building and fire codes, and develop an appreciation of legal, statutory and design integrity requirements, as well as the need for design compliance. | Completion of an Australian Bachelor degree (or equivalent) in a similar discipline, or in any discipline with a minimum five (5) years approved work experience. | Relevant Building Surveyor (RBS) capable of determining compliance of an alternative building design solution. |

“

I COULD SEE THE IMPACT OF IT SKILLS PROLIFERATING INTO EVERY INDUSTRY, AND KNEW THAT SOME FORMAL TRAINING COULD FUTURE-PROOF MY CAREER.

”

“I chose cyber security because data protection is a large part of my current role and applies to all other organisations.

I believe my training in cybersecurity gives me an edge as there are so few public policy professionals with training in network security.”

Brian Lau
Graduate Certificate in Cyber Security



“

THE COURSE WAS TAUGHT ALMOST ENTIRELY BY INDUSTRY EXPERTS WHO WERE ABLE TO GIVE REAL, PRACTICAL AND APPLICABLE ADVICE.

”

“When I was ready to progress in my career assessing fire engineered performance solutions, I chose VU as they’re renowned in the industry and the sole provider of the necessary qualification.

The course is great for students like me who are already in the workforce, as it was delivered in four week-long blocks throughout the year. Working in the industry while I studied meant that I could apply the knowledge I gained in real time.”

Dishana Liang
Graduate Certificate in Performance Based Building & Fire Codes

INFORMATION TECHNOLOGY

| COURSE/CODE | OVERVIEW | ADMISSION CRITERIA | CAREER OUTCOMES |
|--|---|---|---|
| INFORMATION TECHNOLOGY | | | |
| GRADUATE CERTIFICATE IN CYBER SECURITY CODE: NTCS DURATION: 1 YEAR PART-TIME CAMPUS: FOOTSCRAY PARK vu.edu.au/courses/ntcs | Build on your prior grounding in information technology with skills and knowledge in the practice of cyber security. The course content covers the essential areas of cyber security, from proactive cyber threat detection, risk management to cyber law and regulations. | Completion of an Australian Bachelor degree (or equivalent) in a similar discipline. A minimum five (5) years approved work experience will be considered for admission to this course. | Cyber security specialist; cyber security consultant; cloud security engineer; network security engineer. |
| MASTER OF APPLIED INFORMATION TECHNOLOGY CODE: NMIT DURATION: 2 YEARS CAMPUS: FOOTSCRAY PARK vu.edu.au/courses/nmit | Boost your career prospects and become highly employable with a postgraduate qualification in IT. This flexible course provides advanced training in IT for students with an IT undergraduate qualification. Apply your knowledge and skills to real world problems and scenarios in this practical course. | Completion of an Australian Bachelor degree (or equivalent) in a similar discipline, or Graduate Diploma (or equivalent) in a similar discipline. If you don't meet the entry requirements, you may be admitted to the Graduate Diploma based on approved work experience. Once completed, you may be eligible for admission to this course. | Careers in areas such as software development/engineering, networking, network administration, IT consultancy, data warehousing, cloud computing, data mining, sensor networks, project management, IT training, IT project management and business intelligence. |



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