## **DESIGN** 2017

A collision of architecture, civil systems, computing, construction, digital technologies, graphic design, landscape architecture, mechanical systems, performance design, property, spatial systems and urban planning.





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The new Bachelor of Design embraces the interdisciplinary potential of design to foster a new generation of professionals who will create solutions for a better future.

# **DESIGN AT MELBOURNE**

The Bachelor of Design is a uniquely multidisciplinary degree that fosters innovative design professionals equipped with new ways of thinking, practical skills and theoretical expertise.

# A pathway to professional success in a design-related career

Design applies to a whole range of contexts, with applications in the creation and improvement of cities, buildings, transport, furniture, websites, processes, bridges, landscapes and the environment.

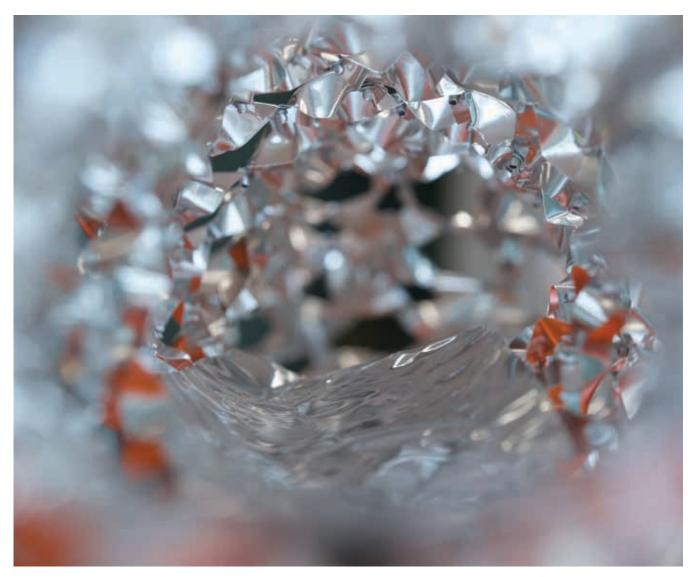
### Design innovative solutions for global challenges

As a student in the new Bachelor of Design, you'll use innovative processes to solve problems creatively, and determine solutions for a better future.

You will work with internationally recognised scholars and industry professionals to develop knowledge and skills. You will study real projects within the built environment, engineering, performing arts, graphic design, and technology disciplines such as computing and spatial systems.

### Learn through making and doing

Design studios, site visits, field trips and interaction with industry practitioners will take you into 'real life' situations with industry briefs.



# **BACHELOR OF DESIGN**

Design offers innovative ways to harness knowledge and technology to create ideas and solutions for a better future.

### - Bachelor of Design

### Duration

3 years full time Part time available (domestic students only)

### Campus

Parkville and Southbank

**Entry** Semester 1 or 2

### **Contact hours**

Approximately 16 hours per week plus independent study time of approximately six hours per subject per week

### - Find out more

bdes.unimelb.edu.au



### - What will I study?

You will study the application of design to a wide range of contexts, from the macro level of the metropolis, to the construction of buildings, bridges and landscapes, through to the small-scale of systems and microstructures.

The Bachelor of Design offers unique flexibility with the option to complete majors, minors, double majors and specialisations. Students can combine in-depth study in a particular area with subjects from a wide range of disciplines within the field of design.

### First year

In the first year of the Bachelor of Design, you will be introduced to the spectrum of design – from the creative and imaginative, through to the algorithmic and policy-generated, to conventional and managed problem-solving.

You will be immersed in a world of design – discovering new concepts and skills. You could be working on the design of a performance space; in a computer lab writing code; contemplating design theory and putting it into practice; making 3D models or on a construction site. The subjects you complete in your first year provide the basis for knowledge of design that will carry through for the rest of your degree.

### Second year

By your second year, you will deepen your understanding of your chosen design discipline(s) and be able to finalise your selection of majors, minors and specialisations. This will see you continue to spend substantial time developing practical and theoretical knowledge in studios, workshops and laboratory-based subjects.

### Third year

In third year, you will complete the requirements for your major(s). In your final semester, you will engage in your major's capstone experience. Capstone subjects draw together the theoretical and practical knowledge you have gained throughout your degree, and may be expressed as an industry-based project, a public exhibition, a coursework subject based on best practice, or a performance.

### Majors

Your major is the area of study you will focus on in your degree. A major is made up of 50 points (three to four subjects) at third year level, which builds on first year level and second year level subjects.

The Bachelor of Design offers 12 disciplines that can be studied as a major or a minor:

- Architecture
- Civil Systems
- Computing
- Construction
- Digital Technologies
- Graphic Design
- Landscape Architecture
- Mechanical Systems
- Performance Design
- Property
- Spatial Systems
- Urban Planning

## 12 majors to choose from

### Double majors

Possible double major combinations include:

- Architecture and Construction
- Architecture and Graphic Design
- Architecture and Landscape Architecture
- Architecture and Performance Design
- Architecture and Property
- Architecture and Spatial Systems
- Architecture and Urban Planning
- Construction and Digital Technologies
- Construction and Property
- Construction and Spatial Systems
- Construction and Urban Planning
- Digital Technologies and Graphic Design
- Landscape Architecture and Construction
- Landscape Architecture and Graphic Design
- Landscape Architecture and Property
- Landscape Architecture and Urban Planning
- Property and Spatial Systems
- Spatial Systems and Urban Planning

### Minors and specialisations

Minors and specialisations are made up of 25 points (two subjects) at third year-level.

Minors are a shortened sequence of subjects taken from the range of existing majors in the degree. They provide a complementary course of study to your major and, in some circumstances, may offer a pathway to a shortened masters degree.

Specialisations are a sequence of subjects that focus on particular themes relevant across multiple disciplines. Subjects in specialisations do not form part of any existing major but are distinctive and are complementary to your major. The completion of a specialisation will complement the area that you have chosen to major in and may also support a research pathway or increase your employment opportunities.

### Breadth

Each year, you will complete subjects that contrast with your core study area. We call this the 'breadth' component of your degree. Breadth subjects allow you to gain knowledge and understanding across a broader range of disciplines, enabling you to develop insight, experience, and new ways of thinking in areas distinct from design. Your breadth selection can be either as broad or targeted as you like.

### Concurrent diplomas

Concurrent diplomas offer you another way to follow your passion and earn an additional qualification alongside your degree. You can apply for one of the following diplomas once you have been accepted into the Bachelor of Design:

- Diploma in Informatics
- Diploma in Languages
- Diploma in Mathematical Sciences
- Diploma in Music

For more information about concurrent diplomas, see page 20.

### Career outcomes

Your career path will depend on the majors, minors and specialisations you choose. Further information on the potential careers open to you directly from the Bachelor of Design is available on page 18.

The Bachelor of Design is also a pathway to many of the University of Melbourne's graduate degrees. For some – such as architecture, construction, civil and mechanical engineering, urban planning and property – you will need to undertake a masters degree in order to meet the educational requirement to gain professional accreditation.



# ARCHITECTURE



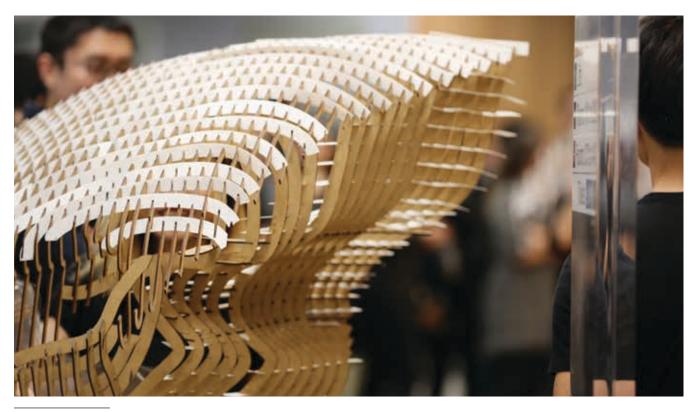
Architects combine creative vision, innovation, technological understanding and architectural theory to shape how we live, work and play in the built environment. Architects deal directly with many of the complex challenges facing our world, and are at the forefront of change. Design lies at the heart of the architectural process, and you will learn to develop your designs using modelling and rendering techniques through studio-based classes and virtual and physical modelling.

Once you graduate, you can enter the workforce and join architecture or construction teams to provide specialist assistance on large projects, or continue your studies in the Master of Architecture to meet the academic requirements to become an accredited architect.

### Sample course plan – Bachelor of Design Major in Architecture

Year 1	Semester 1	Global Foundations of Design	Foundations of Design: Representation	Elective	Breadth
rear i	Semester 2	Design Studio Alpha	Construction as Alchemy	Elective	Breadth
Year 2	Semester 1	Design Studio Beta	Modern Architecture: MoMo to PoMo	Construction Analysis	Breadth
rear 2	Semester 2	Design Studio Gamma	Digital Design	Environmental Building Systems	Breadth
Year 3	Semester 1	Design Studio Delta	Construction Design	Elective	Breadth/Elective
	Semester 2	Capstone: Design Studio Epsilon		Elective	Breadth/Elective
Compulsory subjects Major subjects Elective Design subjects Breadth subjects Breadth or Elective subjects					

🜒 This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment.



# **CIVIL SYSTEMS**

Civil engineers are problem-solvers, meeting the challenges of pollution, traffic congestion, drinking water and energy needs, urban redevelopment and community planning. The discipline involves community service, development, and improvement. Civil engineers look for the most effective way of interacting with the natural environment, and create solutions to improve quality of life. The Civil Systems major provides the foundation for understanding the planning, design and construction of the built environment for the provision of essential services and infrastructure. These include structures such as buildings, bridges and tunnels, as well as transport systems, water supply, drainage systems, ports and harbours.

You will develop a fundamental understanding of how planning, design and construction can interact with the natural and social environment to create solutions to satisfy the needs of society.

### Sample course plan – Bachelor of Design Major in Civil Systems

Year 1	Semester 1	Calculus 1	Physics 1	Elective	Breadth
	Semester 2	Calculus 2	Statics	Elective	Breadth
Year 2	Semester 1	Engineering Mechanics	Linear Algebra	Elective	Breadth
rear 2	Semester 2	Earth Processes for Engineering	Engineering Materials	Engineering Mathematics	Breadth
Y	Semester 1	Engineering Risk Analysis	Fluid Mechanics	Elective	Breadth/Elective
Year 3	Semester 2	Systems Modelling and Design	Structural Theory and Design	Elective	Breadth/Elective

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# COMPUTING

**#1** in Australia, #13 globally in Computer Science and Information Systems

QS World Rankings by Subject 2015-2016

Computing involves the design, analysis, and implementation of complex systems involving computer networks, databases and web services. These technologies are applied across the domains of health, safety, community, businesses and education and are realised through the building of algorithms and apps. The Computing major is designed for technically focused students who want to develop strong professional capabilities in programming and development of digital artefacts. You will gain useful technical skills in the areas of computer programming, algorithm design, data manipulation and visualisation, graphics programming and web development.

### Sample course plan – Bachelor of Design Major in Computing

	Semester 1	Media Computation	Calculus 1 or 2	Elective	Breadth
Year 1	Semester 2	Foundations of Algorithms	Linear Algebra	Elective	Breadth
Year 2	Semester 1	Design of Algorithms	Elements of Data Processing	Elective	Breadth
rear 2	Semester 2	Database Systems	Elective	Elective	Breadth
Veer 2	Semester 1	Web Information Technology	Computer Systems	Elective	Breadth/Elective
Year 3	Semester 2	Graphics and Computation	IT Project	Elective	Breadth/Elective
Compulsory subjects Major subjects Elective Design subjects Breadth subjects Breadth or Elective subjects					

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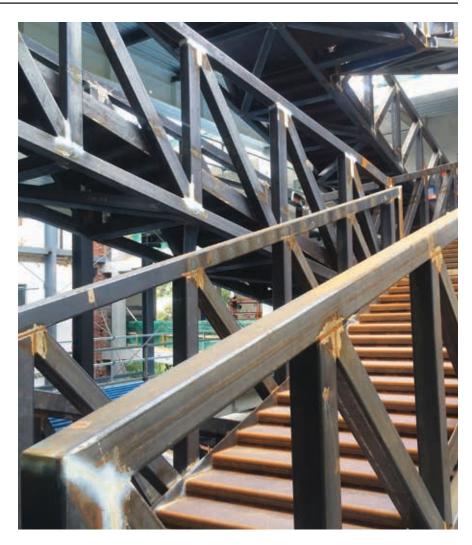
# CONSTRUCTION

It is an exciting and challenging time to be working in the construction field. Technologies are changing rapidly and our built environment has to respond quickly to difficult global environmental and resource challenges.

Increasingly construction companies operate as a part of large project teams, where professionals from different disciplines work closely together to resolve construction and design objectives.

The Construction major has been specifically designed to prepare students for these challenges. It focuses on the management of people, processes and materials in the construction industry, and how they apply to specific building projects.

You will learn through site visits and special presentations by industry professionals to deepen your understanding of real world practice.



## Sample course plan – Bachelor of Design Major in Construction

Year 1	Semester 1	Global Foundations of Design	Understanding the Built Environment	Elective	Breadth
Tear I	Semester 2	Principles of Building	Principles of Business Law	Elective	Breadth
Veer 2	Semester 1	Finance for Built Environment	Organisational Behaviour	Elective (Environmental Building Systems recommended)	Breadth
Year 2	Semester 2	Designing and Constructing Concrete Buildings	Building Design Measurement	Elective	Breadth
Year 3	Semester 1	Designing and Constructing Steel and Concrete Buildings	Construction Management	Elective	Breadth/Elective
Tedr 3	Semester 2	Capstone: Industry Partner Project Studio	Construction Contract Administration	Elective	Breadth/Elective

Compulsory subjects 📃 Major subjects 📃 Elective Design subjects 📃 Breadth subjects 📕 Breadth or Elective subjects

This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment.

Ø Mathematical knowledge equivalent to a study score of at least 25 in VCE Mathematical Methods Units 3 and 4 is required to undertake this major.

# **DIGITAL TECHNOLOGIES**



The field of digital technologies is focused on Human Computer Interaction. This includes the study of how people interact with technologies, design of technology, the Internet of Things, and user experience (UX). It examines how we might ensure that information technology is usable, useful and satisfying to use. Digital Technologies graduates will be prepared for careers in a range of industries, from finance and banking, to government, search engines and entertainment.

The Digital Technologies major will provide you with practical skills and knowledge that can be applied in a variety of fields associated with design, with a special focus on digital artefacts such as web-based media, mobile media, and interactive technologies.

You will learn the fundamentals of digital technology including algorithmic, data-oriented, and web-based techniques, and develop an understanding of how they are applied in a range of areas. You will also be able to identify the needs and opportunities presented in areas of human life that might be addressed through the application of computing, informatics, and digital media.

## Sample course plan – Bachelor of Design Major in Digital Technologies

Veer 1	Semester 1	Media Computation	Foundations of Design Representation	Elective	Breadth	
Year 1	Semester 2	Foundations of Algorithms	Fundamentals of Interaction Design	Elective	Breadth	
Year 2	Semester 1	Elements of Data Processing	Processes of Modelling and Fabrication	Elective	Breadth	
Tear 2	Semester 2	Database Systems	Usability Evaluation Methods	Elective	Breadth	
Veer 2	Semester 1	Web Information Technologies	Game Design	Elective	Breadth/Elective	
Year 3	Semester 2	Capstone: Interactive Technology Project		Elective	Breadth/Elective	
Comp	Compulsory subjects Major subjects Elective Design subjects Breadth subjects Breadth or Elective subjects					

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# **GRAPHIC DESIGN**

Graphic designers are visual communicators, assembling illustrations, typography, images and motion graphics to create a piece of design. Graphic designers work within print and digital-based mediums to present information in ways that are both memorable and accessible. The Graphic Design major will provide you with practical and conceptual skills to undertake professional graphic design work. Grounded in a strong tradition of VCA studiobased visual art practice, it integrates design theory, digital and analogue approaches, and modern industry practices.

You will work towards the completion of a design portfolio, which can be used as a foundation for commencing a graphic design-based career or further study.

## Sample course plan – Bachelor of Design Major in Graphic Design

Year 1	Semester 1	Foundations of Design: Representation	Critical and Theoretical Studies 1	Elective	Breadth
Teal I	Semester 2	Graphic Design 1: Image and Text	Studies Drawing & Printmedia	Elective	Breadth
Year 2	Semester 1	Graphic Design 2: Image and Media Technology	Critical and Theoretical Studies 3	Elective	Breadth
Tear 2	Semester 2	Colour Studio	A Brief History of Colour	Elective	Breadth
Year 3	Semester 1	Photomedia Studio	The Power of Text and Image	Elective	Breadth/Elective
Year 3	Semester 2	Capstone: Graphic Design Studio		Elective	Breadth/Elective
Compulsory subjects Major subjects Elective Design subjects Breadth subjects Breadth or Elective subjects					

This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment.



# LANDSCAPE ARCHITECTURE

Landscape Architecture utilises design and ecology to plan our external environments. It plays an important role in our experience of living, from neighbourhoods, to city squares, urban forests, parks, streets, gardens, and green infrastructure.

It is also concerned with community programs, garden and landscape heritage, and sustainability of our natural resources. Responsive to new challenges in the built and natural environments, landscape architects never stop learning, and are often inspired and challenged differently with every project.

The Landscape Architecture major utilises a problem-based approach that will challenge you to respond to land planning and transformation issues, sustainable design principles, and to engage with natural processes to generate ecologically responsive and appropriate designs.

You will develop skills to create sustainable design solutions to address local and global ecological, cultural and social issues. Studies incorporate studio classes, site visits and the theory, history and practice of landscape architecture.

### Sample course plan – Bachelor of Design Major in Landscape Architecture

Year 1	Semester 1	Global Foundations of Design	Foundations of Design: Representation	Elective	Breadth
	Semester 2	Design Studio Alpha	Ecological Systems for Design	Elective	Breadth
Year 2	Semester 1	Design Studio Beta	Designing with Plants	Elective	Breadth
rear 2	Semester 2	Design Studio Gamma	Digital Design	Elective	Breadth
Voor 2	Semester 1	Landscape Studio: Urban Open space	Site Tectonics	Elective	Breadth/Elective
Year 3	Semester 2	Capstone: Landscape Studio: Designed Ecologies		Elective	Breadth/Elective

Compulsory subjects Major subjects Elective Design subjects Breadth subjects Breadth or Elective subjects

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Design majors

DESIGN 2017

# **MECHANICAL SYSTEMS**

#1 in Australia, #28 in the world for Mechanical Engineering QS World University Rankings by Subject 2016

Mechanical engineers create innovative solutions to global challenges in fields such as energy and transport, as well as space exploration, climate change, health care and more. They work in a diverse range of industries, from aeronautics, robotics, automotive, energy, manufacturing and bioengineering, to materials science and nanotechnology.

The Mechanical Systems major involves understanding the design, construction, operation and maintenance of machines. This encompasses the development and design of new products and the machines to make them, as well as the design, planning and management of the systems, people and technical facilities needed to produce goods and services.

You will gain the ability to integrate fundamental science in mechanics with engineering principles, and you will learn to solve practical problems involving mechanical systems.

### Sample course plan - Bachelor of Design Major in Mechanical Systems<sup>®</sup>

Semester 1	Calculus 1	Physics 1	Elective	Breadth
Semester 2	Calculus 2	Statics	Elective	Breadth
Semester 1	Linear Algebra	Engineering Mechanics	Elective	Breadth
Semester 2	Engineering Computation	Foundations of Electrical Networks	Engineering Mathematics	Breadth
Semester 1	Systems Modelling & Analysis	Mechanics and Materials	Elective	Breadth/Elective
Semester 2	Thermodynamics and Fluid Mechanics	Capstone: Mechanical Design	Elective	Breadth/Elective
	emester 2 emester 1 emester 2 emester 1	Thermodynamics and Fluid	Genester 2       Calculus 2       Statics         Genester 1       Linear Algebra       Engineering Mechanics         Genester 2       Engineering Computation       Foundations of Electrical Networks         Genester 1       Systems Modelling & Analysis       Mechanics and Materials         Thermodynamics and Fluid       Constance Machanical Design	iemester 2Calculus 2StaticsElectiveiemester 1Linear AlgebraEngineering MechanicsElectiveiemester 2Engineering ComputationFoundations of Electrical NetworksEngineering Mathematicsiemester 1Systems Modelling & AnalysisMechanics and MaterialsElectiveiemester 2Thermodynamics and FluidConstance Machanical DesignElective

This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment

Mathematical knowledge equivalent to a study score of at least 25 in VCE Mathematical Methods Units 3 and 4 is required to undertake this major. Students in this major require 25 points of first-year maths. This course plan reflects entry with a study score of at least 25 in VCE Mathematical Methods 3/4. Students with a study score of at least 25 in VCE specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1.



# **PERFORMANCE DESIGN**

A central player in the act of creating a performance is the designer. Whether it is in the role of set designer, costume designer, lighting designer or sound designer, they play a pivotal and collaborative part in the conception and realisation of a performance. Performance designers use as their raw materials some or all of the following: the human figure, space, light and sound. As a student, you will learn to manipulate these materials and explore their relationship to each other through studio-based classes alongside a comprehensive study of the theory, history and practice of performance design.

You will develop the conceptual and technical skills required to respond to a design brief and effectively represent and communicate your ideas, culminating in a major design project in third year.

## Sample course plan – Bachelor of Design Major in Performance Design

Veer 1	Semester 1	Foundations of Design: Representation	Critical and Theoretical Studies 1	Elective	Breadth
Year 1	Semester 2	Sound Studio	Sound and Music in Performance	Elective	Breadth
Year 2	Semester 1	Figure Studio	Reading the Human Figure	Critical and Theoretical Studies 2	Breadth
rear 2	Semester 2	Light Studio	A History of Light in Performance	Digital Design	Breadth
Voor 2	Semester 1	Space Studio	Space in Performance	Elective	Breadth/Elective
Year 3	Semester 2	Capstone: Performance Design Studio		Elective	Breadth/Elective

Compulsory subjects 📕 Major subjects 📕 Elective Design subjects 📕 Breadth subjects 📕 Breadth or Elective subjects

This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment



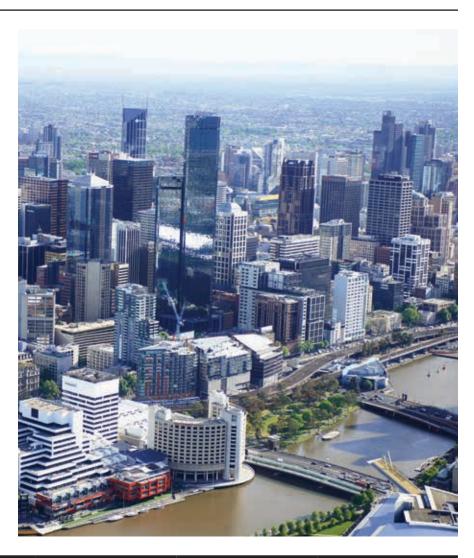
# PROPERTY

The property industry offers a fastpaced and exciting professional career spanning economics, investment and finance, market research, feasibility, development, valuation and management, construction, urban planning, and law.

The Property major focuses on developing an understanding of the ownership, development, management, feasibility, funding and investment, and occupation of land and buildings.

The mix of disciplines that comprise this major are particularly targeted at industry needs, and have contributed to successful outcomes for our graduates. Studies include the full range of skills and specialisations needed for a professional career in this dynamic and varied industry.

You will learn about contemporary planning issues, trends in the property market, and how the application of construction practices and structural design can add value to developments.



## Sample course plan – Bachelor of Design Major in Property

Year 1	Semester 1	Global Foundations of Architecture	Principles of Marketing	Elective	Breadth
	Semester 2	Economics and Cities	Personality and Social Psychology	Elective	Breadth
Year 2	Semester 1	Finance for Built Environment	Principles of Business Law	Elective	Breadth
	Semester 2	Design and Property Principles	Design and Construction Studies - Property	Elective	Breadth
Veer 2	Semester 1	Property Case Studies	Property Valuation	Elective	Breadth/Elective
Year 3	Semester 2	Sustainable Management of Design Assets	Capstone: Design and Property Studio	Elective	Breadth/Elective

Compulsory subjects 📃 Major subjects 📃 Elective Design subjects 📃 Breadth subjects 📕 Breadth or Elective subjects

This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment.

🥝 Mathematical knowledge equivalent to a study score of at least 25 in VCE Mathematical Methods Units 3 and 4 is required to undertake this major.

# SPATIAL SYSTEMS

Spatial Systems is the study of the science and technology of 3D measurement, mapping and visualisation and focuses on fundamental questions of where, what and when. It is concerned with capturing, analysing, managing and presenting spatial information, and is fundamental to human decisionmaking, planning and design. Spatial information experts develop the technologies that lie behind urban analytics, smart cities, disaster management, GPS, web mapping, mobile location-based services, and virtual environments. These technologies require substantial design as well.

The Spatial Systems major focuses on spatial data handling and infrastructures, web and mobile mapping, spatial analysis, as well as spatial cognition and logical reasoning.

You will learn to apply spatial systems to design needs-based measurement (sensing), modelling (storing), and representation (mapping) of physical spaces in the real world.

### Sample course plan – Bachelor of Design Major in Spatial Systems

Year 1	Semester 1	Calculus 1	Mapping Environments	Elective	Breadth
Tear I	Semester 2	Linear Algebra	Elective	Elective	Breadth
Year 2	Semester 1	Applications of GIS	Engineering Computation	Elective	Breadth
rear 2	Semester 2	Surveying and Mapping	Database Systems	Elective	Breadth
No. and	Semester 1	Engineering Risk Analysis	Imaging the Environment	Elective	Breadth/Elective
Year 3		Land Administration Systems	Capstone: Integrated Spatial Systems	Elective	Breadth/Elective

Compulsory subjects 📃 Major subjects 📒 Elective Design subjects 📃 Breadth subjects 📃 Breadth or Elective subjects

This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment.
 Mathematical knowledge equivalent to a study score of at least 25 in VCE Mathematical Methods Units 3 and 4 is required to undertake this major. Students in this major require 25 noints of first-year maths. This course plan reflects entry with a study score of at least 25 in VCE.

25 points of first-year maths. This course plan reflects on vestice and vestice of at least 25 in VCE Mathematical Methods 3/4. Students with a study score of at least 25 in VCE Specialist Mathematics 3/4 (or equivalent) are not required to complete Calculus 1. Students with a study score of 30 or more in VCE Specialist Mathematics 3/4 (or equivalent) may not enrol in Calculus 1 for credit.



# **URBAN PLANNING**

Urban planners are actively engaged with some of the most pressing issues of our time, including the pressures of increased urbanisation, the impact of climate change, and sustainable resourcing challenges.

Urban design is the art of making places, and is a collaborative process that shapes the physical setting for life in urban areas. Urban planning focuses on the intersection of the built environment and the public interest. Together they explore the design and planning of public and private spaces, focusing on the importance of design and planning within the social, environmental, aesthetic and economic contexts.

Urban planners and designers work to positively influence environmental sustainability, economic resilience and social equity in cities and towns. These are broad and challenging disciplines that benefit from vision and innovation and can lead to globally influential careers.

The urban planning major focuses on bringing design and problem-solving to bear on the discipline of urban planning and design. This includes developing a broad knowledge of the science of climate change and the roles of planners in addressing it to support sustainable development, and the ability to identify the main trends and factors shaping the spatial economics and development of local, national, regional and global communities.

You will develop a broad knowledge of the history, theory, leading concepts and principles of urban planning and urban design.

### Sample course plan – Bachelor of Design Major in Urban Planning

Year 1	Semester 1	Urban History	Elective	Elective	Breadth
	Semester 2	Introduction to Urban Planning	Elective	Elective	Breadth
Year 2	Semester 1	Cities: from Local to Global	Applications of GIS	Elective	Breadth
	Semester 2	Planning Social Research Workshop	Property and Construction Economics	Elective	Breadth
Year 3	Semester 1	Planning Scenario and Policy Workshop	Urban Design and Planning Studies	Elective	Breadth/Elective
	Semester 2	Capstone: Urban Precinct Studio		Elective	Breadth/Elective
Compulsory subjects Major subjects Elective Design subjects Breadth subjects Breadth or Elective subjects					

This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment.



# **CAREERS IN DESIGN**

Studying design at Melbourne equips you with the knowledge and skills you need for a career in a rapidly changing world, and provides access to an astonishing array of careers and professions.

## Preparation for a fulfilling career

Your career path will depend on the majors, minors and specialisations you choose. Here are some potential careers open to you directly from the Bachelor of Design:

- Architectural design assistant
- Building analyst and designer
- Construction coordinator
- Digital and visual designer
- Engineering technologist
- Junior estimator
- Landscape designer
- Property valuer
- Performance designer
- Urban data analyst
- Urban planning assistant.

### - Engineering

### **Career outcomes**

There is a critical shortage of engineers worldwide. New engineering specialisations are emerging to tackle today's environmental and technological challenges. Qualified engineers in all fields are in demand and can command high salaries. Our graduates work around the world, building successful careers with top international companies such as SKM, Google, Boeing, Exxon Mobil, Ford, Toshiba, Kodak, Shell, KPMG and Ericsson.

### Professional recognition

Students who complete an undergraduate degree with appropriate studies in engineering, followed by the Master of Engineering, will receive accreditation as professional engineers. You will have the freedom to work as an accredited professional wherever your travels take you. The University's Master of Engineering programs are the first in Australia to be accredited in Europe under the EUR-ACE<sup>®</sup> system, allowing graduates to work in continental Europe.

The Master of Engineering is also accredited by Engineers Australia, a signatory to the Washington Accord, which allows graduates to work as professional engineers in 12 of the world's leading economies, including the US, UK, Canada and Singapore.

### Melbourne School of Design

### **Career outcomes**

MSD graduates are recognised as leading, adaptable professionals in their fields, knowledgeable across a range of disciplines with an excellent grounding and strong practical skills.

Our graduates have gone on to careers in a range of organisations such as:

- Architecture Media
- Aspect Studios
- Brookfield Multiplex
- CB Richard Ellis
- City of Melbourne
- City of Vancouver
- Deloitte
- Denton Corker Marshall
- Department of Planning and Community Development.
- Grocon Constructions
- Hansen Yuncken
- Harvard University
- Hassell
- John Wardle Architects
- Jones Lang LaSalle
- KPMG

- Lend Lease Development
- Macquarie Bank
- Places Victoria
- Probuild Constructions
- Royal Botanic Gardens Melbourne
- Taylor Cullity Lethlean
- Toronto City Planning
- Tract Consultants
  - University of Edinburgh
  - Urbis.

Internship experience and workintegrated learning is embedded in many of our graduate programs, allowing students to gain relevant industry participation as part of the degree.

### Professional recognition

Masters degrees in Architecture, Construction Management, Landscape Architecture, Property, Urban Design and Urban Planning are professionally recognised by the respective industry associations.

### Victorian College of the Arts

### **Career outcomes**

The VCA has celebrated over 40 years of artistic excellence in nurturing Australia's creative talent. Our graduates are recognised nationally and internationally as leaders in their chosen artistic disciplines, and are frequently acknowledged in the most prestigious festivals, arts prizes and industry awards.

Graduates of the Performance Design or Graphic Design major could go on to careers in costume or set design, lighting, sound or audio design, or as graphic and visual designers across advertising, marketing, web design, art or creative direction, user interface and user experience design in real world and digital contexts.

# **GRADUATE STUDY**

Completing a graduate qualification after your Bachelor of Design will set you up to become a leader in your field, and open up a wide range of career opportunities and increased earning potential.

The Bachelor of Design is a pathway to many of the University of Melbourne's graduate degrees. For some – such as architecture, construction, engineering, planning and property – you will need to undertake a masters degree in order to meet the educational requirement to gain professional accreditation.

### Melbourne School of Engineering

The Melbourne School of Engineering produces graduate engineers with outstanding personal and professional qualities. The Bachelor of Design is a pathway into accredited masters programs in the following specialisations:

- Civil Engineering
- Civil with Business
- Environmental Engineering
- Mechanical Engineering
- Mechanical with Business
- Mechatronics
- Software Engineering
- Software with Business
- Spatial Engineering
- Structural Engineering
- Master of Information Technology - MIT
- Master of Information Systems - MIS
- Master of Science Computer Science - MSc (CS).

### Melbourne School of Design

The Melbourne School of Design (MSD) offers coursework and research programs spanning the breadth of the built environment. The MSD graduate programs are structured to provide students with clear career pathways to professional recognition, research specialisation or industry-oriented advancement. The Bachelor of Design is a pathway into the following accredited masters programs:

- Master of Architecture
- Master of Architectural Engineering
- Master of Construction Management
- Master of Landscape Architecture
- Master of Property
- Master of Urban Design
- Master of Urban Planning.

## Victorian College of the Arts

Graduate study at the Victorian College of the Arts (VCA) involves professional training programs tailored for industry needs and creative arts research. Both are characterised by an intense interest in the artistic field of choice, a willingness to cross disciplinary boundaries, an open spirit of enquiry, active collaboration and often with a highly specialised focus.

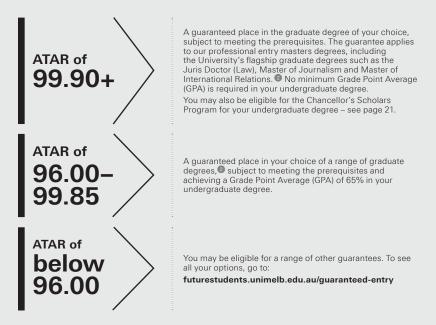
The Bachelor of Design is a pathway into the following masters programs:

- Master of Design for Performance
- Master of Production Design for Screen.

### **GUARANTEED ENTRY INTO GRADUATE DEGREES**

Would you like to begin your undergraduate degree at Melbourne with the security of knowing a graduate place is reserved for you?

Guaranteed entry • is available for most graduate degrees, depending on the ATAR/notional ATAR you achieve:



• The guaranteed entry pathways above are available to domestic and international students who complete an Australian Year 12 or the International Baccalaureate (IB) Diploma in Australia in 2016. Eligible students must enrol in a University of Melbourne undergraduate degree immediately following Year 12, or be granted a deferral by the University.

Some exclusions apply. See futurestudents.unimelb.edu.au/guaranteed-entry for the list of applicable courses.

# **CONCURRENT DIPLOMAS**

### Concurrent diplomas offer another way to follow your passion and earn an additional qualification.

### - Flexible study options

Our diplomas give you many flexible options. You can choose to study a diploma alongside your undergraduate degree (adding a further year of study), or cross-credit some of the study in your undergraduate degree to your diploma and take a 'fast track' to completion (potentially completing the diploma in the same time it takes to complete your undergraduate degree). Conditions apply and you should discuss your options with a student adviser once you enrol in your undergraduate degree.

### - Diploma in Informatics

The Diploma in Informatics will provide you with the IT tools and technologies employers are looking for. It is designed to complement your core studies with fundamental programming and data management skills.

### Available to:

Students enrolled in Arts, Biomedicine <sup>①</sup>, Commerce, Design, Music and Science.<sup>②</sup>

### Prerequisites

There are no additional prerequisites once you are enrolled in your undergraduate degree.

### msi.unimelb.edu.au/study/ undergraduate/concurrentdiplomas

### - Diploma in Languages

Languages available: Ancient Greek, Arabic, Chinese, French, German, Hebrew, Indonesian, Italian, Japanese, Latin, Russian and Spanish.

Undergraduate domestic students may be eligible to receive the final 50 points of the diploma HECS free.

- Bachelor of Biomedicine students cannot complete the diploma and the degree within the standard structure and timeframe. Consult your student adviser.
- Students doing Computing and Software Systems or Informatics major are not permitted to do the Diploma in Informatics.
- Bachelor of Science students who complete a major in Mathematics and Statistics or Mathematical Physics are not permitted to complete a Diploma in Mathematical Sciences.

### Available to:

Students enrolled in Arts, Biomedicine, Commerce, Design, Music and Science. Available in some Graduate programs (pending permission from graduate program co-ordinator).

### Prerequisites

There are no additional prerequisites once you are enrolled in your undergraduate degree. Please note: This program is taken concurrently. Students must have a minimum of 50 points remaining in their degree on application.

ba.unimelb.edu.au/enrich/diplomalanguages

## Diploma in Mathematical Sciences

The Diploma in Mathematical Sciences enables you to gain a mathematics qualification while completing an undergraduate degree.

Domestic students may be eligible to receive the final 50 points of the diploma HECS free.

### Available to:

Students enrolled in Arts, Biomedicine, Commerce, Design, Music and Science.

### Prerequisites

A study score of 30 in VCE Specialist Mathematics Units 3 and 4 or equivalent, or successful completion of university-level studies equivalent to VCE Specialist Mathematics Units 3 and 4.

courses.science.unimelb.edu.au/ study/degrees/diploma-inmathematical-sciences

### - Diploma in Music

The Diploma in Music allows students to undertake a tailored sequence of music study and gain a music qualification while completing an undergraduate degree in another field at the University of Melbourne. Students can tailor a program of academic, theoretical or practical music study based on their interests, in areas across Music Performance, Composition, Musicology, Ethnomusicology, Jazz & Improvisation, or Interactive Composition.

### Available to:

Students enrolled in Arts, Biomedicine, Commerce, Design and Science.

### Prerequisites

Entry is by audition in early February. mcm.unimelb.edu.au



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## CHANCELLOR'S SCHOLARS PROGRAM

The Chancellor's Scholars Program gives very high-achieving students, who finish secondary school in Australia, a guaranteed place in the graduate program of their choice and a range of other exciting benefits.

### - You deserve the rewards

Would you like to begin your Bachelor of Design degree at Melbourne with the security of knowing a graduate place is reserved for you when you finish?

If you're studying Year 12 in Australia, you may be eligible for our Chancellor's Scholars Program.

As a Chancellor's Scholar you will be guaranteed a place in the graduate program of your choice • and a range of other benefits.

### - Benefits

### Excellence scholarship

Domestic students will receive a Melbourne National Scholarship, with a value of up to \$32 000 (depending on your undergraduate degree). International students will be considered for an International Undergraduate Scholarship, with a value of up to approximately \$165 000 (depending on your undergraduate degree).

### Overseas study scholarship

Access to up to \$2500 for approved overseas study is available for eligible students.

## A guaranteed place in the graduate program of your choice

Domestic students receive a guaranteed Commonwealth Supported Place (CSP) in the professional entry masters degree of your choice.

International students receive a guaranteed international fee place in the professional entry masters degree of your choice.

Entry is guaranteed into degrees such as Melbourne's Doctor of Medicine, Juris Doctor (Law), Doctor of Dental Surgery, Master of Engineering, Doctor of Veterinary Medicine, Doctor of Optometry and Master of Architecture.

No minimum Grade Point Average (GPA) is required in your undergraduate degree. However, you may be required to meet course prerequisites and other requirements, such as an interview, for specific courses.

### Selection criteria

You must:

- Complete an Australian Year 12 or the International Baccalaureate (IB) in Australia in 2016 (you must either enrol immediately following Year 12 or be granted a deferral by the University); or
- Be an Australian citizen and have completed Australian Year 12 or the IB outside Australia in 2016
- Achieve an ATAR or notional ATAR of 99.90 or above. Music applicants must achieve an ATAR or notional ATAR of 99.85 or above and an audition score of A+
- Satisfy undergraduate course prerequisites (Bachelor of Music applicants must also meet specific extra requirements)
- Indigenous applicants (all courses) must achieve an ATAR or notional ATAR of 90.00 or above (and satisfy extra requirements for Music).

chancellorscholars.unimelb.edu.au



# ADMISSIONS

### Pathways to more than **20** masters degrees

### - How to apply

### Domestic students

Domestic students applying for an undergraduate course must submit an application through the Victorian Tertiary Admissions Centre (VTAC). Domestic students studying overseas must also apply through VTAC.

### International students

International students studying the VCE, an Australian Year 12 or IB in Australia must apply through VTAC. All other international students, including those undertaking foundation studies in Australia, must apply directly to the University or through one of our overseas representatives.

### - Diploma in General Studies

If you want a year to decide what to do next, and you want it to count, choose the Diploma in General Studies.

Completion of the Diploma in General Studies may give you guaranteed entry into degree courses at the University of Melbourne and improves your employment prospects. The program is a sampler of the Melbourne bachelors degrees, and provides you with the opportunity to study science, commerce, design or agriculture.

This course is available to domestic students only.

### fvas.unimelb.edu.au/study/courses/ diploma-in-general-studies

### – Fees

### Domestic students

All domestic undergraduate students are enrolled in a Commonwealth Supported Place (CSP), subsidised by the Australian Government. Payment of the student contribution amount can be deferred through HECS-HELP for eligible students.

### International students

Tuition fees are charged for each year that you are enrolled. You will pay tuition fees according to your specific enrolment in any given semester. Detailed fee information, including the fee policy covering your enrolment, will be provided when you are offered a place at the University. For full details about tuition fees, visit:

### futurestudents.unimelb.edu.au/ admissions/fees

### Scholarships

The Melbourne Scholarships Program is one of the most comprehensive and generous in Australia. It recognises outstanding academic achievement and provides access to students who might otherwise be excluded by socio-economic, cultural, geographic and other disadvantages.

For more information about scholarships, visit:

services.unimelb.edu.au/ scholarships

### Access Melbourne

If you are a domestic student, you can enhance your opportunity for selection by applying for Access Melbourne, the University's special entry scheme.

Access Melbourne can help you gain a place in a course, even if your ATAR is below the Clearly-in Rank, by letting you explain the ongoing circumstances that have affected your education. Scholarships are also available.

### access.unimelb.edu.au

### Get a guaranteed place

The University has a selection guarantee for eligible applicants who have a disadvantaged financial background or are from a rural or isolated area.

Guaranteed ATARs for 2017 will be published at:

### access.unimelb.edu.au/ seasguaranteed

### How to apply

Applications are made using the Special Entry Access Scheme (SEAS) application on the VTAC website.

vtac.edu.au/who/seas



# ENTRY REQUIREMENTS

Qualification	Bachelor of Design	Bachelor of Design (Chancellor's Scholars Program)				
Australian Year 12						
Domestic students 2017 Minimum ATAR 1	85.00	99.90 🚳				
International students 2017 Guaranteed ATAR®	85.00	99.90				
VCE (units 3 and 4) prerequisite subjects @	A study score of at least 25 in English/English Language/Literature or at least 30 in EAL					
International Baccalaureate (IB) Diploma						
International students: 2017 Guaranteed IB score®	31	99.90 (notional ATAR) Ø				
IB prerequisite subjects III	At least Grade 4 in English (Standard or Higher level)					
GCE A Levels/Singapore A Levels						
2017 Guaranteed score	BCC	Not available to A Level students				
A Level prerequisite subjects	At least Grade C in an accepted AS Level English subject					
Trinity College Foundation Studies						
International students: 2017 Guaranteed score 3	80	Not available to TCFS students				
TCFS prerequisite subjects	A score of at least 50% in both English and EAP					

Domestic students: The Clearly-in Rank may be higher, depending on demand for the course and the number of places available. Only applicants eligible for special entry schemes will be admitted below the minimum ATAR.

Students who achieve an ATAR or notional ATAR of 99.90 or above and satisfy course prerequisites will be guaranteed a place in the Chancellor's Scholars Program. Students must have completed an Australian Year 12 qualification or the International Baccalaureate (IB) in Australia in the year prior to entry (students must either enrol immediately or be granted a deferral in the year following Year 12).

International students: The University guarantees admission to a course when an international student achieves the required score, meets prerequisite studies, satisfies the English language requirements and there are still places available in the course at the time of acceptance. If you do not meet the guaranteed score your application will not be considered for entry. Guaranteed scores apply only if no further study has been undertaken after completion of one of these programs.

Domestic students completing an international qualification: The score listed should be considered a minimum score to be eligible for a place in that course. The actual standard required may be higher depending on the demand for the course and the number of Commonwealth Supported Places (CSPs) available.

Mathematical knowledge equivalent to a study score of at least 25 in VCE Mathematical Methods Units 3 and 4 is required for the following majors: Civil Systems, Computing, Construction, Mechanical Systems, Property and Spatial Systems. Students intending to pursue one of these majors should take VCE Mathematical Methods Units 3 and 4 or an equivalent subject. A bridging subject will be available for students who have completed VCE Mathematical Methods Units 1 and 2 but not VCE Mathematical Methods Units 3 and 4 or students who have received a study score below 25 in VCE Mathematical Methods Units 3 and 4. Some double majors are only possible if students have completed specific subjects in VCE or equivalent. Please refer to the website for more information.

For students with English as their second language a pass in English B at the required level will be accepted as satisfying the English prerequisite. Except where specified, IB subjects must be passed to at least Grade 4 Standard or Higher Level.

O Accepted GCE AS and A Level English subjects are: General Paper, General Studies, English Language and Literature, English Literature, English Language. Singapore A Level subject Knowledge and Enquiry (H2) is also accepted.



### futurestudents.unimelb.edu.au

### - Open Day

Parkville and Southbank campuses Sunday 21 August 2016 10.00am–4.00pm

### - Course Information Day

Wednesday 14 December 2016 Parkville campus

### Events near you

futurestudents.unimelb.edu.au/ events

### – Contact us

 Visit us at Stop 1 (Parkville):
 757 Swanston Street The University of Melbourne Victoria 2010 Australia

- Call 13 MELB (13 6352) + 61 3 9035 5511
- Submit an enquiry online at futurestudents.unimelb.edu.au/ contact

### Connect with us

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- futurestudents.unimelb.edu.au/ contact/brochure

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#### Statement on Privacy Polic<sup>,</sup>

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For further information, refer to: unimelb.edu.au/unisec/privacy

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Authorised by: Director, External Relations, August 2016

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