



# MASTER OF CONSTRUCTION AND INFRASTRUCTURE MANAGEMENT

[swinburne.edu.au/sydney](https://swinburne.edu.au/sydney)

The Master of Construction and Infrastructure Management aims to prepare graduates for future roles in managing people, equipment, materials, technological processes and funds in the construction, management and maintenance of buildings and assets in the civil infrastructure. This aim is facilitated by the study of advanced management and engineering techniques in the fields of construction, building and maintenance.

Students gain significant knowledge and skills in procurement and project delivery, resource planning and management, project costing, health and safety, and risk management. They also learn about the environmental, financial, legal and contractual considerations associated with project-based industries.

## COURSE SNAPSHOT

**Duration:** Two years full-time

**Location:** Sydney

**Intake:** January, May, September

**Fee:** A\$37,480 (annual fee for 2020)\*

\*Fees displayed are relevant to 2020 and are subject to annual review. Fees are based on a student's study load in each semester. Please see website for more information.

## ENTRY REQUIREMENTS

- A bachelor qualification in engineering, building, architecture, construction management or other cognate engineering/technology disciplines. Or a qualification deemed to be equivalent (in the opinion of the selection officer) to any of the above.
- English language proficiency (please see website for details).

## SCHOLARSHIP OPPORTUNITIES

Scholarships are available for selected students who apply for and begin this two-year master by coursework program. For more on scholarships, visit [swinburne.edu.au/international/scholarships](https://swinburne.edu.au/international/scholarships)

## WHY SWINBURNE?

A world-ranked university, Swinburne is focused on creating career-ready professionals who regularly find employment with the world's best companies, including IBM, Mercedes-Benz, Siemens, PricewaterhouseCoopers, and more.

Swinburne is proud to be recognised as one of the world's top universities by being ranked number 45 in the 2019 QS Top 50 Under 50.

Swinburne Sydney is situated in Parramatta, just 30 minutes by train from Sydney's city centre. Parramatta is a major business and commercial centre bustling with retail shops and global eateries. With a wide range of arts and cultural events, it offers the perfect lifestyle for young professionals and families.

With high-quality teaching and research, state-of-the-art facilities, student accommodation options and a range of support services, Swinburne Sydney is the ideal choice for students.

## INDUSTRY CONNECTIONS

For over 50 years, Swinburne University of Technology has been partnering with leading organisations to offer students practical learning and authentic workplace experiences. Our postgraduate programs are co-designed with industry, and many of our students undertake industry-linked projects, or projects with their own employers, as part of their studies.

## COURSE OVERVIEW

You must complete the following units of study:

- 3 Foundation units (37.5 credit points)
- 5 Technical units (62.5 credit points)
- 4 Elective units (50 credit points), selected from Elective, Technical or Foundation unit lists
- 1 Research Methods unit (12.5 credit points)
- 1 Research Paper (12.5 credit points)
- 1 Research Project (25 credit points)

### Units of study

#### Foundation units

Complete three units (37.5 credit points):

- Engineering Project Management
- Construction Site Operations
- Introduction to Risk and Due Diligence

#### Technical units

Complete five units (62.5 credit points):

- Environmental Sustainability in Construction \*
- Location-based Management for Construction \*
- Procurement and Risk Management in Projects \*
- Resource Planning and Management \*
- Infrastructure Deterioration Modelling

#### Elective units

Complete four units (50 credit points):

- Principles of Sustainability
- Maintenance Management of Engineering Assets
- Professional Masters Career Management
- Project Costing

#### Research units

Complete three units (50 credit points):

- Research Methods \*
- Research Paper \*
- Research Project \* (25 credit points)

\* Outcome units - matched exemptions are generally not granted for higher education outcome units.

\*\* Units are subject to regular review and may change.

Onshore international students can undertake no more than 25% of their course by online or distance education and may not study exclusively online/distance in any compulsory study period in accordance with government regulations.

## CAREER OUTCOMES

These programs will provide graduates with an opportunity to gain advanced theoretical and practical knowledge of construction and infrastructure management principles, procurement and cost analysis. Graduates can pursue careers as construction managers, project engineers/managers, civil engineers and asset management engineers in a range of industries including consulting engineering, construction, research organisations, private sector, local and other government authorities.

## AIMS AND OBJECTIVES

At the completion of the Master of Construction and Infrastructure Management course, graduates will be able to:

- demonstrate high-level advanced knowledge and skills in construction and infrastructure management practice related to design, construction, operation and maintenance of buildings and civil infrastructure
- plan and execute an independent research project in a relevant construction and infrastructure management topic by applying appropriate research principles, sound methods and research skills
- manage practical issues/complex problems and describe/develop contemporary and sustainable construction and infrastructure management trends and best practices related to design, construction, operation and maintenance of buildings and civil infrastructure
- investigate, analyse and synthesise complex information, perceptions, problems, concepts and theories of construction and infrastructure

management practice to provide rational solutions to complex problems using critical thinking and team-based and/or independent judgement in the project-based construction industry

- demonstrate clear and coherent communication skills to articulate complex knowledge and justify propositions and professional decisions to specialist and non-specialist audiences, including clients, customers, multi-disciplinary/multi-cultural project teams and stakeholders
- demonstrate a high level of autonomy, accountability, credibility, ethics, and responsibility for all personal work outputs.



## HOW TO APPLY

You can submit an online application directly to Swinburne Sydney or through an authorised representative in your country.

[swinburne.edu.au/sydney](http://swinburne.edu.au/sydney)

## MORE INFORMATION

Submit an online enquiry  
From Australia: 1800 595 333  
International: +61 2 9160 7788  
sydneyinfo@swin.edu.au  
1-3 Fitzwilliam St, Parramatta NSW 2150