

# CIVIL CONSTRUCTION DESIGN

**Course Guide** 





### Sydney State College

ABN: 18 626 015 647 | RTO CODE: 45765 | CRICOS PROVIDER CODE: 105623G



#### WHY STUDY CIVIL CONSTRUCTION DESIGN?

The Civil Construction Design course at Sydney State College offers a comprehensive education in architectural and engineering design. It combines theoretical knowledge with practical skills, covering building codes, regulations, and advanced design software. The curriculum emphasizes handson projects, allowing students to apply their learning to real-world scenarios and develop attention to detail. Guided by experienced professionals, students explore diverse design principles, including sustainability and urban planning, gaining deep insights into construction design.



#### **High Demand for Professionals**

There is a consistent demand for civil construction professionals due to ongoing infrastructure development, urbanization, and the need for maintenance and renovation of existing structures. This demand often translates into a stable job market.



#### **Diverse Career Paths**

The field offers a variety of roles, including structural engineer, civil engineer, construction manager, project manager, and urban planner. This diversity allows you to find a niche that matches your interests and skills.



#### **Global Opportunities**

Civil construction design is a field with global applicability. Skills and qualifications are often transferable internationally, providing opportunities to work in different countries and experience various cultures.



#### **Growth Potential**

With experience and further education, you can advance to senior positions such as chief engineer, project director, or even start your own consulting firm. The field offers substantial opportunities for career growth and specialization.



#### **Competitive Salaries**

Due to the technical nature of the work and the level of responsibility, civil construction design roles often come with competitive salaries. Experienced professionals, especially those in specialized areas or leadership positions, can command high salaries.



#### **Job Security**

Infrastructure is a critical sector, and the need for skilled professionals remains strong, even in economic downturns. This stability can offer greater job security compared to some other fields.

#### WHY CHOOSE THIS COURSE?

As an Advanced Diploma of Civil Construction Design student, you will:

- Understand the principles of structural design and analysis for different types of infrastructure.
- >>> Learn how to design safe and efficient road and highway systems.
- **Explore eco-friendly design and construction methods.**
- >>> Develop the skills needed to oversee and manage construction projects effectively.
- Gain insight into the legal and regulatory aspects of construction design.
- Master the latest CAD software for creating detailed construction plans.
- Successfully navigate unexpected and expected changes more efficiently and calmly.
- Develop practical skills in decision-making, problemsolving, and strategic planning.
- Acquiring tools to drive positive change and improve operational efficiency.
- Explore opportunities to make a career in the opportunities for advancement into Civil Construction positions.
- >>> Prepare for evolving job market demands with relevant Civil Construction competencies.

#### **YOU WILL LEARN**

- Managing program risk.
- Advising on the application of safe design principles to control risk.
- Leading and managing team effectiveness.
- Managing the civil works design process.
- Better understand of compliance with safety and legal standards.
- Establishing and maintaining a quality system.
- Interpreting civil engineering drawings and building plans.
- Preparing designs for land subdivisions, road infrastructure, drainage, sewer and water systems.

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**FACE TO FACE** 

**20 HOURS/WEEK** 

\$AU 17,600

#### **ENTRY REQUIREMENT**

Sydney State College (SSC) has the following entry requirements:

**International Students must:** 

- Be at least 18 years of age and have completed Year 12 or equivalent.
- Have an IELTS\* score of 6.0 (test results must be no more than 2 years old). English language competence can also be demonstrated through documented evidence of any of the following:
- Successful completion of an English Placement Test
- Successfully completed at least 6 months of a Certificate IV level course in an Australian RTO

#### **REASON TO CHOOSE / COUNT ON US**

- >>> Industry Talks
- **Industry Excursion**
- **Individual Mentoring**
- **Career Support**
- **Modern Computer Labs**

#### **STUDY PATHWAYS**

Upon successful completion of this course, students have a number of pathway options:

- A range of Advanced Diploma level qualifications.
- An undergraduate degree at universities or higher education providers those are willing to accept your credentials and experience (subject to higher education providers' course entry requirements).

FIND OUT MORE ABOUT YOUR **COURSE AND YOUR SUBJECTS** 



#### **COURSE STRUCTURE**

BSBPMG632	Manage program risk
BSBTWK502	Manage team effectiveness
BSBWHS616	Apply safe design principles to control WHS risks
RIICWD601E	Manage civil works design processes
RIIQUA601E	Establish and maintain a quality system
BSBSTR601	Manage innovation and continuous improvement
BSBOPS601	Develop and implement business plans
RIICWD526E	Prepare detailed traffic analysis
RIILAT402E	Provide leadership in the supervision of diverse work teams
BSBPMG530	Manage project scope
MEM30031	Operate computer-aided design (CAD) system to produce basic drawing elements
RIICWD512E	Prepare detailed design of motorways and interchanges

#### CAREER OPPORTUNITIES

Successfully completing this qualification provides the knowledge and skills required for students to gain fulltime/part time or casual employment in the following role/s:

- **Civil Engineering Draftsperson**
- **Civil Engineering Technician**
- **Road Design Draftsperson**
- **Structural Engineering Drafting Officer**
- Site Manager
- **Estimator**
- **Contract Administrator**



## Why study at SYDNEY STATE COLLEGE

Sydney State College (SSC) is more than just a place to learn. Our positive approach to study not only helps you prepare for a career in our changing world but helps define what success means for you. No matter who you are or where you want to go, our courses guide you towards mastering your strengths and developing skills that open up a world of opportunity.



#### **STUDENT SUPPORT**

Our trained staff helps ensure you remain on the right path to achieve your study and career goals. They can help you reserve free extra classes outside of your scheduled lectures for support, assist with planning your goals, study progression, and pathway, and provide access and direction for student resources. They are also the initial point of contact for all students.





#### **ACADEMIC SUPPORT**

Our all the academic staff members are highly qualified. Trainers and assessors are specialists in Vocational education and training who have years of experience providing quality advice to a wide variety of students. They are also aware of industry trends and stay up to date with the latest information to help you achieve your future career goals.



#### **WELLBEING AND SUPPORT SERVICES**

We understand that during training, some individuals may encounter challenges that require additional support. Our complimentary Student Wellbeing and Support service is here to offer students the assistance they need to overcome any obstacles that may disrupt their learning journey. We are committed to helping every learner succeed.



#### **CAREER SUPPORT**

Our goal is for Sydney State College students to graduate with the confidence, skills, knowledge, and qualities that make them highly sought after by employers. To accomplish this, Sydney State College offers access to our regular workshops focused on preparing for employment.



#### **CAMPUS FEATURES**

Facilities and equipment Modern and up-to-date new campus with multiple facilities which located in near Norwest Station. closed to transports, mall and restaurants.



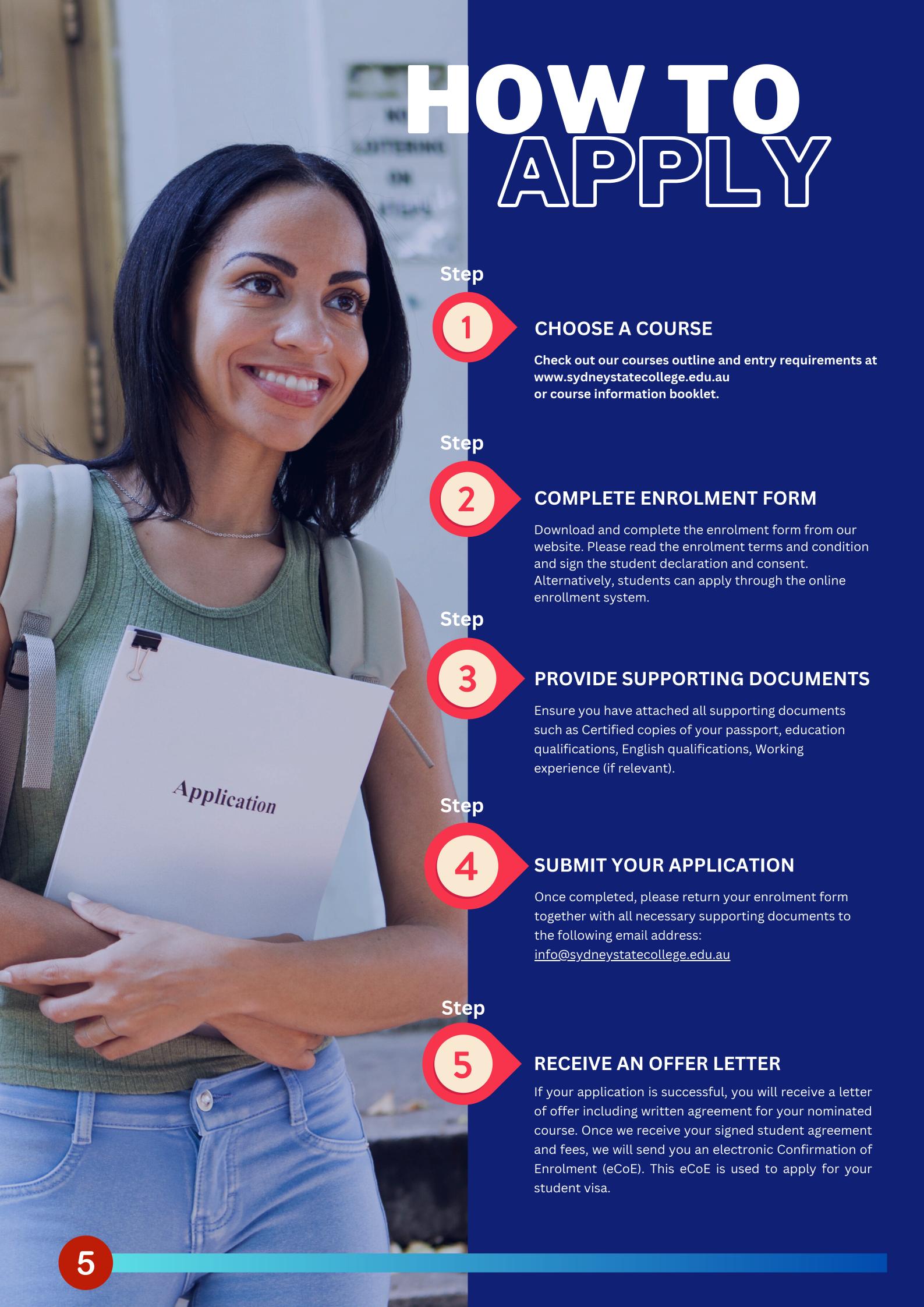
#### LEARNER ENGAGEMENT

Students are satisfied with their engagement with learning at their institution and whether they had a sense of belonging at their institution. Students engagement is the cornerstone of effective education, encompassing the active participation, motivation, and enthusiasm of students in their learning process. It goes beyond mere attention or compliance, involving genuine curiosity and a sense of ownership over one's learning journey.



#### **INDUSTRY RECOGNITION**

Industry recognition is a vital validation of an organisation's or individual's achievements and capabilities within a specific field or sector. Sydney State College is committed to signifies acknowledgment from peers, stakeholders, and experts for exemplary performance, innovation, or contribution to the industry.





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#### **Contact with us**











