

ENGINEERING TECHNOLOGY

CIVIL ENGINEERING DESIGN PROGRAMS

Want to further enhance your knowledge and skills to establish yourself in the growing industry of Engineering Technology (Civil Engineering Design).

Graduates in these roles carry out moderately complex tasks in a specialist field, working independently, as part of a team or leading a deliverable with others.

Graduates may apply their skills across a wide range of industries, business functions and departments, or as a business owner (sole trader/contractor).



APPLY NOW



CBD Campus

Modern facilities, computer labs, student lounges.



Student Support

Student lounge, student activities, In-house counsellor.



Nationality Mix

41 + Nationalities. Data from Feb 2025.



Capacity

936 Students.

ADVANCED DIPLOMA OF ENGINEERING TECHNOLOGY (CIVIL ENGINEERING DESIGN)

Code: 22700VIC

Cricos Code: 118246J

Course Duration: 104 weeks (Including 14 weeks of Holidays)

Total Hours: 1800 hours

Material Fees: \$1,000*

Digital Access Fees: \$200**

Course Fee: \$34,000

Scholarship available 15% of total course fee for Onshore Students Only.

*Students will be required to purchase additional resources at their own expense. Information regarding the estimated cost and where to obtain these resources will be provided in due course.

Industry Sector

Civil Construction
Engineering Design

Career Opportunities

Graduates of this qualification can pursue para-professional roles such as:

- Civil Draftsperson
- Engineering Laboratory Technician
- Research Assistant
- Civil Technician



NATIONALLY RECOGNISED
TRAINING

You will gain the knowledge, skills and training to support civil engineers in the civil and structural designing of infrastructure, construction and design industry.

The Advanced Diploma of Engineering Technology (Civil Engineering Design) equips graduates with practical and technical skills to assist civil engineers in designing and constructing infrastructure projects.

This qualification provides the knowledge and expertise to prepare detailed drawings and plans for civil engineering projects, supporting Civil Engineering Professionals in their work.

Graduates will contribute to the civil engineering and related industries by applying advanced engineering practices, enhancing existing products and services, and developing innovative solutions for global competitiveness.

GRADUATE OUTCOMES

Graduates of this program will be able to:

- Apply engineering and scientific principles to design civil applications within a specialized knowledge domain.
- Prepare technical sketches, charts, tabulations, and plans for civil engineering projects, including drainage, water supply, sewerage systems, roads, airports, dams, bridges, and other structures.
- Analyse, diagnose, and design civil construction solutions using engineering technology principles.
- Estimate material costs and ensure projects comply with specifications, regulations, and contract provisions.
- Utilize computer-aided drafting (CAD) software to create detailed drawings, plans, and designs for construction.
- Prepare cost estimates and material specifications for civil engineering works.
- Collaborate with construction workers and project managers to ensure project success.
- Inspect completed works to confirm compliance with specifications and regulations.
- Conduct laboratory and field testing of materials, soil, and water quality.

CORE UNITS

MEM13015	Work safely and effectively in manufacturing and engineering	
MEM16006	Organise and communicate information	
MEM16008	Interact with computing technology	
MEM22001	Perform engineering activities	
MEM22002	Manage self in an engineering environment	
MEM23004	Apply technical mathematics	
MEM30007	Select common engineering materials	
MEM30031	Operate computer-aided design (CAD) system to produce basic drawing elements	
VU23908	Investigate advanced technology applications in the manufacturing industry and related industries	
MEM22013	Coordinate engineering projects	
MEM30033	Use computer-operated design (CAD) to create and display 3-D models	

ELECTIVE UNITS

MEM23007	Apply calculus to engineering tasks	
MEM23109	Apply Engineering Mechanics Principles	
VU23948	Apply advanced statics principles to engineering problems	
VU23960	Apply environmental and heritage solutions to civil engineering projects	
VU23955	Apply principles of mechanics to engineering structures	
VU23963	Produce engineering design for a stormwater reticulation scheme	
VU23957	Produce engineering design for a reinforced concrete structure	
VU23959	Produce an engineering design for a steel structure	
VU23964	Produce advanced engineering drawings for a reinforced concrete structure	
VU23965	Produce advanced engineering drawings for a steel structure	
VU23950	Apply surveying computations to civil engineering projects	
VU23958	Analyse and design foundations and footings	
VU23962	Design timber structures	
VU23951	Produce Geometric Design for roads	
VU23961	Analyse the strength of civil structural elements	
VU23956	Apply Principles of soil mechanics	
VU23936	Produce drawings to enable road construction	
VU23930	Apply fundamentals of civil engineering to a construction project	
VU23932	Apply surveying for civil engineering projects	
VU23933	Perform measurements and layout task on construction site	
CPPBDN6106	Produce building information modelling for building design projects	
CPPSSI4035	Apply GIS software to spatial problems	

HOW WE TEACH

Experienced and Friendly Trainers at Danford College have a wide range of industry experience. Moreover, they have been selected and trained to appropriately relate to and support students in their learning.

RELEVANT CONTENT AND RESOURCES

Course content is regularly reviewed to ensure that it is up-to-date and relevant to the needs of the industry. Students and staff have access to a range of high-quality, comprehensive, and informative resources. Our up-to-date course content is available to students on our digital platform: CANVAS.

CLASS STRUCTURE

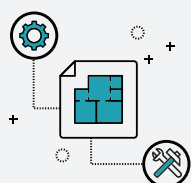
At Danford College all qualifications are delivered entirely

face-to-face in our Melbourne Campus. (Minimum of 20 hours of classroom contact per week). Courses consist of classroom-based training (maximum of 26 students) of theory and practical sessions with small groups.

ASSESSMENT

Students must demonstrate competency through highly practical and interactive assessments. These include: Practice exercises that reinforce interpersonal skills, Simulated training activities, Learner Resource Workbooks to support training, Independent research projects and Participation in simulated activities that closely reflect workplace processes.

For further information visit our website at www.danford.edu.au



Jobs

Graduates of Engineering and related Technology field (Advanced Diploma) are most often employed as:

- 33.9%** Technicians and Trade Workers
- 30.6%** Professionals
- 9.8%** Managers

Reference source: <https://www.yourcareer.gov.au/>

Industries

Graduates of Engineering and related Technology field (Advanced Diploma) are most often employed in:

- 17.2%** Transport, postal and warehousing
- 13.1%** Mining
- 12%** Manufacturing

For information about entry requirements visit our website at www.danford.edu.au **Digital Access refers to your learning resources and assessments via our learning management system.