RII50515 Diploma of Civil Construction Design

National ID: RII50515 | State ID: AZE3

About this course

The Diploma of Civil Construction Design reflects the role of personnel working as designers or design para-professionals who support professional engineers. They perform tasks involving a high level of autonomy and requiring the application of significant judgement in planning and determining the selection of equipment/roles/techniques for themselves and others. They are required to develop site specific work designs to ensure the implementation of the client’s site requirements. They demonstrate the application of a broad range of technical, managerial, coordination and planning skills.

The course content has been designed and selected as recommended and supported by industry to ensure graduates have a strong understanding of Australian standards, business practices, national codes and guidelines.

Gain these skills:

• Schedule and estimation of construction tasks
• Calculate foundation and footing requirements
• Manage a project schedule, cost and risk
• Knowledge of structural requirements, local building and construction standards, codes and practices
• Structural mechanics: loads, analysis, materials, and design of building members such as columns, beams,
trusses and portal frames
- Simulating various load conditions to determine the strength and stiffness of structure by reporting component stress, strain and deformations
- Create detail drafting, technical specifications, schedules, and bill of quantities for a building project
- Building Information Modelling (BIM) implementation through planned coordination to deliver specific project outcomes, time and cost savings
- Detailed designs of both rural and urban roads, surface and subsurface drainage
- Investigate location of underground services and their impact on projects
- Calculating, sizing and selecting infrastructure components
- Geometric designs to optimize operational efficiency and road safety
- Analyse, interpret and apply Australian, MRWA and Austroads standards and guides
- Stormwater capture methods

Flexible delivery!
For those of you already working in the industry, this course is delivered full time as well as part time, along with flexible learning delivery modes to support full-time workers. Evening delivery will support people unable to attend day classes to obtain a Civil Engineering Diploma qualification, in order to enhance career ambitions and to build and update your knowledge and skills in this rapidly changing industry.

Want to study this course part time in Semester 2?
This course offers part time study options. To have an enrolment officer contact you when part-time enrolments open, visit our Part time study webform.

Overview

This course may be offered with a blended, flexible delivery model to enable social distancing measures to be undertaken during the COVID-19 pandemic. This approach may include a mix of online and classroom based delivery, as well as practical and work experience placements. Lecturers will provide any specific instructions if your training delivery style needs to change.

All year round, 2020
Munster - Classroom-Traineeship

Duration: 18 Months
When: All year round
How: Part Time

Units

Elective

<table>
<thead>
<tr>
<th>National ID</th>
<th>Unit Title</th>
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</thead>
<tbody>
<tr>
<td>BSBPMG512</td>
<td>Manage project time</td>
</tr>
<tr>
<td>BSBPMG513</td>
<td>Manage project quality</td>
</tr>
<tr>
<td>BSBPMG517</td>
<td>Manage project risk</td>
</tr>
<tr>
<td>BSBPMG518</td>
<td>Manage project procurement</td>
</tr>
<tr>
<td>CPPBDN5013A</td>
<td>Develop and collaborate on building information models for small-scale building design projects</td>
</tr>
<tr>
<td>CPPSIS5032</td>
<td>Capture new spatial data</td>
</tr>
<tr>
<td>MEM23004A</td>
<td>Apply technical mathematics</td>
</tr>
<tr>
<td>MEM23109A</td>
<td>Apply engineering mechanics principles</td>
</tr>
<tr>
<td>MEM30031A</td>
<td>Operate computer-aided design (CAD) system to produce basic drawing elements</td>
</tr>
<tr>
<td>MEM30033A</td>
<td>Use computer-aided design (CAD) to create and display 3-D models</td>
</tr>
<tr>
<td>RIICSG401D</td>
<td>Apply the principles of civil concrete structures construction</td>
</tr>
<tr>
<td>RIICSG402D</td>
<td>Apply the principles of civil steel structures construction</td>
</tr>
<tr>
<td>RIICSG403D</td>
<td>Apply the principles of civil timber structure construction</td>
</tr>
<tr>
<td>National ID</td>
<td>Unit Title</td>
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<tr>
<td>RIICWD501D</td>
<td>Prepare detailed design of foundations</td>
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<tr>
<td>RIICWD504D</td>
<td>Prepare detailed design of environmental controls</td>
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<tr>
<td>RIICWD508D</td>
<td>Prepare detailed design of rural roads</td>
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<tr>
<td>RIICWD511D</td>
<td>Prepare detailed design of sub-divisions</td>
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<tr>
<td>RIICWD521D</td>
<td>Prepare detailed design of flexible pavements</td>
</tr>
<tr>
<td>RIICWD531D</td>
<td>Prepare detailed design of subsurface drainage</td>
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<tr>
<td>RIIMPO402D</td>
<td>Apply the principles of earthworks construction</td>
</tr>
</tbody>
</table>

**Entrance requirements**

<table>
<thead>
<tr>
<th>School Leaver</th>
<th>Non-School Leaver</th>
<th>AQF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of WACE General or ATAR (Minimum C Grades) or equivalent</td>
<td>Completion of WACE General or ATAR or equivalent (minimum C Grades)</td>
<td>Certificate III</td>
</tr>
</tbody>
</table>

This course is available as a traineeship.

**Entrance requirements for traineeships**

You must be employed in a training contract by an appropriate organisation to study an apprenticeship or traineeship.

In a traineeship you also gain hands-on skills and work experience, and improve your employment prospects, while earning a wage. On successful completion you will gain a nationally recognised qualification which can lead to rewarding career options. The difference between a traineeship and an apprenticeship is that a traineeship can be either a full time or part time employment based training arrangement, usually for a nominal duration of 12 months or more, generally in a non-trade related area.

To find out how to arrange a traineeship and study at South Metropolitan TAFE, please contact the [Jobs and Skills Centre](mailto:) closest to you.
Study pathway

- Certificate III in Civil Construction
- Certificate III in Trenchless Technology
- Diploma of Civil Construction Design
- Advanced Diploma of Civil Construction Design

Job opportunities

- Civil Engineering Drafter
- Civil Engineering Designer

Please note this list should be used as a guide only as job titles and qualification requirements may vary between organisations.

SM TAFE actively promotes the employment availability of course graduates to key industry partners and organisations. We also seek expressions of interest from organisations for the placement of our students into work experience. We endeavour to assist students into a career pathway, but please be aware that neither employment nor work experience placement is guaranteed by us.

To access free career planning and job search assistance, visit the Jobs and Skills Centres page.

Fees and charges

Indicative fees and charges

- 2020 general admission fees list
- 2020 apprenticeship/traineeship fees list

Fees and charges published on our website are indicative. Your fees will depend on your eligibility for government funding or a concession rate, and the units you choose to study or seek to be recognised under Recognition of Prior Learning (RPL). Our Indicative fees lists show fees that are:
Based on the full possible study plan of units, including the recommended electives
Based on full time study in 2020
Charged at the government funded rate for over 18 years of age students
Based on unit electives designed to meet localised industry demand for skills
Made up of course fees and resource fees, or RPL fees. Course fees are the cost of your tuition, while resource fees pay for consumables provided to you to aid your study (such as printing and paper). You may also be required to purchase textbooks or equipment that are not part of our tuition or resource fees.

Fees may vary between students and between educational providers. Other charges may apply.

Visit our [Fees and payment options](#) page for more information.

Call 1800 001 001 to get a more accurate fee indication based on your eligibility and study plan before applying.

**VET Student Loans**

Selected courses are VET Student Loan eligible courses.

A VET Student Loan creates a debt that must be repaid to the Commonwealth and is only available to students who are eligible.

To find out if you are eligible or to see the list of eligible courses visit our [Student Loans](#) page.

**International students**

Selected courses are available to International students for full time study only.

Fees, charges, available locations, applications and enrolment procedures for International students are different to those for students who have Australian permanent residency.

For more information or to find a course visit the [TAFE International WA](#) website.

**Apprenticeships and traineeships**

Fees for apprenticeships and traineeships are charged at a rate per nominal hour of study.

This means that your fees will vary depending on the units you study as part of your training plan.

Apprentices and trainees are liable to pay for their own fees but some industrial agreements (awards) dictate that employers are required to reimburse their apprentice upon receipt of satisfactory progress. An employer may also opt to pay on behalf of the apprentice or trainee.

For more information visit our [Apprenticeships and traineeships](#) page.
Recognition of Prior Learning

Recognition of Prior Learning (RPL) enrolments are charged at $3.25 per nominal hour of study.

No concession fees apply to RPL enrolments. Refer to the institutional or apprenticeship/traineeship fee lists for an indicative RPL course fee.

Please note, fees are subject to change.