

2023

ACES INDUSTRY GUIDE

Issue No. 13



MONASH
ACES



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President's Welcome Address



“ANYONE CAN BUILD A BRIDGE THAT STANDS, BUT IT TAKES AN ENGINEER TO BUILD A BRIDGE THAT BARELY STANDS”

“We are privileged as civil engineers – we hold a great deal of responsibility to influence countless people’s lives. As EA requires us, we must practice competently. Learn and connect with the best in the business. Take it upon yourself to learn new skills and understand your craft better. ACES helps students to begin this journey of self-improvement.

Building bridges is such an important part of becoming a professional. These pieces of paper you are holding in front of you are your first step in nailing that interview, learning from real practitioners, and finding your place in the civil engineering world.

Trust yourself and keep things balanced. Optimise that drainage network or skyscraper or the staging of that bridge construction project, but have fun doing it! Show complete respect for safety and practice due diligence, but work somewhere with a culture that suits you!

Oh yeah...and amongst all that career stuff, ACES also throws parties!

Special thanks go out to our incredible sponsors for this year: SMEC (platinum), 12d Model, SPACE GASS, Arcadis, ATC Williams, Dalton Consulting Engineers, GHD, Laing O’Rourke, Seymour Whyte, Taylors, Tonkin + Taylor, Traffix Group, WSP, WGA, as well as Monash University’s Department of Civil Engineering.

Finally, absolutely nothing would be possible without the selfless commitment of the entire committee, without whom, the civil engineering cohort at Monash would be without a dedicated student club.

I now leave you with our Industry Guide publication; let it serve as a small glimpse into ACES’ events and initiatives, as well as help you bridge the gap between your current ambitions and the civil engineering industry.

A handwritten signature in black ink, appearing to read 'Anton Zangl'.

Anton Zangl
ACES President

ABOUT ACES

The Association of Civil Engineering Students (ACES) is the dedicated club for Civil Engineering students at Monash University. Our main goal is to bridge the gap between students and the industry by providing insight into Civil Engineering careers, as well as opportunities for networking and professional development.

Our industry events enable students to expand their network and explore different career pathways by connecting with representatives from various civil engineering companies. Such events include our annual Industry Night, Vacation Work Information Night, and Mock Assessment Centre.

We also host social and academic events, including our Welcome BBQs at the beginning of each semester, and various software training sessions. These events are a great way for students to expand their technical knowledge and skillsets, while meeting other civil engineering students across all year levels.

Ultimately, the wide range of ACES offerings will help ensure that Monash Civil Engineering students are well-equipped with the relevant skills needed to successfully enter the workforce.



2023 EVENTS TIMELINE

O-Week

Semester 1 & 2

2023 kicks off with fun and freebies at the ACES O-Week stall. This is a great opportunity to become an ACES member, win exclusive merch, and chat to our friendly committee about anything related to civil engineering.



Welcome BBQ

Week 1, Semester 1 & 2

ACES members get to enjoy a free lunch at Welcome BBQ whilst making new friends with fellow civil engineering students.

Victorian Tunnelling Centre Site Tour

Week 2, Semester 1

A guided tour in Australia's first specialist tunnelling training centre located in Chadstone. Students get to visit a replica mined tunnel and TBM, experience virtual reality and network with representatives from Suburban Rail Loop.



Industry Night

Week 5, Semester 1

With over 15 companies from every field of civil engineering attending, Industry Night is not a night to be missed. This is a fantastic opportunity to network and learn about undergraduate and graduate offerings.

Software Training Sessions

Semester 1 & 2

Upskilling is a must to stand out among the crowd. Our software training sessions are led by professionals with years of experience.



OGM

Week 10, Semester 1

OGM is a chance for the club to reflect on its performance in the previous months. Members are welcome to attend and nominate themselves for any vacant positions.

SWOTVAC Study Sessions

SWOTVAC, Semester 1 & 2

The best way to get through the tough exam season is to do it with others. Come along to our study sessions and study with like-minded students.



Inter-Club Trivia Night

Winter Break

Trivia Night at the bar is a sure-fire way to break the ice and meet engineering students of all specialisations before the semester starts. If you're looking for fun, this is it!

Vacation Work Information Night

Week 3, Semester 2

This networking evening is not one to be missed if you are interested in applying for undergraduate and graduate roles.



Platinum Sponsor Exclusive Event

Week 5, Semester 2

A new addition to our event calendar involving a Q&A panel discussion and networking session with design company, SMEC.

Mock Assessment Centre

Week 6, Semester 2

Mock AC is the perfect opportunity to practise your interview skills and expose yourself to case studies with the guidance of industry professionals



AGM

Week 9, Semester 2

Our Executive team reports on the year, and the committee is dissolved. We welcome anyone interested in joining the committee!

WHAT IS CIVIL ENGINEERING?

Civil engineering is defined as the design, construction and maintenance of physical and naturally built environments that form the key infrastructure of modern society. As a discipline, civil engineering is exceptionally broad and may be divided into multiple key areas, scale (local, municipal, commercial), public or private applications, and even areas of overlap with other engineering disciplines (i.e. Resources and Environmental Engineering).

A rundown of the 4 main subdivisions of civil engineering as offered by Monash — structural, water, transport & traffic, and geotechnical — is outlined below:

Water Systems

Water Systems Engineering concerns the design, operation and optimisation of water and wastewater treatment facilities, reservoirs, dams, pipe networks, open channels, and stormwater. Planning and management of water supply, quality and drainage systems for communities, agriculture and industry form a pivotal part of projects in this sector. Software is frequently used in conjunction with GIS and topographical data to assist in planning and design, providing a means to view surrounding water bodies, model drainage patterns, and predict critical flooding events.

Monash Units:

- CIV2263
- CIV3248
- CIV3285
- CIV4288

Geotechnical

Geotechnical engineers work on a variety of projects - tunnels, dams, buildings, mines, landfills and roads. Aspects of this can include foundation design, support structures, stability of slopes, tunnel design and construction, and the suitability of materials for infrastructure projects. This often involves fieldwork, in-situ, and laboratory testing to develop an accurate profile of the soil and ground characteristics to determine its response to imposed loads from engineering infrastructure.

Monash Units:

- CIV2242
- CIV3248
- CIV3247

Structural

Structural Engineering relates to the built environment. Residential and office buildings, bridges, tunnels, and dams are just a few examples of different projects a structural engineer may work on in their career. Using a combination of maths, mechanics, and material properties, a structural engineer assesses the durability, serviceability and ability of structures to resist various imposed loads and stresses to inform their design and construction. Throughout the design procedure, an engineer must also follow and abide by building standards to ensure safety is achieved.

Monash Units:

- CIV2206
- CIV2235
- CIV3294
- CIV4280
- CIV3221

Transport

Transport Engineering covers the behaviour, optimisation and management of transport and traffic systems to improve infrastructure efficiency and cost effectiveness. Transport engineers design the physical aspects of transportation systems such as highways, railroads, air transportation, logistical supply systems and their terminals. They do this by using criteria such as minimising travel delays, improving safety, reducing emissions and enhancing reliability. An assessment of future travel flow patterns is especially important to account for the constantly changing population and traffic flow.

Monash Units:

- CIV2282
- CIV3283

CIVIL ENGINEERING CAREER PATHWAYS

Consulting

Civil engineers who work in consulting will have the opportunity to devise and implement civil engineering solutions for a diverse range of projects and clients.

The aim is to assist the clients with meeting deadlines in a timely manner and to a high standard. You will have a say in every aspect of the project, from design to construction, and you can work onsite or in the office depending on project needs.

Consulting spans the gamut of engineering work, from:

- Design
- Project management
- Forensics
- Software development
- Construction services, and more



Construction

Civil engineers in construction manage and enhance both natural and built environments. You will work on projects of varying sizes and complexities, spending much of your time on site.

You will be responsible for planning, designing, constructing, and testing these structures before they can be used by the public.

Rewards for those who succeed in this often fast-paced environment include:

- High salaries
- Team camaraderie, and
- The satisfaction of seeing tangible results of their work

Public Sector/Government

Civil engineers who choose a career in public agencies may work in local, regional, state, or federal agencies. This track is ideal for individuals with a strong desire to:

- Help shape their community
- Make a difference in the world around them, and
- Work on a variety of important issues

The work is challenging and varies, requiring a resourceful problem solver with strong technical acumen who enjoys a wide range of experiences.

There are early opportunities for taking on significant responsibility for those with a desire to involve themselves in important and complex issues.



Industry

As a civil engineer in the industry, you have the opportunity to bring technical expertise and innovation to improve operations, processes, and products. This field exposes you to diverse settings such as:

- Manufacturing
- Technology
- Pharmaceuticals
- Public facilities, and other goods and service providers.

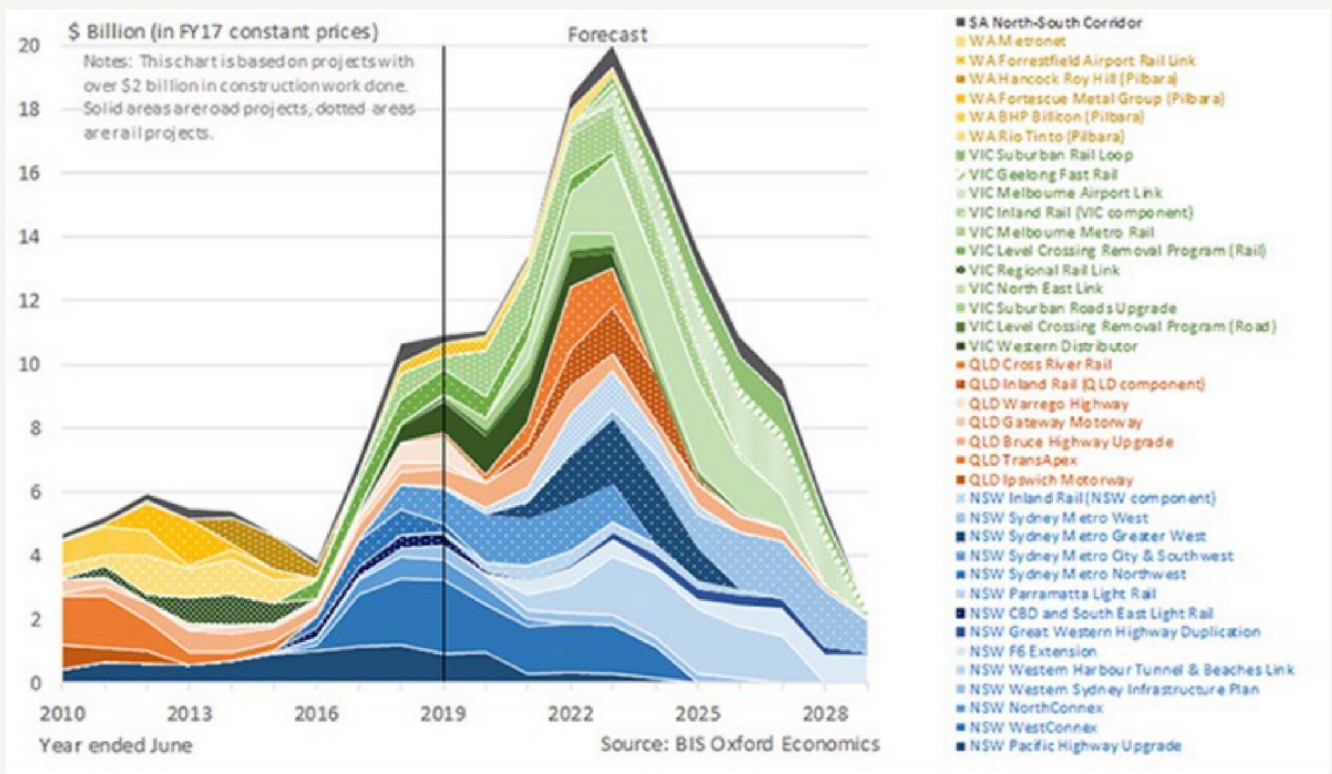
You will manage large plants, oversee facility design and construction, conduct environmental site assessments, and feasibility studies for new ventures.



STATE OF THE CIVIL ENGINEERING INDUSTRY

The civil engineering industry in Australia is currently experiencing significant growth and expansion, with new infrastructure projects and innovative technologies driving progress and opportunity. This growth has been particularly pronounced in Victoria, with a range of recent and current projects underway that are transforming the state's infrastructure and improving its connectivity and sustainability.

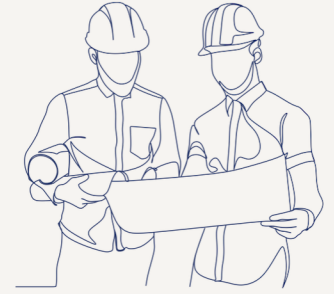
The figure below visually depicts the expenditure on major infrastructure projects in Australia, as forecast in 2017 [1]. Halfway through 2023 was predicted to be the peak, and a drop in investment is predicted in the years to follow. With the future of certain projects such as Geelong Fast Rail and Melbourne Airport Rail in doubt, as future civil engineers, we need to consider this trend when we make decisions about our careers and the companies we work for.



[1] Infrastructure Magazine (2020)

However, the job outlook for civil engineering professionals in Australia is generally positive, with a strong demand for skilled engineers in both consultancies and construction companies. According to the Australian Government's Job Outlook website, employment in the civil engineering industry is expected to grow over the next five years, with an estimated 12,000 new jobs to be created by 2026. This growth is being driven by ongoing investments in infrastructure, particularly in areas such as transport, energy, and water infrastructure. However, as a graduate engineer, your options are not limited to engineering consultancies and construction companies. Civil engineers are also frequently hired in other industries such as renewable energy, mining and even business consultancies. So when looking for a job, make sure to widen the breadth of your research. Private residential, commercial and industrial developments typically also require the expertise of geotechnical, traffic, water, and structural engineers - though these developments often do not receive the same attention as major government projects.

The civil engineering industry in Victoria and across Australia is also experiencing growth and innovation in a range of other areas, particularly around sustainability and technology. Sustainable design and construction practices are becoming increasingly important in the industry, with a focus on reducing carbon emissions, minimising waste, and maximising energy efficiency. Examples include the use of crushed recycled concrete and glass for pavement subgrades on the West Gate Tunnel Project and using electric 'E-TBMs' for tunnelling on the M4-M5 Link in Sydney instead of diesel-powered TBMs, among countless other examples. This trend is being driven by a range of factors, including government regulations, public demand for more sustainable infrastructure, and the availability of new materials and technologies that support sustainable practices.



Technological innovation is also driving change in the civil engineering industry, with the adoption of new technologies such as Building Information Modelling (BIM), drone imagery, and autonomous vehicles transforming the design and construction process. BIM, in particular, is becoming an increasingly important tool in the industry, allowing engineers and designers to create detailed 3D models of buildings and infrastructure projects that can be analysed and modified in real-time. This technology can improve the accuracy and efficiency of the design process, reducing errors, making designs "dynamic" to accommodate last-minute changes to the client's needs, and improving the overall quality of the finished project.

Understanding the culture within different types of companies is also important for students and young professionals looking to establish a career in the civil engineering industry. There are significant differences between the working cultures of consulting and contracting firms.

Construction firms

The culture of a construction contractor is strongly team-focused and often adopts a "get the job done" mentality. This can make your work very rewarding, but often involves long working hours, weekend and/or night shift work. This can be quite a high-pressure environment, with tight deadlines and the need to make quick decisions in response to changing circumstances. This culture is one that leaders in the construction industry are actively trying to improve, to make the industry more diverse and inclusive. On the other hand, a civil engineering consultancy may have a more collaborative culture, with a greater emphasis on teamwork, communication, and a solutions-based approach.

Consultancies

Consultancies may also have a greater emphasis on professional development, training, and mentoring, but your work day probably won't be as varied, with engineer site visits a rarity. Civil engineering companies often have different cultures and working atmospheres depending on their size. Boutique firms may encourage their graduates to take more responsibility for projects, often working on a much larger scope of a smaller project, while Tier 1 companies may provide more structured career development opportunities, but your scope of work may be smaller. The level of support you receive as a graduate engineer also differs between company to company. Bigger companies with a more structured graduate program typically try to 'ease you in' when first joining the company, while smaller and more boutique firms expect you to get accustomed to the work they are undertaking more rapidly. This does tend to create a higher level of stress for younger engineers. However, it also means that there are more learning opportunities at the beginning of your career.

WANT TO FIND OUT MORE ABOUT CIVIL AND CONSTRUCTION ENGINEERING?

Here is just a small snapshot of the insane efforts creators/journalists/academics put into educating and informing us civvies of what's happening in our industry!



Infrastructure Magazine

<https://infrastructuremagazine.com.au/>

Register to receive a free printed magazine every few months! 50+ pages of news, expert insight from professionals + leaders.



Roads & Infrastructure Magazine

<https://roadsonline.com.au/>

Similar format to "Infrastructure Magazine" but with a focus on the future of road and civil infrastructure across Australia.

Content creator: The B1M

<https://www.theb1m.com>



A global juggernaut in architecture and civil engineering content creation, with weekly videos highlighting the social, environmental & political aspects of the built environment. They boast an exceptionally light-hearted podcast with a pub-like feel and plenty of banter.

Content creator: Practical Engineering

YouTube: @PracticalEngineeringChannel



An unmistakable "practical" engineering channel, hosted by Grady Hillhouse, breaking down civil engineering concepts and news events with models and demonstrations.

Engineering Management Institute Podcasts

<https://engineeringmanagementinstitute.org/podcasts/>

A series of podcasts hosted by a range of professionals in the USA. Regularly host interviews with practitioners who are leaders in their field, with plenty of career advice.



Content creator: Brendan Hasty

YouTube: @BrendanHasty



A Melbourne-based structural engineer and content creator focussing on both technical rules of thumb, as well as career advice particularly for an Australian audience.



Content creator: The Efficient Engineer

YouTube: @TheEfficientEngineer

An incredibly well-produced series of academically-leaning civil/mechanical engineering fundamentals videos. Explains concepts such as bolted joints, shear stress, buckling, and FEM in very visual and intuitive ways.

Podcast: The Construction Engineering Show

Apple Podcasts/Spotify: *The Construction Engineering Show*

Hear the often off-the-cuff thoughts of American engineer Bob Hildebranski about how to be more productive and successful in the field of construction.



Mass Timber Construction Journal

<https://www.masstimberconstructionjournal.com/>

A free, open-access academic journal about everything mass timber. Mass timber is disrupting the building construction industry with its simple fabrication & installation process, superior sustainability credentials and aesthetics.



NETWORKING 101

Benefits of Networking

Networking is an important way to make yourself known among other engineers and to find jobs that are not formally advertised (i.e. Seek, CareerOne, MyCareer). Using your contacts allows you to tap into the hidden job market.



Who are your contacts?

Your current networks may include other students, friends, lecturers, workmates, student clubs and societies, colleagues, employers and members of your sporting team or community organisation. Some of these people may currently work in your preferred industry or they may know someone else who could provide assistance.



A decorative background consisting of a network of light blue dots connected by thin lines, forming a complex web-like structure. The dots are of varying sizes and are scattered across the page, with a higher concentration in the top-left and bottom-right corners.

NETWORKING TIPS

●..... Build real connections

Networking events are a bit like being set up on a blind date, and similar rules apply. Don't take over the conversation and talk about yourself and your business. People want to feel that you are genuinely interested in them. Rather, demonstrate a sincere interest in the professionals you meet by asking thoughtful questions about their work and experiences. By building authentic connections and establishing a rapport, potential opportunities for mentorships, internships and graduate positions may arise.

●..... Research and prepare

The best impressions are the ones that appear effortless. Approaching others too aggressively and not paying proper attention to the people and conversations around you can have a negative effect. To make a positive impression, prepare thoughtful questions that demonstrate your interest in learning about the person and their work. Engage in mutually engaging conversations that create an environment where you feel comfortable sharing your own experiences or interests when appropriate. Remember, building relationships takes time and effort, so be patient and persistent in your networking efforts.

●..... Consider your 'personal brand'

A big part of networking is taking the time to consider the image you want to convey. What impression do you want to make to potential colleagues and employers? The way you present and express yourself, both verbally and in written form, for example, in your resumes and cover letters are the most obvious way to make a positive impact. Take your time to refine your communication skills to ensure that your message aligns with your professional goals.

A decorative background featuring a network diagram with interconnected nodes and lines, primarily in shades of blue and grey, positioned in the top-left and bottom-right corners of the page.

NETWORKING TIPS

●..... **Develop an ‘elevator pitch’ about yourself.**

An elevator pitch is a brief introduction of who you are and what you are seeking. The idea behind an elevator pitch is that it can be delivered in the time it takes for an elevator ride (approximately 30 seconds). It is designed to get the conversation started – you want to get the attention of potential employers in a concise and effective way. The pitch should be engaging, concise, and encourage the employer to ask questions for more details. A well-executed elevator pitch can lead to valuable networking opportunities for your career.

●..... **Set up a LinkedIn profile**

Your LinkedIn profile serves as your online resume. Ensure it's complete and detailed, including your experience, qualifications, and skills. Check out a sample profile on Career Connect's social media job searching page to get an idea of how to create a compelling profile.

●..... **Review your ‘digital footprint’**

As a student looking to build relationships with professionals in the industry, your digital footprint is crucial to your personal brand. Your email address, such as studmuffin@hotmail or fairyprincess@gmail, may not convey professionalism to potential employers. Social media platforms such as Facebook can also negatively impact your chances of getting hired. It is important to regularly Google yourself, adjust your privacy settings, and remove potentially embarrassing photos or content that may not align with your areas of work interest.

NETWORKING TIPS

●..... **Have a goal**

When attending a networking event for an hour, aim to make at least three meaningful connections. Not every conversation will be exceptional, but if the person you're speaking with is not in a relevant department, ask if they can introduce you to someone who is. If that's not possible, politely conclude the conversation and continue to meet new people. Avoid getting too focused on one person, as it can hinder your success at the event

●..... **Bring a friend**

Attending networking events can be intimidating, but having a friend or colleague with you can make it easier to break the ice. When you meet new people together, it can keep the conversation flowing. It can be difficult to talk about your own achievements, but having someone else to sing your praises can be helpful. And don't forget to return the favour!

●..... **Consider joining a professional association**

The following is a list of relevant professional associations:

- Professionals Australia
- Australian Local Government Association (ALGA)
- Consult Australia
- Institute of Public Works Engineering
- Institute of Transportation Engineers (ITE-ANZ)

●..... **Practice makes perfect**

Building a professional network is an ongoing process and requires continuous effort. It's essential to enhance your networking skills by regularly attending events and expanding your network. Take time to reflect on your previous networking experiences and identify areas for improvement. Incorporate those lessons into your next event to make it more productive. Set a personal goal to attend at least one networking event every month to stay engaged and build long-lasting professional relationships. With consistent effort and dedication, you'll be able to develop a strong and valuable network that can help you advance your career.

EMPLOYMENT 101

Employment Opportunities

Beginning your journey into the world of civil engineering can be daunting but no matter where you are in your studies there are always career options to explore. Civil engineering companies offer roles for students at all stages of their studies, and they can be found on websites and forums where they can post job listings. Some good website examples are GradAustralia, GradConnection, and LinkedIn, while large forums like Whirlpool are also useful. The civil engineering faculty also sends emails informing you of any job opportunities they come across.

Cadetships

- Intended for younger students (1st and 2nd year)
- Work casually or part-time until you graduate
- Great way to learn about the industry
- Scarce opportunities but will help you get ahead in your career

Vacation Programs

- Usually a full-time 12-week program over the summer
- Intended for students in their penultimate year of study (2nd last year)
- Can lead to casual/part-time work after the program finishes (into your final year)
- Great experience and can often lead to graduate offers
- Applications open from March/April onwards

Graduate Programs

- Full-time jobs beginning within 1 year of graduating
- Generally, applicants need to be in their final year of study
- Applications open early in the year, generally from February
- More opportunities for international students compared to aforementioned programs

*This list is not exhaustive and many places offer casual/part-time employment for aspiring civil engineers.



EMPLOYMENT 101:

How to Write Your Cover Letter

A cover letter is a tool used to convey a compelling narrative of your professional identity and reason for application. You should aim to create a strong first impression by articulating your interest and suitability for the role. This should be done by sharing meaningful information of interest to your hiring manager, such as skills and experiences relevant to the advertised role and related information confirming your desire to work at the organisation. Make sure to tailor each cover letter to the role and company you are applying for as every job and organisation will have different demands. Recruiters spend less than 60 seconds reading your cover letter, so it is important to differentiate yourself from the pool of applicants.



Before Writing Your Cover Letter

Prior to writing, it is essential that you have researched the company and role you are applying for. Remember to note down information in the general aspects of:

- Company values and culture
- Company mission and strategies
- Company history and scope
- Key projects that interest you
- Current information about the industry and its effect on the company

The advertised job description will also provide clues about what the company is looking for. Look out for details such as:

- Description of tasks and responsibilities
- Relevant experiences, qualifications, or skills
- Key selection criteria



Tips for Writing your Cover Letter

FIRST PARAGRAPH

- Introduce yourself. State your degree and the stage you are in.
- Briefly convey why you wish to apply for the advertised role and what differentiates you.
- Reference any connection or referrals to add more interest.

SECOND PARAGRAPH

- In the second paragraph address the skills and experiences you bring and match them to the key selection criteria
- Always use examples from your past experiences to support your claim.

THIRD PARAGRAPH

- Confirm your interest and sign off.

OVERALL

- Keep it concise and use short well-structured sentences as your cover letter should only be 1 page.
- Proofread your cover letter as there should be no errors. If you can, have someone else review it for you.



EMPLOYMENT 101:

How to write your CV/Resume



This sample resume only serves as a guideline. Make sure to tailor your CV according to your area of interest and expertise as well as your target company.

Cameron Vans

Wellington Road, Clayton VIC 3800 0412 345 678
cameron.vans@engineersmail.com [Linkedin Profile](#)

A highly competent individual with a strong drive for supporting the growth of our local infrastructure and economy. With a keen eye for detail and pursuit for excellence, I strive to work in a fast-paced team environment where I can develop my technical skills and capabilities to solve complex engineering problems.

As the opening of your CV, provide a quick snapshot that covers your career aspiration. Aim to summarise the most relevant and notable aspects of your skills and experience. Keep this attuned to your target company and role to present yourself as a suitable applicant.

EDUCATION

2017 – present
Bachelor of Engineering, Monash University
Major in Civil Engineering
Expected completion in 2021

Achievements:

Distinction average, awarded Monash Mentor Scholarship for undergraduate study

You may also include key knowledge areas, notable projects such as your FYP, exchange experience and other awards and academic achievements.

RELEVANT EXPERIENCE

December 2020 – April 2021

Undergraduate Intern

Civil Roads, Melbourne

- Assisted the roads and highway team in preparing two functional designs for roads in poor conditions, allowing for optimal optioneering based on risk and cost-efficiency.
- Improved efficiency in project scoping by 40% through integrating data capture in a centralised dashboard for poor road conditions.

Use general structure of “action + keyword + quantitative information” to provide scope and scale of achievements. Aim to provide measurable outcomes or exemplify desirable skills in relation to the responsibilities you undertook.

March – June 2021

Final Year Engineering Project

- Project outputs seek to assist in research of future sustainable development of regional towns through efficient roadway management and urban planning.
- Demonstrated high standard of oral and written communication in working with local authorities to seek qualitative and policy data.

- Always tailor your resume so that your application corresponds to key selection criteria as illustrated by the job description.
- Stick to a simple structure that is easy to read. Often, your resume is screened by an applicant tracking system instead of the human eye, thus, avoid intricate resume templates and designs.
- Proofreading is key. Make sure your application is free of spelling errors and you have addressed it to the correct company.
- Receive feedback! Check out Monash's Career Connect service and an experienced friend/ family member to provide suggestions to your applications before submission.

VOLUNTEER AND COMMUNITY EXPERIENCE

June 2018 – March 2019

Access Monash Mentoring

Monash University

- Dedicated individual support and assistance to under-represented students in their final high school years to facilitate their transition into higher education.
- Developed active listening and ability to build rapport with students from diverse backgrounds.

Oct 2020 – present

Industry Officer

Association of Civil Engineering Students (ACES)

- Coordination with industry representatives to establish professional and networking opportunities to 250+ members.
- Supported team in the planning and running of online events to drive club engagement.

Two pages is the maximum.

SKILLS SUMMARY

Collaboration Skills

Highly collaborative team player, as demonstrated through leadership positions in university club and group-oriented projects during tertiary studies.

Technical Skills

Proficient in AutoCAD, 12d Model, SPACE GASS, MATLAB and Microsoft Office (Excel, Word, PowerPoint, Outlook)

A section under skill summary is appropriate for students without much work experience. List skills that are relevant to the role and include evidence of skill demonstration.

REFERENCE

Referees available upon request.

Most firms will request for details of your referees at later stages of application.



LinkedIn is a professional networking website that connects you to the corporate world and industry. It allows you to connect with colleagues, classmates, increase your professional networks and keep up to date on the latest events and trends in the industry. Having a professional profile will increase your profile's visibility to companies and opportunities.



1. Choose an appropriate professional photo.

2. Optimise your headline by having a compelling title that succinctly reflects your current status, job titles and future ambitions.

3. Build up your network not only within Monash and your workplace but also company representatives you meet during networking sessions.

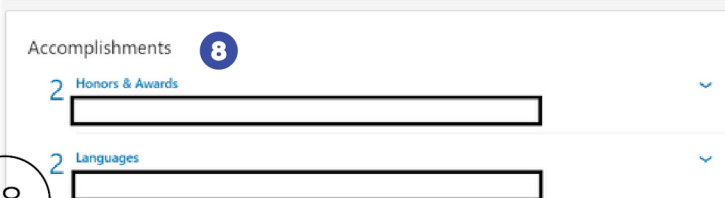
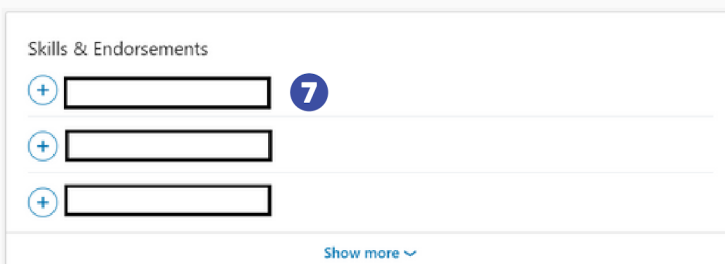
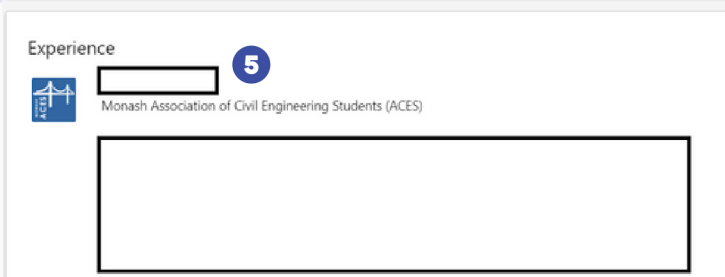
4. Have an informative summary (~ 3 paragraphs) about your employment ambitions, key employability skills and unique attributes.

5. Include relevant work and volunteer experience. Describe your key roles and any accomplishments in the role similar to how you would in a resume.

6. Include university-related programs you have participated in.

7. Include both soft and industry technical skills to increase the searchability of your profile.

8. Add any relevant accomplishments, research projects and language skills.



LINKEDIN TIPS



Choose an appropriate professional photo



Regardless of what the proverbs say, people can and do judge books by their covers. And potential employers will do the same with your LinkedIn profile. Make the best first impression you can by using professional headshots.

Grow your connections early



Build up your network not only within Monash and your workplace but also company representatives you meet during networking sessions. It's a great way to stay in touch with industry professional after events. That being said, try to avoid adding random people just for the sake of growing your connection numbers. Aim for quality over quantity always!

Keep every single experience updated



While people may tell you to keep your profile concise and only add in relevant experiences, from personal experiences of many committee members, it's actually been seen that each experience is valuable (even though you may not see the value in it). We instead recommend keep your resume concise and relevant for the jobs you are interested in but go all out with your LinkedIn profile. You have worked hard for all your accomplishments, let them be seen! Whether that's your first part-time job at McDonalds, volunteering at an aged-care facility or working for a less known local firm - it all counts and contributes to your personal brand.

Be Active



Posting on LinkedIn is a great way to share your thoughts, ideas, and achievements. This helps create better connections with your existing network and also helps grow your network, as your posts may get you noticed by new contacts. Engaging with LinkedIn communities can also help you become a thought leader in your industry. By answering LinkedIn questions or starting groups, you can help foster conversation and become recognised as an industry expert.

EMPLOYMENT 101: PREPARING FOR INTERVIEWS

If you have managed to score yourself an interview, congratulations! You're nearly there! Here are some tips to improve your chances of getting that job you worked so hard to get.

Be Prepared

Research the company and the role you are interviewing for. This will help you understand the company's values, goals, and culture, and allow you to tailor your answers to the specific job requirements.

Listen Carefully

Listen carefully to the interviewer's questions and make sure you understand them before answering. This will help you provide thoughtful and relevant answers.

Provide Specific Examples

When answering questions, provide specific examples from your experience that demonstrate your skills and qualifications for the role.

Video Interview Tips

If the interview is virtual, make sure to test your technology, choose a quiet and well-lit location, minimize distractions, look directly at the camera, use positive body language, speak clearly and slowly, and be prepared with your resume and any other relevant materials.

Attend ACES Vacation Work Information Night

The best networking event for internships and vacation programs! Learn about the application process and hear about personal experiences from graduates and interns who have completed the program.

Use Positive Body Language

During the interview, use positive body language, such as making eye contact, smiling, and sitting up straight. This will help you come across as confident and engaged.

Practice Your Responses

Review common interview questions and prepare answers to them in advance. This will help you feel more confident and prepared during the interview. Here are some common interview questions:

- Tell me about yourself.
- Why did you choose to study engineering?
- What made you want to apply to our company?

Ask Questions

Ask thoughtful questions about the company and the role to demonstrate your interest and engagement. This will also give you valuable information about whether the role is a good fit for you.

Attend ACES' Mock Assessment Centre Event

It's not every day you have the chance to practise your interview skills and participate in mock assessments, supervised by industry recruiters and company representatives. ACES' Mock Assessment Centre Event can provide you with this opportunity in a fun and supportive environment!

Employment + Industry tips

Here are some tips to help you secure your next job!

Join student clubs & teams



Uni is not just about learning, but also about developing transferable skills. Joining clubs and teams will improve your teamwork and leadership skills, which are essential in today's workforce. Extracurricular activities are a great way to gain some valuable experience and improve your engineering problem-solving and soft skills.

Apply for research programs



Every winter and summer break, the university opens applications for students to apply for a research program role. This is a good way to gain some work experience related to your field. The research program will also help you to build your network with the supervisors and other PhD students. If you are planning to continue to study PhD, doing a research program will give you a basic idea of what a PhD project looks like.

Reach out to small scale companies



Sometimes reaching out to smaller engineering firms and asking them for work experience might just do the trick. Never underestimate the power of 'word of mouth' and networking. Just from making close connections, you can get your name noticed when you hand in that application.

Brush up your technical skills

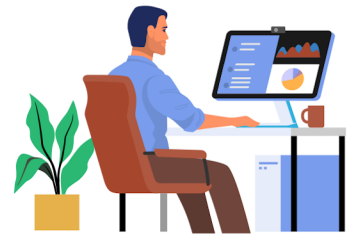


Learning some "in-demand technical skills" such as AutoCAD, 12d Model, REVIT and SPACE GASS can significantly improve your chances of landing a job.

Monash students have access to LinkedIn Learning, which is a free online learning resource that allows you to learn in-demand skills. The best thing about these online courses is that there are no deadlines, so you can learn at your own pace, and you will be rewarded with a certificate once you successfully complete these courses.

Get involved in virtual internship programs

Virtual Internship programs replicate work at top companies and connect students to the companies themselves. They contain real industry tasks, to develop transferable skills for workplace readiness. You do not just learn new skills; you are able to showcase your knowledge & get noticed by recruiters from top companies. Within a short period of time, you could learn the relevant tools and skills needed to complete the given tasks that replicate an employee's workday. These virtual programs do not require any previous experience and applications. Forage and Young Engineers Australia are platforms where you can find virtual internship programs related to civil engineering.



Obtain licenses

Sometimes, holding specific licenses required in the construction, engineering, and consultancy industries may help you stand out amongst the crowd in interviews. Construction Induction, Working in Confined Spaces, and Working at Heights are some licenses to look out for.



Apply early

Our last piece of advice is to start applying for jobs early and not wait until your final semester. Ideally, you should start applying to positions right after your second year because securing a position may take several tries. Also, never give up despite rejection, and keep trying!

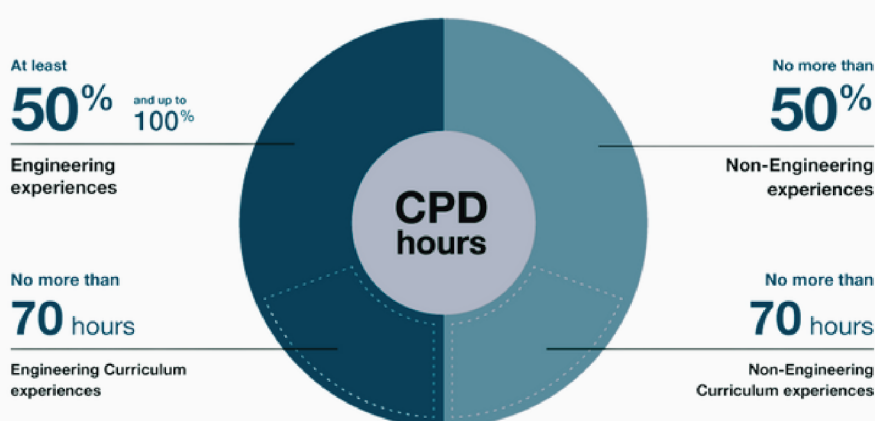


CPD Information

WHAT IS CPD?

All Monash engineering students must complete 420 hours of Continuous Professional Development (CPD), of which, 50% must be engineering relevant activities. CPD collects all work, volunteering, and professional development opportunities partaken in during your studies. Completing CPD is highly important as it provides the invaluable experience and self-reflection needed to work as a successful engineering professional.

Restrictions on CPD Hours



HOW TO LOG CPD HOURS?

1. Getting Started

Log in to Monash Careers Gateway and in the top left-hand corner, under Career Gateway, select Engineering Student Futures.

<https://careergateway.monash.edu.au/>

2. Experience + Details

Add in your experience from the list of categories. Then add in a description of your experience and the contact details of the person who can verify your hours, such as lecturer, supervisor, coordinator or club president.

3. Skills and Reflection

Select the skills related to your experience. Write a reflection for each chosen skill. Use the STAR method to explain how you developed the skill during your experience.

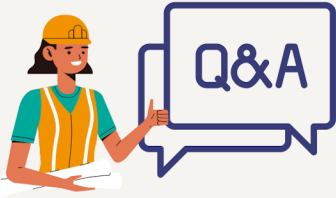
STAR method (Situation, Task, Action, Result)

4. Supporting Documents

Evidence for your hours/responsibilities is required for experiences longer than 35 hours. This could be a letter from your employer or in other forms. You will need to scan, upload and retain the original copy of your supporting document.

5. Finalise

Complete your CPD prior to week 3 of your final semester. In addition to completing hours and skill reflections, some assessment questions needed to be answered in Moodle.



WITH INTERNS



MAGGIE WU

Undergraduate Engineer
MPS



SONALI KAMBOJ

Environment and
Sustainability Advisor
Ace Contractors

How did you find out about this undergraduate work experience?

The undergraduate experience is very challenging and fulfilling. I always find new things to learn and never stop developing my professional figure.

How did you gain confidence when you first began in your role?

I gained confidence by doing the task over and over again. I know I am on the right track only when I can explain what I am doing to others.

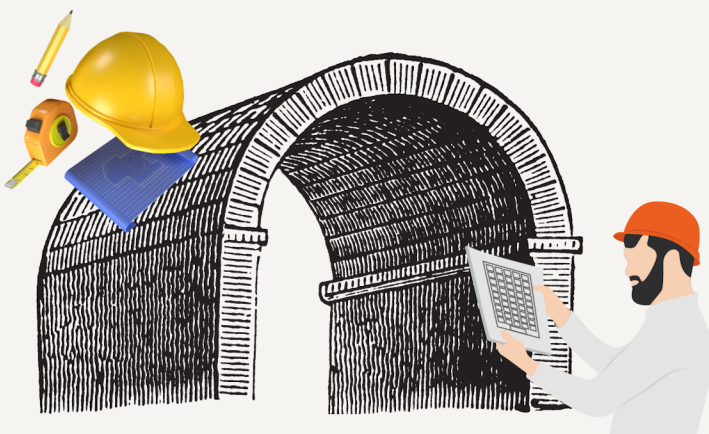
What kind of work does your position involve?

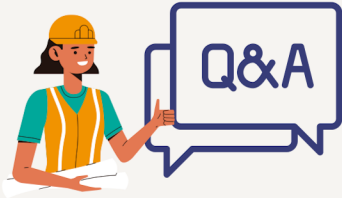
To provide sustainability advice to projects and facilitate sustainability communication between key parties. Maintenance of the sustainability tracking spreadsheet, including monitoring of sustainability performance across all requirements. In addition, it involves the development and maintenance of the site management plan and monitoring of its implementation.



What are some key highlights of your work experience? What do you enjoy in your role?

I have worked on VicRoads projects and worked with the recycled first policy. A career in sustainability can provide a great deal of emotional, psychological, and financial satisfaction. It is incredibly rewarding to be a part of social and environmental progress and to witness how your job is having a direct positive impact on the way the world works.





WITH A GRADUATE



TENGXIN PAN

Graduate Engineer in Urban (Land) Development
SMEC

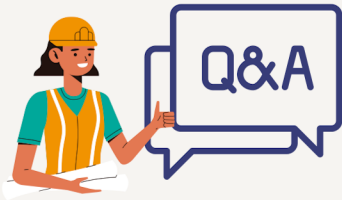
How is the working life compared to your time at university?

I personally believe that my working life is more balanced and healthier compared to my time at university. I no longer have to constantly worry about assignments and deadlines, nor do I need to stress about exams or stay up all night studying for them. I feel a greater sense of control over my own life now, something I never experienced during my university years.

What kind of work does your position involve? Is it different from what you imagined?

I primarily specialise in subdivision design for greenfield projects, which entails master planning of precincts and subsequent design of roads, drainage systems, sewer lines, and water distribution networks. While I was introduced to certain aspects of road and drainage design during my time at university, the overall concept of land development was relatively new to me when I initially joined this field. I never imagined myself working in this industry, as I wasn't aware that it could be considered a part of civil engineering. It is crucial for students to familiarise themselves with the various areas encompassed by civil engineering during their studies, as it opens up more opportunities when applying for jobs in the future.





WITH A GRADUATE



TENGXIN PAN

Graduate Engineer in Urban (Land) Development
SMEC

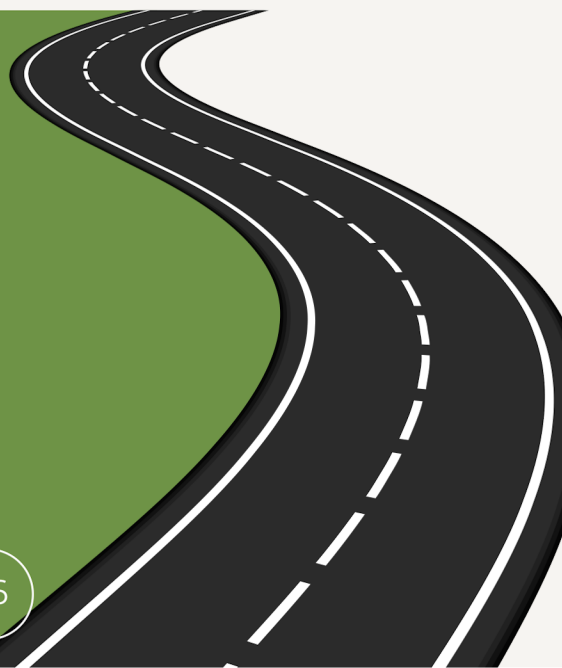
What are some key highlights of your work experience? What do you enjoy in your role?

One key highlight in my job so far has been the opportunity to be involved in the design of a massive industrial project, which is often not available to designers early in their careers. Through this experience, I have learned how different these projects can be compared to traditional residential projects, particularly in areas such as costing, the utilisation of standards, and environmental management.



Do you use skills and knowledge acquired during your studies at work? If so, how often?

I have occasionally utilised the knowledge gained from the Road Engineering and Engineering Hydrology units in my work. However, the majority of my skills, including proficiency in various software, were acquired on the job. I do wish that university could provide more units that focus on teaching students practical skills.





COMPANIES



Your adventure starts here

Join our community of problem solvers and innovators!

Delivering exceptional outcomes starts with having exceptional people. At SMEC, we're not only looking for passionate professionals who are eager to learn and develop their technical and professional skills – we're looking for remarkable human

beings. If you have a growth mindset, excellent problem solving skills, a strong work ethic and a proactive approach to everything you do – we want to hear from you. Your adventure starts here.

At SMEC, we believe in the power of fresh perspectives and boundless innovation.

Are you ready to unleash your potential and embark on an extraordinary journey?

SMEC is not just a company – it is a vibrant global community that celebrates and nurtures young talent. As an early career professional, you will be surrounded by a diverse group of passionate individuals who are driven to make a positive impact on the world.

At SMEC, our driving force is our purpose, and we navigate our path guided by our core values. Through creating and connecting communities we strive to leave a sustainable legacy ensuring present and future generations will thrive. Whether it is designing renewable energy projects or challenging boundaries on iconic transport infrastructure — we're applying expertise to innovate, creatively solve, and ultimately deliver projects on a mind-blowing scale that genuinely create a better world.

As part of our SMEC early careers community, you will become an integral member of a talented group dedicated to making a difference.

Collaborate with professionals who share your passion and connect with mentors who will guide you on your path to success. Your journey as a young professional at SMEC is not just about the projects you work on, but also about your personal and professional growth.

We are committed to investing in your development, providing you with the tools, resources, and mentorship needed to thrive. With access to programs and workshops, as well as on-the-job learning, your skill set will expand each day, allowing you to stay ahead of the curve in this rapidly evolving industry.

We are dedicated to creating a diverse and inclusive workplace where you can make your mark. Join one of our many committees, enjoy our social club activities and make the most of the SMEC benefits on offer.

If you're looking to start your adventure, we'd love to hear from you! Get in contact today by sending an email to graduates@smec.com or for more information on our Graduate Development Program, scan the QR code below.

A little about us

For more than 70 years, SMEC has built a reputation as a trusted partner on major transport and energy infrastructure projects around the world. Our design leaders and specialist teams draw on deep expertise and experience delivering projects across a range of diverse environments, from some of the world's most remote locations to some of the densest urban surroundings.





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Don't miss this opportunity to prepare for a successful career - enrol today and unleash your full potential with **12d Model**.

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Or contact us at

info.civil@12d.com





CREATE YOUR FUTURE AT ATC WILLIAMS

ATC Williams is an internationally recognised leader in the sustainable design and delivery of Tailings, Water, Waste and Resources Recovery projects.

Would you like to work for an employee-owned company whose team has extensive industry experience and is committed to staying up to date with the latest industry technologies and innovations?

UNDERGRADUATE PROGRAM

Our Undergraduate program offers students a full-time, fully paid internship from November to February.

TRANSITION PROGRAM

Opportunity to work 1-2 days a week during term and/or during university holidays.

GRADUATE PROGRAM

Come on board full time and gain a deeper experience working across multiple disciplines.



If you are an undergrad or graduate who aspires to help deliver innovative engineering solutions to achieve long-term sustainable outcomes, apply today.



HOW TO APPLY

Applications close 31 August

Please include: Cover Letter, Resume, Academic Transcript. Shortlisted candidates will receive an interview.

Have a question?

Email us: PeopleCulture@atcwilliams.com.au

APPLY ONLINE

www.atcwilliams.com/join-us/



Traffix Group

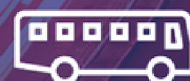
We're Victoria's leading private consultancy of transport planners and traffic engineers

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GRADUATE ENGINEERING OPPORTUNITIES

About Us

Taylor's are a leading development consultancy recognised in our industry for providing first class outcomes to our client base across the infrastructure, urban development and built environment markets for 60 years. Built on a foundation of relationships, innovation, and expertise we have a team of talented professionals delivering outcomes to our communities across Civil Engineering, Town Planning, Urban Design, Surveying, Project Management and Corporate Services.

We pride ourselves on fostering a culture of belonging, growth, innovation and providing you with every opportunity to contribute to both business and personal success. We bring our full selves to work each day and work alongside extremely talented, supportive, and dedicated teams.

Our Graduate Opportunities

We offer student and graduate opportunities for motivated, young professionals looking to kick start their Civil Engineering career. You will learn from the best whilst being mentored and motivated to forge your career in civil engineering on groundbreaking land development projects.

Our students and graduates receive exposure to a wide variety of projects, with on-the-job learning guided by a highly skilled team of professionals and using the latest technology to achieve superior results.

We are a truly flexible workplace where you can choose to work from home or the office.

Please visit our website to submit an application:
www.taylor'sds.com.au/join-our-team



Taylor's - Urban | Infrastructure



www.taylor'sds.com.au

TAYLORS

Urban Development | Infrastructure

Together we create and sustain a better world

Tonkin + Taylor is a leading geotechnical and environmental consultancy, with offices across Australia and New Zealand.

Join our specialist team and work across a wide range of sectors, including land development, transport, energy, industry, waste, and critical minerals.

- Graduate and Internships 2025

Graduate applications for the 2025 intake will open in February/March 2024
(Engineering [Geotechnical] & Environmental)

- On-the-job and professional development training
- Opportunity to work on projects that shape Australia's future
- Be empowered to shape the career you want through your interests with the support of mentors, fellow graduates, and teammates

www.tonkintaylor.com.au

Scan here to learn more about T+T



WGA

2024

GRADUATE & WORK EXPERIENCE POSITIONS ADELAIDE | BRISBANE | DARWIN | MELBOURNE | NEWCASTLE | PERTH

WGA (Wallbridge Gilbert Aztec) is a national multi-disciplinary, award-winning engineering team with an ethos based on developing long-term collaborative client relationships, and delivering innovative, buildable and economical solutions.

We are offering 2024 graduate positions and work experience opportunities across our building structures, civil, mechanical, maritime, geotechnical, project management, defence and electrical teams based in our Adelaide, Brisbane, Darwin, Melbourne, Newcastle and Perth offices.

At WGA we are passionate about promoting diversity in age, gender and cultural backgrounds and recognise the richness of Aboriginal and Torres Strait Islander cultures and as such, we welcome and encourage applications from Aboriginals and Torres Strait Islander people.

As a graduate with WGA you will gain well-rounded experience and exposure from day one. You will be mentored by some of the best engineers in the industry along with working on some of the most exciting and challenging projects.

We will foster your professional development (including your pathway to Chartered Status) and technical training along with your consulting and design skills.

WGA Graduates are flexible and willing to adapt to new situations. They can demonstrate solid analytical skills and a desire to participate in a progressive company culture.

In return WGA offer you an open, supportive working environment which allows for autonomy and creativity.

We value work/life balance and provide flexibility to meet personal commitments as well as company sponsored social activities.

A GREAT COMPANY STARTS WITH GREAT PEOPLE

To express your interest in either our Graduate positions or Work Experience opportunities, please send a covering letter detailing which position you are applying for, resume and academic transcript by Friday 12 May to pandc@wga.com.au



wga.com.au



[apply now](#)



Be the best you.

Our people, like Monash University undergrads, Carrie and Claudia, are empowered to relentlessly look for smarter ways to influence our world-class projects positively at any stage of their careers.

Carrie and Claudia have spent their undergrad placement at our Healesville-Koo Wee Rup project since September 2022, working alongside the civil engineering, sustainability & environment, commercial, quality and safety team.

Today, they're helping us create tomorrow's world — using sustainable materials such as low carbon concrete and glass fibre reinforcement bars to build structures that will stand the test of time.

Proud to forge a sustainable world with innovative retaining walls, fauna crossings and underpasses to protect threatened populations of nationally significant *Southern Brown Bandicoots* and *Growling Grass Frogs*, Carrie relishes the graduate experience to make a positive impact.

You can be a part of it too. With us, the possibilities for personal growth, satisfaction, and success are well within reach.



Photos: (Clockwise from top) Healesville-Koo Wee Rup (HKWR) Road fauna crossing & underpass, HKWR's innovative retaining wall to protect wildlife; and Undergrad Engineers Carrie and Claudia.

The application process

1) Apply online

Apply through our careers page at seymourwhyte.com.au/careers (please scan QR code to access the website).

2) Interviews and assessments

Phone interviews are scheduled for shortlisted applicants. Successful applicants are then invited for an assessment and face-to-face interview.


3) Reference checks

Shortlisted candidates are reference-medical-and-working-rights-checked.

4) Formal offer

Following an initial verbal offer, a contract is generated and emailed to successful candidates.





Kick-start your career with Laing O'Rourke

Join our Internship Programme

We're looking for bright and committed individuals who will bring energy and new ideas to help us transform the construction and engineering industry.

Applications for our 2023 Internship Programme are now open and close Sunday 23 July 2023.

We're hiring interns across nine core streams:

- Civil Engineering
- Services Engineering (Mechanical or Electrical)
- Environmental Engineering
- Sustainability
- Health & Safety
- Construction Management
- Planning & Project Controls
- Procurement
- Quantity Surveying

Scan to apply now.



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→ Let's solve the big problems together

#GraduateCareers

→ The Power of Commitment



The GHD Graduate Development Program is an integrated two-year, holistic approach to developing our future leaders and technical experts. The structured program will give you the tools and opportunities you need to establish and build a successful career with us.

* Scan here to watch the video:



→ The Power of Commitment



**DALTON
CONSULTING
ENGINEERS**



OUR GRADUATES ARE OUR FUTURE - DEVELOP YOUR FUTURE WITH US!

As a leading civil engineering consultancy, DCE offers unparalleled opportunities for talented individuals in search of a rewarding career. At its heart, DCE is a people business. We work hard to provide an environment in which you can flourish and enjoy being a part of the Team DCE culture.

For sheer diversity of clients and projects, DCE is hard to beat. Working within the fields of Urban Development, Urban Infrastructure and Sport, DCE is an industry leader in providing our clients with outstanding, sustainable solutions and our people with challenging, rewarding careers.

About our program

We believe that our engineers should gain a strong design base before moving to other areas of the business, as this leads to higher performing, more well-rounded engineers.

As a Graduate Engineer you will gain insight into all areas of the firm, from design to construction and project management, but your initial role will be strongly design focused, with room to progress into other areas of interest as you progress your career.

dceng.com.au/careers





Metro Tunnel, VIC



Accelerating meaningful action

WSP is a world-class consultancy that develops creative, comprehensive, and sustainable engineering solutions for a future where society can thrive.

Our Story

We are dedicated to our local communities and propelled by international brainpower employing engineers, technicians, scientists, planners, surveyors, and environmental specialists, as well as other design, program, and construction management professionals. We design lasting solutions in the Transport & Infrastructure, Property & Buildings, Earth & Environment, Water and Mining

& Energy sectors as well as offering strategic Advisory, Engagement & Digital services. With approximately 54,000 talented people globally, we engineer future ready projects that will help societies grow for lifetimes to come <http://www.wsp.com/en-au/>

The culture

We aim to create a workplace that is free from discrimination and offers equal opportunities, based on merit, in all areas of employment, recruitment, training and promotion. At WSP we care about individuals and their progress and offer the most fulfilling career development for all our professionals. We make extraordinary efforts to attract, develop, engage, and retain the best professionals in our fields of expertise because this is what makes us great.

Career prospects

WWSP offers a comprehensive two-year professional development program for Graduates to help them quickly assimilate the skills required to be productive and successful as they transition from University to Corporate life. You will work on "challenging, stimulating projects" and get exposure "to new ideas, technology and innovation."



Star of the South Gippsland Victoria

Other Companies



2023 Gold Sponsor

Arcadis is a global design, engineering and management consulting company. Their purpose is to improve quality of life and to find innovative solutions to the world's biggest challenges. Notable projects include the Regional Rail Link in Victoria, Daintree Renewable Microgrid Project, and Darling Square in Sydney.

Domestic



Acciona is a leader in sustainable solutions for infrastructure, renewable energy and water treatment projects. Notable projects include various wind farms around Australia, Murray Basin Rail Project and the Sydney Light Rail.

Domestic



ARUP is a global collective of designers, engineering and sustainability consultants, advisors and experts with the primary goal to develop a truly sustainable built environment. Notable projects include the redevelopment of State Library Victoria, Melbourne Airport Southern Precinct Program and the Melbourne Recital Centre.

Domestic



Aurecon is a design, engineering and advisory company with the purpose of bringing together design, engineering and advisory capabilities to provide clients with integrated solutions across the entire asset lifecycle. Notable projects include Allianz Stadium, Icon Water Drought Management Plan and the Suburban Rail Loop.

Domestic

International



AECOM

AECOM is a provider of engineering, consulting, and project management services. The company designs, builds, operates, and finances various infrastructure projects for businesses, governments, and organisations worldwide. Notable projects include Level Crossing Removal Project, Sydney Gateway Project and West Gate Tunnel Project.

Domestic

International

Beca

Beca is one of Asia Pacific's largest independent advisory, design and engineering consultancies. The company offers a wide range of services across sectors such as power and energy, transport and infrastructure, buildings and water. Notable projects include Altus Renewables Energy Pellet Plant, Auckland Harbour Bridge and Level Crossing Removal Project.

Domestic

International

CIMIC

CIMIC Group is an engineering-led construction, mining, services and infrastructure development leader with a history dating back to 1899. The company's collective experience spans sectors such as aviation, building, defence and security, education, health, resources, ports, power and energy, transport, tunnelling and water. Notable projects include Western Harbour Tunnel, North East Link and M12 Motorway

Domestic

Downer

Relationships creating success

Downer is a diversified engineering and services provider based in Australia and New Zealand. The company offers a wide range of services including engineering, construction, maintenance, and infrastructure management across various sectors such as transport, utilities, communications, mining, and oil and gas. Some notable projects that Downer has been involved in include the Sydney Light Rail project, the Auckland Electrification project, the NBN rollout in Australia, and the West Gate Tunnel project in Melbourne.

Domestic

International





Fulton Hogan is a leading construction and engineering company that has been operating in Australia, New Zealand, and the South Pacific for several decades. The company has built a reputation for delivering innovative and sustainable solutions across a range of sectors, including civil engineering, road construction, infrastructure maintenance, and quarrying. Notable for their commitment to quality and excellence, Fulton Hogan has been involved in several high-profile projects across the region. Including the construction of major motorways, light rail systems, and airports.

Domestic

Jacobs

Jacobs is a multinational engineering and construction company with a diverse range of capabilities spanning various sectors including aerospace, water, transportation, and infrastructure. The company has a presence in over 25 countries and employs more than 55,000 people worldwide. Some of Jacobs' notable projects include the refurbishment of the Sydney Opera House in Australia, and the development of the London 2012 Olympic Park in the UK.

Domestic

International

JOHN HOLLAND

John Holland is a renowned construction and engineering company that has been operating in Australia for over 70 years. The company offers a wide range of services including civil construction, building, engineering, maintenance, and asset management. Throughout its history, John Holland has been involved in several notable projects, including the development of major infrastructure like the West Gate Tunnel project in Melbourne and the Gold Coast Light Rail Stage 2 project in Queensland.

Domestic



Lendlease is a multinational real estate group based in Australia which develops, constructs and invests in infrastructure and urbanisation projects. They work in multiple sectors including commercial, residential, health, defence, and education. Some of their recent projects are the Barangaroo precinct and Singapore's Paya Lebar Quarter.

Domestic





McConnell Dowell has been operating for 60 years, providing their expertise in building, civil, electrical, fabrication, marine, mechanical, pipelines, rail, tunnel, and underground construction for the construction of various infrastructure projects. Notably they have worked on the Level Crossing Removal Projects and the Overseas Passenger Terminal in Sydney.

Domestic



Mott MacDonald is a global engineering, management and development consultancy headquartered in the United Kingdom, but operates in over 140 countries. A few of the sectors they provide services for are buildings, aviation, energy, transport planning, tunnels, rail, highways and bridges. Some of their projects include the Adelaide Oval, the Sydney Metro and the Auckland City Rail Link.

Domestic



Multiplex is an international construction company which specialises in high-rise buildings, studio, high-end residential, mixed-use, education, health and civil infrastructure developments. Notable projects include Australia 108, Monash Learning & Teaching Building and M-City.

Domestic



Robert Bird Group is a global consulting engineering firm based in Brisbane with offices in the United Kingdom, New Zealand, Hong Kong, Dubai, New York, and all across Australia. They have been working on projects around the globe, such as the upgrade of Hong Kong International Airport and the development of Crown Sydney, for over 40 years. They provide services in structural, civil, construction and geotechnical engineering as well as virtual design.

Domestic



Victoria's Big Build is a government body responsible for the planning, delivery and construction of major rail and road projects across Victoria, helping to create connected communities and transforming the way Victorians travel. Projects include the Level Crossing Removal Project, North East Link Program and the Suburban Rail Loop.

Domestic





RESOURCES

MONASH CAREER CONNECT

DEVELOPING YOUR EMPLOYABILITY EDGE

Career Connect helps you prepare for the world of work with a range of career guidance services including:

- **job application and interview skills**
- **career coaching**
- **leadership development**
- **access to online resources**

We assist you to blend your academic and professional selves to enhance your employability.



**Start developing your
competitive edge today!**

monash.edu/career-connect | careerconnect@monash.edu

ACKNOWLEDGEMENTS

The 2023 Industry Guide from the Association of Civil Engineering Students is a testament to the power of collaboration and inclusivity.

We begin by acknowledging the land on which the Clayton campus of Monash University now stands, which has been the traditional home of the Kulin Nations for thousands of years. We pay our deepest respects to their Elders, past, present, and emerging, and commit to working towards a future of mutual respect and reconciliation.

The creation of this Guide was made possible by the hard work and dedication of many individuals, and we extend our heartfelt gratitude to all of them. We are particularly grateful to the Publications Team, led by Emily Lu, and including Veronica Ng, Adheesh Aggarwal, Grace Kumar, Umer Saleem, and Kaylie Oo, whose creativity and attention to detail brought the disparate contributions of our community together into a cohesive whole.

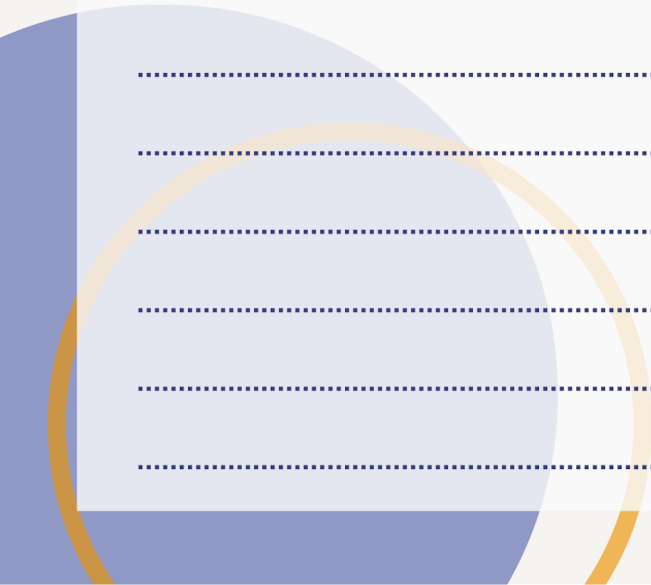
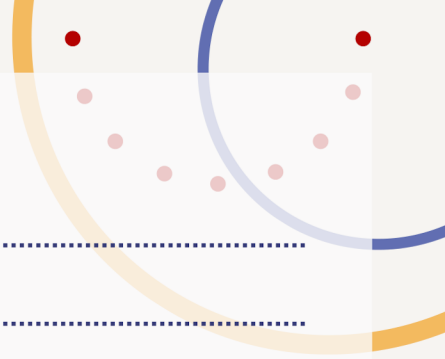
We are also indebted to the teams at Monash Talent, Career Connect, and the various Civil Engineering-related student clubs, who have generously shared their resources and expertise with us. Their contributions have made this Guide a valuable tool for all those seeking to explore the wide-ranging opportunities available in the field of civil engineering.

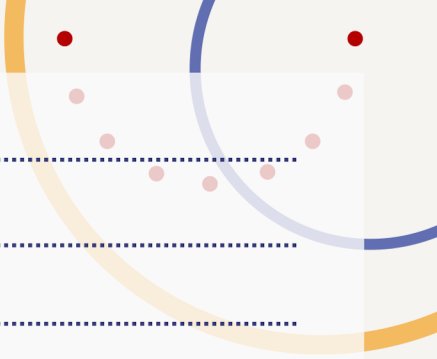
Finally, we would like to express our deepest appreciation to the many content contributors who have made this Guide possible. Your insights, experiences, and perspectives have enriched this publication and made it a true reflection of the diverse and vibrant community that is the Association of Civil Engineering Students. We hope that this Guide will be a valuable resource for all those who receive it and that it will inspire and empower the next generation of civil engineers to make a positive difference in the world.



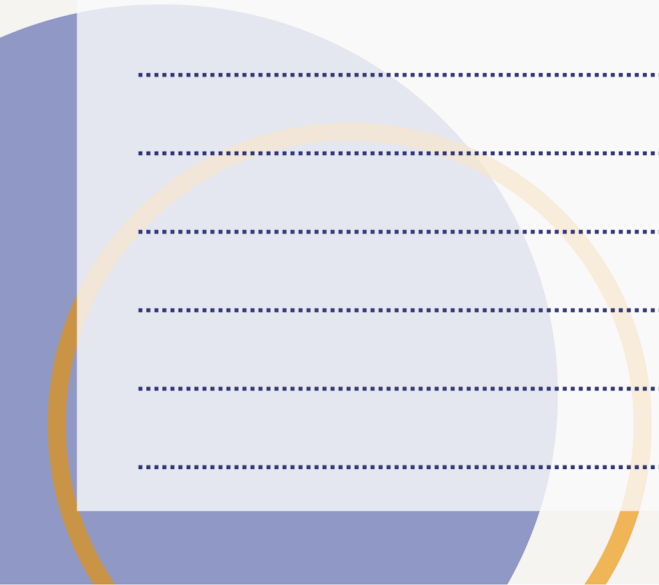
NOTES

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