

## ENGINEER YOUR CAREER

Information from Industry for Student Engineers

## Synlait

## DOING MILK DIFFERENTLY FOR A HEALTHIER WORLD

WE ARE A GROWTH COMPANY AND WANT YOU TO JOIN US.

**250 NEW ROLES** IN THE NEXT 12 MONTHS.

#### **BECOME A FUTURE LEADER**

At Synlait we know that young people are our future, and we're doing everything we can to attract the brightest talent out there. Our Future Leaders programme lets us select final year students we think could become our shining stars, and then develop them towards being our future senior leaders. Could you be one of our future leaders?

APPLY NOW: CAREERS.SYNLAIT.COM

# MAKE AMAZING HAPPEN

Graduates - with their fresh thinking and passion for reimagining what's possible - are critical to our success.

AECOM has the people, technology and vision to create smart solutions for our clients' challenges:

- 90,000+ AECOM team members working in over 170 countries
- 3,500+ team members across Australia and New Zealand
- 20+ offices across Australia and New Zealand.

On every project and for every client, our talented teams pride themselves on big ideas, positive change, and on leaving lasting legacies that build communities.

Whether we're delivering city-shaping infrastructure or enabling clean and stable water supply to far-flung places many of us may never visit, our work makes a difference.

#### WHAT ARE OUR GRADUATE **OPPORTUNITIES?**

We are seeking applicants from a wide range of disciplines, including civil, electrical, environmental, geotechnical, mechanical, structural, building services and chemical engineering, as well as design, planning and program and cost management fields.

Our two-year Growing Professional Skills graduate program is designed to help you bridge the gap between formal education and the workplace.

As part of the program, we work with you to develop a plan, set your goals, and the actions required to achieve them. We not only provide technical training and access to experts in the industry, but training in soft skills

in line with our focus on effective communication, client service and building agility and resilience.

There are many opportunities for gaining exposure or experience on different projects, in different locations and with different teams.

We are seeking graduates who want to try new things and expand their skills and knowledge. There are opportunities for rotations during the program, as well as opportunities once you have completed the program to apply for our Asia Pacific Young Person Exchange program, where you can gain 12 months' experience in one of our offices across Asia Pacific.

#### **HOW WE SELECT**

Your application for a graduate role will be assessed through a staged approach, including an initial application review, online video game testing (Gamification), emotional intelligence assessment, video interview, and assessment centre/ face-to-face interview.

#### **APPLY ONLINE** aecom.com/australia-newzealandgraduate-careers/ Applications close Friday 22 March 2019.





### MEET ONE OF **OUR GRADS**

#### Semisi Ikahihifo

AECOM Undergraduate Electrical Engineer and Auckland City Mission volunteer

Semisi is not your average summer intern. He's spent his holidays immersing himself in the AECOM electrical engineering team, learning how to apply his new skills and knowledge in a 'live' environment.

But wait...there's more! Semisi is a volunteer at the Auckland City Mission (ACM), where he regularly puts his culinary skills to the test in the kitchen and serving those in need. Linking his two passions, Semisi is glad to see AECOM is also providing Building Engineering services to support the redevelopment of the ACM building.

A lifelong passion has started.



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**Josh Lotter** BE (Hons) Civil & Environmental Engineering

I completed my internship with PDP across the 2016/2017 summer, before starting as a graduate at the beginning of 2018.

PDP Graduates have a strong but flexible development programme to assist in developing key soft skills and to familiarise themselves with the company and the aspects of being a professional engineer.

The best part about PDP is the flat organisational structure and the employee focused culture – you are constantly working side-by-side with everyone, from Interns to company Directors, allowing exposure to all of the facets of consultancy life.

The size of PDP is also perfect – constantly growing as renowned New Zealand specialists, but also a small enough size where you have a consistent involvement in a wide variety of projects and ever-changing roles.

I have been privileged to work on some awesome projects from reviewing the oil/water interception systems at big hydropower dams, to designing pressure sewer systems and industrial wastewater treatment plants.

Even as a graduate, you are entrusted with managing key parts of projects, accelerating your learning and building on your experience.

My first year at PDP has given me the opportunity to build relationships and networks with clients as well as improving my technical and design skills in the areas that I am passionate about.

ABOUT **Pop** 

PDP is an employee owned and operated engineering and environmental consultancy. We have over 30 years' experience providing environmental solutions throughout New Zealand, Australia and the Pacific Islands.

We have over 140 employees and 5 offices nationwide.

At PDP you will be working with high-calibre Civil and Environmental Engineers and Scientists at all levels, and professionals who are leaders in their field.

We are recruiting graduates and interns for our offices in Auckland, Tauranga and Christchurch.

To find out more about what we do, go to pdp.co.nz

### Talk to us on campus at the Auckland STEM Expo on 30 April and 1 May

To learn more, come along to our Presentation Evening on Tuesday 7 May at 5:30pm in Room 401-401

#### APPLICATIONS CLOSE 31 MAY 2019

APPLY ONLINE pdp.co.nz/careers

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www.jacobs.com

## First look at **JACOBS**°

77K

**\$15B** 

Employees

Billion in annual revenue

Countries

40+

\$2.7B

Billion in Client Savings for FY2017 400+

Offices

Find out how you can help shape our future with a **career at Jacobs** - a global business delivering building and infrastructure solutions for a more connected, sustainable world.

In collaboration with **the University of Auckland** and **the University of Canterbury**, Jacobs has developed the First Look Student Scholarship Programme. It has been in place for several years and is considered to be an immense success.

The programme offers successful recipients summer work experience and typically results in the recipients being offered a graduate position with Jacobs.

Outside of the First Look Student Programme, Jacobs also has a number of additional employment opportunities for graduates and interns. Visit **jacobs.com/careers** for more information.

Jacobs is Ranked No. 1 on Fortune's 2019 World's Most Admired Companies List



#### **Civil Engineering Intern**

Jacobs presented new challenges for me and gave me the tools and opportunities to develop and explore what I want from my career. I took the internship with Jacobs hoping to expand on my experience in engineering, try something new, and have been rewarded with working on varied projects such as the City Rail Link tender and a wastewater upgrade.

## Joel

#### Graduate Structural Engineer

As a second year graduate structural engineer at Jacobs, I have already been exposed to a range of interesting projects including a zoo, a water park and a BMX track to name but a few. I was fortunate enough to be offered a scholarship to be an intern at Jacobs. Having a fun, knowledgeable and supportive environment is crucial to enjoying your workplace and my colleagues at Jacobs provide just that.



#### Why Choose Jacobs?

- Our graduate and internship programmes are designed to cater specifically to your interests.
   We encourage exposure to other disciplines to help you navigate your career path of choice.
- Jacobs is involved in major
  infrastructure projects here in New
  Zealand as well as around the globe.
- With our JacobsGo programme, you have the opportunity to explore and discover new places while working in one of our 400+ offices around the world.
- Our Culture of Caring places significant value on inclusion and diversity, sustainability, health and safety, work-life balance and overall workplace satisfaction.
- Jacobs in New Zealand holds a YWCA Equal Pay Compact Award for our commitment to equal pay.



PRISM is a Jacobs employee network dedicated to creating an environment where people feel able and empowered to bring their whole self to work.

#### At Jacobs, we hire

Geotechnical Engineers Drafters Transport Planners Bridge Engineers Mechanical Engineers Technicians Project Controllers 3D Modellers Water Resource Engineers GIS Consultants Electrical Engineers Designers Data Scientists Architects Hydrologists Sales Representatives Economists Geologists Sustainability Consultants Process Engineers Environmental Planners Risk Management Consultants Safety Managers Cost Managers Civil Engineers Ecologists Geothermal Scientists Commercial Advisors Estimators

Project Managers Land Surveyors Structural Engineers

Applications for our **2019 First Look Scholarship Programme** open in mid-February and close early April.

Visit the University of Auckland Scholarships and Awards page, and search "Jacobs Scholarship" for more information.

## Gurkunwar Bedi Geotechnical Engineer

#### How did you get the job at T+T?

During my third year at university, I attended the annual engineering job fair. At that time, I had no idea as to what field of civil engineering I wanted to work in. I began talking to some representatives from T+T (who are now my good friends), who told me about their graduate programme and the large variety of projects recent graduates were involved in. This conversation got me really excited about the prospect of working for T+T, so in my fourth year I applied for a graduate role and was lucky to be accepted.

#### What do you actually do?

When I first started working for T+T, I was asked if I wanted to go out to site and learn how to carry out a geological investigation. I'd like to believe that I'm a hands-on learner, so I was happy to accept. Through this, I learnt how to log and identify the underlying geology, and eventually use this information to analyse the soils behaviour on a proposed structure. This included anything from designing a foundation or a retaining wall, analysing the liquefaction potential of soil's in earthquake prone regions to assessing the stability of a slope.

Because the subsurface geology can be highly variable, no two projects are alike, which means that each project can pose unique challenges requiring innovative solutions. For this reason, I feel that I am always exposed to new and interesting learning opportunities. Generally, I am involved in three to five projects at once, all at diverse stages of development. This means that my typical week comprises a mix of being in the office writing reports, carrying out geotechnical analysis using computer software and being out on site undertaking geotechnical investigations or construction observations.

#### How has T+T supported your career?

T+T has a culture that sets up a foundation for long term success at the company. T+T fosters an environment where asking questions and getting different perspectives on a problem is encouraged. Additionally, they have encouraged me to develop my technical skills by offering regular learning workshops from industry professionals and providing personal mentoring sessions from their technical directors.

## What's the best thing about working for T+T?

With T+T being New Zealand's leading environmental and engineering consultancy, the immense variety of projects that we get to work on is awesome! In my short time at T+T I have worked on large commercial complexes, high-rise buildings, international luxury resorts and much more. The best thing is, if you are passionate about a specific type of project/ development, all you need to do is ask and you'll be given the opportunity to become part of it.

## What advice do you have for current students?

If you are struggling to understand something that wasn't covered in your class, don't be afraid to ask your lecturer or your colleagues. It will save you a lot of stress in the long run. Likewise, if someone asks you for help, help them. It will further solidify your understanding of the topic and will develop your mentoring skills, which are highly desirable to any employer.



**Exceptional thinking together** www.careers.tonkin.co.nz

### **Graduate & Internships at McConnell Dowell**

## **BUILD YOUR FUTURE ON SOLID GROUND**

#### Georgia Summer Intern | Hunua 4 Watermain

I've been lucky enough to work on and observe many aspects of the job and it's great being able to apply what I've learnt at university to a more practical environment.



#### Alex Graduate Engineer | Wynyard Edge Alliance (America's Cup)

As a summer intern I discovered there's never a dull moment working for McConnell Dowell. I got awesome insight into how tunnelling work is carried out. It was a no-brainer coming back as a Graduate. Being part of the America's Cup Project I get to gain unique marine experience with great on-site guidance.

#### Tyler <u>Site Engine</u>er | CRL C2 City Rail Link Tunnel

The variety of work over the past couple of years has been one of the most enjoyable parts of working with McConnell Dowell. From the construction of open cut pipelines, pipe bridges and culverts to an 18m deep open cut tunnel structure in the middle of Auckland's CBD CRL C2, there continue to be new challenges and opportunities to gain experience and knowledge.



Graduate applications open in May, Internship applications open in June at **www.mcconnelldowell.com**.

Meet us at the 2019 CDES Careers Expo on 30 April 2019.



Unconventional

Those who dare to explore new frontiers step from the *impossible* into the *possible*. **Flexibility. Choice. Freedom to be you. Make an impact. Design a better future. It's all possible.** If you choose to work with us, you'll use your uniqueness to re-imagine engineering and create a legacy for humanity.

Aurecon is an engineering and infrastructure advisory company, but not as you know it. We've re-imagined engineering.

Pictured: Aurecon Environmental Sustainability Engineer, Jess Lam



Bringing ideas to life

aurecongroup.com/graduates

### Who are we?

Aurecon is a global engineering and infrastructure advisory company, but not as you know it. We've re-imagined engineering.

Our clients' ideas and aspirations drive all that we do. We work alongside them like no other firm to co-create clever, innovative solutions to some of the world's most complex challenges.

In 2018, we were listed in LinkedIn's Top Companies 2018, and in 2017, we were ranked #5 in the Australian Financial Review's Most Innovative Companies list.

## What makes us unconventional?

If you choose to work with us, we'll want you to embrace your uniqueness to re-imagine engineering by asking 'What if?', 'What's next?' and 'Why not?'

From advising on the world's largest lithiumion battery to store renewable energy. To using digital technology to plan and restore transport access to communities after major earthquakes. To designing Australia's tallest engineered timber office building where people are at the heart of the design.

We believe the answers to the world's most complex challenges are out there.

### Our graduate programme

With our graduate programme, we've said goodbye to rigid schedules and hello to a collaborative environment where you have the flexibility to pursue your passions, design, and fast track your career.

As part of a diverse team, you'll collaborate with others across geographies and markets, applying your skills to re-imagine engineering and design a better future.

You will also work alongside **industry leading professionals**, mentors and peers. If you would like to experience numerous areas of Aurecon's business, we can facilitate that too.

### Find out more:

www.aurecongroup.com/graduates-interns



Michael Xu Graduate Electrical Engineer Location: Auckland, New Zealand Time at Aurecon: 3 years Degree completed: Bachelor of Engineering (Electrical), University of Auckland Strongest Aurecon Attribute: Inquisitive

To be honest, I was unsure what I wanted to do after school. Luckily, I chose engineering! Soon after starting my studies, I realised how fascinating and multifaceted electrical engineering can be. Seeing how critical my work is in various structures, devices, and industries also turned my interest into a real passion.

When the time came to find summer work experience, I was looking for a workplace that designed larger than life projects. Furthermore, I wanted to join a company that helps clients create important community infrastructure such as a new hospital or a school. That's why I chose Aurecon.

Aurecon fosters a culture of human-centric design, creativity and innovation; and its engineers collaborate well to create meaningful solutions for their clients. Even as an intern, I got a taste of what will be in store for me when I graduated.

Of all my projects, I am most proud of my work on a new tertiary education building here in Auckland. Sure, it may just be another new building for some, but for me, the new building means students now have a space to learn, and lecturers have more resources to bring their lessons to life. It's humbling and rewarding to know I helped to create a new place for Aucklanders to learn.

My most important piece of advice for graduates is to apply for companies that will allow you to gain a wide variety of experience. When I graduated I had a broad idea of what I'd like to do, but it's only been through delivering a wide variety of projects, that I have learnt what I truly enjoy. I'd also encourage everyone to take their time to find their 'dream company', and not to settle. That way, you'll be engaged from your first day.

### RILEY Consultants Ltd - Recent Scholarship Students

For 35 years RILEY has undertaken geotechnical, environmental, civil, and water resources engineering throughout New Zealand and the Pacific Basin. Projects are varied, ranging from large-scale land development to complex footings design for multi-storey structures; from dam design to hydrological modelling. The future of engineering is in the hands of our young engineers, and RILEY is pleased to offer scholarships to help them on their way.



Faizaan Mohammed – Geotechnical

Before starting university, I took time out to work with my family who run an earthworks and excavation contracting company. This experience made me curious about engineering – I wanted a deeper understanding of the reasons for the work I was undertaking. Now in my third year, specialising in geotechnical and environmental engineering, I have been able to expand on my contracting experience.

I was fortunate to be awarded a RILEY scholarship, which included summer vacation work. This has exposed me to new experiences, both field and office-based, from a consultancy perspective.

I have worked on some interesting and complex projects, have attended site visits and inspections, and have gained training in fieldwork techniques including Scala penetrometer and hand auger. I have also installed piezometers and monitored and analysed rainfall data.

In the office I have assisted with and learnt techniques for succinct report writing and the complexities of tender document compilation. I have also prepared design calculations for structures including retaining walls, swale drains, settlement attenuation etc., and have had an opportunity to learn a variety of industry software packages including CAD, gINT, and Settle 3D.

Acquiring physical and technical skills is only part of the role of a successful geotechnical engineer. Just as importantly I have come to realise, is teamwork, communication, being organised, and being able to work to a budget and schedule. My time at RILEY taught me a lot, but I have only scratched the surface. One thing I know is that my summer work experience has reinforced my desire to progress my career as a geotechnical engineer.

#### Oscar Barrett-Garnier - Water Resources

I chose engineering as a career to complement my passion for water and geography. Geography for the processes – why and how something is occurring, and engineering for the design/build aspects to manipulate what is occurring to our advantage. I decided on water resource engineering as my specific area of study after working in the field last summer and have enjoyed the projects I have worked on and opportunities I have been afforded this year.

My most memorable experiences at RILEY were in the field. Working with geotechnical engineers while visiting numerous sites in Whangarei and Auckland was great fun. However, the two days I spent in Taranaki inspecting hydropower schemes must clinch the top spot.

Work in the office was also varied and engaging. I learnt a lot during my introduction to dam break modelling; mike11; Hec HMS; and other modelling software while working on a range of projects. Expanding my skills in hydrology, report writing, and CAD, and applying my knowledge of GIS, to a range of different applications has also expanded my knowledge considerably.



The frequent morning teas were a definite highlight too, as was working with a friendly and supportive team. In addition to an interesting and useful work experience, the scholarship has given me the opportunity to have my Part IV Research Project supported by RILEY.

#### **RILEY Scholarships**

RILEY awards Civil and Environmental Engineering Scholarships for secondand third-year students. Scholarship recipients are generally offered vacation work which, in turn, often leads to permanent employment. Check the University web site or with the Scholarships Office for further information. Scholarship applications open on 20 July and close on 31 August.

#### **RILEY Graduate Programme**

Attention geotechnical, water resource, and civil engineers, do you have what it takes to be a part of the RILEY team? Applications for our Graduate Programme close on 31 May. Email your transcription, CV, and an accompanying letter telling us a little about yourself and indicating which office you would like to work from (Auckland or Christchurch) to recruitment@riley.co.nz.

#### www.riley.co.nz/careers



#### Meet One Of Our Grads

Phoebe Moses joined our grad programme in 2014 and has proven herself as a talented structural engineer, showcasing her drive to make a difference. Last year she was presented the Outstanding Emerging Professional Award by Engineering New Zealand for championing diversity in engineering and her passion for social and environmental sustainability.

## The Beca purpose is 'make everyday better'. How does that apply in your role?

I'm lucky that much of my work contributes to the built environment of Auckland. We create buildings which enhance the community, the visible landscape and the economic productivity of the local environment. The very definition of sustainability is meeting the needs of the present without compromising future generations.

#### How did the Beca Graduate Development Programme help you to emerge as a successful consultant?

Having been one of the Beca grad reps, I've had the unique perspective of someone who is both behind the scenes of, and benefiting from, the Beca grad programme. I have been able to learn about effective communication and networking, and then put them into practice coordinating training sessions.

#### If you were chatting to someone who was thinking about applying to the Beca grad programme, what would you say?

Go for gold – and if you're unsure about which specific career path is right for you, don't worry too much about it. A big part of the grad programme is helping you to figure out your own way of being in the working world, and how to deal with career decisions which come your way.





#### My team has supported my technical development by sharing their expertise and encouraging me to challenge myself

#### Phoebe Moses Structural Engineer

## 調 Beca

#### About Beca

We are 3300 professionals spread across 19 Asia-Pacific offices. We are a diverse team of engineers, planners, project managers, architects, quantity surveyors, and valuers. We bring a wide range of perspectives, skills and disciplines to every client and every challenge to deliver smart solutions that **make everyday better**.

#### The Beca Graduate Development Programme

Each year, we employ up to 150 graduates and 70 summer interns across Australia and New Zealand. We have a range of different graduates joining us from science, engineering, arts and IT, just to name a few!

On our two-year grad programme, you can expect to work on real jobs for our clients, right from the start. You'll get ongoing support from experienced mentors, development opportunities, support towards professional memberships as well as a yearly graduate conference!

#### How to Apply

Applications for our 2020 grad intake will be open from 11 March - 18 April 2019. Find out more and apply on our website.

#### **Questions?**

Chat to our **Grad Chatbot** on Facebook and follow us on Instagram @becagraduates

#### www.beca.com/becagrads

### make everyday better.

"The more I learn, the more I realise how much room there is to continue learning and growing beyond uni. Thankfully, there's plenty of support at Holmes to help facilitate that learning."

Chloe Lau

Commercial Bay, Auckland

## Engineer Your Career

#### HOW DID YOU GET INTO ENGINEERING?

After dabbling in a graphic design class during intermediate, I was initially bent on architecture as a future career and had the misconception that engineering was an all-male industry for car mechanics! It wasn't until I went to a career presentation by Auckland University's Engineering Department that I realised that engineering would allow me to combine my creativity and interest in design with my love of maths and science – the best of both worlds.

#### MOST CHALLENGING PROJECT SO FAR?

The NZ Bus Depot on Halsey Street. As a smaller project involving alterations to an existing building, I got to partake in all parts of the design process which proved to be quite a steep learning curve. There are a multitude of details and unanticipated changes to coordinate with all the different parties to a project, especially the architect, and this is something that no university course will prepare you for! The more I learn, the more I realise how much room there is to continue learning and growing beyond uni. Thankfully, there's plenty of support at Holmes to help facilitate that learning.

#### BEST THING ABOUT WORKING AT HOLMES?

The people and culture. Holmes is full of incredibly bright, driven and hard-working individuals, and has a culture of fun and camaraderie. The interesting and iconic projects that come our way are an added bonus, for example, Auckland's Commercial Bay and Sylvia Park.

We also have a strong social network. Earlier in the year I played for the indoor netball team, which was a great way to relax after work (even if, like me, you don't have an athletic bone in your body). I also volunteered to plant trees on Motutapu Island for a Holmes social good venture, which was a good opportunity to catch up with workmates in a setting outside of work and spend a purposeful weekend.

#### **FAVOURITE PROJECT SO FAR?**

Botany Town Centre. Even though I've had a relatively small part to play in the design of the \$78 million expansion, Botany happens to be my local shopping mall. Being able to see the ongoing construction happen first-hand and my designs begin to jump from paper into real life so close to home has made my work all the more exciting and meaningful.



### WHAT ARE YOUR SHORT-TERM GOALS?

At this stage, I'm aiming to gain as much design experience as possible and build up a portfolio of work to meet the competencies required to become chartered. I'd also like to leverage my conjoint BCom degree and gradually develop my project management skills.

#### WHERE WILL WE SEE YOU IN 5 YEARS?

With any luck, I will have gained professional chartership (CPEng) by then and will be in Europe on my big OE. I'm looking to gain some overseas work experience, perhaps in Holmes' Netherlands office... but watch this space!

#### WHO DO YOU LOOK UP TO AT WORK?

Too many people to list! If I were to name one, it would be my team leader David Saechao, who I have been fortunate enough to work closely with on the two projects mentioned above. I admire the depth of his technical knowledge, but also the way he leads and empowers others. It's no surprise that he is a role model to many.

Join us at the Auckland University careers evening Tuesday, 12 March 2019, at 6:00pm, Lecture Theatre 401.439, Faculty of Engineering.

Or apply for graduate or summer intern positions at www.holmesconsulting.co.nz/join-us/graduates/



### In your career, how will innovation keep you ahead of automation?

## How will your ideas make the world better?



#### Meet Bridget Velasco

Bachelor of Engineering (Hon University of Auckland

I started my career with EY in 2017 as an Analyst within Transaction Advisory Services within the Infrastructure Advisory team. We advise the public and private sector on major infrastructure projects helping them form robust strategies and business cases to optimally achieve their goals. We can provide economic, regulation and policy advice; explore commissioning and contestability; and assist in optimising the infrastructure transaction outcomes. We can work on projects across a variety of sectors including healthcare, health and human services, transport, education, water and defence.

I graduated with a Bachelor of Engineering (First Class Honours) specialising in Biomedical Engineering from the University of Auckland.

One memorable project was being involved in the development of a business case to justify the Government's investment in new infrastructure and technology that would improve GPS positioning across Australasia. Over many months consultation with a number of stakeholders we developed a case detailing the economic benefits of the new infrastructure; the financial impact; key commercial structures; legal considerations and project management plans if investment by New Zealand was to be made.



#### Which programme is right for you?

For me personally it was invaluable to learn how this technology would have a number of positive implications for New Zealand such as improved health, safety, environmental outcomes and the significant economic benefits across a range of sectors including agriculture, road transport, aviation and maritime.

Digital disruption is a wave that is accelerating the transformative impact of technology on how the world operates. Rapid urbanisation, aging infrastructure, quality of life, and safety and security are some of the most significant issues facing the cities of the future. Smart and resilient cities that integrates technology, physical infrastructure, sensors, data and applications to improve citizen wellbeing will be required. Organisations and communities will continually be affected by technology as it increasingly plays a crucial role in how infrastructure can be planned and implemented. To me, this is because technology has the ability to maximise economic benefits for a country in many ways we may not even realise.

#### Share in our purpose and see the world through the lens of better

Would you like to work side-by-side with the entrepreneurs, game-changers, disrupters and visionaries of tomorrow? At EY, you can. Just imagine, every day you could play a part in the rise and success of the world's greatest companies. And maintain the foundations of economic stability and growth. By helping the best in the business to innovate, you'll be building on their legacy and creating a better working world.

At EY we'll encourage you do all this and more. Here the scale of your impact is matched only by the scope of your ambition. We'll help you to develop the mindsets to ask and answer the most challenging questions posed by unrelenting disruption and unlimited innovation. You'll have access to on-demand learning, formal training, coaching and real time feedback to shape your career and prepare you for the future.

You'll gain invaluable skills, experience and a lifetime of contacts that will set you up for a successful career – no matter which path you choose. It's how together we can build a better tomorrow for our people, our clients and our communities.

#### For more information on how to apply, where you fit, how we develop you, life at EY and what makes us different, visit:

ey.com/nz/betterbeginsnow

in bit.ly/EYLinkedIn CareersAUNZ

- f facebook.com/eycareersnewzealand
- ♥ twitter.com/ey\_careersaunz

instagram.com/eynzcareers

## Will you wait for the future to happen, or take a hand in shaping it?

Discover more about a career with EY ey.com/nz/betterbeginsnow #FutureOfWork

The better the question

The better the question. The better the answer. The better the world works.



## Want to gain experience around the world?

## What if you can...

Learn from the best right here in New Zealand or join our engineers, innovators, and thought leaders at one of our 551 offices across 41 countries.

As part of the WSP Opus Graduate Development Programme, you not only get the opportunity to work on projects that are shaping New Zealand, but have the support from some of the world's best experts through our mentoring programmes.

#### **Apply now**

wsp-opus.co.nz/graduates2019

## KiwiRail — Stronger Connections. Better New Zealand.

KiwiRail has a proud 155-year history in New Zealand and we're a key part of the country's social and economic fabric, responsible for significantly driving economic growth through our internationally-acclaimed tourism brands, by moving over a third of New Zealand's export goods and by holding the country's second largest property portfolio.

We have a vision for a bigger, bolder role for rail and we're looking for energetic, ambitious and talented graduates who genuinely care about creating stronger connections, for a better New Zealand to be our next generation of influential and inspiring leaders.

### Graduate programme

Our graduate programme is designed to nurture and develop and we offer a comprehensive two-year programme which will see you pushed out of your comfort zone, growing towards your full potential. Upon successful completion of the programme you'll secure a permanent job offer.

Our innovative induction includes a seven- week tour across the country on our trains and ferry services to spend time in different KiwiRail locations, getting to know the business comprehensively.

#### During the programme you will:

- · Complete many different business area rotations
- Participate in formal events and training with the other graduates
- Work closely with a mentor from within Senior Management and a buddy from within the business, who will ensure you are well supported
- · Have your performance and pay reviewed every six months
- Travel to different locations around NZ to really get involved in the business
- · Participate in innovation smashes, projects and day-to-day work

### We have opportunities across many areas of the business including:

- Sales and Commercial
- Engineering and Planning
- HR
- Safety Management
- Operations



#### MEET A CURRENT GRADUATE

#### Marty Arwani- Network Services

"The graduate programme in KiwiRail is one of a kind. You begin the programme with a business familiarisation that takes you across the country and invaluably shows you how the company operates as a whole. You then get to rotate into different teams to help find you the most suitable role while also giving you a deeper understanding about the different roles. A big highlight for me is when I was made responsible for a few projects, this highlighted the trust I was given and also the high expectations. Last but not least are the great leaders in the programme that are always available to support and mentor you throughout."



Applications open in September and before then, join our LinkedIn group (KiwiRail Student Careers) to stay in touch with news and opportunities.

You can also visit our KiwiRail careers page for more information (https://careers.kiwirail.co.nz/home)



## ACCIONA Infrastructure

- A leader in sustainable solutions across the globe through its five lines of business; construction, concessions, water, industrial and services.
- With over 100 years of experience, it has comprehensive vision, embracing the entire value chain of a project.
- Innovation and ground-breaking uses of technology are the hallmarks of its projects.
- Operating in more than thirty countries in five continents, with high geographic specialisation.
- ACCIONA Infrastructure employs solutions that are sustainable for the context in which it operates, supporting current development without risking the environment or future growth.



It has extensive experience in developing and executing large-scale operations and is focused on the following lines of business;

#### CONSTRUCTION

Specialising in three major areas: Bridges, Roads and Special Structures; Railways and Tunnels; and Ports and Hydraulic Projects. It can handle all aspects of projects in any of these areas, from design and engineering to eventual completion and maintenance.

#### WATER

It is a leader in the water treatment sector with the ability to design, construct and operate drinking water treatment plants, residual purification plants, tertiary treatment plants for re-use and reverse-osmosis desalination plants.

#### INDUSTRIAL

It is a specialist in high-tech EPC and turnkey projects, including Waste-to-Energy, Thermal Power Generation, Hydroelectric, Photovoltaic Power Generation, Oil & Gas, Transmission Grids and Substations, and Facilities.

#### ACCIONA INFRASTRUCTURE AROUND THE WORLD



#### FLAGSHIP PROJECTS





A World Record for Tunnel Boring Machine (TBM) Performance was broken during construction, excavating 49.7 metres in one day, beating the previous record by 13.7 metres. Legacy Way is the 4.6km road tunnel that connects the Western Freeway at Toowong with the Inner City Bypass at Kelvin Grove. The optimised project design enhances user experience for motorists, public transport services and active transport users, private vehicles and pedestrians in the area. It also integrates the project into the city, with urban designs aimed at preserving and enhancing the importance of adjacent areas, including the Brisbane Botanic Gardens.

#### TOOWOOMBA SECOND RANGE CROSSING

ACCIONA Infrastructure as a Design and Construct JV partner of the Nexus Infrastructure consortium, awarded with the contract to design and construct the \$1.6 billion Toowoomba Second Range Crossing (TSRC). The TSRC is 41km-long connecting the Warrego Highway at Helidon Spa in the east with the Gore Highway at Athol in the west, via Charlton. We reached partial opening in December 2018 and the remaining section is anticipated to open around mid-2019.



#### LILYVALE SOLAR FARM

The Lilyvale Solar Farm will have a capacity of 100 MW, and the project will be carried out as a turnkey or EPC (Engineering, Procurement and Construction) contract for global solar developer Fotowatio Renewable Ventures (FRV). A joint venture between ACCIONA Industrial and Gransolar (GRS), led by GRS, is set to construct one of Australia's largest photovoltaic plants.



#### ADELAIDE DESALINATION PLANT

The Adelaide Desalination Plant has been operating continuously since completion and has delivered more than 130 gigalitres of desalinated drinking water into the SA Water supply network (current as of end-December 2015). This state significant South Australian asset provides 50% of Adelaide's drinking water needs from a climate-independent source.

Applications for our 2020 engineering intern & graduate programmes are open from 1 April 2019. To learn more about these opportunities visit: http://employmentchannel.acciona.com http://employmentchannel.acciona.com/acciona-graduates

For more information: www.acciona.com.au

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A business of Callaghaninnovation New Zealand's Innovation Agency

## We're New Zealand's Measurement Standards Laboratory. We're here to make sure New Zealand's measurements are consistent with international definitions.

That means measurements have to be accurate, traceable and reliable. That's important for a whole range of reasons. It allows economies and markets to work properly. It's also vital for regulating health, safety and the environment. In fact, they underpin practically all industrial processes, as well as many innovations.

MSL is part of Callaghan Innovation – New Zealand's innovation agency, and is based in Lower Hutt.

Joining us gives you a wide variety of exciting career opportunities, from leading calibration services to developing cutting-edge technology for measurement and solving industrial problems.

Still studying and want some hands-on experience? We also hire paid student interns to work on research projects at MSL every summer (usually for three months between November and February).

You can find out more on our website: www.measurement.govt.nz or get in touch: info@measurement.govt.nz

## YANG **Yenn**



BE(Hons) in Mechatronics Research engineer (photometry and radiometry)

#### What do you do at MSL?

My team is responsible for ensuring that all sorts of measurements of light across New Zealand are accurate and meaningful. So every day is different for me. One day I'm calibrating light meters or UV meters for clients, the next I might be designing and 3D-printing parts for our reference photometers or improving the temperature stability of our instruments to ensure the most accurate possible standards for New Zealand.

## What is your favourite thing about being an engineer?

I love having the tools and opportunity to solve problems that improve the measurement capabilities of New Zealand industry.

#### Why did you choose MSL?

With world-renowned scientists and world-class equipment here, who wouldn't choose MSL? But I didn't really understand the importance of metrology until I saw the research being done here, and appreciated the dependence of all cutting-edge technology on accurate measurements. My colleagues here are highly knowledgeable yet humble, which makes working at MSL such a rewarding experience. I've learned so much from them! That, and being able to confidently measure something within a fraction of a percent is truly amazing!





#### **Ally Bodmer**

**Study area:** Bachelor of Civil and Environmental Engineering at the University of Auckland.

As a high-school student I was passionate about maths and sciences and helping my community. I knew I wanted to work in a field where I wouldn't always be at a desk and could help make the community a better place for those in it and look after our environment. Engineering seemed to be the most tangible and practical way of reaching that goal. What better way to learn how our city works and how I can contribute to its growth than to work for the council that runs it? I started as an intern with the Healthy Waters Design Office and quickly learned that working in the water area was where I wanted to be – as it was the one area that combined community and the environment, as well as the technical challenges that I enjoyed. It was the work that drew me in, but it was the people at Auckland Council that convinced me to stay on as a graduate after my internship as there is so much support and collaboration. You get a chance to work with industry leaders and learn more than just what one role involves.

As I mentioned I started as an intern in the Healthy Waters Design Office, and with their support I joined the Auckland Council Graduate Programme with Healthy Waters as my home team. Working with Healthy Waters gave me a chance to try technical design, site work, experiencing both sides of being client and consultant and the complexities of large projects with lots of stakeholders.

The Graduate Programme has rotations that lets us learn more about the organisation and try different skills. I am currently on my second rotation, working with the Engineering Technical Services (ETS) team. In ETS I support the practise leads and get to work

### About our Engineering Graduate Programme

Auckland Council is a professional development partner under the ENZ training scheme.

Our four-year programme will provide you with accelerated learning and development, and rotations through your chosen area of work – ensuring you have hands on experience, exposure to senior leaders and the chance to work on large scale projects and unique developments.

Throughout the rotations you'll have performance and development discussions with your manager, set achievement goals and highlight your strengths and improvement areas to fast track your development.

You will have a personal support team that includes a graduate cohort network, a business mentor and the Early Career Pathways team. All these support people are on board to ensure you succeed and will help you every step of the way.

#### Rotations

- Healthy Waters
- Regulatory Services
- Engineering Technical Services

#### **Application dates**

Our applications open from 12 March 2019 to 26 March 2019.

Auckland Council is the perfect place for Engineers like you to grow and develop your career. So why don't you take a closer look and discover the roles we have for graduates, by visiting <u>www.endlesspossibilities.co.nz</u> with some of the most knowledgeable members of the industry on the technical guidelines and documents that are used to support the development of Auckland.

#### Alex De Guzman

**Study area:** I'm studying a conjoint in a Bachelor of Engineering specialising in Civil and Environmental, and a Bachelor of Arts majoring in French.



I wanted to do engineering because I feel like engineers help people – a lot of people. I think it's great that the work that we do has such a massive impact on so many people! I focus more on the environmental side of civil engineering, leaning towards water quality something very important for everyone, no matter where you may be in the world.

I chose Auckland Council because I wanted to know how the city works – how do we get from the plans, to the actual operations. I also wanted to work in a place where there is a focus on people - the council definitely puts Aucklanders first! It was interesting to see how engineers fit into council across the different phases of a project from planning, regulatory, design, and implementation.

I've been lucky to spend my past two summers with Auckland Council. I spent my first Summer with the Healthy Waters team where our team of interns got to work on site for a water/wastewater separation project. My second summer was spent updating Guideline Document 6 on On-Site Wastewater management. These two summers have brought me very different experiences as a young engineer – both highly valuable in my early career!

## ODTIVER WHERE TRADING AND TECHNOLOGY JOIN FORCES



OptiverAsiaPac #optiverlife optiver.com.au

#### Some of our perks include:

- Annual trip
- Free snacks
- Weekly massages
- Monthly social events
- Free gym membership
- Group training sessions
- Our famous Games Room
- On-site, free barista-made coffee
- Chef-prepared breakfast and lunch



Being an Engineer is about solving technical problems. About seeing the world in numbers and models. It's about analysing existing states and planning for the future.

But what if instead, you could use data that evolves by the minute? And instead of planning long term projects, you could take immediate action on your inferences? What if you could build a career by making order out of chaos, in the most competitive industry of them all?

Optiver is a technology-driven trading firm. We combine the power of cutting edge technology, trading expertise and analytical rigour to provide liquidity to the global financial markets. We work to improve the market, trading options and other financial instruments. We don't have clients. Or dress codes. We don't have a stifling organisational hierarchy. And we don't have the ego-driven culture you might be expecting from finance. We hire talented students from STEM backgrounds who are driven to solve open-ended problems.

Working at Optiver is a unique experience. You're surrounded by incredibly smart people, who want to share their knowledge and expertise. You're given responsibility and autonomy, and plenty of feedback about how you can deliver better work every day. You collaborate with generous, passionate people to tackle amazing problems and deliver real value to the business. Right from day one.

We expect the best from our people, so it's only fair that we give the best as well. From free breakfast and lunch, to weekly massages, gym membership and our top floor games area, you'll find there's something for everyone. We hire engineers with the best problem solving skills into our Trading and Technology teams. And we give them everything they need to succeed, grow and challenge the status quo.

The choice is yours. You can spend your career evaluating impact. Or you can make your own.

> To explore our culture and the way we do things, check out our social channels. To learn more and apply for our graduate or intern roles, visit optiver.com.au

# Meet the Student Development and Engagement team

The Student Development and Engagement team provides support to students to ensure they have the best possible experience at the University.

This includes pastoral support such as counselling, financial assistance and early childhood education, as well as mentoring and support plans for all students. Support is available from orientation through to employment.

Initiatives that are provided include Orientation, the Part I Assistance Centre, Women in Engineering Network (WEN), Tuākana for Māori and Pacific students, and information evenings with prospective employers.



Michael Willimott Student Development and Engagement Manager Phone: 09 923 7881 m.willimott@auckland.ac.nz Room 402.403, Level 4, 20 Symonds Street

Michael manages student development, engagement, support and retention initiatives to enhance students' experience.



Dr Naomi Fleming Women in Engineering Adviser Phone: 09 923 6773 n.fleming@auckland.ac.nz Room 402.414, Level 4, 20 Symonds Street

Naomi is focused on the participation, retention and success of female engineering students. She works closely with the Women in Engineering Network, and engages with schools to raise the profile of Engineering as a career choice for girls. The Student Development and Engagement team also provides the opportunity for the students to connect with the faculty and student organisations, through social events.

Other groups supported by the team are Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI), students with disabilities, refugee students and international students.



Chris McClymont Student Experience Adviser Phone: 09 923 2927 c.mcclymont@auckland.ac.nz Room 402.402, Level 4, 20 Symonds Street

Chris provides a range of development and engagement activities for all students. He works closely with Campus Life and the faculty's student clubs.



Jonathan Culley Employer Liaison Manager Email: j.culley@auckland.ac.nz Room 402.410, Level 4, 20 Symonds Street

Jonathan facilitates employer networking and fosters industry relationships, along with graduate and intern recruitment. He also provides advice and support to students on career options.



Alcione Fagundes Student Support Adviser (Equity) Phone: 09 923 2990 a.fagundes@auckland.ac.nz Room 402.412, Level 4, 20 Symonds Street

Alcione supports all engineering students with their wellbeing, pastoral care and learning support. She is also the primary Student Support Adviser for equity students.



Meleane Akauola Student Support Adviser m.akauola@auckland.ac.nz Room 402.412, Level 4, 20 Symonds Street

Meleane supports all engineering students with their wellbeing, pastoral care and learning support. She is also the primary Student Support Adviser for international students.



Steve Roberts Student Support Adviser (Māori and Pacific) Ext: 09 923 4538 s.roberts@auckland.ac.nz Room 402.412, Level 4, 20

Symonds Street

Steve supports all students with their wellbeing, pastoral care and learning support. He is the primary Student Support Adviser for Māori and Pacific students.



Monique Warder Student Experience Adviser m.warder@auckland.ac.nz Room 402.402, Level 4, 20 Symonds Street

Monique provides a range of development and engagement activities for postgraduate students.



## DOWNER YOUR FUTURE

Our Downer Graduate Programme welcomes our young professionals to the team from day one. Our graduates might just be starting out in their careers, but they are encouraged to think about how they can role model the Downer values and deliver on the Downer pillars - Safety, Thought Leadership, Delivery and Relationships.

Your first job is not just about technical development. It's also about how you fit in the culture and how you can contribute to that as a future leader.



Zero Harm is embedded in Downer's culture and is fundamental to the company's future success.

"I contribute to the Downer Zero Harm culture by making sure that every single person who enters our construction site is well aware of the potential site hazards. I constantly work towards improving the overall on-site health and safety by attempting to eliminate, minimise and isolate critical risks through innovative construction methods.

Safety is important because I truly care about my work crew."

Isaac, Auckland University Graduate

#### DELIVERY

We build trust by delivering on our promises with excellence while focusing on safety, value for money and efficiency.

"Great delivery is important. We are rebuilding Western Springs College around a live school, and sometimes need to cut off critical services for upgrades. These have to be planned meticulously to ensure minimum disruption.

Delivery is also important in our costs. It is essential we compare all prices to ensure value for money without compromising on quality."

Michelle, Auckland University Graduate



#### THOUGHT LEADERSHIP

We remain at the forefront of our industry by employing the best people and having the courage to challenge the status quo.

"I work to promote a sustainability culture. Last year, I was a Downer Leadership Award winner for development of an Engineering Sustainability Hackathon, #HackOurFuture. Working with Downer and UoA society- the Sustainable Future Collective, we brought together 32 students to solve a sustainability-based challenge. The event saw some awesome ideas generated for the future of a more sustainable business."

Dalong, Auckland University Graduate

#### **RELATIONSHIPS**



We collaborate to build and sustain enduring relationships based on trust and integrity.

"The relationships you build are so important because you need to establish a good rapport with your colleagues to work alongside them. Collaboration is key when we are challenged and need to create a solution as a team.

I am also proud to connect with the SPIES group. Being a part of the alumni means I can provide some guidance and share the lessons I've learnt from my experiences."

Havea, Auckland University Graduate



Applications for our Graduate programme open Monday 18 March 2019. Applications for our Summer Intern programme open Monday 1 July 2019.