

ENGINEER YOUR CAREER

AUTUMN 2023

Information from Industry for Student Engineers

FISHER & PAYKEL

THE BEST INNOVATORS DON'T JUST UNDERSTAND TECHNOLOGY, THEY UNDERSTAND PEOPLE. OUR RESEARCH AND DEVELOPMENT IS BACKED BY A CULTURE OF OPEN INNOVATION, COLLABORATION AND CURIOUSITY



"F&P has a clear promotion pathway for us"

"Informal training is excellent. People are always willing to help. Formal training supports our informal development"

Find out more at: https://www.fisherpaykel.com/nz/our-story/careers



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:

- 56,000+ AECOM team members working across 7 continents
- 3,500+ team members across Australia and New Zealand
- 18+ 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.

How we select

Your application for a graduate role will be assessed through a staged approach, including initial application review, online strengths based assessment, video interview and assessment centre/ face to face interview.

Apply online

aecom.com/australia-newzealandgraduate-careers/

AECOM

Applications opening, 1st March 2023, closing 29th March 2023.

AN ENGINEERING CAREER LIKE NO OTHER

Marine Engineering Officer (MEO)

Marine Engineering Officers are the Navy's experts on ship structure, propulsion, power generation, hydraulic and habitability systems. MEOs onboard ship lead teams of skilled technicians who operate, maintain and repair this diverse range of equipment.

A diverse range of shore based positions include management of complex projects, equipment procurement, ship system and physical upgrades, and performance analysis.

Eligible degrees: BE(Hons) or BEngTech in:

- Mechanical
- Materials

Process

 Mechatronics Chemical

Electrical

Electronics

Weapons Engineering Officer (WEO)

Weapon Engineering Officers are the Navy's experts in weapon systems, communication, sensors, and combat management systems. WEOs onboard ship lead a team of skilled technicians who maintain and repair the sophisticated equipment that provides our fighting capability.

WEOs are also involved in complex multi-million dollar project management, equipment procurement and upgrades, system optimisation and maintenance planning.

Eligible degrees: BE(Hons) or BEngTech in most engineering specialties (excluding Civil). Degrees in Computer Science, Systems or IT are also accepted.

TE TAUAARANGI AIR FORCE

Engineering Officer

Mechanical

Engineering Officers actively manage the engineering and maintenance of RNZAF aircraft and its mechanical, avionics and armament systems. You will be responsible for the safety, airworthiness and availability of the aircraft.

Engineering Officers work across all engineering disciplines, including the research and development of aircraft, equipment modifications, managing budgets and financial systems, and designing structural repairs.

Eligible degrees: BE(Hons) or BEngTech in:

- Mechatronics
- Electrical & Electronics Aeronautical Engineering

Learn more at defencecareers.mil.nz **08001FORCE**



work that matters



Navy & Air Force Scholarships

Undergraduate Schemes Graduate Schemes

Navy Tangaroa Scheme: Complete Junior Officer Common Training prior to your studies. University fees and associate expenses will be paid by the Navy, plus you'll receive an annual salary*

Bursary Scheme:

Join the Air Force or Navy Reserves and study at your university of choice with course fees covered*

Available for engineering graduates and final year students only. In addition to your normal salary, you will receive annual payments totalling \$40,000 over four years (for a fouryear degree). There is no minimum time to serve or return of service attached to this scheme.

defencecareers.mil.nz/scholarships

*Upon graduating, you will be required to complete one year of service for every year of sponsored study.







Perry Bridge, Horotiu

Ioana Manoa

Engineer your Career

HOW DID YOU FIND THE **TRANSITION FROM BEING A HOLMES INTERN TO COMING BACK AS A GRADUATE?**

Joining Holmes as a graduate was a super smooth process. It was awesome coming back into the office after being an intern and having familiar faces around. As I had an understanding of some of Holmes' processes, it was nice and easy to integrate back in.

WHAT IS SOMETHING THAT SURPRISED YOU ABOUT **HOLMES AS AN INTERN?**

The wide range of projects both interns and graduates get the opportunity to work on was something that surprised me as an intern. There are so many different types of projects that people are working on around the office at any one time, so as an intern I was able to contribute to a variety of structural and infrastructure projects throughout the 10-week internship. The opportunity to work in both the structures and infrastructure teams as an intern was a great way to get an idea of the different work each practise offers.

WHAT INSPIRED YOU TO **BECOME AN ENGINEER?**

My curiosity for how things work and my love for problem solving was a big reason why I wanted to study engineering and create a career for myself as an engineer. As a Samoan female, increased representation of females and Pasifika in science, technology, engineering and mathematics (STEM) based careers has also been a goal of mine from early high school.

WHAT'S BEEN YOUR MOST CHALLENGING PROJECT?

The most challenging project l've worked on so far would have to be the detailed design of a rectangular concrete tunnel. As the first major project I completed as a graduate, the tunnel design taught me so many valuable lessons and skills; both technical and non-technical.

IN THREE WORDS HOW WOULD **YOU DESCRIBE HOLMES?**

Innovative. Collaborative. Supportive

HOW WOULD YOU DESCRIBE THE CULTURE AT HOLMES?

The culture at Holmes is one of collaboration, support and encouragement. There is a familylike culture to each of the Holmes offices that makes work a really enjoyable place to be.

Join us for our University of Auckland recruitment evening

Tuesday, 7 March at 6pm (room 401, 401)

https://holmesanz.com/careers/graduates-interns/



BEST THING ABOUT WORKING FOR HOLMES?

The best part of Holmes is the people! From working on awesome projects alongside many knowledgeable engineers and drafters to playing touch rugby together after work, it's always a good time.

MOST CHALLENGING PART OF LEAVING UNIVERSITY AND STARTING WORK FULL-TIME?

The most challenging part of entering full-time work after university has been creating a consistent work routine. Uni life fluctuates between intense study periods and long holiday breaks, whereas full-time work is more consistent over the year. So finding a new consistent routine that worked for me has been a key challenge in the transition.

WHAT ADVICE WOULD YOU **GIVE A NEW GRADUATE?**

Every project has a learning to take away no matter the complexity or scale. So just bring a good attitude to learning, ask lots of questions and don't be afraid to ask for support because everyone is more than happy to help you out.





Introducing Hala Barakat

What's your role at T+T?

My name is Hala Barakat and I have had the pleasure of being an intern at Tonkin +Taylor (T+T) the past two summers. The summer of 2021 I was a transport technician and the summer of 2022 I was a geotechnical technician; thus, I was able to get a taste of the two disciplines that intrigued me the most.

What have you enjoyed about your time at T+T?

The people are what captivated me into staying at T+T for two years. The company is filled with experts in all things civil + environmental engineering. You can casually ask these experts questions and they don't mind taking the time to sit down with you and explain projects from the very beginning. They work on incredibly complex and interesting projects across the country and the pacific. The intern programme is specifically designed so that if you catch an interesting project or topic that you want to be involved in, they will try their best to involve you somehow. That is why I was able to complete such diverse work over the years which has really propelled my knowledge in the disciplines.

How did you find out about T+T?

Prior to applying, I had seen the T+T logo plastered on every Auckland University Engineering Society (AUES) shirt and event, so, I figured they were a large and reputable company. We then had the geotechnical discipline director come into our Part II civil engineering class to speak about a scholarship opportunity and the company culture. He was so enthusiastic, passionate, and hard working which gave me an indication of what the company culture was likely to be like. As a result, I decided that it would be a perfect place to jump start my career.

Most memorable experience so far at T+T?

The travel has been the highlight of my experience. As only an intern I have been so fortunate to travel across New Zealand for work. I have been to Wellington to assess a transitional cycleway, Marlborough Sounds to assess landslip damage on private and commercial properties and Waihi to assess slope stability on a gold mine!

At T+T, we shape the interface between people and the environment - earth, water and air - using science and engineering. We hire from a range of engineering specialisations, applications for our graduate programme open in March and applications for our intern programme open in July.



"The people are what inspired me to stay at T+T."

(O) tonkintaylor.careers in Tonkin + Taylor

Tonkin + Taylor F Tonkin + Taylor

www.tonkintaylor.co.nz/careers



Oji Fibre Solutions 🛛 😂 😡 🕆 🕀 🔀

Powering the circular bioeconomy

Oji Fibre Solutions (OjiFS) is the largest integrated pulp, paper and fibre-based packaging manufacturer in New Zealand.

We're talking wood-fibre, not fibre optics! Our manufacturing operations promote the efficient and complete use of sustainably sourced virgin wood-fibre from renewable forestry resources, with all OjiFS sites proudly FSC[®] and PEFC[™] Chain of Custody Certified[®].



2-year Graduate Programme at Kinleith & Tasman Mills

We know our greatest strength is our people, and the quality of those that lead them.

That's why we created a two-year Pulp and Paper Graduate Programme, that develops the technical, teamwork and management skills needed for graduate engineers to grow and continually hone their craft, and ultimately progress to become our leaders of the future.

If you're a problem-solver, motivated by the opportunity of working in a large-scale manufacturing environment, where every day is challenging, different and exciting, we want to hear from you!

YEAR 1

Leadership & Teamworking

- Online modules & assignments
- Individual coaching sessions
- Group challenges
- Whole cohort days with other mills

YEAR 2 Management & Technical

- Essential management tools
- Technical enhancement
- Specific to engineering discipline
- Expert content internally & externally

For more information visit: ojifs.com/graduates-interns-and-apprentices



Calling all future engineering leaders!

Get invaluable, real-world experience at our mills and fast-track your career with our two-year Graduate Programme – for mechanical, electrical and process engineers.

EVIE BRAKE

Graduate Process Engineer Tasman Mill, Kawerau



• February 2022

Started at OiiFS

I am currently a Graduate Process Engineer working alongside the Technical Team at the Tasman Mill.

In the year that I have been here, I have had the opportunity to be involved in a range of projects that focus on improvement and optimisation of the Recovery and Recausticizing Plant. As my time here lengthens, the more I learn that the Pulp and Paper Industry can be considered a "process engineers' playground", where there is the opportunity to work on almost all types of equipment and processes, and apply the theory learnt at University.

This, in my opinion, is a great exposure to working in an industrial environment that will benefit myself throughout my entire engineering career. While the lead up to, and the initial few weeks of starting at OjiFS was daunting and slightly overwhelming, it quickly became very rewarding. The more I learnt, the more I was able to identify and work towards solving issues and creating plans to improve parts of the process.

A key part of the graduate programme is rotating through the different areas of the mill, which allows us to gain experience and knowledge of all processes involved. This a great opportunity to find out what parts we enjoy and have the most interests in, for when we finish the graduate programme.

Along with this, I personally think that moving to the Bay of Plenty is an added bonus. Tasman Mill is in close proximity to Rotorua, Tauranga and Whakatane, which provides ample opportunities to fill my free time with activities outside of work.

Come & chat to us at the STEM Fair next month

VINCENT AUGUST

Electrical Engineer Penrose Mill, Auckland

Started at OjiFS

- 2018/2019 Summer Student
- 2020/2022 Graduate Electrical Engineer, Kinleith Mill, Tokoroa.



• 2022 Electrical Engineer, Penrose Mill, Auckland.

I first joined Oji fibre Solutions as a summer student at Kinleith Mill in Tokoroa. Four years later, I am now working in Auckland as the Electrical Engineer for our Penrose Pulp & Paper Recycling Plant.

I was initially drawn to OjiFS by the excitement of getting away from Auckland for the summer and being able to experience working in such a massive industry. However, I decided to continue on with OjiFS through the Graduate programme, as I realised just how much I could learn in one place.

The Graduate programme rotated me through four different areas in the mill and with each new rotation brought an entirely new set of skills on wide range of equipment. From working on turbine generators, electrolysers and boilers, to a multitude of motors and instruments, there is not many places in New Zealand with the same level of industrial variety.

The best thing about working at Kinleith Mill as a graduate, was the amount of freedom given to us to explore and learn in our own way. I was given many different projects during my time and was encouraged to come up with my own solutions, whilst still having an array of support from more experienced engineers.

Completing this programme with around 15 other graduates across both mills, I thoroughly enjoyed our graduate days and having cross-over projects with each other. I know I have made a few lifelong friends along the way.





FINANCIAL REVIEW BOSS MOSTINNOVATIVE COMPANIES



aurecon

Bringing ideas to life

aurecongroup.com/graduates

Who are we?

Aurecon is an international design, engineering and advisory company. Our purpose is bringing ideas to life, to imagine and co-create with our clients a better future for people and the planet.

We were proud to be placed Top 5 in Grad New Zealand's Top 100 Graduate Employers in 2022. We were also honoured to be the first New Zealand engineering company to achieve Rainbow Tick certification for diversity and inclusion.

What makes us unconventional?

The people who design a better future for humanity are the brave new thinkers like you.

We need you to create unconventional ideas and piece together solutions to complex challenges.

Such as using a digital-first approach on the Trentham to Upper Hutt (T2UH) project allowing more frequent and reliable train services for the Wellington region, or using innovative 3D digital modelling to reduce wastewater discharge by over 90 per cent on the St Marys Bay Area Water Quality Improvement Project.

Join us and you'll also become part of a community working together to tackle some of the world's most complex challenges.

Aurecon graduate programme

Our 2-year programme helps you develop a strong foundation of relevant skills and experience through formal, interactive, and informal learning experiences.

You'll work in different teams through our graduate rotations, experience our inclusive culture, discover our hybrid ways of working, make an impact on communityshaping projects, and build connections to set you up for the future.

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

Apply now



www.aurecongroup.com/careers/graduates-interns

Graduate applications open: 22 February - 10 April 2023

Internship applications open: July 2023



Lupesina Koro



Transport Engineer

University attended: University of Auckland Degree qualification: Bachelor of Commerce and Bachelor of Engineering (Hons)

Can you tell us a little bit about you?

My internship journey began with the Integrated Transport Team (ITM) where I helped out with stakeholder engagement and traffic design. In my final year of university, I switched to the Project Management & Project Controls team overlooking project financials.

As a graduate, I re-joined the ITM team and started to work on developing a transport strategy and understanding what is required to ensure the opening of a new transport corridor is seamless and that it maintains a legible network.

Since joining the company full time, I've been able to build and refine my skills in business case development that involves justifying the need for a particular transport investment, evaluating different solutions and eventually making a recommendation to the client. Being part of the ITM team has allowed me to refine different skills and be involved in different stages of the project lifecycle.

What has been the highlight of the graduate programme?

No amount of group assignments at university can prepare you for the collaboration, teamwork and communication required in the workplace. My highlight is the opportunity to grow in these areas through my involvement with project teams but also within the wider business, specifically Aurecon's Auckland Limelight Network.

Limelight is a network for emerging professionals at Aurecon that offers a unique opportunity for us to learn and connect with each other. Being on the committee, I've had the opportunity to work with many different people from diverse fields across Aurecon which helped me learn more about the business. I became the Auckland Limelight Chair in July 2022 and it has further expanded my network and grown my confidence.

What advice would you give to someone thinking about applying for Aurecon's graduate programme?

Don't overthink. Just apply and see where it takes you. Always have the audacity to back yourself 100%, embrace the fear and join us.

Consider a career in PROJECT MANAGEMENT

Join Frequency's two-year Graduate Programme 2024

frequency

We look for motivated people from the following disciplines:

- Building Sciences
- Engineering
- Architecture
- Design
- Construction Law
- Quantity Surveying
- Property and Planning
- Trades

Applications are open now and close April 2023.

For more info and to apply go to: frequency.nz/graduates At Frequency, we work on some of Aotearoa's most transformational infrastructure and construction projects.

Our structured Graduate Programme is designed to develop your skills and knowledge in a supportive and inclusive environment.

To find out more, visit frequency.nz

sk us about a career in



From the beginning I was working in a management role on a high value infrastucture project in which I had direct input on the success of the outcome.

> Tristan Ware Associate and former graduate

MEET THE TEAM

Find us at The University of Auckland **2023 STEM Expo!**

Wednesday 29 March 10.30am-3pm Engineering building

Follow us on social



frequencyprojects

in frequency

NATASHA BYCROFT

WHERE DO YOU SEE

I was first introduced to PDP through a three-month summer internship in the Water Infrastructure team, in the holidays just before my final year of university. I had heard about PDP throughout my time at uni, as they were one of the sponsors of CESA (the Civil Engineering Student Association) as well as a supporter of the Engineering School's Case Study Competition. PDP was immediately top of my list for internships because of their environmental focus and expertise in Three Waters. The team made a great impression right from the interview; I could tell that everyone I met had a huge passion for their work. Having completed a full year working here as a grad, I can confirm that my initial perception has not changed!

My typical working day starts with commuting to the Auckland office in Newmarket, brewing a much-needed coffee and settling into my various tasks for the day. Spreadsheets have become a good friend (nothing more satisfying than getting those complicated formulae to work!). I am often involved in report/proposal writing, costings, modelling and mark-ups for the CAD team.

Scattered alongside these tasks are project meetings, mid-morning coffees (yes, more coffee) with my team and the occasional site visit to spice up the day. Being a medium-sized company, I have been lucky to work on a diverse range of unique projects where I typically take on a lot of responsibility, supported by the awesome people I work with. Most recently, I have been part of the preliminary and detailed design for the Cambridge WWTP (wastewater treatment plant) upgrade. The project work has included the hydraulic design and modelling for the plant, biofilter design and dewatering building layout, to name a few; it has been exciting to see this design come to life.

What would you tell someone considering a graduate role with PDP?

I would tell them to stop thinking and apply! PDP's projects are so varied and engaging, the people are friendly and always happy to answer questions, the office banter and activities keep the mood light, and through our work, you are playing your part in improving our environment.

WHO ARE WE

PDP is a leading environmental and engineering consultancy offering solutions for environmental issues through our specialised range of services.

DO

We are an NZ, employee-owned and operated company, with 36 years of experience in providing environmental solutions throughout New Zealand, Australia and the Pacific Islands.

 (\mathbf{O})

in

Our team of over 230 specialists are located in Northland, Auckland, Hamilton, Tauranga, Hawke's Bay, Wellington, Christchurch, Central Otago and Invercargill.

Graduating 2025 Career Compass Programme

Student Programmes

Building a better working world

Opportunities await.

Your future is bright.

Graduating 2024 Internship Programme

Could the skills you build here unlock doors anywhere?

From bots that do number crunching, sustainability projects that positively impact people and the planet, or transforming businesses through technology, we have opportunities to match your passion and strengths.

Receive support and training to build skills for a bright future. Gain experiences that challenge you. Work in a place that rewards performance. That's what's on offer at EY. After all, our success is founded on yours.

We'll help you - with the scale, teams, culture and technology to build a career as unique as you are. You'll have access to learning, skills and qualifications for you to personalise your career.Here, your career is truly yours to build.

Opportunities await for your exceptional EY experience.

Connect with us

For more information on our application process, life with us, competitions and to get the inside scoop on EY, follow us on:

facebook.com/EYCareersNewZealand Dit.ly/EYOceaniaCareersYoutube ≥ ey.com/nz/careers 📴 instagram.com/eynzcareers in bit.ly/EYLinkedIn_CareersAUNZ

To find out more and apply online, visit pdp.co.nz/careers or email careers@pdp.co.nz

© 2023 Ernst & Young, New Zealand. All Rights Reserved. NZ20232-002016. ED None



Meet Chelsea Jones

Graduating 2023

Graduate Programme

Bachelor of Commerce (Information Management now known as Business Analytics) University of Auckland



I'm a Senior Manager in Technology Consulting in the Digital and Emerging Tech team. I started my career as a graduate nine years ago and now lead project teams that are focused on unlocking the full potential of technology and data for our clients. My clients are primarily in the Consumer Products space, who are undergoing transformation programmes focusing on Technology and Supply Chain.

My degree was a mix of tech, and business, which I have found I use day-in day-out on my projects – it provided me the opportunity to not only learn a base of technical and data analysis skills, but also a good understanding of how system implementations work, what good project management looks like and what it is so important for business and tech to be on the same page!

My advice to students considering applying to EY is to apply! One of the awesome things about our diverse Consulting team is that our people come from all different backgrounds, degrees and past experiences – we love Engineers from all different specialisations. Also make sure to do your research, ask lots of questions, attend campus events, know why you want to apply and make sure it is the right fit for you.

Meet the Student Development & Engagement Team



Jonathan Culley | Student Development and Engagement Manager | j.culley@auckland.ac.nz Jonathan manages development, engagement, support and retention initiatives to enhance students' experience.

Alcíone Fagundes | Student Development and Engagement Team Leader | a.fagundes@auckland.ac.nz Alcíone works closely with the Student Experience Advisers and Student Support Advisers to support undergraduate and postgraduate students, and provide development opportunities for all students.

Meleane Akauola | Student Support Adviser (Maori and Pacific) | m.akauola@auckland.ac.nz Mele supports all students with their wellbeing, pastoral care and learning support. She is the primary Student Support Adviser for Maori and Pacific students.

Courtney King | Employer Liaison Manager | Courtney.king@auckland.ac.nz Courtney facilitates employer networking and fosters industry relationships, along with graduate and intern recruitment. She also provides advice and support to students on career options.

Caitlin Scragg | Women in Engineering Adviser | c.scragg@auckland.ac.nz Caitlin supports WEN, as well as provides advice and support strategies for Women in Engineering.

Jane Williams | Student Support Adviser | jane.williams@auckland.ac.nz Jane supports all engineering students with their wellbeing, pastoral care and learning support. She is also the primary Student Support Adviser for international & postgraduate students.

Lili Posada | Student Support Adviser | lili.posada@auckland.ac.nz Lili supports all engineering students with their wellbeing, pastoral care and learning support. She also coordinates our Part II Academic Assistance Centres.

Ashleigh Fox | Project Manager, WIE33 Project | a.fox@auckland.ac.nz Ashleigh manages our WIE33 project, designed to increase the representation of undergraduate engineering students.

Joanna Luo | Student Experience Adviser | joanna.luo@auckland.ac.nz Joanna provides a range of development, transition and engagement activities for all students. She work closely with Campus Life and the faculty's student clubs.

Natasha Morsch | Student Experience Adviser | natasha.morsh@auckland.ac.nz Natasha provides a range of development, transition and engagement activities for all students. She work closely with Campus Life and the faculty's student clubs.

Quang Le | Student Support Adviser | quang.minh.le@auckland.ac.nz Quang supports all engineering students with their wellbeing, pastoral care and learning support. He also coordinates our Part I Academic Assistance Centre.