

Mechanical Engineering Trades





Tylah



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Fabricator and Welder

After moving from creative media, to tiling, to panel beating, Tylah finally made the switch to Mechanical Engineering Trades, where she found her love for welding. Thanks to being eligible for an MPTT scholarship, Tylah was gifted tools, overalls, gloves, and help to get her driver's license. Now, Tylah is working at Lead Fabrication in Upper Hutt, where she gets to work on pieces that are used all over the New Zealand.

What does a day in your life look like?

Interpreting drawings, cutting and moving pieces of metal, clamping them together, and mostly, welding! I like seeing the finished product, seeing the usable item that was once just a pile of metal.

We've made barriers for Naenae train station, basketball hoops for the Kura Kaupapa Māori in Alicetown, and pieces for the Interislander. There's always something different.

What type of welding do you do?

We do MIG and stick welding. MIG is a more automated type of welding, but you still need a fair amount of patience and control. Being precise is important, and the heat from welding can warp the metal, so you've got to clamp your pieces together well.

Why did you decide to study Mech. Engineering Trades?

'One of the most helpful things was getting my driver's license through Te Āti Awa. The Tamaiti Whāngai team arranged lessons, and I was able to borrow a car to take my test.'

It took me a while to figure out what I wanted to study! I had tried tiling and creative media, but I didn't love either of them. I originally signed up for panel beating, but a couple of weeks into the programme when we started welding, my tutors were impressed by my ability and encouraged me to switch to Mechanical Engineering Trades.

How did the Māori and Pacifica Trades Training scholarship help you?

I was gifted tools, overalls, and gloves, and my course costs were completely covered. One of the most helpful things was getting my driver's license through Te Āti Awa. The Tamaiti Whāngai team arranged lessons, and I was able to borrow a car to take my test.

How was your study experience?

I made a good group of friends that I still keep in touch with. Our strengths and weaknesses complimented each other, so it was a great group to work on assignments with.

We were in class just three days a week, so we could work the other days of the week if we wanted to. I did DeliverEasy at the time so I could choose how much work I had. .

Follow the QR code below to read the full story.





Māori and Pasifika Trades Training

Ākonga Māori and Pacific looking to learn a trade can apply for a Māori and Pasifika Trades Training (MPTT) scholarship to cover full fees and course-related costs.

Tautoko while studying

Māori and Pasifika Trades Training scholarship students are supported by both Te Pūkenga - Whitireia and Te Pūkenga - WelTec through the Tamaiti Whāngai team.

The Tamaiti Whāngai team will support you with mentoring, goal setting, pastoral and cultural support. You'll have the opportunity to get your drivers license, site safe, and first aid certificates. The dedicated Tamaiti Whāngai Job Brokers have close links with employers and industry and will assist you to find an apprenticeship and/or employment.

Programmes where you can get a Māori and Pasifika Trades Training scholarship include - Automotive, Bakery, Collision Repair, Construction, Electrical Engineering, Hairdressing, Makeup and Skincare, Mechanical Engineering, Plumbing, Gasfitting and Drainlaying, Painting and Decorating, and Tiling.

Job Brokers

Our Tamaiti Whāngai Job Brokers have close with employers and have information of available jobs for MPTT ākonga.

We thank our iwi partners, Te Rūnanga o Te Āti Awa and Ngāti Toa Rangatira as well as our Pasifika partner, Mafutaga Faifeau Samoa for the support they provide to our Māori and Pasifika Trades Training scholarship students.

Scholarship criteria

You need to meet the entry criteria for the programme you are enrolling in and be:

- of Māori or Pacific decent
- 16-40 years old at the start of your study
- a New Zealand citizen or permanent resident
- able to meet the entry requirements for your programme

We want you to be passionate and show that you are motivated to succeed.

Get in touch

✉ tw@weltec.ac.nz



Job Brokers Tui and Tame

New Zealand Certificate in Mechanical Engineering (Level 3)

📖	Level 3
🕒	1 year, full-time
💰	\$9,528 (indicative for 2025 intake)
⚙️	120 credits

Learn the introductory skills needed to progress on to an engineering apprenticeship. This programme teaches you how to carry out engineering tasks, and the importance of health and safety. You'll also get to work on a range of projects, using relevant tools, machinery and materials.

What you will learn

Gain skills to build, maintain and operate mechanical engineering equipment and plant. Learn maintenance fitting, welding, fitting and turning, sheet metal work and fabrication. Use the machinery that is used in the industry. Work on your own projects to develop your skills further.

Most of your learning is in the workshop with around three hours of theory each week. Work on projects to develop your skills further. Use the different machinery that is used in the industry. Our students have gone on to work on everything from buildings to coffee machines.

Students will learn the following skills:

- Gain skills in fabrication - learn the behaviours of materials and how to shape and structure metal
- Carry out machining processes to manufacture a variety of parts and learn how to fit together equipment
- Gain knowledge and practical experience in a variety of welding disciplines
- Carry out and apply engineering calculations
- Read, interpret and produce engineering drawings
- Understand health and safety requirements

Career options

- Apprentice fitter and turner
- General engineer
- Fabricator
- Machinist
- Sheet metal worker
- Welder
- Toolmaker

Entry requirements

Under 20

- 10 NCEA Level 1 credits literacy and 10 NCEA Level 1 credits numeracy (algebra, trigonometry, measurement recommended). Applicants must be able to carry out the physical requirements of the programme.

20+

- If you're 20 years or over, you may qualify for special admission on this programme. Contact us if you don't meet the Under 20 entry criteria.

Related study options

[New Zealand Certificate in Engineering Fabrication \(Trade\) \(Level 4\) with strands in Heavy Fabrication, Light Fabrication, and Steel Construction](#)

Programme Handbook



Disclaimer: The information contained in this document is correct at the time of print. Whitireia and WelTec | Te Pūkenga reserves the right to cancel or postpone any of the programmes, and shall not be liable for any claim other than the proportion of programme fees that the cancelled portion bears. Some programmes may be dependent upon formal approval from NZQA (New Zealand Qualifications Authority), TEC (Tertiary Education Commission) funding allocation, and the number of enrolments. As part of the NZQA targeted review of all Level 1-6 New Zealand qualifications, there may still be changes to some programmes starting in 2024. Fees, programmes, entry and selection criteria, and dates, are subject to change. Please check the relevant programme pages at whitireiaweltec.ac.nz for up-to-date information and full entry regulations before applying to enrol. Information regarding English language requirements is available on each course page at whitireiaweltec.ac.nz.