

POWER UP YOUR CAREER IN MANUFACTURING

EXPLORE THE POSSIBILITIES



THE
FUTURE
MAKERS

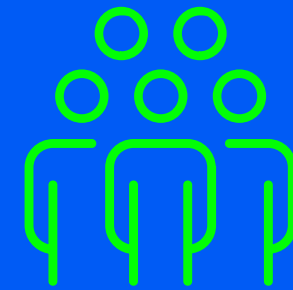
MAKE
YOUR
MARK

WHY CHOOSE A CAREER IN MANUFACTURING?

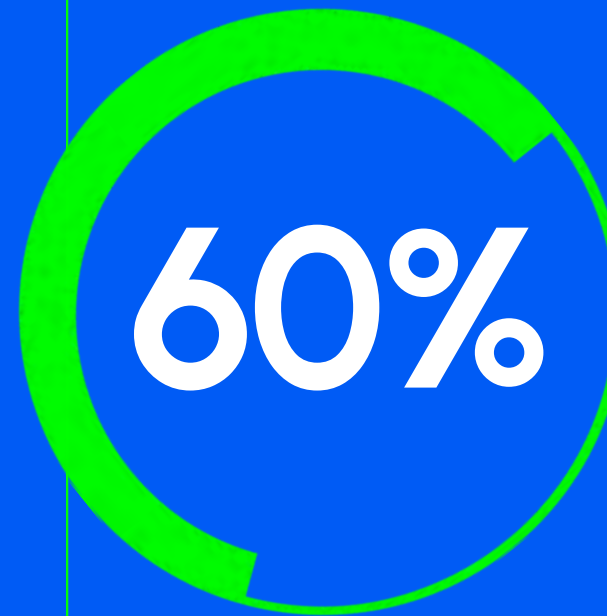
Manufacturing is at the heart of New Zealand's economy, fueling innovation, sustainability, and global growth.

Whether you're just starting out or looking for a change, this sector offers hands-on creativity, real-world problem-solving, and a chance to build what's next—from rockets to biotech breakthroughs.

Join an industry that blends craftsmanship with cutting-edge tech, helping you make your mark in ways that truly matter.

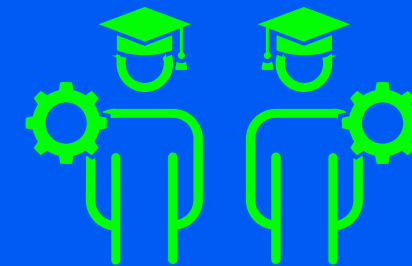


220,000+
KIWIS EMPLOYED IN
MANUFACTURING



OF NEW ZEALAND'S
EXPORTS ARE
MANUFACTURED GOODS

5,000+



APPRENTICESHIPS LAUNCHED EVERY YEAR IN
TRADES AND TECHNOLOGIES



FIND YOUR PATH: MORE THAN ONE WAY IN, ENDLESS WAYS FORWARD

There's no single "right" path into manufacturing. Many careers start with on-the-job learning through apprenticeships, cadetships, or traineeships. Others begin with study and move quickly into hands-on roles, or combine work and learning over time. Micro-credentials can be stacked as skills grow, and moving between pathways is normal.

Manufacturing rewards people who are curious, practical, and motivated to solve real problems. Skills and experience matter, learning never stops, and careers evolve over time. This isn't one job or one destination,
It's a set of meaningful challenges shaping the world we live in.

START YOUR JOURNEY

FIND YOUR PATH →



YOUR PATH STARTS HERE

Manufacturing values **creativity, practical skills, and real problem-solving.**

Careers are flexible — you can start on one path and grow into another as your interests evolve. With constant learning and a wide range of roles, you’ll help design, build, and improve the things the world relies on. Explore the pathways and see where your journey leads.



01 PATHWAY

CADETSHIP "COMPANY-SPONSORED TRAINING PROGRAMS"



FIND YOUR PATH

02 PATHWAY

APPRENTICESHIP

"LEARN WHILE YOU EARN WITH HANDS-ON TRAINING"

SECONDARY SCHOOL

YEAR 11 - 13

Requirements:
NCEA Level 1-2,
Gateway/Star programs

Focus:
Basic education and career
exploration

PRE-TRADE PROGRAM

6-12 MONTHS

Content:
Industry taster courses

Opportunities: Earn as you Learn NZ
Certificate in Manufacturing Level 3 –
Hands-on Experience: Mix of 3
manufacturing environments on 10-
week rotations builds practical skills
across sectors.

Purpose:
Explore different trades before committing

APPRENTICESHIP

3-4 YEARS

Training:
On-the-job training + block
courses at polytechnic

Opportunities:
MAST Academy, Competenz

Outcome:
Learn a trade while earning
income

QUALIFIED TRADE

ONGOING DEVELOPMENT

Opportunities:
Stack Micro-credential
qualifications

Status:
Fully qualified tradesperson

SENIOR/LEAD ROLE

5+ YEARS EXPERIENCE

Roles:
Supervisor, Foreman,
Specialist

Responsibilities:
Leading teams and complex
projects

03 PATHWAY

POLYTECHNIC

"TECHNICAL DIPLOMA WITH PRACTICAL FOCUS"

SECONDARY SCHOOL

YEAR 11-13

Requirements:
NCEA Level 2, technology
subjects

Focus:
Practical and technical
subjects

DIPLOMA PROGRAM

2 YEARS

Industry experience:
Often includes practical projects, workplace
learning, or employer-linked training.

Qualification:
NZ Diploma in Engineering

Nature:
Hands-on, practical training with theory

TECHNICIAN ROLE

1-2 YEARS

Job:
Engineering Technician

Activities:
Supporting engineers,
technical work

SENIOR TECHNICIAN

3-5 YEARS

Roles:
Specialist or Team Lead

Expertise:
Deep technical knowledge in a
specific area

TECHNICAL MANAGEMENT

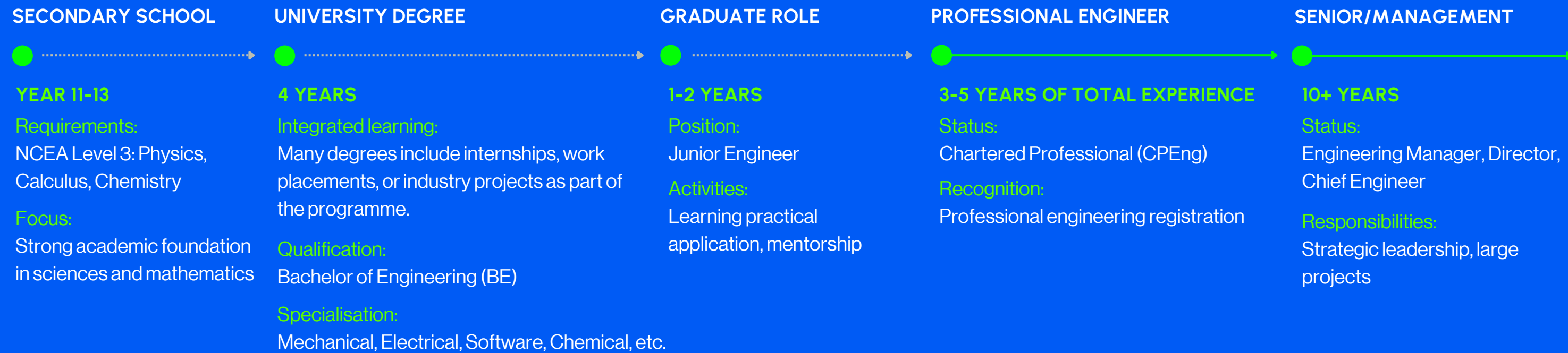
8+ YEARS

Roles:
Technical Manager, Consultant

Focus:
Managing technical teams and
projects



UNIVERSITY "ENGINEERING DEGREE PATHWAY FOR TECHNICAL ROLES"



PATHWAY
COMPARISON
SUMMARY

FEATURES

	APPRENTICESHIP	UNIVERSITY	POLYTECHNIC	CADETSHIP
Duration to Qualification	3-4 years	3-4 years	3-4 years	3-4 years
Entry Requirements	NCEA L1-2	NCEA L3 + Sciences	NCEA L2	NCEA L2+
Learning Style	Hands-on, workplace	Academic + research	Practical + theory	Company-specific
Earning While Learning	✓	✗	✗	✓
Entry Salary	\$50-60K	\$65-75K	\$55-65K	\$50-60K
Senior Salary Potential	\$90-120K	\$140-200K+	\$100-140K	\$100-130K
Best For	Hands-on learners	Academic achievers	Practical learners	Company loyalty



WHERE YOU MIGHT FIT...

CLIMATE & CIRCULARITY CHALLENGERS KEI TE WERO I TE ĀHUARANGI

 **Environmentally conscious**

 **Purpose-driven**

 **A systems thinker**

 **Forward-thinking**

 **Innovative**

Rethinking how materials, energy, and resources are used. This cluster focuses on reducing waste, improving efficiency, and helping manufacturing transition to a more sustainable future.

SCHOOL SUBJECTS THAT HELP

Science (chemistry and/or physics)
Digital Technology
Geography
Maths
English

EXAMPLE ROLES (GUIDE ONLY)

Sustainability Manager
Environmental Engineer
Circular Economy Lead
Process Technician

COMMON STUDY PATHWAYS (GUIDE ONLY)

- On-the-job learning or apprenticeships in manufacturing environments
- Polytechnic diplomas or certificates in engineering, science, or sustainability
- University study in Environmental, Chemical, or Materials Engineering, or Product Design

FAST FACTS

- New Zealand is a world leader in sustainable manufacturing
- Demand for circular economy expertise is growing globally
- Sustainability roles combine science, business, and environmental thinking

NZ MANUFACTURERS YOU MIGHT RECOGNISE

Brenworth
WOOLCARPETS

Autex
Acoustics

pact
SUPPORTING PEOPLE

TYPICAL EARNINGS OVER TIME

\$55k →
\$130k+

TECH BUILDERS & AUTOMATION HANGARAU ME TE AUNOA

 **Tech Savvy**

 **Analytical**

 **A problem solver**

 **A continuous learner**

 **Precise**

Building smarter systems through technology, robotics, software, and automation. Turning ideas into machines, processes, and tools that work better, faster, and safer.

SCHOOL SUBJECTS THAT HELP

Physics
Maths (calculus and/or statistics)
Digital Technology
Science
English

EXAMPLE ROLES (GUIDE ONLY)

Automation Technician
Robotics Engineer
Mechatronics Engineer
PLC / Controls Engineer

COMMON STUDY PATHWAYS (GUIDE ONLY)

- Apprenticeships or on-the-job training in automation, electrical, or controls roles
- Polytechnic diplomas or degrees in IT, engineering, or automation
- University study in Electrical, Software, Mechatronics, or Systems Engineering

FAST FACTS

- Industry 4.0 is transforming how manufacturing operates
- Automation and robotics skills are highly transferable
- From self-driving machinery to smart factories

NZ MANUFACTURERS YOU MIGHT RECOGNISE

Robotics
Plus

ROCKETLAB

GALLAGHER

TYPICAL EARNINGS OVER TIME

\$65k →
\$160k+

WHERE YOU MIGHT FIT...

PRODUCT CREATORS & ADVANCED MAKERS KAIHANGA HUA

-  **Creative**
-  **Hands-on**
-  **Detail-orientated**
-  **A visual thinker**
-  **Innovative**

Designing and making high-quality products using advanced tools, technology, and hands-on skills. This is where creativity meets precision to bring ideas to life.

SCHOOL SUBJECTS THAT HELP

Materials Technology
Maths
Physics
Design & Visual Communication
Digital Technology

EXAMPLE ROLES (GUIDE ONLY)

CNC Machinist / Operator
Product Designer
Welder / Fabricator
Toolmaker

COMMON STUDY PATHWAYS (GUIDE ONLY)

- Pre-trade programmes and apprenticeships (e.g. machining, fabrication, toolmaking)
- Polytechnic diplomas or certificates in mechanical or manufacturing engineering
- University studies in Mechanical Engineering or Product Design

FAST FACTS

- NZ manufacturers create products used worldwide
- From rockets to biotech, advanced making underpins NZ innovation
- New Zealand is projected to need up to 15,000 engineering machinists / CNC machinists over the next five years

NZ MANUFACTURERS YOU MIGHT RECOGNISE



TYPICAL EARNINGS OVER TIME

\$50k → \$120k+

PROBLEM-FIXERS & PROCESS IMPROVERS KAIWHAKATIKA RARURARU

-  **Detail focused**
-  **Analytical**
-  **Methodical**
-  **A continuous learner**
-  **Quality-focused**

Finding what's not working and making it work better. Improving quality, efficiency, and reliability through practical problem-solving to make manufacturing smarter, safer, and more efficient.

SCHOOL SUBJECTS THAT HELP

Maths
Science
Digital Technology
Business
English

EXAMPLE ROLES (GUIDE ONLY)

Automation Technician
Robotics Engineer
Mechatronics Engineer
PLC / Controls Engineer

COMMON STUDY PATHWAYS (GUIDE ONLY)

- On-the-job learning in manufacturing, engineering, or production environments
- Polytechnic diplomas or certificates in engineering, manufacturing, or quality
- University study in Industrial Engineering or related engineering disciplines

FAST FACTS

- Lean and Six Sigma skills are highly valued across manufacturing
- Data-driven decision-making is transforming how factories operate
- These roles often lead to senior technical or leadership positions

NZ MANUFACTURERS YOU MIGHT RECOGNISE



TYPICAL EARNINGS OVER TIME

\$55k → \$130k+

WHERE YOU MIGHT FIT...

FUTURE WORKFORCE LEADERS ĀRAHI KAIMAHI

 **Natural leader**

Supporting people, teams, and systems to perform at their best. Leading change, building capability, and shaping how work gets done across manufacturing.

 **Clear communicator**

 **Strategic thinker**

SCHOOL SUBJECTS THAT HELP

English
Business
Maths (statistics)
Digital Technology
Science

 **People-focused**

 **Results-driven**

EXAMPLE ROLES (GUIDE ONLY)

Team Leader / Supervisor
Production or Operations Manager
Project Manager (Manufacturing / Capex)
Plant Manager

COMMON STUDY PATHWAYS (GUIDE ONLY)

- Trade or technical roles with leadership responsibility gained over time
- Polytechnic diplomas or degrees in business, engineering, or operations
- University study combined with on-the-job leadership and management experience

FAST FACTS

- Many manufacturing leaders started their careers on the factory floor
- Leadership skills develop through experience, not just study
- Management roles offer strong long-term earning potential

NZ MANUFACTURERS YOU MIGHT RECOGNISE



Fisher & Paykel
HEALTHCARE

TYPICAL EARNINGS OVER TIME

\$65k → \$250k+

EXPORT & GLOBAL NAVIGATORS KAIWHAKAHAERE KAUPAPA Ā-ĀO

 **Globally minded**

Connecting New Zealand manufacturing to global markets. Managing supply chains, logistics, and relationships across borders to ensure products reach customers around the world.

 **Organised**

 **Relationship builder**

 **Strategic**

 **Adaptable**

SCHOOL SUBJECTS THAT HELP

English
Business (economics/accounting)
Geography
Maths
Digital Technology

EXAMPLE ROLES (GUIDE ONLY)

Logistics Coordinator
Supply Chain Manager
Export Manager
Production Planner / Master Scheduler

COMMON STUDY PATHWAYS (GUIDE ONLY)

- On-the-job experience in logistics, supply chain, or operations roles
- Polytechnic diplomas or certificates in supply chain or operations
- University study in Business, Supply Chain Management, or International Business

FAST FACTS

- Around 60% of New Zealand's exports are manufactured goods
- Supply chain skills are in high demand globally
- These roles combine business acumen with technical understanding

NZ MANUFACTURERS YOU MIGHT RECOGNISE

 **ABODO**

 **Whittaker's**
SINCE 1896

— THE —
**PURE
FOOD**
— CO —

TYPICAL EARNINGS OVER TIME

\$55k → \$145k+

BEHIND EVERY ROLE IN MANUFACTURING IS A STORY OF INNOVATION, DEDICATION, AND AMBITION. CHECK OUT HOW SEE HOW THESE CHANGEMAKERS TURNED CURIOSITY INTO INDUSTRY-SHAPING CAREERS.

MEET THE MAKERS

Their stories prove **manufacturing is more than a job**—it's purposeful work, transforming entire industries while uplifting communities.



DMITRY CARRUTHERS
MANAGING DIRECTOR -
GISBORNE ENGINEERING
7+ years in industry

CAREER CLUSTER: FUTURE WORKFORCE LEADERS

PATHWAY: APPRENTICESHIP

Apprenticeship: Machine Shop (started age 16)

Career Pathway: On-site Line Boring Operator → CNC Machinist → Machine Shop Operations Manager → General Manager → Managing Director (by age 23)

What Dmitry Does: Directs business strategy, operations, and technical excellence, driving company growth and success at Gisborne Engineering.

Dmitry's rapid progression to leadership highlights his strong technical foundation, initiative, and entrepreneurial spirit from an early age. Starting his machine shop apprenticeship at just 16, he quickly mastered CNC machining and moved through operational roles to become Managing Director by age 23. His story proves that in manufacturing, drive and capability matter more than years on the clock.

“MANAGING DIRECTOR BY 23 - PROVING AMBITION AND SKILL HAVE NO AGE LIMIT”

**EXPLORE MORE STORIES &
LEARN HOW YOU CAN JOIN
THE FUTURE MAKERS. →**



SIR PETER BECK
FOUNDER & CEO - ROCKET LAB
25+ years in industry

CAREER CLUSTER: TECH BUILDERS & AUTOMATION

PATHWAY: APPRENTICESHIP

After a toolmaking apprenticeship, Peter launched Rocket Lab, now the world's third most frequent rocket launcher. His journey shows that with Kiwi grit, anything's possible. From odd jobs to building rockets that launch satellites into orbit, Peter proves that manufacturing careers can literally reach for the stars.

"IF YOU'RE HAVING A BAD DAY, GO TOUCH SOMETHING THAT'S GOING TO SPACE."



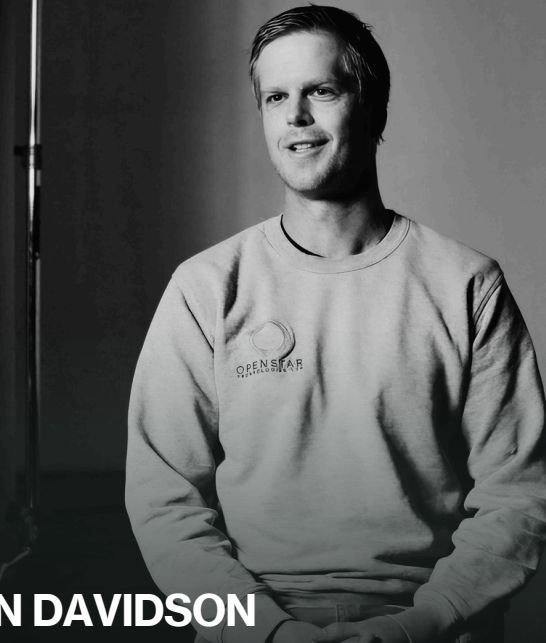
MCKENNA LESLEY
APPRENTICE FABRICATOR - LONGVELD LTD
2 years in industry

CAREER CLUSTER: PRODUCT CREATORS & ADVANCED MAKERS

PATHWAY: APPRENTICESHIP

McKenna demonstrates that you can pursue multiple passions - excelling in athletics while building a career in fabrication. Her story shows the flexibility and opportunity that apprenticeships can offer.

"COMBINING SPORTS ASPIRATIONS WITH SKILLED FABRICATION"



RYAN DAVIDSON
LEAD - MANUFACTURING - OPENSTAR
7 years in industry

CAREER CLUSTER: PROBLEM-FIXERS & PROCESS IMPROVERS

PATHWAY: APPRENTICESHIP

From odd jobs to CNC machining, Ryan found his calling at OpenStar, crafting high-tech components for clean-energy fusion. A perfect example of Kiwi 'can-do' spirit in action. He's building the future of energy, one precision part at a time.

"WE LITERALLY MAKE PARTS FOR A FUSION REACTOR THAT COULD POWER THE WORLD"



SHAUN EDLIN
FOUNDER - DOTTEREL
12 years in industry

CAREER CLUSTER: TECH BUILDERS & AUTOMATION

PATHWAY: UNIVERSITY

Mixing neuroscience with startup hustle, Shaun's team at Dotterel reimaged audio tech, proving advanced manufacturing in NZ can rival global giants—one mic array at a time. From Hollywood film sets to industrial applications, Dotterel's technology is changing how we capture sound.

"OUR 'EVERYTHING MICROPHONE' ADAPTS FROM A ROARING DRONE TO A WHISPER ON SET"



IAIN MCMILLAN
CEO - ENZTEC
20+ years in industry

CAREER CLUSTER: TECH BUILDERS & AUTOMATION

PATHWAY: APPRENTICESHIP → UNIVERSITY → PHD

Starting as a fitter-turner apprentice, Iain earned his trade certificate, then a degree, then a PhD. His journey from the workshop floor to CEO proves manufacturing careers have no ceiling.

"FROM FITTER TURNER APPRENTICE TO PHD ENGINEER TO CEO – EVERY STEP BUILDS THE NEXT"



SEBASTIAN LEMBERG
MECHANICAL DESIGN ENGINEER - HAYES INTERNATIONAL
6 years in industry

CAREER CLUSTER: PRODUCT CREATORS & ADVANCED MAKERS

PATHWAY: UNIVERSITY

Sebastian combines creativity and technical precision to design the next generation of machinery. With a background in physics, calculus, and music, his career proves that engineering is as much about imagination as it is about numbers.

"DESIGNING TOMORROW'S MECHANICAL EDGE"



TONY MISA
**VICE PRESIDENT, CUSTOMER RELATIONS
& GLOBAL OPERATIONS SUPPORT**
BUCKLEYS SYSTEMS
20+ years in industry

CAREER CLUSTER: EXPORT & GLOBAL NAVIGATORS

PATHWAY: APPRENTICESHIP

Tony's dynamic pathway showcases how a CNC machining apprenticeship can launch a career spanning continents. From CNC apprentice to overseeing 110+ staff across machine shop, fabrication and planning teams—Tony's precision manufacturing skills opened doors worldwide.

**"FROM CNC APPRENTICE TO GLOBAL
OPERATIONS LEADER - PASSION FOR
PRECISION OPENS DOORS WORLDWIDE"**



CLARE & TANE BRADLEY
CO-FOUNDERS - AGRISEA
15+ years in industry

**CAREER CLUSTER: CLIMATE & CIRCULARITY
CHALLENGERS**

PATHWAY: UNIVERSITY

Clare and Tane co-lead Agrisea, transforming coastal seaweed into bio-stimulants and advanced materials. Their synergy proves that small-batch precision can have a global impact, all while honouring New Zealand's natural resources. They're pioneering sustainable manufacturing that works with nature, not against it.

**"WE'RE TAPPING INTO 32 MILLION YEARS OF
NATURE'S R&D, TURNING SEAWEED INTO
SUSTAINABLE INNOVATIONS"**



ILA FORD-ROBERTSON
INDUSTRIAL ELECTRICIAN -
HAYES INTERNATIONAL
3 years in industry

**CAREER CLUSTER: PROBLEM-FIXERS & PROCESS
IMPROVERS**

PATHWAY: APPRENTICESHIP

Ila jumped directly into an Earn & Learn apprenticeship after high school, proving that real-world experience is a powerful career accelerator. Now she's keeping critical systems running and building expertise that will last a lifetime.

**"WIRING UP A BRIGHT FUTURE STRAIGHT
OUT OF HIGH SCHOOL"**

CONTACT US

Whether it's **finding the right pathway**, accessing resources, or sharing your story, we'd love to hear from you.

The Future Makers campaign is proudly brought to you by Advancing Manufacturing Aotearoa (AMA) - a leading voice for innovation and excellence in New Zealand's manufacturing sector. AMA serves as the bridge between visionaries, educators, policymakers, and aspiring makers.

Have questions, need guidance, or want to collaborate? We're here to support your journey in manufacturing and connect you to the resources you need.

REACH OUT TO AMA



EMAIL:
CONTACT
PHONE:
HEADQUARTERS:

INSTAGRAM
FACEBOOK
TIKTOK

INFO@AMANZ.NZ
CATHERINE LYE - CEO
+64 21-636-219
24 BALFOUR RD, PARNELL, AUCKLAND

@AMA_NZ_OFFICIAL
AMANZOFFICIAL
@AMA_NZ_OFFICIAL

