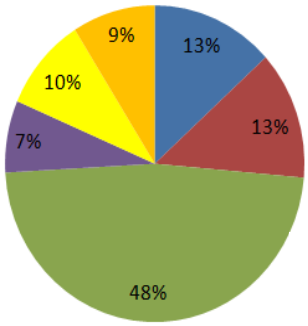
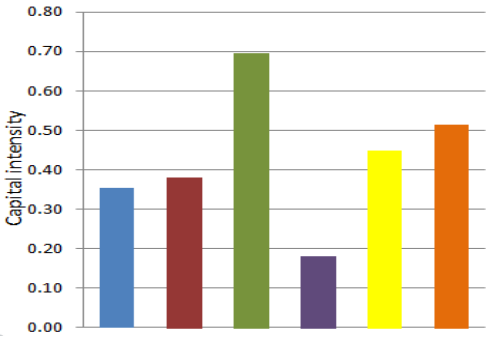
Manufacturing & Technology

Proportion of GDP productivity across the Vocational Pathways measured by GDP from labour (per person) for 2015



Source: Infometrics

Capital intensity measured as the share of GDP which is attributable to capital, in each Vocational Pathway



Valued skills can include:

- understanding how chemistry or robotics is being used in a current ICT product
- understanding ways to control data processing in a manufactured product
- developing a product design through graphics practice and technological modelling
- understanding sustainability and disposal in manufacturing design
- applying algebraic methods to solve design problems with nano technologies
- integrating spreadsheet and database information to understand trends in a design brief
- using appropriate equipment to diagnose faults in a range of automotive or other electrical circuits
- understanding and following good practice when manufacturing or repairing electrical, mechanical, robotic or hydraulic products

Vocational Pathways provide a framework for learner engagement, skill development, work experience and progression.

The Youth Guarantee initiatives provide a set of tools and resources to address learner needs in the most appropriate ways.

- **Total GDP 2015: $219,529m**
- **Manufacturing and Technology share of GDP: $17,562.32m**
- **Manufacturing and Technology (including an aspect of Primary Industries) share of GDP: $4,610.11m**

National contribution to economic growth 2005-2015 ($M)

- Manufacturing and Technology contributed towards the $17, 258M provided from all other industries to the national economy
  Source: Infometrics

National contribution to top 50 employing industries in NZ in 2015

- Engineering Design and Engineering Consulting Services
  24,371 jobs - 1.10% of NZ total
- Meat Processing
  19,476 jobs - 0.9% of NZ total
- Other Automotive Repair and Maintenance
  15,623 - 0.70% of NZ total
  Source: Infometrics

Vocational Pathways Awards 2014

- 785 awards in 2014 – 4% of NZ total

Trades academies places across NZ in 2016

- 1646 places – 27% of total numbers

Type and number of Manufacturing and Technology programmes across Trades Academies in 2015

- Automotive / Motor Industry Engineering (18)
- Mechanical Engineering (13)
- Electrical engineering (11)
- Electronics / Computer Technician / CAD / Digital Technologies / Applied Tech & Design (9)
- Joinery/ Welding/ Fabrication/Manufacturing (4)
- Civil / General Engineering (4)
- Aviation (2)

To be globally competitive New Zealand needs to grow its skilled workforce. The industry has said that skills shortages need to be addressed and having skilled staff is one of the most important factors for growth.

Manufacturing & Technology

What work is available?

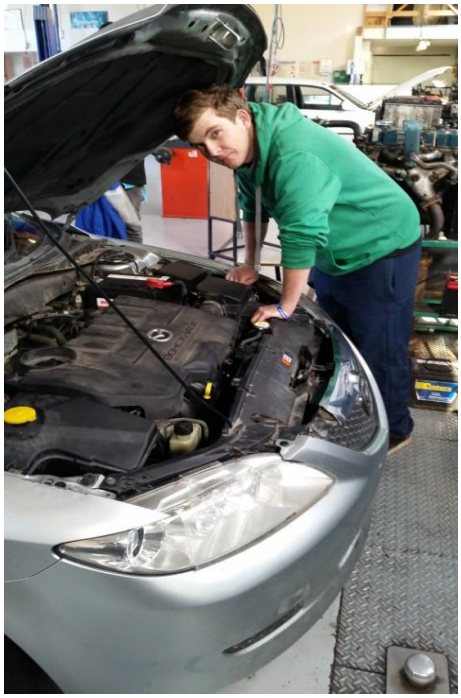
Manufacturing:
Assembler, appliance servicing, butcher, baker, designer, electrician, electrotechnology, engineer, supporting the engineering industry, industrial measurement or control, fixing machines, fabrication, fitter, inventory, logistics, machine operator, make erect and rig steel, meat inspection, packing, processing, production planner, production manager, purchaser, quality control, shipping and receiving, testing, warehouse stock controller.

Technology:
Biotechnologist, designer, food technologist, telecommunications technician, production technologist, medical technologist.

Link to jobs listed in Manufacturing and Technology Vocational Pathway

http://www.youthguarantee.net.nz/vocational-pathways/the-six-vocational-pathways/manufacturing-and-technology-pathway/jobs-in-manufacturing-and-technology/

I want to create things that move.
My path is Red.



Dominic Pope from St. Kevin's College

What industries are there?

Manufacturing
Aircraft manufacture, baking, boatbuilding, marine products, clothing, textiles, footwear and leather, concrete, dairy, defence force, electronics, food and beverage, glass, machinery and equipment, mechanical engineering, metal and related products, paint, petrol, chemicals and plastics, pharmaceutical, specialised crafts like jewellery, watches, furniture, upholstery, musical instruments, sports equipment, transport, wood and paper, medical instrumentation.

Technology
Aeronautical and automotive engineering, clean or "green" technologies, computer-aided design, defence force products, engineering, electrotechnology, information and communications technology, marine technology, nanotechnology, robotics, software.

For further careers information go to

Youth Guarantee
youthguarantee.net.nz

Careers NZ
careers.govt.nz/

Occupational Outlook
mbie.govt.nz/info-services/employment-skills/labour-market-reports/occupation-outlook

Industry Training Organisations for this sector include: Competenz, The Skills Organisation

To be globally competitive New Zealand needs to grow its skilled workforce. The industry has said that skills shortages need to be addressed and having skilled staff is one of the most important factors for growth.