Field Engineering and Technology

Registration of *Mechanical Engineering* skill standards

Hanga Aro Rau Manufacturing, Engineering and Logistics Workforce Development Council has completed the registration of four skill standards.

Date new versions published

May 2024

Planned review date

December 2029

Summary

Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council undertook the development of new skill standards for CNC Computer numerical control operator level 3 micro-credential. Regular Technical Advisory Group (TAG) meetings were held with a wide range of industry stakeholders, including representatives from industry associations, employers, training providers, assessment writers and subject matter experts. This project also considered the planned review of engineering unit standards and the progression to skill standards. This project started in October 2022.

To address the identified skills shortage in this industry sector, Hanga-Aro-Rau has developed four new skill standards. This initiative comes in response to the industry's rapid increase in investment in CNC and other advanced technological equipment. Historically, CNC operation was integrated into broader qualifications because businesses usually operated only one or two machines. However, as more companies transition from manual to CNC machines, coupled with an aging workforce, there is a significant rise in demand for CNC operators. These operators require a specific skill set that is less comprehensive than that of traditional tradespersons.

All feedback received was incorporated and endorsed for registration by the stakeholders in December 2023.

Main changes

- Skill standard 40034 is a core skill standard for the engineering industry to cover health and safety and as an induction tool to ensure someone understands health and safety and can follow workplace procedures.
- Skill standard 40035 was developed to meet the industry's growing emphasis on quality standards and the need for a distinct skill set that focuses on quality assurance processes and control measures.
- Skill standard 40036 was developed to address the need for an updated, more sector-flexible approach to preventive maintenance practices.
- Skill standard 40037 was developed to provide a more cohesive and comprehensive framework for CNC operation. It addresses the need for skilled operators who can efficiently set up and manage CNC machinery.

Detailed list of unit and skill standards - classification, title, level, and credits

Key to review category					
Α	Dates changed, but no other changes are made - the new version of the standard carries the				
	same ID and a new version number				
В	Changes made, but the overall outcome remains the same - the new version of the standard				
	carries the same ID and a new version number				
С	Major changes that necessitate the registration of a replacement standard with a new ID				
D	Standard will expire and not be replaced				

Engineering and Technology > Mechanical Engineering > Engineering Core Skills

ID	Title	Level	Credit	Review Category
40034	Apply health and safety practices in an engineering environment	3	5	NEW
40035	Apply quality assurance and control principles and processes in an engineering environment	3	10	NEW
40036	Carry out preventive maintenance tasks on plant or equipment in an engineering environment	3	5	NEW

Engineering and Technology > Mechanical Engineering > Engineering Machining and Toolmaking

ID	Title	Level	Credit	Review Category
40037	Set up and operate computer numerical control (CNC) machinery in an engineering environment	3	20	NEW