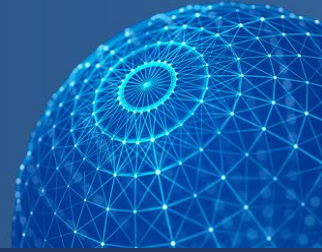




# Updating ANZSCO

Reflecting a modern Australian labour market



Architectural,  
engineering and  
technical services

ANZSCO Comprehensive Review

Australian Bureau of Statistics

17/6/2024

## ANZSCO [Preliminary] Proposed Changes

Version 2.0



# Updating ANZSCO

Reflecting a modern Australian labour market



## Essential Notes

The Australian and New Zealand Statistical Classification of Occupations (ANZSCO) describes all occupations for the Australian and New Zealand labour market.

The ABS has undertaken a comprehensive review of the Australian and New Zealand Standard Classification of Occupations (ANZSCO) to reflect the contemporary labour market and better meet stakeholders' needs. Public consultation rounds were held across 2023, with each round targeting selected occupations grouped by focus area.

Statistics New Zealand (Stats NZ) have elected not to participate in the current review and therefore occupation changes have only been considered in respect of the Australian labour market.

## Updates to document

This document has been updated based on stakeholder feedback and further research. Minor updates have been made to a handful of occupations. The format of the document has also been updated to improve usability based on feedback received. A preliminary proposed changes document has been created for each of the 43 focus areas. Focus areas were designed to group occupations for consultation purposes only and will not be present in the classification structure.

The preliminary proposed changes presented do not include the full scope of not elsewhere classified categories (nec). Exclusion statements are incomplete and do not reference specific occupation locations within the classification. Outstanding nec categories, exclusion statements and final tweaks to occupations are currently being finalised in preparation for the release of the draft proposed classification in July on the ABS website. The July release will provide users with an opportunity to provide feedback on the structure of the proposed changes, before finalising the update for release by December 2024. These preliminary proposed changes documents are for information only.

## Task lists

ABS recognises the potential of Artificial Intelligence (AI) to enhance our operations and efficiency. To this end, we have employed AI to assist in the creation of initial task lists. However, human experts are responsible for the final content, and AI serves as a tool, not a decision-maker. We value stakeholder input and incorporate it into our editing process placing importance on stakeholder submissions and other relevant research contributions.

Learn more about ANZSCO and the review at [Updating ANZSCO | Australian Bureau of Statistics \(abs.gov.au\)](https://abs.gov.au/anzSCO)

## Occupations in the Architectural, engineering and technical services focus area include:

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## About the focus area

The Architectural, engineering and technical services focus area covers occupations which require specialised knowledge and skills to:

- prepare project documentation, sketches and scale drawings, and integrate structural, mechanical and aesthetic elements in final designs
- monitor the operation and maintenance of equipment to achieve maximum efficiency under safe operating conditions
- determine construction methods, estimate building times, and required materials and quality standards
- draft and interpret specifications, drawings, plans, designs, construction methods and procedures
- obtain soil and rock samples at different sites and test samples to determine factors that affect the behaviour of soil and rock when a structure is imposed
- plan and design power stations and power generation equipment
- plan, research and advise on engineering operations for the exploration, location and extraction of oil and natural gas
- develop products such as electric motors, electronic components, equipment, appliances, circuits, and systems used for computer, communication and control systems and other industrial applications.

## Summary of consultation

Stakeholder feedback played a pivotal role in ensuring occupations in the Architectural, engineering and technical services focus area are relevant and align with industry needs.

Recommendations included proposing new occupation groups, and providing comprehensive information regarding occupation descriptions, qualifications, registration prerequisites, tasks, refinement of specialisations, and adjustments to terminology.

## 133211 Engineering Manager

Existing	Proposed
<p>133211 Engineering Manager</p> <p>Plans, organises, directs, controls and coordinates the engineering and technical operations of an organisation.</p> <p>Skill Level: 1</p>	<p>133211 Engineering Manager</p> <p>Plans, organises, directs, controls, and coordinates the engineering and technical operations of an organisation. Oversees teams of engineers, related professionals, and support personnel to deliver engineering projects in a range of industries and engineering disciplines.</p> <p>Registration or licensing may be required.</p> <p>ICT Engineering Managers and persons managing property assets are excluded from this occupation.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Determines, implements and monitors engineering strategies, policies, plans and technical operations while ensuring compliance with laws, regulations and safety standards</li><li>• Manages and assigns tasks to engineering teams and oversees their schedules, activities and budgets</li><li>• Monitors and evaluates the performance of engineering teams and individuals</li><li>• Provides professional guidance on all technical issues related to engineering projects</li><li>• Oversees, plans, controls and, evaluates engineering projects and instructs engineering teams throughout the project's operation</li><li>• Collaborates with other departments, represents the organisation in engineering related matters and liaises with stakeholders to achieve organisational goals</li></ul> <p>Specialisation:</p> <ul style="list-style-type: none"><li>• Infrastructure Asset Manager</li></ul>

## 232111 Architect

Existing	Proposed
<p>232111 Architect</p> <p>Plans and designs buildings, provides concepts, plans, specifications and detailed drawings, negotiates with builders and advises on the procurement of buildings.</p> <p>Registration or licensing is required.</p> <p>Skill Level: 1</p> <p>Specialisation:</p> <ul style="list-style-type: none"><li>• Conservation or Heritage Architect</li></ul>	<p>232111 Architect</p> <p>Plans and designs residential and multi-residential, commercial and industrial buildings. Provides concepts, plans, specifications and detailed drawings. Negotiates with builders, consultants and advises on the procurement of buildings.</p> <p>Registration or licensing is required.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Works with clients, engineers, consultants and other stakeholders to determine their requirements and objectives for architectural projects</li><li>• Develops detailed, innovative, sustainable and functional architectural designs taking into consideration social, environmental and economic concerns</li><li>• Conducts site inspections to assess project feasibility and submit town planning designs for permits</li><li>• Addresses request for information (RFI) as part of contract administration from consultants, engineers and other stakeholders involved in the building construction</li><li>• Evaluates and selects appropriate building materials, finishes and systems to achieve sustainability objectives</li><li>• Completes design tasks (3D modelling) in accordance with project and client design briefs</li><li>• Utilises building information modelling (BIM) and applies relevant building regulations and codes to manage the planning and design of building projects</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Conservation or Heritage Architect</li><li>• Design Architect</li><li>• Project Architect</li></ul>

## 232112 Landscape Architect

Existing	Proposed		
<p>232112 Landscape Architect</p> <p>Plans and designs land areas for projects such as open space networks, parks, schools, institutions, roads, external areas for all building types, land subdivisions, and commercial, industrial and residential sites.</p> <p>Skill Level: 1</p>	<p>232113 Landscape Architect</p> <p>Plans, designs and manages natural and built environments by applying aesthetic and scientific principles to address ecological sustainability, preserve cultural heritage and enhance the quality and health of landscapes.</p> <p>Landscape Designers are excluded from this occupation.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Designs, plans, manages and maintains projects for new developments, heritage protection, preservation of natural and cultural landscapes and the rehabilitation of degraded landscapes</li> <li>• Prepares landscape documentation, including drawings, specifications, schedules and contract documents and calls for tenders on behalf of clients</li> <li>• Conducts research and analysis to develop sustainable landscape designs, planning and management practices, methods and development strategies</li> </ul>	<p>232114 Landscape Designer</p> <p>Designs and creates detailed plans and drawings for residential landscapes and small public or commercial landscape projects, with an emphasis on speciality horticulture and the integration of hard landscape elements to improve the aesthetic and functionality of outdoor spaces.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Consults with clients to prepare outdoor design briefs suitable for the site and the clients' lifestyle, budget and preferred aesthetic</li> <li>• Assesses local site conditions to determine factors that may impact landscape designs</li> <li>• Explores applications of materials, techniques and trends in landscape design</li> <li>• Prepares design concepts and drawings for residential gardens including all elements of the hard landscaping design, lighting, soils, drainage and irrigation</li> <li>• Specifies materials and products used in the construction of landscapes to achieve the desired result for clients</li> <li>• Collaborates with other professionals, builders and associated trades to prepare landscape construction cost estimates for clients</li> </ul>	<p>232115 Urban Designer</p> <p>Designs and plans the spatial form and layout of cities, towns, suburbs and precincts considering the relationship between urban systems and social, environmental and economic needs.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Designs and plans the division of land and layout of cities, towns and suburbs to integrate public spaces, infrastructure, buildings, streets and parks</li> <li>• Performs site analysis using spatial data and analyses the physical, cultural, social and environmental characteristics of sites to inform urban design projects</li> <li>• Produces documents such as master plans, performs feasibility studies and creates urban design guidelines</li> <li>• Creates detailed drawings and plans utilising artistic and graphic skills to convert concepts into technical drawings using software such</li> </ul>

	<ul style="list-style-type: none"> <li>• Conducts feasibility studies and impact assessments to assess the impact of development upon the ecology, environmental character, cultural values and community health and welfare of landscapes</li> <li>• Collects and documents data through site analysis, considering indigenous practices, landform, soils, vegetation, hydrology, visual characteristics and human-made and managed features</li> <li>• May provide expert advice and advocacy on landscape matters in conflict resolution, judicial courts and commissions</li> </ul>	<ul style="list-style-type: none"> <li>• Provides advice on ornamental and amenity horticulture, soil improvement, and functional outdoor design in keeping with the surrounding architecture</li> <li>• Provides recommendations for the ongoing maintenance of newly constructed landscapes or gardens</li> </ul>	<p>as computer-aided design (CAD)</p> <ul style="list-style-type: none"> <li>• Works with design and planning teams and negotiates with stakeholders and consultants to shape urban places</li> <li>• Creates or contributes to policy, standards and guidelines that affect the built environment</li> <li>• Advises state and local governments about the potential impacts of development proposals on regions, cities or places</li> </ul>
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## 233111 Chemical Engineer

<b>Existing</b>	<b>Proposed</b>
<p>233111 Chemical Engineer</p> <p>Designs and prepares specifications for chemical process systems and the construction and operation of commercial-scale chemical plants, and supervises industrial processing and fabrication of products undergoing physical and chemical changes.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p>	<p>233111 Chemical Engineer</p> <p>Designs and develops chemical process systems, equipment and specifications for the construction and operation of chemical plants and commercial-scale production including transportation of chemicals, materials and energy. Supervises industrial processing and fabrication of products undergoing physical and chemical changes.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Researches, designs, develops, and improves chemical processes, process systems, reactions and materials</li><li>• Identifies ways to optimise performance of chemical equipment and processes while ensuring compliance with safety and environmental regulations</li><li>• Develops operating procedures, safety protocols and methods to deal with by-products and waste materials and troubleshoots problems with chemical manufacturing processes</li><li>• Collaborates with plant designers to develop chemical plant specifications, equipment, and control instruments for the production process</li><li>• Supervises the fabrication and installation of equipment and systems for chemical processes and transportation</li><li>• Monitors and analyses data from processes and conducts research and experiments to develop new chemical processes and improve existing ones</li><li>• Provides technical support and guidance to staff involved in chemical processes and plant operations</li><li>• May use computer models to identify cost-effective production methods while minimising risks</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Process Control Engineer</li><li>• Process Engineer (Chemical)</li></ul>

## 233112 Materials Engineer

### Existing

233112 Materials Engineer

Investigates the properties of metals, ceramics, polymers and other materials and assesses and develops their engineering and commercial applications.

Registration or licensing may be required.

Skill Level: 1

### Proposed

233113 Materials Engineer

Investigates the properties of metals, ceramics, polymers, and other materials to assess and develop their engineering and commercial applications such as in the design of composite materials, corrosion resistance and protection, and welding and fabrication.

Registration or licensing may be required.

Skill Level: 1

Main Tasks:

- Researches and analyses the properties of various materials to produce new composite materials
- Tests materials under different conditions to examine their properties and behaviour to determine their use in various applications or in the development of new technologies
- Analyses the results of laboratory testing on faulty materials to determine the causes of material defects and develop solutions
- Studies the performance of materials to evaluate their deterioration rate under different conditions and identify main factors contributing to degradation
- Produces cost estimates and analyses the feasibility of using different materials in engineering projects
- Conducts analysis on welds to identify welding issues, associated risks, and provide or develop solutions and appropriate mitigation methods

Specialisations:

- Corrosion Engineer
- Materials Welding Engineer
- Physical Metallurgist

## 233211 Civil Engineer

Existing	Proposed	
<p>233211 Civil Engineer</p> <p>Plans, designs, organises and oversees the construction and operation of dams, bridges, pipelines, gas and water supply schemes, sewerage systems, airports and other civil engineering projects.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Specialisations:</p> <ul style="list-style-type: none"> <li>• Airfield Engineer Officer (Air Force)</li> <li>• Hydraulics Engineer</li> </ul>	<p>233216 Civil Engineer</p> <p>Plans, designs, organises and oversees the construction and operation of dams, bridges, pipelines, gas supply schemes, airports and other civil engineering projects.</p> <p>Registration or licensing may be required.</p> <p>Rail Engineers and Water Engineers are excluded from this occupation.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Analyses site locations and conducts surveys to determine the feasibility and requirements of civil engineering projects</li> <li>• Undertakes calculations and designs and develops specifications for civil engineering projects and provides solutions to design related issues</li> <li>• Studies, evaluates and reports on the environmental implications of civil engineering projects to ensure compliance with existing regulations</li> <li>• Determines construction methods, materials and quality standards for civil engineering projects</li> </ul> <p>Specialisations:</p> <ul style="list-style-type: none"> <li>• Airfield Engineer Officer (Air Force)</li> </ul>	<p>233217 Water Engineer</p> <p>Plans, designs, researches, manages and oversees water-related engineering projects involving the supply of clean water, prevention of flood damage and disposal of wastewater and sewage.</p> <p>Registration or licensing may be required.</p> <p>Coastal Engineers and Hydraulic Engineers (Mechanical) are excluded from this occupation.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Plans, develops and improves water facilities and equipment such as sewers, pipes and pumping stations</li> <li>• Develops plans for controlling runoff and overland flow to minimise the risk of contamination of nearby bodies of water such as rivers and lakes by polluted water</li> <li>• Studies water quality to identify and characterise sources of water pollution</li> <li>• Uses computer models to simulate risks of flooding and propose engineering solutions</li> <li>• Evaluates the operation and maintenance of water or wastewater systems to identify ways to improve their efficiency in a sustainable way</li> <li>• Designs building features to ensure the supply or removal of fluids in a safe and efficient way</li> </ul>

- Coastal Engineer
- Construction Engineer
- Road Engineer
- Roothing Engineer (NZ)

- Designs water or wastewater treatment plants, sewage systems, stormwater capture and treated water reuse schemes

Specialisations:

- Hydraulic Engineer (Civil)
- Water and Wastewater Engineer
- Water Resources Engineer

## 233214 Structural Engineer

<b>Existing</b>	<b>Proposed</b>
<p>233214 Structural Engineer</p> <p>Analyses the statical properties of all types of structures, tests the behaviour and durability of materials used in their construction, and designs and supervises the construction of all types of structures.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p>	<p>233214 Structural Engineer</p> <p>Alternative Title:</p> <ul style="list-style-type: none"><li>• Structural Design Engineer</li></ul> <p>Analyses, calculates and predicts the stability, strength and rigidity of built structures, tests the behaviour and durability of materials used in their construction, and designs and supervises the construction of all types of structures.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Calculates pressures, loads and stresses on structural foundations to ensure the safety of the construction</li><li>• Studies and analyses the strength of building materials to select and advise on the suitable ones for the construction</li><li>• Conducts structural inspections to evaluate the conditions and foundations and assess the structural integrity</li><li>• Uses computer models to simulate and predict the structure behaviour under varying conditions such as high winds, flooding or earthquakes</li><li>• Researches and improves construction techniques and structural designs</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Bridge Engineer</li><li>• Facade Engineer</li><li>• Tunnel Engineer</li></ul>

## 233215 Transport Engineer

Existing	Proposed	
<p>233215 Transport Engineer</p> <p>Plans and develops transport systems to improve infrastructure efficiency and the cost effectiveness of moving people and freight.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Specialisation:</p> <ul style="list-style-type: none"> <li>• Rooding Engineer (NZ)</li> </ul>	<p>233218 Rail Engineer</p> <p>Plans, designs and develops rail tracks and support structures for rail systems to enable safe and optimised operations.</p> <p>Registration or licensing may be required.</p> <p>Rail Signalling Engineers are excluded from this occupation.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Designs, plans and develops rail tracks and rail system infrastructure and forecasts the cost of rail projects</li> <li>• Identifies suitable rail routes to develop effective and sustainable rail systems that meet the needs of clients and communities</li> <li>• Analyses issues or faults in rail systems and provides advice on suitable engineering solutions</li> <li>• Ensures building work on rail projects complies with existing safety standards and regulations</li> </ul> <p>Specialisations:</p> <ul style="list-style-type: none"> <li>• Rail Track Engineer</li> <li>• Rolling Stock Engineer</li> </ul>	<p>233221 Transport Engineer</p> <p>Plans, designs and develops transport systems to optimise infrastructure efficiency, safety and the cost effectiveness of moving people and freight.</p> <p>Registration or licensing may be required.</p> <p>Rail Engineers are excluded from this occupation.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Designs, plans and evaluates transportation systems or parts of systems such as highways, urban transit, ports and airports</li> <li>• Analyses traffic data to identify and predict future travel flow patterns and conducts studies to determine the feasibility and costs of transportation projects</li> <li>• Researches and analyses existing transport systems to identify needs and issues and plans modifications to improve safety</li> <li>• Uses computer models to simulate transport problems to identify suitable engineering solutions</li> </ul> <p>Specialisation:</p> <ul style="list-style-type: none"> <li>• Traffic Engineer</li> </ul>

## 233311 Electrical Engineer

Existing	Proposed	
<p>233311 Electrical Engineer</p> <p>Designs, develops and supervises the manufacture, installation, operation and maintenance of equipment, machines and systems for the generation, distribution, utilisation and control of electric power.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Specialisations:</p> <ul style="list-style-type: none"> <li>• Electrical Design Engineer</li> <li>• Railway Signalling Engineer</li> <li>• Signalling and Communications Engineer</li> </ul>	<p>233312 Electrical Engineer</p> <p>Designs, develops, implements and supervises the manufacture, installation, operation and maintenance of equipment, machines and systems used for the generation, distribution, utilisation and control of electric power from renewable and non-renewable sources.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Plans, designs and tests power stations and equipment used for the generation, distribution, transmission and utilisation of electric power</li> <li>• Develops new ways to store power generated by renewable and sustainable energy sources such as solar, wind and sea</li> <li>• Determines the type and arrangement of circuits, networks, transformers, circuit-breakers, transmission lines and other equipment</li> <li>• Installs and tests electrical systems and processes</li> <li>• Uses software and performs detailed calculations to plan, design and develop manufacturing, construction and installation standards and specifications to improve electrical systems</li> <li>• Leads and coordinates electrical infrastructure projects in industries such as transportation, construction and manufacturing</li> </ul>	<p>233313 Rail Signalling Engineer</p> <p>Alternative Title:</p> <ul style="list-style-type: none"> <li>• Signalling Engineer</li> </ul> <p>Develops systems used to signal and control trains, including equipment on tracks, computer networks and fail-safes. Controls railroad traffic by coordinating between systems and rail companies to keep trains operating safely and smoothly.</p> <p>Registration or licensing may be required.</p> <p>Rail Engineers are excluded from this occupation.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Designs, implements and solves technical problems with rail signalling systems</li> <li>• Provides technical advice and retrofits existing signalling systems to update them, either in response to regulations or to improve efficiency and performance</li> <li>• Ensures that the rail signalling design conforms to all safety, environmental, construction, commissioning and operational requirements</li> <li>• Prepares and reviews the signalling design with appropriate solutions to satisfy the customer specifications such as signalling arrangement</li> </ul>

- Provides technical expertise in electrical service design, ensuring compliance with industry standards and regulations
- May specialise in research in areas such as power generation and transmission systems, transformers, switchgear and electric motors, telemetry and control systems
- May manage and integrate renewable energy sources including battery storage into the electricity grid

Specialisations:

- Electrical Design Engineer
- Grid Connection Engineer
- Power System Engineer
- Renewable Energy Engineer

plans, power calculations, headway signalling spacing calculations, and circuit designs

- Engages with stakeholders to discuss rail signal plans and prepares case studies to understand specifics of signalling installation
- Oversees the maintenance and operations of rail signalling equipment and investigates equipment faults
- Assists the construction team with on-site signalling equipment installation, testing or commissioning
- Researches, develops and optimises electrical, control and signalling systems
- May oversee tender preparation including ensuring all technical elements of the tender are coordinated between design, testing, commissioning, and construction team members



## 233411 Electronics Engineer

<b>Existing</b>	<b>Proposed</b>
<p>233411 Electronics Engineer</p> <p>Designs, develops, adapts, installs, tests and maintains electronic components, circuits and systems used for computer, communication, command and warfare systems, entertainment, transport and other industrial applications.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Specialisation:</p> <ul style="list-style-type: none"><li>• Combat System Engineer</li></ul>	<p>233411 Electronics Engineer</p> <p>Designs, develops, adapts, installs, tests and maintains electronic components, circuits and systems used for computer, communication, command and warfare systems, entertainment, transport and other industrial applications.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Analyses and prepares material costs, time estimates and design specifications for electronic systems and equipment and ensures compliance with relevant regulations and standards in electronic engineering</li><li>• Develops operating standards for electronic systems and equipment</li><li>• Models and simulates processes for the development of new electronic devices</li><li>• Designs and integrates electronic circuits, components, systems and equipment for various applications</li><li>• Adapts and modifies existing electronic components and systems to meet specific requirements</li><li>• Installs, tests and maintains electronic components and systems to ensure proper functioning and optimal performance</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Combat System Engineer</li><li>• Control and Instrumental Engineer</li><li>• Hardware Engineer</li></ul>

## 233511 Industrial Engineer

### Existing

233511 Industrial Engineer

Investigates and reviews the logistics and utilisation of personnel, facilities, equipment and materials, current operational processes and established practices, to recommend improvement in the quality and efficiency of operations in a variety of commercial, industrial and production environments.

Registration or licensing may be required.

Skill Level: 1

Specialisations:

- Engineering Assurance Engineer
- Integrated Logistics Support Engineer
- Process Engineer (Industrial)

### Proposed

233511 Industrial Engineer

Plans, investigates and reviews the logistics and utilisation of personnel, facilities, equipment and materials, operational processes and practices to improve the quality, safety and efficiency of operations in commercial, industrial and production environments.

Registration or licensing may be required.

Skill Level: 1

Main Tasks:

- Plans, implements and coordinates the sequence of operations in an industrial facility to maximise efficiency of time and resources
- Estimates production costs and risks associated with product design, process changes and fabrication
- Analyses data and product specifications to determine the quality of finished products, identify quality issues and implement strategies for improving products and processes
- Designs systems and processes to minimise production issues and optimise resource use
- Develops and implements quality control procedures to ensure product and process consistency
- Identifies and analyses potential hazards in industrial facilities and develops and implements safety policies and strategies to mitigate them

Specialisations:

- Integrated Logistics Support Engineer
- Manufacturing Engineer
- Process Engineer (Industrial)
- Quality Assurance Engineer (Industrial)
- Systems Engineer (Industrial)

## 233512 Mechanical Engineer

<b>Existing</b>	<b>Proposed</b>
<p>233512 Mechanical Engineer</p> <p>Plans, designs, organises and oversees the assembly, erection, commissioning, operation and maintenance of mechanical and process plant and installations.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Airconditioning Engineer</li><li>• Building Services Engineer</li><li>• Heating and Ventilation Engineer</li></ul>	<p>233512 Mechanical Engineer</p> <p>Plans, designs, develops, tests and oversees the manufacturing, operation, maintenance and installation of mechanical systems.</p> <p>Registration or licensing may be required.</p> <p>Hydraulic Engineers (Civil) are excluded from this occupation.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Designs mechanical equipment, machines, tools and components for agricultural, mining, construction, manufacturing and other industrial purposes</li><li>• Plans and designs the layout, flow and processes of mechanical and process plants</li><li>• Oversees the assembly, erection and commissioning of mechanical and process plant and installations</li><li>• Studies and analyses mechanical systems and components to evaluate their performance</li><li>• Inspects, maintains and tests mechanical equipment and investigates mechanical failures or unexpected maintenance issues</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Building Services Engineer</li><li>• HVAC Engineer</li><li>• Hydraulic Engineer (Mechanical)</li></ul>

## 233513 Production or Plant Engineer

### Existing

233513 Production or Plant Engineer

Plans, directs and coordinates the design, construction, modification, continued performance and maintenance of equipment and machines in industrial plants, and the management and planning of manufacturing activities.

Registration or licensing may be required.

Skill Level: 1

Specialisations:

- Automation and Control Engineer
- Maintenance Engineer (Shipbuilding)

### Proposed

233513 Production or Plant Engineer

Plans, directs and coordinates the design, construction, modification, continued performance and maintenance of equipment and machines in industrial plants, and the management and planning of production and plant activities.

Registration or licensing may be required.

Skill Level: 1

Main Tasks:

- Determines and plans the layout of equipment and machines in industrial plants
- Develops and implements strategies to improve the performance and efficiency of production and plant activities
- Coordinates the construction, modification and maintenance of equipment and machines in industrial plants
- Identifies and resolves technical issues and problems in industrial plants
- May use established systems to recognise and control at-risk behaviours and situations, and support the interaction of personnel and equipment in production activities
- May manage autonomous fleets of vehicles and identify and implement operational improvements for autonomous fleet management systems to improve efficiency, productivity and overall operations in production activities

Specialisations:

- Automation and Control Engineer (Production or Plant)
- Automation Engineer (Production or Plant)
- Control Systems Engineer (Production or Plant)
- Maintenance Engineer (Shipbuilding)

## 233611 Mining Engineer (excluding Petroleum)

<b>Existing</b>	<b>Proposed</b>
<p>233611 Mining Engineer (excluding Petroleum)</p> <p>Plans and directs the engineering aspects of locating and extracting minerals from the earth.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Specialisation:</p> <ul style="list-style-type: none"><li>• Process Engineer (Mining)</li></ul>	<p>233611 Mining Engineer (excluding Petroleum)</p> <p>Plans and directs the engineering aspects of locating and extracting minerals from the earth.</p> <p>Registration or licensing may be required.</p> <p>Drilling Engineers (Petroleum) are excluded from this occupation.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Plans and designs mining operations including the location and layout of the mine development</li><li>• Researches and improves the efficiency and safety of mining methods and equipment</li><li>• Monitors and evaluates mining operations to ensure compliance with safety and environmental regulations</li><li>• Assesses mineral reserves and analyses production costs to determine the viability of mining projects</li><li>• Conducts geological surveys and analyses data to identify mineral deposits</li><li>• Optimises procedures to extract raw materials from the ground using blasting, drilling and other excavation methods</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Drill and Blast Engineer (Mining)</li><li>• Process Engineer (Mining)</li></ul>

## 233612 Petroleum Engineer

<b>Existing</b>	<b>Proposed</b>
<p>233612 Petroleum Engineer</p> <p>Plans and directs the engineering aspects of locating and extracting petroleum or natural gas from the earth.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Mud Engineer</li><li>• Petrophysical Engineer</li></ul>	<p>233612 Petroleum Engineer</p> <p>Plans, develops and directs the engineering work in drilling, production and formation evaluation to achieve optimal exploration, development and extraction of oil and gas resources.</p> <p>Registration or licensing may be required.</p> <p>Drill and Blast Engineers (Mining) are excluded from this occupation.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Plans, researches, designs and provides advice on engineering operations for the exploration, location and extraction of oil and gas</li><li>• Conducts studies to determine potential locations for drillings</li><li>• Uses computer models to determine ideal recovery processes and simulate and predict reserve performance</li><li>• Analyses reservoir rock and fluid data to design optimum methods of controlling the flow of oil or gas from wells</li><li>• Monitors the evaluation of wells, well testing and well surveys</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Drilling Engineer (Petroleum)</li><li>• Reservoir Engineer</li><li>• Subsea Engineer (Oil and Gas)</li></ul>

## 233911 Aeronautical Engineer

### Existing

233911 Aeronautical Engineer

Performs and supervises engineering work concerned with the design, development, manufacture, maintenance and modification of aircraft for flight.

Registration or licensing may be required.

Skill Level: 1

Specialisations:

- Aeronautical Engineering Officer (Navy)
- Aerospace Engineer
- Aerospace Engineer Officer – Aeronautical (Air Force)
- Aerospace Engineer Officer – Armament (Air Force)
- Aerospace Engineer Officer – Electronics (Air Force)
- Avionics Systems Engineer
- Weapons Aeronautical Engineering Officer (Navy)

### Proposed

233911 Aerospace Engineer

Performs and supervises engineering work concerned with the design, development, manufacture, maintenance and modification of aircraft, launch vehicles and spacecraft for flight.

Registration or licensing may be required.

Skill Level: 1

Main Tasks:

- Designs and develops aircraft, launch vehicles and spacecraft, components and systems
- Studies and analyses aerospace products to improve their efficiency, performance and safety
- Researches and identifies new technologies, materials and methodologies that can help to improve aerospace products and systems
- Tests, evaluates and assesses aircraft or spacecraft systems, prototypes and equipment to ensure compliance with regulations and standards
- Analyses data to solve technical issues identified in aircraft or aerospace vehicles and their systems
- Inspects damaged aircraft or spacecraft products to identify source of problems and provide possible solutions

Specialisations:

- Aeronautical Engineer
- Aerospace Engineer Officer - Aeronautical (Air Force, Navy)
- Aerospace Engineer Officer - Armament (Air Force)
- Aerospace Engineer Officer - Electronics (Air Force)
- Propulsion Engineer

## 233912 Agricultural Engineer

<b>Existing</b>	<b>Proposed</b>
<p>233912 Agricultural Engineer</p> <p>Alternate Title:</p> <ul style="list-style-type: none"><li>Natural Resources Engineer</li></ul> <p>Performs and supervises engineering work related to the use and development of agricultural land, buildings, machines and equipment.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p>	<p>Retire occupation and merge residual with proposed occupation; 233999 Engineering Professionals nec</p>



## 233913 Biomedical Engineer

### Existing

233913 Biomedical Engineer

Applies knowledge and methodology of physics, engineering, mathematics, computing, physical chemistry and materials science to problems in biology and the treatment and prevention of human disease.

Registration or licensing may be required.

Skill Level: 1

Specialisations:

- Bioengineer
- Clinical Engineer
- Medical Engineer

### Proposed

233913 Biomedical Engineer

Combines engineering principles with science, computing, and medicine to develop and maintain medical systems, devices and equipment for healthcare purposes.

Registration or licensing may be required.

Skill Level: 1

Main Tasks:

- Designs and develops biomedical systems and devices including artificial or bionic organs and parts, prosthetics, diagnostic machines and health monitoring devices
- Maintains medical equipment and devices and performs safety checks to ensure compliance with regulatory standards
- Oversees the implementation of medical devices and systems in healthcare settings
- Provides support and training to healthcare professionals to effectively use medical devices
- May work in clinical settings to diagnose and resolve problems including analysing data from medical imaging technology
- May design software to run medical equipment or computer simulations to test new drug therapies and delivery systems
- May work with scientists in nanotechnology to design new materials to create medical products

Specialisations:

- Bioengineer
- Clinical Engineer
- Medical Engineer
- Medical Equipment or Device Engineer

## 233914 Engineering Technologist

<b>Existing</b>	<b>Proposed</b>
<p>233914 Engineering Technologist</p> <p>Analyses and modifies new and existing engineering technologies and applies them in the testing and implementation of engineering projects.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Biomedical Engineering Technologist</li><li>• Industrial Engineering Technologist</li><li>• Mining Engineering Technologist</li><li>• Safety Engineering Technologist</li><li>• Structural Engineering Technologist</li></ul>	<p>233914 Engineering Technologist</p> <p>Analyses and modifies new and existing engineering technologies and applies them in the testing and implementation of engineering projects.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Researches, identifies and recommends new engineering technologies to support engineering activities</li><li>• Modifies existing engineering technologies to improve their efficiency and effectiveness</li><li>• Collaborates with engineers and other professionals to develop and implement engineering solutions</li><li>• Applies engineering technologies in the testing and implementation of engineering projects</li><li>• Conducts experiments and tests to evaluate the performance of engineering technologies</li><li>• Conducts inspections to ensure engineering technologies are applied in compliance with relevant regulations and standards</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Biomedical Engineering Technologist</li><li>• Industrial Engineering Technologist</li><li>• Mining Engineering Technologist</li><li>• Safety Engineering Technologist</li><li>• Structural Engineering Technologist</li></ul>

## 233915 Environmental Engineer

### Existing

233915 Environmental Engineer

Assesses the impact on air, water, soil and noise levels in the vicinity of engineering projects, plans and designs equipment and processes for the treatment and safe disposal of waste material, and assesses what may cause problems for the environment in the long-term.

Registration or licensing may be required.

Skill Level: 1

### Proposed

233915 Environmental Engineer

Assesses environmental impacts for engineering projects while working with other professionals to develop solutions for long term environmental sustainability. Plans and designs equipment and processes for the treatment and safe disposal of waste materials.

Registration or licensing may be required.

Environmental Consultants and Acoustic Engineers are excluded from this occupation.

Skill Level: 1

Main Tasks:

- Assesses and identifies the potential environmental impacts of air, water, soil and noise levels of engineering projects
- Develops and designs equipment and sustainable processes to prevent, control, or remediate environmental impacts
- Oversees and coordinates environmental management plans for engineering projects such as hazardous waste treatment facilities and air pollution control systems to protect the environment
- Works with Environmental Research Scientists, Urban and Regional Planners and other professionals to assess causes of long term environmental problems and to develop solutions
- Liaises with regulators, contractors and other internal and external stakeholders to ensure engineering projects meet environmental requirements and objectives
- May develop uses for renewable energy and contribute to sustainable energy planning and design
- May be involved in the development and planning of sustainable infrastructure and implementation of environmental rating tools

## 233916 Naval Architect / Marine Designer

Existing	Proposed
<p>233916 Naval Architect / Marine Designer</p> <p>Designs and oversees the construction and repair of marine craft and floating structures.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Specialisation:</p> <ul style="list-style-type: none"><li>• Shipbuilding Designer</li></ul>	<p>233916 Naval Architect / Marine Designer (NZ)</p> <p>Designs and oversees the construction and repair of marine craft and floating structures.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Oversees the design, construction, repair, conversion or decommissioning of marine craft and floating structures</li><li>• Uses specialist computer-aided design (CAD) software to design marine craft and floating structures, taking into account factors such as stability, strength, and performance</li><li>• Designs and coordinates the build of offshore floating structures such as offshore drilling platforms, floating units and subsea infrastructure installations</li><li>• Prepares detailed plans, specifications, and cost estimates to establish basic characteristics of marine craft such as size, weight and speed</li><li>• Ensures marine craft and floating structures comply with design specifications and safety and regulatory standards</li><li>• Collaborates with engineers and other professionals to coordinate the design and layout of marine craft and floating structure systems, equipment and machinery</li></ul>

## 233999 Engineering Professionals nec

Existing	Proposed			
<p>233999 Engineering Professionals nec</p> <p>This occupation group covers Engineering Professionals not elsewhere classified.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Occupations in this group include:</p> <ul style="list-style-type: none"> <li>• Acoustic Engineer</li> <li>• Calibration Engineer</li> <li>• Corrosion Engineer</li> <li>• Fire Safety Engineer</li> <li>• Mechatronics Engineer</li> <li>• Product Design Engineer</li> <li>• Safety Engineer</li> <li>• Test and Activation Engineer (Naval Shipbuilding)</li> </ul>	<p>233917 Acoustic Engineer</p> <p>Studies and applies the science of sound and vibration in the design and development of technologies to solve acoustic related problems such as sound quality, transmission of sound, noise control or environmental noise pollution.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Measures sound levels, reverberation and vibration within buildings and outdoor environments</li> <li>• Analyses and performs tests on acoustic designs to enhance or control sound and vibration</li> <li>• Models, predicts, measures and assesses the impact of noise on the environment and noise sensitive receptors, including wildlife</li> <li>• Advises on materials and structures that can be used to</li> </ul>	<p>233918 Fire Safety Engineer</p> <p>Studies, designs and develops fire protection strategies to analyse, prevent and mitigate fire risk in various structures and environments.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Designs fire detection, fire suppression and fire control systems and equipment</li> <li>• Assesses and rates fire risks to ensure buildings comply with existing fire safety legislation and regulations</li> <li>• Analyses building designs to develop fire strategies including fire escape routes, safety systems and facilities for fire services</li> <li>• Studies causes of fires and provides solutions to prevent them</li> <li>• Uses computer modelling to simulate and understand fire, test safety levels and</li> </ul>	<p>233921 Mechatronics Engineer</p> <p>Researches, designs and develops intelligent systems that process information and make decisions by combining mechanical, electrical, electronic and software engineering principles.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 1</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Researches, designs and develops intelligent systems, machinery and mechatronic components and equipment</li> <li>• Designs prototypes for intelligent systems and mechatronic products</li> <li>• Conducts computer modelling and simulations to assess mechatronic products performance</li> <li>• Analyses mechatronics prototype test results and provides solutions on how to improve performance</li> </ul>	<p>233999 Engineering Professionals nec</p> <p>This occupation comprises Engineering Professionals not elsewhere classified.</p> <p>Registration or licensing may be required.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Calibration Engineer</li> <li>• Product Design Engineer</li> <li>• Safety Engineer</li> <li>• Test and Activation Engineer (Naval Shipbuilding)</li> </ul> <p>Skill Level: 1</p>

	<p>minimise noise levels that could disrupt the local environment and ensure those levels comply with local laws</p> <ul style="list-style-type: none"> <li>• Designs noise and vibration attenuation solutions for environmental noise, building engineering services systems in buildings, transport infrastructure and industry</li> </ul>	<p>validate fire prevention systems</p> <ul style="list-style-type: none"> <li>• Designs strategies to protect people and their environment from fire</li> </ul> <p>Specialisations:</p> <ul style="list-style-type: none"> <li>• Fire Protection Engineer</li> </ul>	<ul style="list-style-type: none"> <li>• Designs, builds and implements mechatronic products modifications to improve safety, functionality and reliability</li> </ul> <p>Specialisation:</p> <ul style="list-style-type: none"> <li>• Robotics Engineer</li> </ul>	
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## 312211 Civil Engineering Draftsperson

Existing	Proposed
<p>312211 Civil Engineering Draftsperson</p> <p>Prepares detailed drawings and plans for civil engineering work in support of Civil Engineering Professionals and Engineering Technologists.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Civil Engineering Design Draftsperson</li><li>• Plumbing Engineering Draftsperson</li><li>• Road Design Draftsperson</li><li>• Sewage Reticulation Drafting Officer</li><li>• Structural Engineering Drafting Officer</li></ul>	<p>312211 Civil Engineering Draftsperson</p> <p>Alternative Title:</p> <ul style="list-style-type: none"><li>• Civil Designer</li></ul> <p>Prepares detailed drawings and plans for civil engineering work in support of Civil Engineering Professionals and Engineering Technologists.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Prepares detailed drawings and plans for civil engineering projects</li><li>• Uses computer design software to convert civil engineering sketches into digital documents</li><li>• Creates topographical and relief maps of locations hosting new civil development projects</li><li>• Incorporates design changes and updates into existing drawings and plans based on feedback from engineers and architects</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Hydraulic Designer (Civil)</li><li>• Road Designer</li><li>• Structural Draftsperson</li><li>• Transport Designer</li></ul>

## 312212 Civil Engineering Technician

<b>Existing</b>	<b>Proposed</b>
<p>312212 Civil Engineering Technician</p> <p>Conducts tests of construction materials, prepares sketches and tabulations, and assists in estimating costs in support of Civil Engineering Professionals and Engineering Technologists.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Civil Engineering Assistant</li><li>• Civil Laboratory Technician</li><li>• Geotechnical Laboratory Technician</li></ul>	<p>312212 Civil Engineering Technician</p> <p>Conducts tests of construction materials, prepares sketches and tabulations, and assists in estimating costs in support of Civil Engineering Professionals and Engineering Technologists.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Prepares sketches, drawings and tabulations to assist in the design and planning of civil engineering projects</li><li>• Performs laboratory testing and analyses data from construction sites to support Civil Engineering Professionals</li><li>• Assists with the inspection, organisation and supervision of civil engineering works to ensure adherence to project timelines and compliance with engineering specifications and safety standards</li><li>• Assists with estimating quantities and costs of materials and labour required for civil engineering projects</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Civil Laboratory Technician</li><li>• Hydraulic Engineering Technician (Civil)</li></ul>



## 312311 Electrical Engineering Draftsperson

### Existing

312311 Electrical Engineering Draftsperson

Prepares detailed drawings and plans of electrical installations and circuitry in support of Electrical Engineers and Engineering Technologists.

Registration or licensing may be required.

Skill Level: 2

Specialisations:

- Electrical Engineering Design Draftsperson
- Electrical Engineering Detail Draftsperson
- Electrical Engineering Drafting Officer
- Relays Draftsperson
- Substation Design Draftsperson

### Proposed

312311 Electrical Engineering Draftsperson

Prepares detailed drawings and plans of electrical installations and circuitry in support of Electrical Engineers and Engineering Technologists.

Registration or licensing may be required.

Skill Level: 2

Main Tasks:

- Prepares detailed drawings, plans and diagrams of electrical installations and circuitry
- Collaborates with Electrical Engineers and Engineering Technologists to ensure the accuracy of electrical drawings and plans
- Uses computer-aided design (CAD) software to create and modify electrical drawings and plans
- Conducts site visits to gather information and measurements for electrical installations
- Calculates and determines dimensions, materials and specifications for electrical installations and circuitry
- Inspects electrical designs for compliance with design specifications and government regulations

Specialisations:

- Electrical Engineering Design Draftsperson
- Electrical Engineering Detail Draftsperson
- Electrical Engineering Drafting Officer
- Relays Draftsperson
- Substation Design Draftsperson

## 312312 Electrical Engineering Technician

<b>Existing</b>	<b>Proposed</b>
<p>312312 Electrical Engineering Technician</p> <p>Alternative Title:</p> <ul style="list-style-type: none"><li>• Electrical Engineering Technical Officer</li></ul> <p>Conducts tests of electrical systems, prepares charts and tabulations, and assists in estimating costs in support of Electrical Engineers and Engineering Technologists.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Electrical Engineering Laboratory Technician</li><li>• Electrical Instrument Technician</li></ul>	<p>312312 Electrical Engineering Technician</p> <p>Alternative Title:</p> <ul style="list-style-type: none"><li>• Electrical Engineering Technical Officer</li></ul> <p>Supports and assists Electrical Engineers and Engineering Technologists in the design, testing, maintenance and modification of electrical systems, prepares charts and tabulations and assists in cost estimation.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Supports and assists Electrical Engineers and Engineering Technologists in designing and developing electrical systems</li><li>• Installs, commissions, tests, monitors, repairs, and maintains electrical systems ensuring systems are in line with relevant safety regulations</li><li>• Assists in estimating material costs and quantities for electrical work in industrial or commercial sectors to support engineering teams</li><li>• Ensures relevant documentation is up to date including the writing of service reports for electrical systems</li><li>• Collects data, conducts tests and reports on test results utilising various formats including the use of computer-aided design (CAD), graphs, charts, tabulations and calculations for clarity</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Electrical Estimator</li><li>• Electrical Instrument Technician</li></ul>

## 312411 Electronic Engineering Draftsperson

Existing	Proposed
<p>312411 Electronic Engineering Draftsperson</p> <p>Prepares detailed drawings and plans of electronic engineering work in support of Electronics Engineers and Engineering Technologists.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Communications and Data Systems Drafting Officer</li><li>• Control Systems Drafting Officer</li><li>• Electronics Detail Draftsperson</li></ul>	<p>Retire occupation and merge residual with proposed occupation; 312915 Other Draftsperson</p>

## 312412 Electronic Engineering Technician

Existing	Proposed
<p>312412 Electronic Engineering Technician</p> <p>Conducts tests of electronic systems, collects and analyses data, and assembles circuitry in support of Electronics Engineers and Engineering Technologists.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Aircraft Electronics Technician</li><li>• Combat Systems Technician</li><li>• Communications Engineering Technician</li><li>• Computer Numeric Control Technician</li><li>• Digital Controls Technician</li><li>• Flight Surveyor</li><li>• Printed Circuit Board Designer</li><li>• Process Control Technician</li><li>• Telemetry Technician</li></ul>	<p>312412 Electronic Engineering Technician</p> <p>Supports and assists Electronics Engineers and Engineering Technologists in circuitry design, testing, data collection and analysis, and assembles circuitry of electronic systems.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Collects data, performs analysis, maintains and repairs electronic systems</li><li>• Conducts tests on components and equipment to ensure functionality and performance in line with industry standards</li><li>• Assembles circuitry and electronic components according to engineering specifications</li><li>• Assists electronics engineers and engineering technologists in designing and developing electronic systems</li><li>• Installs, configures, calibrates and adjusts electronic instruments and equipment</li><li>• Documents test results, data analysis, and circuitry assembly procedures</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Broadcast Engineer</li><li>• Hearing Aid Technician</li><li>• Simulator Technician</li></ul>

## 312511 Mechanical Engineering Draftsperson

<b>Existing</b>	<b>Proposed</b>
<p>312511 Mechanical Engineering Draftsperson</p> <p>Prepares detailed drawings and plans of mechanical engineering work in support of Mechanical Engineers and Engineering Technologists.</p> <p>Skill Level: 2</p> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Airconditioning Drafting Officer</li><li>• Heating and Ventilating Technical Officer</li><li>• Tool Design Draftsperson</li><li>• Tool Designer</li></ul>	<p>312511 Mechanical Engineering Draftsperson</p> <p>Alternative Title:</p> <ul style="list-style-type: none"><li>• Mechanical Designer</li></ul> <p>Prepares detailed drawings and plans of mechanical engineering work in support of Mechanical Engineers and Engineering Technologists.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Prepares detailed drawings and plans of mechanical engineering work</li><li>• Ensures plans and drawings of mechanical engineering work comply with industry standards and regulations</li><li>• Creates detailed blueprints that manufacturers can use for mass production of mechanical parts</li><li>• Uses computer-aided design (CAD) software and 3D printing to create models of mechanical parts and specify product dimensions and quantity of materials needed</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Hydraulic Designer (Mechanical)</li><li>• Piping Designer</li><li>• Tool Designer</li></ul>

## 312512 Mechanical Engineering Technician

<b>Existing</b>	<b>Proposed</b>
<p>312512 Mechanical Engineering Technician</p> <p>Conducts tests of mechanical systems, collects and analyses data, and assembles and installs mechanical assemblies in support of Mechanical Engineers and Engineering Technologists.</p> <p>Skill Level: 2</p> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Boiler Testing Technician</li><li>• Hydraulic Controls Technician</li><li>• Mechanical Laboratory Technician</li><li>• Pipe Testing Technician</li></ul>	<p>312512 Mechanical Engineering Technician</p> <p>Conducts tests of mechanical systems, collects and analyses data, and assembles and installs mechanical assemblies in support of Mechanical Engineers and Engineering Technologists.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Conducts tests of mechanical systems, machines or parts to evaluate performance and identify issues</li><li>• Assists mechanical engineers and engineering technologists in the design and development of mechanical systems</li><li>• Collects and analyses data from tests and experiments of machines, components and materials</li><li>• Assists in quality control checks and inspections of mechanical installations, components and systems</li><li>• Installs parts or machinery to ensure they meet performance targets and work as intended</li></ul> <p>Specialisation:</p> <ul style="list-style-type: none"><li>• Hydraulic Technician (Mechanical)</li></ul>

## 312911 Maintenance Planner

<b>Existing</b>	<b>Proposed</b>
<p>312911 Maintenance Planner</p> <p>Alternative Titles:</p> <ul style="list-style-type: none"><li>• Maintenance Scheduler</li><li>• Shutdown Coordinator</li><li>• Shutdown Planner</li></ul> <p>Develops maintenance planning strategies, and schedules, coordinates and monitors the maintenance of all plant equipment.</p> <p>Skill Level: 2</p>	<p>312911 Maintenance Planner</p> <p>Alternative Titles:</p> <ul style="list-style-type: none"><li>• Maintenance Scheduler</li><li>• Maintenance Superintendent</li><li>• Shutdown Coordinator</li><li>• Shutdown Planner</li></ul> <p>Develops maintenance planning strategies, and schedules, coordinates and monitors the maintenance of plant equipment and machinery, such as public buildings, railways, roads, ports and mines.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"><li>• Prepares preventative maintenance plans and schedules following the organisation's maintenance goals</li><li>• Coordinates planned downtimes to minimise interference with production or service schedules</li><li>• Adjusts schedules to include emergency work</li><li>• Collaborates with procurement staff to ensure availability of necessary maintenance materials and supplies</li><li>• Ensures compliance with existing maintenance procedures and regulations</li></ul> <p>Specialisations:</p> <ul style="list-style-type: none"><li>• Aircraft Maintenance Planner</li><li>• Electrical Maintenance Planner</li><li>• Mechanical Maintenance Planner</li><li>• Rail Maintenance Planner</li></ul>

## 312914 Other Draftsperson

Existing	Proposed	
<p>312914 Other Draftsperson</p> <p>Prepare detailed drawings, technical plans, maps, and illustrations to precise specifications.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Specialisations:</p> <ul style="list-style-type: none"> <li>• Aerospace Draftsperson</li> <li>• Architecture Technician</li> <li>• Mining Detail Draftsperson</li> <li>• Shipbuilding Draftsperson</li> </ul>	<p>312915 Other Draftsperson</p> <p>Prepares detailed drawings, technical plans and illustrations to precise specifications for electronic engineering, mining and shipbuilding projects.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Prepares detailed drawings, plans, and illustrations according to client specifications and industry standards and regulations</li> <li>• Uses computer-aided design (CAD) software and other drafting tools to create accurate and precise technical drawings and plans</li> <li>• Consults with clients and collaborates with engineers and other professionals to ensure that drawings and plans meet project requirements</li> </ul> <p>Specialisations:</p> <ul style="list-style-type: none"> <li>• Electronic Engineering Draftsperson</li> <li>• Mining Detail Draftsperson</li> <li>• Shipbuilding Draftsperson</li> </ul>	<p>312919 Architectural Technician</p> <p>Coordinates technical and design information and monitors the technical progress of architectural projects. Assists with preparing building designs, regulatory applications and construction specifications.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>• Collates and organises technical building information, interprets designs and uses models to display architectural plans and specifications using computer-aided design (CAD) software and drawings</li> <li>• Assists Architects and building designers by converting designs into blueprints and models</li> <li>• Interprets designs for Construction Managers and assists in resolving design construction issues by modifying blueprints and relaying any changes under the instruction of Architects and building designers</li> <li>• Monitors the technical progress of projects to ensure compliance with design specifications, building codes and health and safety standards</li> <li>• May coordinate and manage building information modelling (BIM) architecture software or develop and implement BIM standards for workplaces</li> </ul>



## 312999 Building and Engineering Technicians nec

Existing	Proposed	
<p>312999 Building and Engineering Technicians nec</p> <p>This occupation group covers Building and Engineering Technicians not elsewhere classified.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Occupations in this group include:</p> <ul style="list-style-type: none"> <li>Automation Technician</li> <li>Biomedical Technician</li> </ul>	<p>312916 Biomedical Technician</p> <p>Tests, calibrates, repairs, services and maintains biomedical equipment using a variety of tools and computer applications to keep biomedical machinery operating in optimal conditions.</p> <p>Registration or licensing may be required.</p> <p>Skill Level: 2</p> <p>Main Tasks:</p> <ul style="list-style-type: none"> <li>Conducts scheduled maintenance, quality control checks and electrical safety inspections of biomedical equipment to ensure safe and effective operation</li> <li>Installs and calibrates biomedical equipment or components</li> <li>Demonstrates and assists with the operation of specialised biomedical equipment</li> <li>Cleans, repairs and replaces biomedical equipment when necessary</li> </ul>	<p>312999 Building and Engineering Technicians nec</p> <p>This occupation comprises Building and Engineering Technicians not elsewhere classified.</p> <p>Registration or licensing may be required.</p> <p>Example:</p> <ul style="list-style-type: none"> <li>Automation Technician</li> </ul> <p>Skill Level: 2</p>