Defence Industry Careers Quick Guide

Because of the wide range of occupations involved, there are multiple pathways that can lead to a career in the Defence Industry. Some roles require University study, others have a VET pathway and some entry-level positions provide on-the-job training.



There are also two specialised programs that can help you get into the Defence Industry:

The **Defence Industry Pathway Program (DIPP)** Traineeship in Perth (https://www.southmetrotafe.wa.edu.au/defence-industry-pathways-program). This is a 12-month traineeship that includes manufacturing and engineering, computing, logistics, procurement, technical drawing and computer-aided design (CAD), along with paid work at various defence industry providers.

The **Defence Industry Internship Program (DIIP)** (https://diip.com.au) provides Engineering and Technology university students with paid internships in Defence Industry businesses.





This list of occupations is just a small selection of the opportunities available in the Defence Industry.

Job Title	Description	Skills	Pathways
Drone Pilot/UAC Operator	Operates and monitors drones for tasks like surveillance, inspection, or mapping in defence projects.	Hand-eye coordination, spatial awareness, understanding of regulations, problem-solving.	 Certificate III in Aviation (Remote Pilot); CASA Remote Pilot Licence (RePL).
Systems Engineer	Designs and integrates complex defence systems, ensuring components like software, electronics and mechanics work together.	Systems thinking, problem- solving, communication, technical analysis, STEM knowledge.	 Bachelor of Engineering (various fields); Defence Industry Internship Program.
Cybersecurity Analyst	Protects defence systems and sensitive information from cyberattacks, ensuring security of networks and data.	Critical thinking, coding, threat detection, cyber risk management.	 Certificate IV or Advanced Diploma in Cyber Security; Bachelor of Cybersecurity or IT; Defence Industry Internship Program.
Electrical Engineer	Designs, develops and oversees the manufacturing, installation, operation and maintenance of electrical machines and systems.	Problem-solving, analytical thinking, electrical knowledge, technical drawing, teamwork and communication.	 Diploma of Engineering- Advanced Trade; Bachelor of Electrical Engineering; Defence Industry Internship Program.
User Experience (UX) Designer	Designs easy-to-use interfaces for defence systems to ensure operators can interact effectively with complex technology.	Empathy, creativity, design software, user research, problem-solving.	Certificate or Degree in Design, UX, or Human-Computer Interaction.
Logistics Manager	Plans and coordinates the transport, storage, and supply of equipment and materials for defence projects.	Organisation, problem-solving, supply chain knowledge, teamwork.	 Diploma or Degree in Logistics, Business, or Supply Chain Management.
Warehouse Administrator	Organises, tracks, and manages equipment, tools, and supplies to make sure the right items are in the right place at the right time	Organisation, problem-solving, teamwork, computer literacy, communication, safety.	 Certificate IV in Supply Chain Operations; Defence Industry Pathways Program traineeship.



Job Title	Description	Skills	Pathways
Electronics Technician	Installs, maintains, and repairs electronic systems used in defence equipment like communication or surveillance devices.	Technical troubleshooting, electronics knowledge, attention to detail.	 Certificate III or IV in Electronics and Communications; Apprenticeship pathways; Defence Industry Pathways Program traineeship.
Simulation and Training Developer	Creates realistic digital simulations and training programs for defence personnel to practise skills in safe environments.	Software development, creativity, problem-solving, understanding of defence operations.	 Bachelor of IT, Computer Science, or Interactive Media; VET pathways in digital design or simulation development.
Welder	Joins metal parts for the construction or repair of defence equipment like vehicles, ships, and infrastructure.	Practical skills, attention to detail, technical knowledge of welding techniques.	 Certificate III in Engineering (Fabrication Trade) Apprenticeship; Defence Industry Pathways Program traineeship.
Industrial Designer	Designs the look, functionality, and ergonomics of defence equipment and products to improve performance and usability.	Creativity, CAD software, materials knowledge, problem- solving.	 Bachelor of Industrial Design, Product Design, or Engineering; VET pathways in design.
Robotics and Automation Engineer	Designs and builds robotic systems to automate processes and enhance capability in defence operations.	Engineering, programming, problem-solving, systems integration.	 Bachelor of Mechatronics, Robotics, or Electrical Engineering; Advanced Diploma of Process Plant Technology or Engineering (Mechanical); Defence Industry Internship Program.
Procurement Manager	Sources and manages contracts for materials, equipment, and services needed in defence projects.	Negotiation, budgeting, attention to detail, business knowledge.	 Diploma of Business or Logistics; Degree in Business, or Supply Chain and Logistics Management.



Job Title	Description	Skills	Pathways
Scheduler	Develops and maintains project timelines to ensure defence projects are completed on time and within budget.	Organisation, time management, problem-solving, project software skills.	 Bachelor of Project or Business Management; Diploma in Project Management or Business.
Project Manager	Leads teams to deliver defence projects, managing resources, budgets, risks, and schedules.	Leadership, organisation, communication, problemsolving.	 Diploma or Business or Project Management; Bachelor of Project Management, or Business.
Mechanic	Maintains and repairs vehicles, machinery, and equipment used in defence industry operations.	Mechanical aptitude, problemsolving, technical knowledge.	Certificate III in Automotive or Diesel Mechanics (Apprenticeship).
Communications Technician	Installs and maintains communication equipment used in defence operations, such as radios and satellite systems.	Technical troubleshooting, electronics knowledge, teamwork.	 Certificate III or IV in Telecommunications Technology; Defence Industry Pathways Program traineeship.
ICT support technician	Provides technical support for computer systems and networks used in defence projects and organisations.	Problem-solving, customer service, technical knowledge, troubleshooting.	 Certificate III or IV in Information Technology; Defence Industry Pathways Program traineeship.
Paramedic	Provides emergency medical care in defence industry settings, including remote worksites and high-risk environments.	Medical knowledge, critical thinking, decision-making, resilience.	 Diploma or Degree in Paramedicine; Industry-specific training.
Sensor specialist	Works with sensor systems that gather data for surveillance, navigation, or monitoring in defence applications.	Electronics, data interpretation, problem-solving, technical troubleshooting.	 Certificate IV or Diploma in Electronics; Bachelor of Engineering (Electrical, Electronic or Systems); Defence Industry Internship Program.



Job Title	Description	Skills	Pathways
Geospatial analyst	Analyses maps, satellite images, and spatial data to support defence planning and operations.	GIS software, data analysis, spatial awareness, problemsolving.	Diploma or Degree in Geospatial Science, Surveying, or GIS.
GPS technician	Installs, tests, and maintains GPS equipment used for navigation and positioning in defence projects.	Technical troubleshooting, spatial awareness, electronics knowledge.	Certificate III or IV in Electronics, Telecommunications, or Surveying.
Field medical officer	Provides medical services in field environments on defence industry sites or remote projects.	Medical knowledge, critical decision-making, adaptability, resilience.	 Medical degree with additional training in remote or industrial medicine.
Environmental Scientist	Assesses and manages environmental impacts of defence industry activities, ensuring sustainable operations.	Scientific analysis, problemsolving, environmental legislation knowledge.	Bachelor of Environmental Science or related fields.
Software developer	Designs and develops software systems for defence applications, including control systems, simulations, or security tools.	Coding, problem-solving, teamwork, analytical thinking.	 Bachelor of Computer Science, Software Engineering, or IT; Certificate IV in IT (programming); Defence Industry Internship Program.
Robotics Engineer	Designs and builds robots for defence applications, enhancing automation and operational efficiency.	Mechanical and electrical engineering, coding, systems integration.	 Bachelor of Mechatronics, Robotics, or Mechanical Engineering; Defence Industry Internship Program.
Data analyst	Interprets and presents data to inform decision-making in defence projects, from logistics to cybersecurity.	Data analysis, critical thinking, software tools (e.g., Excel, Python).	 Certificate IV or Diploma in Data Analytics, Bachelor of Data Science or Analytics; Defence Industry Internship Program.
Security advisor	Assesses and implements physical and cyber security measures to protect defence industry assets.	Risk assessment, problem- solving, communication, knowledge of security standards.	 Certificate IV or Diploma in Security Risk Management; Industry certifications.



Job Title	Description	Skills	Pathways
Public affairs officer	Manages communication between defence industry organisations and the public, ensuring accurate and positive messaging.	Communication, media skills, writing, crisis management.	 Degree in Communications, Public Relations, or Journalism.
Technical writer	Creates clear, accurate documentation such as manuals and reports for complex defence equipment or processes.	Writing, attention to detail, technical understanding.	Diploma or Degree in Technical Writing, Communications, or STEM field with writing skills.
Meteorologist	Provides weather forecasts and climate analysis to support defence operations and planning.	Data analysis, scientific knowledge, problem-solving.	Bachelor of Meteorology, Atmospheric Science, or related fields.
Health and Safety Officer	Ensures workplaces and worksites in the defence industry comply with safety regulations and promote safe work practices.	Risk assessment, problem- solving, knowledge of WHS laws.	Certificate IV or Diploma in Work Health and Safety.
Payload Engineer	Designs, integrates, and manages the equipment or technology carried by drones, aircraft, or satellites to ensure they successfully complete their mission	Technical knowledge of sensors and cameras, drones and aircraft, systems integration and testing, problem solving and innovation, attention to detail and safety.	 Degree in aerospace, mechanical, electrical or systems engineering; Defence Industry Internship Program;



For more information about Defence Industry careers:

Forge Your Future uses Al-driven behavioural science-based tools to provide students with deep insight to discover their natural strengths, engage with opportunities to gain industry experience and certifications, and connect with their future employers. https://www.forgeyourfuture.com.au

Learn more about career opportunities in Australia's Defence Industry https://www.defenceindustry.gov.au

Learn more about Defence Industry career paths https://www.megt.com.au/future-roads-defence-industry-careers-students

Learn more about Western Australia's Defence Industry https://theotherforce.wa.gov.au/careers-and-training/occupations

Learn more about South Australia's Defence Industry https://findyourplacesa.com

Discover more STEM Careers in the Careers with STEM: Defence magazine https://issuu.com/refractionmedia/stacks/3b631ff1909045b39ffe96f371e0ac4a

