

A career in construction is diverse, ranging from carpentry and tiling all the way through to design, architecture and project management.

To look for jobs that match your skills and experience or for further support please visit jobs.incolink.org.au.

Building a long and sustainable career

Building and construction is one of the most important and fast-growing industries in Australia. Overall, employment has grown 78 per cent to 1.16 million over the past two decades, with projections indicating it will reach 1.26 million by 2025.*

Using this document

This document will give you an overview of the skills priority list as of March 2024.

Workers, educators, parents and students can use this document to look at different roles, understand what's involved including the skills and tickets required.

This is to serve as a guide to get a better understanding of what might suit you, your children or students.

The Skills Priority List is being updated monthly, to find the most up to date information, please visit jobsandskills.gov.au/data/skills-shortages-analysis/skills-priority-list.

→ Click here to view the Skills Priority List online.

Jobs in Demand in Construction¹

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
 Architect Meet with clients or builders to discuss their requirements and prepare a design brief Prepare sketches, production drawings and detailed drawings by hand or using computer-aided design (CAD) software Combine structural, mechanical and artistic elements into a building's design, such as decks and atriums, lifts, air conditioning systems and decorative finishes Discuss designs and cost estimates with clients and others involved in the project Obtain necessary approvals from authorities Prepare specifications and contract documents for builders, tradespeople and legal advisers Evaluate projects once they are completed and occupied. 	Problem solving Creativity Communication skills, oral and written Self Management Planning & Organising Team work Digital technology skills	Complete an accredited degree in architecture through university. To be a registered Architect, apply through Architects Accreditation Council of Aust.	English Mathematics Digital skills Drawing skills
Bricklayer Work from plans and specifications Build in door and window frames Spread layers of mortar to serve as a base and binder for bricks, and remove excess mortar Check vertical and horizontal alignment of bricks and blocks Use various tools and brick-cutting machines to cut and shape bricks Construct arches and ornamental brickwork Repair and maintain clay bricks, cement blocks/bricks and related structures Erect scaffolding (subject to licence requirements in some states and territories).	Self-Management Planning & Organising Team Work Communication skills - verbal	Certificate III in Bricklaying and Blocklaying CPC33020. Vocational Education & Training Aptitude that will assist: Enjoy hands on practical work Good hand-eye coordination Fitness to cope with the demands of the job Good at technical activities Likes working outdoors Employers like Y12 completion with drivers' licence (but not mandatory) Scaffolding licences will require CPCCLSF2001 - Licence to erect, alter and dismantle scaffolding basic level (https://cfmeu.edu.au/course/scaffolding-basic/)	English Mathematics

Information extrapolated from https://www.gooduniversitiesguide.com.au/careers-guide March 2024

² https://www.ncver.edu.au/__data/assets/file/0013/2407/2404.pdf accessed March 2024

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Building Technicians	Planning & Organisation	Certificate IV in Building & Construction CPC40120	Mathematics
Covers a variety of roles including Foreman, Project Manager, Estimator, Contracts Administrator, Workplace Safety Officer and Drafting ³ .	Problem solving Team Work	Diploma in Building & Construction CPC50220 Bachelor of Construction Management (Hons)	English Digital Technology skills
 Provide skilled assistance to builders and construction managers by interpreting and carrying out directions for planning and organising building projects 	Digital Technology skills	Aptitude: Good at technical activities.	Physics (can be helpful)
 Interpret building plans, regulations and codes of practice to direct progress of the work, ensuring specifications and regulations are followed, and proper methods and materials are used 			
Calculate costs and estimate completion times to prepare tenders			
Arrange supplies of material and equipment			
 Draw up detailed programs for site works and the coordination of building workers 			
 Record building progress and variations from the design drawings or specifications 			
Negotiate with subcontractors and report to builders and architects.			
Building Inspector/Surveyor	Communication skills - oral	VET Pathway: Advanced Diploma of Building Surveying	English
Provide advice and assistance to builders and owners before finalization and ladgement of building plane to avoid natorial	and written	CPC60121	Mathematics
finalisation and lodgement of building plans to avoid potential problems	Problem solving Planning & Organising	University Pathway: Bachelor of Building and Construction Aptitude: Leadership and management skills. Enjoys	Physics
 Assess building plans submitted for approval to ensure they conform to building regulations and codes of practice 	Self-Management	technical work.	
 Make recommendations on matters such as the provision of amenities for the community 			
Issue building permits			
Carry out pre-purchase inspections of all types of buildings			
 Inspect buildings during construction to ensure proper methods and materials are used and that they conform to building regulations 			
 Keep records and write reports on building progress in instances where regulations have been breached and plans have been altered 			
Issue compliance certificates on completion			

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Give evidence in court cases involving breaches of building regulations			
Assess the condition of existing buildings			
Audit buildings for access by disabled persons.			
Building Insulation Installer ⁴	Self-Management	No formal qualifications are required. However, a VET	English
Building Insulation Installers install and apply insulating material, such as foam, granules, foil, solar film, batts and blankets, to walls, floors, windows and ceilings of buildings to insulate against heat, cold, air, sound and moisture.	Planning & Organising Team work Communication – oral	course such as Certificate IV in Building and Construction CPC40120 would be highly advantageous. Aptitude: Likes working outdoors, physically demanding role, drivers licence is encouraged.	Mathematics
 Examines plans, specifications and work sites to determine the type and quality of installations required and their location 			
 Prepares site for insulation and the installation of fittings by nailing up furring, drilling holes for screws and bolts, and erecting scaffolding and ladders 			
Glues blocks and slabs of foamed plastic and cork to walls			
 Operates equipment to blow and spray mineral wool, fibre fill and foam insulation material into cavities 			
 Cuts insulation material to size and shape, as well as nailing or stapling batt-type insulation to joists, studs and furring 			
Measures, cuts and applies solar control film to windows			
 Fits awnings, security screens, shower screens, prefabricated windows and doors, exterior cladding and other home improvements using hand tools 			
 Drills holes in wood, brick, stone and fibrous structures; fitting bolts, screws and nails into place 			
 Attaches and adjusts mechanical fittings such as cranks, locks and pull-cords 			
 Installs flashing and waterproofing to fittings, such as shower screens and prefabricated windows and doors. 			

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Carpenter	Team work	VET Pathway - Certificate III in Carpentry	Mathematics
Carpenters construct, erect, install, finish and repair wooden and metal structures and fixtures on residential and commercial buildings. They may also carry out work on large concrete, steel and timber structures such as bridges, dams, power stations and civil engineering projects.	Planning and organising Problem Solving Communication skills – oral and written	Aptitude: Strong mathematic skills, enjoys practical work, physically fit, likes working with their hands, good sense of balance and can work at heights, good health and eyesight, enjoys working outdoors.	English
Construct formwork into which concrete is poured	and willen		
 Set out an outline of the building on the ground of the site, using string and pegs to allow for excavations 			
 Build floors, wall frameworks (timber or metal) and roofs, and lay timber floors 	8		
 Read plans and specifications to determine the dimensions, materials required and installation processes to be followed 			
Install metal and timber windows, sashes and doors			
Construct and erect prefabricated units, such as cottages and houses	3		
 Cut materials with hand and power tools, and assemble, nail, cut or shape parts 			
 Install door handles, locks, hardware, flooring underlay, insulating material and other fixtures 			
Maintain and sharpen tools.			
Carpenter & Joiner	Team work	VET Pathway - Certificate III in Joinery CPC31920	Mathematics
Joiners cut, shape and fit timber parts in workshops or on-site to form structures and fixtures that are ready for installation. This could include built-in robes, kitchen and bathroom components or staircases	Problem solving Communication – oral	Aptitude: Enjoys practical hands on activities, enjoys working with wood, good eye and hand coordination, some mathematical skills, good health and eyesight.	English
 Determine job requirements from drawings, templates and written instructions 			
Set up jigs, select and cut timber to size and shape using templates			
Cut joints using wood-cutting machines or hand tools			
Assemble prepared wood to form structures and fittings			
Work with plastic laminates, perspex or metals			
Maintain and sharpen tools.			

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Cabinet Maker Cabinetmakers make, repair or install furniture (both free-standing and fixed) using solid timber, flat-panel or timber-based products and a wide range of laminates and other materials. Match furnishing styles and materials to clients' needs Deliver and monitor service to clients Estimate job costs Measure and draw site layouts for manufactured furniture Read and interpret work documents in order to prepare accurate cutting lists for jobs Program and control computer-aided design (CAD) and computer numerical control (CNC) machines Understand and select timber and timber products for furniture production Fabricate custom furniture Prepare and assemble cabinets for installation	Communication Skills – oral and written Planning & Organising Self-Management Team work	Certificate III in Cabinet Making and Timber Technology MSF30322 Aptitude: Enjoys practical and manual activities, eye for detail and works accurately, good mathematical skills, good hand and eye coordination, free from allergies to dust.	English Mathematics Digital Technology
 Perform on-site repairs and adjustments of cabinets Clean and maintain work areas, including machinery and tools, to ensure a safe working environment. 			
Civil Construction Worker ⁵ Refer Excavator Operator, Plant Roller Operator, Consider Asphalting and Mobile Plant Operator • Clear scrub, strip grass and remove topsoil • Assist with preparation for laying drains • Spread gravel to form the road base • Operate tank-truck distributors or hoses to spray tar, road oils and emulsions on the road before surfacing • Operate paving machines or spread stone chips, gravel or asphalt onto road surfaces	Teamwork Good communication skills	Vocational Pathways: Certificate III in Civil Construction ⁶ Traineeships will require an employee ⁷ Year 10 as a minimum. Employers consider favourably a Yr12 completion with drivers licence. Industry anecdotal comments provide that they like female civil construction workers as they tend to be "gentler" on the machinery and equipment. Aptitude: Enjoy practical hands on work in the outdoors with heavy machinery. Able to cope with the physical demands of the job and have good hand eye coordination. Ability to work safely.	Mathematics English

⁵ https://www.gooduniversitiesguide.com.au/careers-guide/civil-construction-worker#you

https://training.gov.au/Training/Details/RII30920

⁷ https://cfmeu.edu.au/

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Erect and dismantle barricades and construction signs			
Direct traffic through the construction area			
 Load and unload equipment and clean the worksite 			
Calculate the quantities for ordering materials			
Comply with environmental and safety orders			
Landscape surrounding areas with trees and grass seed.			
Civil Engineer	Problem solving	Tertiary - Bachelor of Civil Engineering	Mathematics
Civil engineers plan, design, construct, operate and maintain roads, bridges, dams, water supply schemes, sewerage systems, transportation systems, harbours, canals, dockyards, airports, railways, factories and large buildings.	Communication skills – oral and written Digital technology skills	Aptitude: Leadership and management skills, practical and creative and ability to ensure safety requirements of the site.	Physics English Chemistry
 Investigate sites to determine the most suitable foundation for a proposed construction 	Self-management Teamwork		Digital technology skills
 Research and advise on the best engineering solution to meet a client's needs and budget 			
 Prepare engineering calculations required for the design of projects, and supervise the drafting of plans 			
 Produce detailed designs and documentation for the construction and implementation of civil engineering projects 			
 Organise the delivery of materials, plant machinery and equipment needed for the construction project and supervise labour 			
Develop detailed programs for the coordination of site activities			
 Work with other engineers, architects, landscape architects and environmental scientists 			
 Assist government bodies in preparing yearly works programs (such as work on car parks, drainage, roads, aerodromes or sewerage systems) within set budgets 			
 Operate computers to assist with the design of civil engineering projects 			
 Coordinate and direct research, development and testing of materials, processes or systems related to civil engineering works 			

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
 Research, advise on and plan the control and minimisation of air, water and solid waste pollution, and the management of water resources 			
Supervise the testing and commissioning of completed works			
 Analyse and interpret reports on loading, labour, productivity, quality, materials and performance 			
 Analyse risks associated with natural disasters (including cyclones, earthquakes, fires and floods), and design structures and services to meet appropriate standards 			
 Arrange for geological and geophysical investigations and carry out feasibility studies. 			
Civil Engineer Draftsperson (Civil and Structural Engineering Associate)	Problem Solving Communication skills –	Tertiary: Bachelor of Civil Engineering Graduate Diploma in Professional Engineering, Advanced	Mathematics Physics
Civil and structural engineering associates provide technical support to civil engineers and civil engineering technologists. They assist with the research, design, construction, operation and maintenance of projects such as roads, airports, railways, buildings, bridges, dams and drainage systems Help to estimate costs, prepare specifications for materials and carry out surveying and drafting	written and oral Digital technology skills Self-management Team work	Diploma of Engineering Technology, Diploma of Engineering Technology Vocational Pathway: Certificate III in Civil Construction RII30920 Aptitude: Eye for detail and accuracy, practical and creative, leadership and management. Enjoy research.	Chemistry English Digital technology
Prepare working drawings, plans and designs for construction work			
 Use computers to produce designs, detailed drawings and documentation 			
Help with programming work and checking materials			
 Maintain close contact with construction workers and project managers 			
 Check that finished works are within specifications, regulations and contract provisions 			
 Inspect civil engineering works, and organise and supervise maintenance and repair work. 			

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
 Civil Engineering Technician Civil engineering technicians conduct tests of construction materials and prepare sketches and tables for civil engineers and civil engineering technologists. They assist with the research, design, construction, operation and maintenance of projects such as roads, airports, railways, buildings, bridges, dams and drainage systems. Interpret work assignment instructions, apply appropriate procedures and select equipment under the direction of civil engineers, engineering technologists and engineering associates Conduct field and laboratory tests of construction materials and soils, and collect data for traffic surveys Prepare computations, sketches, charts and tables for civil engineering works such as drainage, water supply, sewage reticulation systems, roads, airports, dams, bridges and other structures. 	Communication skills – oral and written Self-management Team work Problem solving Digital technology	Tertiary: Diploma in Engineer, Advanced Diploma in Engineering Technology, Bachelor of Civil Engineering Aptitude: Leadership and management, eye for detail and accuracy, likes technical activities, including research and structural design. Interested in practical and creative activities.	Mathematics Physics English Digital technology skills
 Construction Project Manager Construction managers are responsible for coordinating the construction of large building projects such as hotels, factories, office blocks, home unit developments, schools, hospitals and housing developments Interpret plans and specifications Plan construction methods and procedures Coordinate the supply of labour and materials Supervise construction sites and direct site managers and subcontractors to ensure standards of building performance, quality, cost schedules and safety are maintained Study building contract documents and negotiate with building owners and subcontractors Control preparation of cost estimates and the documentation for contract bids Control payment to subcontractors by valuation of completed works Make sure that building regulations, standards and by-laws are enforced in building operations Consult with architects, engineers and other technical workers to ensure design intentions are met Arrange building inspections by local authorities. 	Communication Problem Solving Self Management Initiative and Enterprise Technology Team work Planning & Organising Learning	Vocational Pathway: Certificate IV in Building & Construction and/or a Diploma in Building & Construction Tertiary Bachelor of Construction Management Aptitude: Leadership and management, strong personal drive, resourceful.	Mathematics Physics Digital Technology English

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Construction Estimator ⁸ (Also known as Building Estimator, Construction economist, Quantity Surveyor, Surveyor (quantity) and Cost Engineer) Building estimators discuss details with suppliers, contractors, architects, builders, engineers and project owners to prepare and deliver estimates for the completion of a construction project.	Communication – oral and written Problem Solving Self-Management Initiative and Enterprise Technology Team work Planning & Organising	Vocational Pathway: Certificate III trade qualification, Certificate IV in Building & Construction and/or a Diploma in Building & Construction Tertiary Bachelor of Construction Management Aptitude: Negotiating, financial, strong people skills.	Mathematics Physics Digital Technology English
Construction Rigger ⁹ Consider Crane Operator Riggers use mechanical load shifting equipment and associated gear to move, place or secure loads, including plant, equipment or members of a structure. Riggers ensure the stability of those members and set up and dismantle hoists.	Communication Problem Solving Teamwork Initiative & Enterprise	Vocational Pathway: Licence to perform rigging Basic, Intermediate & Advanced CPCCLRG3001, CPCCLRG3002 and CPCCLRG4001 Prerequisites include Licence to perform dogging (CPCCLDG3001) Worksafe High Risk Licence in Elevated Work Platform about 11M Work safely at heights ticket (RIIWHS204E or CPCCCM2012) Aptitude: Strong interest in working safely with heavy machinery and in high-risk environments. Will undertake work at heights. Enjoys working outdoors. Good hand and eye coordination. Physically fit and healthy with good eye sight.	Mathematics English
 Construction Worker Consider Trades Worker Consider Labourer Unload, carry and stack building materials and place tools and equipment in position Dig trenches using hand tools or jackhammers to break up rock and concrete, so that footings and services can be laid Place and compact filling and quarry materials Help to erect and dismantle scaffolding (subject to certification in some states and territories), ramps, catwalks, barricades and warning lights Mix, pour and spread concrete under supervision 	Teamwork Effective communication skills Planning and organising Self-management	You can work as a construction worker without formal qualifications. You will probably get some informal training on the job. You can also become a construction worker through an apprenticeship or traineeship. Some workers acquire a VET course in construction before commencing work. Entry requirements may vary, but employers generally require Year 10 ¹⁰ . Although most employers would appreciate a worker with their drivers licence. Aptitude: Able to cope with the physical demands of the job. Enjoy practical hands-on work in the outdoors. The ability to maintain a constant pace of work. Ability to read and understand safety instructions. Can follow instructions. Will be required to complete the Constructions industry induction and hold their White Card.	English and Mathematics at least to Yr10

⁸ https://buildersacademy.edu.au/careers/what-is-a-building-estimator/

⁹ https://cfmeu.edu.au/course/rigging-basic/

¹⁰ https://www.gooduniversitiesguide.com.au/careers-guide/construction-worker#you

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Use wheelbarrows to remove rubble and rubbish from building sites			
Dismantle small structures and strip materials in preparation for new construction			
 Operate construction machinery (such as excavators), subject to any licensing and accreditation requirements 			
Clean surfaces for painters.			
Crane Hoist or Lift Operator ¹¹	Communication	Vocational Pathway: CPCCLHS3001 - Licence to operate a	English
Refer Crane Operator	Problem Solving	personnel and materials hoist ¹²	Mathematics
Consider Construction Rigger	Teamwork	Prerequisites: White Card Construction Induction card.	
Testing the operation of plant before use to ensure safety	Planning and Organising	Aptitude: Mechanical aptitude and good coordination.	
 Operating controls to rotate cranes, move cranes on fixed rails, raise and lower jibs and booms, and raise, lower and move hooks and objects 		Comfortable working at heights, safety conscious. Must be at least 18 years of age. 13	
 Working in conjunction with Construction Riggers and Crane Chasers to position hooks and raise, move and place loads 			
 Controlling the movement of loads, and monitoring speed, acceleration and braking distances directly and by signalling to other operators 			
 Monitoring plant operation, instruments and gauges to detect malfunctions and problems 			
Lubricating ropes and winches on cranes and replacing worn cables			
 May operate cranes fitted with attachments for purposes such as demolition and pile driving 			
 May operate overhead cranes using hand controls suspended by cables from cranes. 			

¹¹ https://www.jobsandskills.gov.au/data/labour-market-insights/occupations/7121-crane-hoist-and-lift-operators#:~:text=Crane%2C%20Hoist%20and%20Lift%20Operators%20operate%20stationary%20and%20mobile%20cranes,%2C%20sawmills%2C%20wharves%20and%20 shipyards.

¹² https://cfmeu.edu.au/personnel-and-materials-hoist-course/

¹³ https://www.gooduniversitiesguide.com.au/careers-guide/crane-operator#you

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
 Crane Operator¹⁴ Refer Crane Hoist or Lift Operator Consider Construction Rigger Check the condition of the ground before setting up the crane (on a building site, for example) Place timber blocks or steel plates under the outrigger pads of the crane Check that the crane is level on the outriggers before attempting to lift and place a load Be aware of how much material can be safely hoisted in each load according to the crane's capacity and the weather conditions (high winds, for example) Ensure that cranes are ready for use by checking controls, instruments and gauges Move the crane and position the hook so that doggers can attach loads, slings, shackles and chains Check crane cabin instruments to ensure that loads hooked on their machines are within safe working limits Observe and follow the signals given by doggers who direct the moving and positioning of the loads Maintain cranes by inspecting them for defects or wear, lubricate ropes and winches, and replace worn cables. 	Communication Problem Solving Teamwork Self-Management	Vocational Pathways: Traineeships require an Employer initially and then referred into the traineeship. 15 To be considered for Mobile Crane courses candidates need to complete licence to Perform High Risk Work and complete their Dogman's and Spotters tickets 16. Also, refer Education & Training for Crane Operator. 17 Employers look favourably on those with a transport and logistics background. 18 Must be at least 18 years of age. Aptitude: Enjoy technical and engineering activities, able to concentrate for long periods, follow verbal and visual instructions, interests in mechanical and heavy machinery. Good hand eye coordination, comfortable working at heights. Safety conscious. Happy to work long hours. Industry provides "pack your breakfast, lunch and dinner as you don't know what time you'll get home". 19	English Mathematics Physics can be helpful
Contract Administrator ²⁰ Contract Administrators prepare, interpret, maintain, review and negotiate variations to contracts on behalf of organisations.	Communication skills – oral and written Team work Digital Technology Self-management Problem solving	You usually need relevant industry experience to work as a Contract Administrator. Formal qualifications might be useful but aren't essential. Some workers have Vocational Education and Training (VET) or university qualifications in areas such as business and management, building, construction management and law. Aptitude: Fast paced environment. Eye for detail and accuracy.	Mathematics English Digital Technology skills

¹⁴ https://www.gooduniversitiesguide.com.au/careers-guide/crane-operator#the-job

¹⁵ https://cfmeu.edu.au/mobile-crane-courses/

¹⁶ https://cfmeu.edu.au/mobile-crane-courses/

¹⁷ https://www.gooduniversitiesguide.com.au/careers-guide/crane-operator#you

¹⁸ https://metcalfcranes.com.au/

¹⁹ VCTA Coordinator

²⁰ https://www.yourcareer.gov.au/occupations/511111/contract-administrator#how-to-become-a-contract-administrator-2 (accessed March 2024)

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Cablers (Data and Telecommunications) install internal telecommunications and data cabling, equipment and peripherals for computer networks, telephony, cable television and monitored security and fire alarms. Examines drawings, specifications and work areas to determine positioning and connections for equipment to be installed	Digital Technology Skills Problem Solving Communication skills – oral and written Planning and organising	Vocational Pathways: To gain cabling registration you need to complete a certificate II or III in data and voice communications, telecommunications technology or telecommunications network (build and operate). You can work as a Cabler (Data and Telecommunications) without formal qualifications if you are able to demonstrate your technical competency to employers	Digital Technology skills Mathematics English
Installs cabling for telephone, radio, pay tv and computer transmissionJoins cables and seals sheaths with lead and thermoplastic.		Aptitude: Happy to work in a fast paced environment. Enjoys working outdoors. Interested in technical applications.	
Electrical Engineer Electrical engineers design, develop and supervise the manufacture, installation, operation and maintenance of electrical systems. They work on systems for the generation, distribution, utilisation and control of electric power. They also work on electronic systems used for computing, communications and other industrial applications. Electrical engineers may specialise as electrical maintenance engineers, electrical power engineers, electrical design engineers, communications engineers or computer engineers. They may also specialise in areas such as the design and operation of power plants, generators, metal refining, rolling mills, motors and transformers, and in researching new applications of technology or production machinery.	Good Problem Solving skills Oral and Written Communication skills Digital technology skills Self Management	To become an electrical engineer you usually have to complete an engineering degree at university with a major in electrical, electronic, electrical power, telecommunications and network, or communications engineering. Aptitude: Creative and practical, enjoys computing and technical design. Leadership skills.	Chemistry Physics Digital Technology

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Electrician	Self-Management	VET Pathway: Certificate III in Electrotechnology ²²	Mathematics
 Read electrical, architectural and mechanical diagrams, drawings or specifications to determine job requirements Plan the layout of wiring systems Test for, locate and repair electrical malfunctions. Install electrical and electronic control systems and insulated cables Install electrical equipment such as storage heaters, water heaters, electrical signs, switchboards and motors Assemble electrical and electronic components and appliances Connect electrical equipment to power supplies Connect switches, outlets and other fittings Connect circuit breakers Maintain automated production processes. 	Teamwork Good communication skills Problem solving	Aptitude: Enjoys mathematics and technical activities. Good hand and eye coordination, Good eyesight (may be corrected) and normal colour vision. Likes mechanics and electronics. Eye for detail and accuracy, physically fit.	Physics English Digital Technology
 Engineering Manager Direct the formulation of engineering strategies, policies and plans Ensure quality, cost, safety, timelines and performance standards are met Interpret plans, drawings and specifications Provide advice on engineering methods and procedures to achieve construction and production requirements Liaise with marketing, research and manufacturing managers concerning engineering aspects of new construction and product design Determine and put into place project and work schedules and budgets Ensure conformity with specifications and plans, as well as with laws, regulations and safety standards Oversee maintenance requirements to optimise efficiency Control engineering staff selection and training Coordinate the activities of engineering staff 	Strong problem solving and analytical skills Self Management Teamwork Strong communication skills	Tertiary: Bachelor of Engineering, Master of Engineering, Bachelor of Surveying/Bachelor of Business Post Graduate: Master of Management for Engineers Aptitude: Interested in technical and engineering activities. Creative, Interested in leadership opportunities	Mathematics Chemistry Phsics English Digital Technology Skills

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Engineering Professionals			
Refer to Civil Engineer and Electrical Engineer			
Excavator Operator	Teamwork	VET Pathway: You can work as a mobile plant operator	English
Mobile Plant Operator	Self-Management	without formal qualifications. You will probably get some	Mathematics
Consider Civil Construction Worker or Asphalting Crew	Good oral communication	informal training on the job. You can also become a mobile plant operator through a traineeship ²³ . Entry requirements	
Prepare machines for operation	skills	may vary, but employers generally require Year 10.	
 Load and unload equipment from low loaders and move it around worksites 		Aptitude: Enjoys practical and manual activities. Good at taking instruction. Physically fit and likes to work outdoors.	
 Select, change and operate special attachments such as winches, scrub clearers, rippers, pile drivers and rock-breaking hammers 		Good eyesight and hand and eye coordination.	
 Work from drawings and markers under the direction of supervisors and engineers Back-fill trenches 			
 Break up paving, rock and similar material by operating hydraulic or pneumatic breakers 			
 Excavate or scrape earth, rock or rubble to the correct level and alignment 			
 Load trucks with excavated fill Drive machines to and from worksites 			
 Service equipment by cleaning, lubricating and refuelling it, and make minor adjustments and repairs when necessary 			
 Maintain duty of care for other users and work to occupational health and safety requirements. 			
Mobile Plant Operators			
Refer Excavator Operator			
Painter & Decorator	Good communication skills	VET Pathway: Certificate III in Painting & Decorating through	English
Painters and decorators apply paint, varnish, wallpaper and other finishes to protect, maintain and decorate interior and exterior surfaces of domestic, commercial and industrial buildings and other structures. Painters and decorators may concentrate on a specific area of work, such as the internal or external painting of domestic homes, commercial buildings, industrial structures and equipment. They may also concentrate exclusively on restoration work.	Self-Management Teamwork	a TAFE or Training organisation. ²⁴ Aptitude: Physically fit. Doesn't mind working at heights. Enjoys practical work. Good colour vision and eye and hand coordination. Good sense of balance.	Mathematics Chemistry/Science

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Paving Plant Operator			
Refer Civil Construction Worker			
Consider Asphalting Crew			
Plumber	Strong communication skills	Vocational pathways. Completion of Year 10 as a minimum	English
 Prepare and/or study plans and specifications to determine the layout of plumbing systems and materials needed 	Team work and self management skills	but Employers like Apprenctices to complete Y12 and have drivers licences. These requirements are employer	Mathematics Consider chemistry/
Find and mark positions for connections, measure pipes and mark	Problem solving	dependant.	physics
cutting or bending lines, then cut holes through walls and floors to accommodate pipes	Planning and organising	Plumbers must apply for registration and licensing with the relevant body in their state or territory. In Victoria ²⁶ ²⁷ , workers in the construction industry must undertake training in safety and induction with the Construction Induction Card (White Card) ²⁸ . Many TAFES and Training Organisations provide training for the White Card.	
 Cut, thread and bend pipes, assemble and install piping, valves and fittings, and join pipe sections and secure pipes 			
Test lines as required by local plumbing regulations			
 Install equipment such as boilers, chillers, pumps, heating and cooling systems, gas appliances, water tanks, water heaters and solar water heating systems, and fixtures such as toilets, wash basins and industrial processing units 	r	Aptitude: Enjoy hands-on work, good eye hand coordination, happy to work at heights and cope with the physical demands of the job.	
Weld and braise pipework (steel, copper, plastic and stainless steel)			
System testing and commissioning			
 Maintain and repair plumbing systems.²⁵ 			

²⁵ https://www.gooduniversitiesguide.com.au/careers-guide/plumber#the-job

²⁶ https://plumber.com.au/members-home/business-support/registration-and-compliance/

²⁷ https://www.vba.vic.gov.au/registration-and-licensing/plumbing-registration-and-licensing

²⁸ https://cfmeu.edu.au/white-card-courses/

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
Project Builder Project Builders manage the construction, alteration and renovation of dwellings and other buildings. ²⁹ Consider Project Builder vs Custom Builder Consider Construction Management Examine and interpret clients' plans or arrange the drawing of plans to meet building regulations Submit tenders (offers to do jobs at a stated price), quotes or prices for a project to clients Arrange the submission of plans to local authorities for approval and arrange inspections of building work Organise employees and/or subcontractors to carry out all stages of building and negotiate rates of pay Calculate quantities of materials required for building projects and order these from building suppliers or advertise for tenders Arrange delivery times of materials to coincide with various stages of the building process Supervise the work of employees and/or subcontractors to ensure buildings are of an acceptable standard and are proceeding according to the contract requirements and program schedule Coordinate the activities of office staff involved in the preparation and payment of accounts Comply with state and federal legal statutory contract law. ³⁰	Good communication skills Planning and organising Problem solving skills Teamwork Self-management skills	Vocational Pathways: Apprenticeship. Minimum completion Year 10 however many employers prefer a Year 12 completion along with drivers licence. Some states require a builder to be registered. Tertiary Pathways: Bachelor of Construction Management Aptitude: Leadership skills, technical activities, physically fit to manage the workload.	English Mathematics
Railway Infrastructure Worker	Teamwork	You can work as a railway infrastructure worker without	English
Railway infrastructure workers work on the construction, maintenance and operation of railway infrastructure, including tracks, signalling equipment and buildings. Railway infrastructure workers work on railway lines and at transfer yards, mines and quarries. They work shifts, including weekends and public holidays.	Good communication skills	formal qualifications, but employers usually require Year 10. Once you are employed, you will receive formal training, both on and off the job. On completion of this training, you may receive a nationally recognised qualification ³¹ .	Mathematics

²⁹ https://www.yourcareer.gov.au/occupations/133112/project-builder

³⁰ https://www.gooduniversitiesguide.com.au/careers-guide/builder#the-job

³¹ https://www.gooduniversitiesguide.com.au/careers-guide/railway-infrastructure-worker#you

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
 Inspect and monitor railway tracks Check, assess and maintain track-laying equipment Install, maintain and repair tracks, sleepers (wooden or concrete support slats) and ballast (crushed stone surrounding the tracks and sleepers) Operate equipment Perform general site maintenance of the rail corridor.³² Railway Track Operator Refer Railway Infrastructure Worker Railway Track Worker 		Vocational Pathways: Rail Industry Workers must complete training to comply with required work, health and safety regulations and competencies required to work on the railway network. Metro Academy (Metro Trains (Victoria) training organisation ³³ . Refer to Course List. ³⁴ Aptitude: Enjoy ractical hands-on activities, physically fit to meet the demands of the job, safety conscious, a love of trains.	
 Refer Railway Infrastructure Worker Render Solid Plaster³⁵ Level and straighten corners, angles, and wall and ceiling surfaces Clean and prepare surfaces by stapling wire-mesh frames to them, or by roughening them with mechanical hammers Mix and apply coats of plaster, cement, render or similar materials to walls and ceilings, levelling and smoothing them using trowels Apply finishing coats of plaster to give a smooth finish or decorative texture Fix precast cornices and panel mouldings, ceiling centres and other plaster fittings Render exterior walls and moulds Finish the underside of concrete floors with a mixture of cement and granite chips or blue metal Erect scaffolding (subject to licence requirements in some states or territories) and trestles.³⁶ 	Good communication skills Teamwork Planning and organising	Vocational Pathways: Apprenticeship. Minimum Yr 10 but employers look favourably on Yr 12 completion with drivers licence. Certificate III in Solid Plastering ³⁷ Aptitude: Enjoy practical hands-on work, good eye hand coordination, able to work safely at heights, strong eye for detail and ability to work neatly and accurately. Physically fit with ability to work with materials used consider allegeries. Will need to read and interpret work from plans (skills gained through apprenticeship).	English Mathematics
Road Roller Operator Refer Civil Construction Worker, Excavator Operator, Mobile Plant Operator Consider Asphalting			

- 32 https://www.gooduniversitiesguide.com.au/careers-guide/railway-infrastructure-worker#you
- 33 https://www.metroacademy.com.au/metro-academy/about/
- 34 https://www.metroacademy.com.au/metro-academy/course-list/
- 35 https://www.gooduniversitiesguide.com.au/careers-guide/solid-plasterer
- 36 https://cfmeu.edu.au/scaffolding-courses
- 37 https://training.gov.au/Training/Details/CPC31011

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
 Refer Plumber Studying blueprints, drawings and specifications to determine the layout of plumbing systems and materials required Setting out and installing hot and cold water systems and associated equipment Installing water-based fire protections systems, including fire hydrants, hose reels and sprinkler systems Designing and installing sanitary plumbing and water supply systems, discharge pipes and sanitary fixtures Fabricating and installing soil and waste stacks Assembling and installing mechanical services plant, air handling and conditioning equipment and small bore heating systems Installing sewerage and effluent pumping equipment and disposal systems Installing below-ground drainage systems and associated ground support systems Installing gas appliances, flues and pressure regulating devices. 	Strong communication skills Team work and self management skills Problem solving Planning and organising	Vocational pathways. Completion of Year 10 as a minimum but Employers like Apprenctices to complete Y12 and have drivers licences. These requirements are employer dependant. Plumbers must apply for registration and licensing with the relevant body in their state or territory. In Victoria ^{39 40} workers in the construction industry must undertake training in safety and induction with the Construction Induction Card (White Card). ⁴¹ Many TAFES and Training Organisations provide training for the White Card. Aptitude: Enjoy hands-on work, good eye hand coordination, happy to work at heights and cope with the physical demands of the job.	English Mathematics Consider chemistry/ physics
Roof Tiler	Teamwork	Vocational Pathway: Certificate III in Roof Tiler ⁴³	English
Refer Roofer ⁴²	Good communication skills	Will need to complete Safe Working at Heights ⁴⁴	Mathematics
Roofers cover houses and other structures with roof tiles, slates, shingles or steel sheeting to form waterproof and durable surfaces.	Planning & Organising Self-management	Aptitude: Enjoys practical hands on activities, good sense of balance, along with hand eye coordination and a willingness	
 Examine drawings, specifications and worksites to determine materials required 	Sell-Illatiagethetit	to work at heights and outdoors.	
Assess risks			
Erect ladders and tile elevators			
Erect and dismantle restricted-height scaffolding			

³⁸ https://www.skills.vic.gov.au/s/occupation/a0k4a0000009dU4AAI/roof-plumber

³⁹ https://plumber.com.au/members-home/business-support/registration-and-compliance/

⁴⁰ https://www.vba.vic.gov.au/registration-and-licensing/plumbing-registration-and-licensing

⁴¹ https://cfmeu.edu.au/white-card-courses/

⁴² https://www.gooduniversitiesguide.com.au/careers-guide/roofer

⁴³ https://training.gov.au/Training/Details/CPC30820

⁴⁴ https://cfmeu.edu.au/work-safely-at-heights-course/

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
 Place roofing underlays over eaves and secure them by nailing or stapling these to roofs 			
 Correctly space and nail wooden strips (battens) across the roof rafters on which the tiles or other roofing material will be placed 			
 Measure and cut roofing material to fit around vents, chimney edges and the hips and valleys of the roof 			
Fix roof flashings (weatherproof covering)			
Fix the ridge caps and gable ends with cement mortar or tech screws			
Apply protective paint coating systems			
Clear the roof of debris after job completion.			
Scaffolder	Teamwork	Vocational pathways: Traineeships. Employers are required. ⁴⁵	
Scaffolders erect and dismantle scaffolding to provide work platforms on building or industrial sites, or for temporary structures such as stages, seating and catwalks. Check requirements from drawings and written instructions, select materials and set ground levels Fit together steel pipes, support braces and clamps to form bases for scaffolds Lift and position sections of scaffolding and bolt pipes together to build up scaffolding Place planks over horizontal bars to create platforms Check levels in scaffolding structures Use prefabricated scaffolding when available Dismantle scaffolding at the completion of a job.	Good communication skills Planning & organising Problem solving	Scaffolding Basic, Intermediate & Advanced. Prerequisites including White Card and Work Safely at Heights Aptitude: Enjoy practical hands on, manual activities. Physically fit to cope with the demands of the job which can include heavy lifting, able to work at heights with a good sense of balance and hand eye coordination. Must be at least 18 years of age. ⁴⁶	
Steel Metal Worker Consider Sheet metal worker Consider Fabricator Consider Boilermaker Engineering Tradesperson – Fabrication ⁴⁷	Teamwork Good communication skills Self-management Problem solving Technology	Vocational Pathways: To become a fabrication engineering tradesperson you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10. Employers look favourable on Y12 completion with drivers licence. Certificate III in Fabrication. ⁴⁸	Digital technology English Mathematics Chemistry

⁴⁵ https://cfmeu.edu.au/scaffolding-courses/

https://www.gooduniversitiesguide.com.au/careers-guide/scaffolder#you

⁴⁷ https://www.gooduniversitiesguide.com.au/careers-guide/engineering-tradesperson-fabrication#the-job

⁴⁸ https://training.gov.au/Training/Details/MEM31922

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
 Examine detailed drawings or specifications to find out job, material and equipment requirements 			
 Cut, roll, shape, bend, mould, spin, heat or hammer metal products to fabricate parts or sub-assemblies 			
Heat treat metal parts and components			
 Set up and/or operate hand and machine tools, welding equipment or Computer Numerically Controlled (CNC) machines 			
 Assemble parts and structures by lining up and joining them by welding, bolting or riveting 			
 Finish products by cleaning, polishing, filing or bathing them in acid solutions, or by applying protective or decorative coatings. 			
Steel Fixer	Teamwork	Vocational Pathways: As part of an apprenticeship, Certificate	English
Steel fixers position and secure steel bars or steel mesh to reinforce	Good communication skills	III in Steelfixing ⁴⁹	Mathematics
concrete structures.	Planning & Organising	Prerequisites include Construction White Card.	
Steel fixers are mainly employed in the industrial/commercial sectors of the building industry on construction sites. They may also work in precast concrete plants, as well as in areas of pre-stressing, post-stressing and tensioning, using hydraulic jacks and tensioning mechanisms.		Aptitude: Physically fit to carry out demands of the job, enjoys practical hands-on roles and able to work at heights.	
Read and interpret working plans and steel lists for the job			
Set out the work from these instructions			
 Make steel bars or mesh the required length by cutting them with bolt cutters, guillotines or power saws 			
 Assemble the reinforcing bars or mesh by welding, wiring or clipping into predetermined locations within the concrete 			
 Fabricate steel reinforcement such as beams, footing pads or special units 			
 Join prefabricated units together for large sections of high rise or civil projects, and position the reinforcement ready for concrete pours. 			
Structural Engineer			
Refer to Civil Engineer			
Structural Steel Erector			

Refer to Rigger, also Scaffolder, Steel Worker

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
 Tiler - Wall and Floor⁵⁰ Look at plans, measure and mark surfaces to be covered and lay out work Prepare wall and floor surfaces by removing old tiles, grout, cement and adhesive Use tile-cutting tools to cut and shape tiles needed for edges, corners, or around obstacles such as fittings and pipes Attach tiles to surfaces, using correct adhesive, making sure that patterned tiles match Space and even the tiles by using tools such as spirit levels, squares and plumb-lines Prepare and apply grout, remove excess grout, clean and polish tiles Lay floors of cement, granolithic, terrazzo or similar composition Apply waterproofing systems. 	Self-Management Teamwork Good communication skills Technology	Vocational Pathway: Apprencticeship completing a Certificate III in Wall and Floor Tiling ⁵¹ Minimum Yr 10 completion but employers look favourably on a Yr12 completion with drivers licence. Aptitude: Enjoys practical hands on manual activities. Doesn't mind working at heights. Good hand eye coordination with an eye for detail work which can be completed neatly and accurately. Creativity. Industry anecdotal comments provide that female tilers are excellent due to their small hands, creativity and eye for detail.	Mathematics English
Trades Workers Refer Construction Workers			

⁵⁰ https://www.gooduniversitiesguide.com.au/careers-guide/tiler-wall-and-floor#you

⁵¹ https://training.gov.au/Training/Details/CPC31320

Role & Description	Employability Skills Required ²	Education Requirements All roles will require completion of the Construction Induction Card (White Card – CPCWHS1001)	Secondary school subjects that will assist
 Truck Driver Drive defensively and handle hazardous road conditions Load goods onto the truck either by hand, or by using a forklift or other lifting equipment Make sure loads are correctly placed and secured to avoid damage to the truck or goods Couple and uncouple trailers Perform pre- and mid-trip vehicle and security inspections Carry out basic vehicle maintenance Drive vehicles to their destination and unload Carry out administrative duties, such as checking items against the inventory, recording damage, collecting payments and issuing receipts Enter information into in-cab electronic equipment to record required trip information Maintain a work diary with details of trips. 	Self-management Good communication skills Technology Problem solving skills Planning & Organising	You can work as a truck driver without formal qualifications. You will probably get some informal training on the job. Applicants must also undertake practical and written tests and obtain one or more heavy vehicle licences before commencing work. You can also become a truck driver through a traineeship. Entry requirements may vary, but employers generally require Year 10. You must be at least 18 years old and hold a full drivers licence. A heavy vehicle licence is required to drive any vehicle that exceeds 4.5 tonnes gross vehicle mass (GVM). The National Heavy Vehicle Regulator (NHVR) is the sole administrator of the heavy vehicle national law. 52 Depending on the truck to be driven (Light, Medium or Heavy Rigid vehicle) will require appropriate licences. Refer to Vicroads website for providers. 53 Industry ancedotal comments provide that they like female truck drivers as they tend to be "gentle" on the equipment. Aptitude: Enjoys practical hands-on work with a mechanical aptitude. Likes working independently. Able to cope with the physical demands of the job which can include heavy lifting	Mathematics English Digital technology skills
		and sitting for long periods. Must be safety conscious and meet the age requirements. Mathematics skills should be sufficient to understand weight of loads and the like.	

Refer Sheet Metal Worker - Engineering Tradesperson - Fabrication⁵⁴

⁵² https://www.vicroads.vic.gov.au/licences/licence-and-permit-types/heavy-vehicle-licence

 $^{53 \}qquad https://www.vicroads.vic.gov.au/licences/licence-and-permit-types/heavy-vehicle-licence/accredited-heavy-vehicle-training-and-test-providers$

⁵⁴ https://www.gooduniversitiesguide.com.au/careers-guide/engineering-tradesperson-fabrication#the-job

