

Secom Apprentice Engineer Program:

Fire and Security apprenticeships offer a rewarding and challenging career route for you to build your skills and experience while gaining a nationally recognised qualification. Fire and Security is an exciting career where workers are in high demand! The industry provides a wide variety of opportunities from engineers, surveyors through to operations management and much more!

Fire and Security apprenticeships combine on the job training with academic study so you can develop skills and experience which is essential to the industry.

There is a common misconception that Fire and Security apprenticeships only involve pulling cables and crawling into voids wearing hard hats and hi-vis jackets, but a career in Fire and Security is much more than that! Digital technology is changing the face of the Fire and Security industry meaning new and emerging roles are surfacing.

More about Fire and Security apprenticeships:

Training is based on meeting the industry standards and those developed by the trailblazer for the engineer role. The training has been designed at a level 3 standard to ensure that the individual can perform in the field as a polished engineer with impeccable knowledge skills and behavior.

Occupational profile

Fire, Emergency and Security Systems Technicians design, install, commission and maintain electronic systems in and outside simple and complex premises to protect individuals, homes and properties from risk and danger.

Systems include fire, security and emergency systems to detect intrusion, provide surveillance, monitor and control access to buildings, properties and sites or to detect fire and emergencies.

Skills include interconnection of equipment, programming, verifying performance/fault finding and testing and maintaining. Technicians will carry out planned jobs to install new systems, modify and maintain existing systems as well as respond to call-outs to repair faulty systems where they will utilise their problem-solving skills.

They will take a professional approach to customer service skills which include being presentable, tidy and respectful as they can often find themselves working in and outside customers' homes as well as in and outside business premises.

It is important for Fire, Emergency and Security Systems Technicians to be able to work independently or as part of a team and use their knowledge and skills to ensure systems have been appropriately selected and installed and maintained to a professional industry standards, often without any supervision, and done so in a safe, efficient and economical manner to minimise waste.

Knowledge and skills requirements:

Knowledge	What is required
Health and Safety	Health and safety legislation, codes of practice and safe working practices.
Electrical and electronic principles	Installation and testing techniques for electrical and electronic components, equipment and control systems for fire, emergency and security systems.
Practices and procedures	Fundamental principles and quality processes associated with industry/company codes of practices.
Core Systems	Fundamental design criteria, installation, commissioning and maintenance of fire, emergency, security systems and components.
System technologies	How to store, retrieve, manipulate, transmit or receive data/information electronically in a digital form across a range of ICT applications (e.g. personal computers, digital transmission over IP, email, mobile communication technology).
Environmental principles	Compliance to environmental legislation and the impact of processes and technologies associated with fire, emergency and security systems.
Behaviours	What is required
Honesty and Integrity	Develop and retain trust with customers and colleagues by undertaking responsibilities in an ethical and empathetic manner.
Dependable and responsible	Show commitment through being punctual, reliable, diligent and professional. Take responsibility for own judgements and actions to achieve quality focussed outcomes.
Positive can-do attitude	Demonstrate drive and flexibility in fulfilling requirements of role.
Openness to learning	Take responsibility and fulfil own development and the needs of others. Keep up-to-date with best practice. Maintain continuous professional development.
Work with others	Work productively and engage with colleagues, clients, other trades, suppliers and the public.
Safe and Sustainable working	Take responsibility for promoting a healthy and safe working environment. Give consideration to appropriate use of resources and own actions taking into account the impact on environmental, social and economic factors.
Supervisory	Take responsibility for own work and safety and welfare of others. Oversee and organise the programme of work and work environment. Carry out work and manage resources in an environmentally friendly manner.

Options	Knowledge	Skills
Fire	Understand: the relationship of fire detection and alarms to the fire industry, the principles and features for design criteria, and the methods of surveying new and existing systems The Planning and project management for system installation, commissioning and handover. The preventative and corrective maintenance of fire detection and alarm systems, emergency systems and components.	Apply and implement system design, planning, installation, testing, commissioning and handover. Carry out preventative and corrective maintenance, diagnosis and repair faults, of fire detection and alarm and other emergency systems and components.
Security	Understand: the requirement and implementation of security risk assessments, the principles, functions and operation for design criteria. The planning and project management for system installation, commissioning and handover. The preventative and corrective maintenance of Intruder and hold up alarms, Access Control, video surveillance (CCTV) and other electronic security systems and components.	Apply and implement system design, planning, installation, testing, commissioning and handover. Carry out preventative and corrective maintenance, diagnosis and repair faults, of Intruder and holdup alarms, Access Control, video surveillance (CCTV) and other electronic security systems and components.

