

ACARA Code	Section	Completed
ACTDEK020 - Investigate how forces or electrical energy can control movement, sound or light in a designed product of system	RCJA 1, RCJA 6, RCJA 8, RCJA 10	
ACTDEK031 - Analyse how motion, force and energy are used to manipulate and control electromechanical systems when designing simple, engineered solutions		
ACTDEK043 - Investigate and make judgments on how the characteristics and properties of materials are combined with force, motion and energy to create engineered solutions	RCJA 3	
ACTDEK023 - Investigate characteristics and properties of a range of materials, systems, components, tools and equipment and evaluate the impact of their use		
ACTDEK034 - Analyse ways to produce designed solutions through selecting and combining characteristics and properties of materials, systems, components, tools and equipment		
ACTDEK046 - Investigate and make judgments on how the characteristics and properties of materials, systems, components, tools and equipment can be combined to create designed solutions		
ACTDEK047 - Investigate and make judgments, within a range of technologies specialisations, on how technologies can be combined to create designed solutions	RCJA 1, RCJA 8, RCJA 10	
ACTDEP024 - Critique needs or opportunities for designing, and investigate materials, components, tools, equipment and processes to achieve intended designed solutions		
ACTDEP035 - Critique needs or opportunities for designing and investigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas		
ACTDEP048 - Critique needs or opportunities to develop design briefs and investigate and select an increasingly sophisticated range of materials, systems, components, tools and equipment to develop design ideas	RCJA 4, RCJA 5, RCJA 8	
ACTDEP025 - Generate, develop, communicate and document design ideas and processes for audiences using appropriate technical terms and graphical representation techniques		
ACTDEP036 - Generate, develop, test and communicate design ideas, plans and processes for various audiences using appropriate technical terms and technologies including graphical representation techniques	RCJA 5, RCJA 6, RCJA 8	
ACTDEP049 - Apply design thinking, creativity, innovation and enterprise skills to develop, modify and communicate design ideas of increasing sophistication		
ACTDEP026 - Apply safe procedures when using a variety of materials, components, tools, equipment and techniques to make designed solutions	RCJA 5, RCJA 6, RCJA 8	
ACTDEP037 - Effectively and safely use a broad range of materials, components, tools, equipment and techniques to make designed solutions		
ACTDEP050 - Work flexibly to safely test, select, justify and use appropriate technologies and processes to make designed solutions	RCJA 5	
ACTDEP027 - Negotiate criteria for success that include consideration of sustainability to evaluate design ideas, processes and solutions		
ACTDEP038 - Independently develop criteria for success to assess design ideas, processes and solutions and their sustainability		
ACTDEP051 - Evaluate design ideas, processes and solutions against comprehensive criteria for success recognising the need for sustainability	RCJA 2, RCJA 9	
ACTDEP028 - Develop project plans that include consideration of resources when making designed solutions individually and collaboratively		
ACTDEP039 - Use project management processes when working individually and collaboratively to coordinate production of designed solutions	RCJA 3, RCJA 4, RCJA 7	
ACTDEP052 - Develop project plans using digital technologies to plan and manage projects individually and collaboratively taking into consideration time, cost, risk and production processes		
ACTDIK014 - Investigate the main components of common digital systems, their basic functions and interactions, and how such digital systems may connect together to form networks to transmit data	RCJA 3, RCJA 4, RCJA 7	
ACTDIK023 - Investigate how data are transmitted and secured in wired, wireless and mobile networks, and how the specifications of hardware components impact on network activities		
ACTDIK034 - Investigate the role of hardware and software in managing, controlling and securing the movement of and access to data in networked digital systems	RCJA 1, RCJA 3	
ACTDIP017 - Define problems in terms of data and functional requirements, and identify features similar to previously solved problems		
ACTDIP027 - Define and decompose real-world problems taking into account functional requirements and economic, environmental, social, technical and usability constraints		
ACTDIP038 - Precisely define and decompose real-world problems, taking into account functional and non-functional requirements and including interviewing stakeholders to identify needs	RCJA 4, RCJA 5, RCJA 7	
ACTDIP019 - Design, modify and follow simple algorithms represented diagrammatically and in English involving sequences of steps, branching, and iteration (repetition)		
ACTDIP029 - Design algorithms represented diagrammatically and in English, and trace algorithms to predict output for a given input and to identify errors		
ACTDIP040 - Design algorithms represented diagrammatically and in structured English and validate algorithms and programs through tracing and test cases		
ACTDIP020 - Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input	RCJA 5, RCJA 7, RCJA 10	
ACTDIP030 - Implement and modify programs with user interfaces involving branching, iteration and functions in a general-purpose programming language		
ACTDIP041 - Implement modular programs, applying selected algorithms and data structures including using an object-oriented programming language		
ACTDIP021 - Explain how developed solutions and existing information systems are sustainable and meet local community needs, considering opportunities and consequences for future applications	RCJA 2, RCJA 9	
ACTDIP031 - Evaluate how well developed solutions and existing information systems meet needs, are innovative and take account of future risks and sustainability		
ACTDIP042 - Critically evaluate how well developed solutions and existing information systems and policies take account of future risks and sustainability and provide opportunities for innovation and enterprise	RCJA 2, RCJA 9	
ACTDIP022 - Manage the creation and communication of ideas and information including online collaborative projects, applying agreed ethical, social and technical protocols		
ACTDIP033 - Plan and manage projects, including tasks, time and other resources required, considering safety and sustainability	RCJA 2, RCJA 9	
ACTDIP044 - Plan and manage projects using an iterative and collaborative approach, identifying risks and considering safety and sustainability		