Comparison of AC v8.4 to v9.0

ACiQ | v9.0

Years 9–10 band: Design and Technologies

Key	same/refined	removed	new	moved

Note:
- the key applies to the content descriptions only
- v8.4 content descriptions may have been reordered to align with v9.0 content descriptions.

Version 8.4	Version 9.0
Achievement standard	**Achievement standard**
By the end of Year 10, students explain how people working in design and technologies occupations consider factors that impact on design decisions and the technologies used to produce products, services and environments. They identify the changes necessary to designed solutions to realise preferred futures they have described. When producing designed solutions for identified needs or opportunities, students evaluate the features of technologies and their appropriateness for purpose for one or more of the technologies contexts. Students create designed solutions for one or more of the technologies contexts based on a critical evaluation of needs or opportunities. They establish detailed criteria for success, including sustainability considerations, and use these to evaluate their ideas and designed solutions and processes. They create and connect design ideas and processes of increasing complexity and justify decisions. Students communicate and document projects, including marketing for a range of audiences. They independently and collaboratively apply sequenced production and management plans when producing designed solutions, making adjustments to plans when necessary. They select and use appropriate technologies skilfully and safely to produce high-quality designed solutions suitable for the intended purpose.	By the end of Year 10 students explain how people consider factors that impact on design decisions and the technologies used to design and produce products, services and environments for sustainable living. They explain the contribution of innovation, enterprise skills and emerging technologies to global preferred futures. For one or more of the technologies contexts, students explain the features of technologies and their appropriateness for purpose, and create designed solutions based on an analysis of needs or opportunities. Students create, adapt and refine design ideas, processes and solutions and justify their decisions against developed design criteria that include sustainability. They communicate design ideas, processes and solutions to a range of audiences, including using digital tools. Students independently and collaboratively develop and apply production and project management plans, adjusting processes when necessary. They select and use technologies skilfully and safely to produce designed solutions.

Strands	Sub-strands	Content descriptions	Content descriptions	Sub-strands	Strands
Knowledge and understanding	Technologies and society	critically analyse factors, including social, ethical and sustainability considerations, that impact on designed solutions for global preferred futures and the complex design and production processes involved ACTDEK040	analyse how people in design and technologies occupations consider ethical, security and sustainability factors to innovate and improve products, services and environments AC9TDE10K01	Technologies and society	Knowledge and understanding
		explain how products, services and environments evolve with consideration of preferred futures and the impact of emerging technologies on design decisions ACTDEK041	analyse the impact of innovation, enterprise and emerging technologies on designed solutions for global preferred futures AC9TDE10K02		
	Engineering principles and systems	investigate and make judgements on how the characteristics and properties of materials are combined with force, motion and energy to create engineered solutions ACTDEK043	analyse and make judgements on how the characteristics and properties of materials are combined with force, motion and energy to control engineered systems AC9TDE10K03	Engineering principles and systems	
	Food and fibre production	investigate and make judgements on the ethical and sustainable production and marketing of food and fibre ACTDEK044	analyse and make judgements on the ethical, secure and sustainable production and marketing of food and fibre enterprises AC9TDE10K04	Food and fibre production	
	Food specialisations	investigate and make judgements on how the principles of food safety, preservation, preparation, presentation and sensory perceptions influence the creation of food solutions for healthy eating ACTDEK045	analyse and make judgements on how the sensory and functional properties of food influence the design and preparation of sustainable food solutions for healthy eating AC9TDE10K05	Food specialisations	
	Materials and technologies specialisations	investigate and make judgements on how the characteristics and properties of materials, systems, components, tools and equipment can be combined to create designed solutions ACTDEK046	analyse and make judgements on how characteristics and properties of materials, systems, components, tools and equipment can be combined to create designed solutions AC9TDE10K06	Materials and technologies specialisations	
		investigate and make judgements, within a range of technologies specialisations, on how technologies can be combined to create designed solutions ACTDEK047			
Processes and production skills	Investigating and defining	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 ACTDEP048	analyse needs or opportunities for designing; develop design briefs; and investigate, analyse and select materials, systems, components, tools and equipment to create designed solutions AC9TDE10P01	Investigating and defining	Processes and production skills
	Generating and designing	develop, modify and communicate design ideas by applying design thinking, creativity, innovation and enterprise skills of increasing sophistication ACTDEP049	apply innovation and enterprise skills to generate, test, iterate and communicate design ideas, processes and solutions, including using digital tools AC9TDE10P02	Generating and designing	
	Producing and implementing	work flexibly to effectively and safely test, select, justify and use appropriate technologies and processes to make designed solutions ACTDEP050	select, justify, test and use suitable technologies, skills and processes, and apply safety procedures to safely make designed solutions AC9TDE10P03	Producing and implementing	
	Evaluating	evaluate design ideas, processes and solutions against comprehensive criteria for success recognising the need for sustainability ACTDEP051	develop design criteria independently including sustainability to evaluate design ideas, processes and solutions AC9TDE10P04	Evaluating	
	Collaborating and managing	develop project plans using digital technologies to plan and manage projects individually and collaboratively taking into consideration time, cost, risk and production processes ACTDEP052	develop project plans for intended purposes and audiences to individually and collaboratively manage projects, taking into consideration time, cost, risk, processes and production of designed solutions AC9TDE10P05	Collaborating and managing	