# Curriculum connections

#### Science

## Years 7, 8, 9 and 10

### Science as a Human Endeavour—Use and influence of science

Solutions to contemporary issues that are found using science and technology, may impact other areas of society and may involve ethical considerations ACSHE120, ACSHE135

People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity ACSHE121, ACSHE136

People use scientific knowledge to evaluate whether they accept claims, explanations or predictions, and advances in science to affect people's lives, including generating new career opportunities ACSHE160, ACSHE194

Values and needs of contemporary society can influence the focus of scientific research ACSHE228, ACSHE230

# Science as a Human Endeavour—Nature and development of science

Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures ACSHE223

# Technologies

# Years 7 and 8

#### Design and Technologies-Knowledge and Understanding

Investigate the ways in which products, services and environments evolve locally, regionally and globally and how competing factors including social, ethical and sustainability considerations are prioritised in the development of technologies and designed solutions for preferred futures ACTDEK029

Analyse how food and fibre are produced when designing managed environments and how these can become more sustainable ACTDEKO32

#### Design and Technologies-Process and Production Skills

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 ACTDEP035

Generate, develop, test and communicate design ideas, plans and processes for various audiences using appropriate technical terms and technologies including graphical representation techniques ACTDEP036

Select and justify choices of materials, components, tools, equipment and techniques to effectively and safely make designed solutions ACTDEP037

Independently develop criteria for success to evaluate design ideas, processes and solutions and their sustainability ACTDEP038

Use project management processes when working individually and collaboratively to coordinate production of designed solution ACTDEP039

#### Years 9 and Year 10

## Design and Technologies-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

Investigate and make judgements on the ethical and sustainable production and marketing of food and fibre ACTDEK044

#### Design and Technologies-Process and Production Skills

Investigate and make judgements, within a range of technologies specialisations, on how technologies can be combined to create designed solutions ACTDEKO47

Develop, modify and communicate design ideas by applying design thinking, creativity, innovation and enterprise skills of increasing sophistication ACTDEP049

Work flexibly to effectively and safely test, select, justify and use appropriate technologies and processes to make designed solutions ACTDEP050

Evaluate design ideas, processes and solutions against comprehensive criteria for success recognising the need for sustainability ACTDEP051

Develop project plans using digital technologies to plan and manage projects individually and collaboratively taking into consideration time, cost, risk and production processes ACTDEP052

# Cross-curriculum Priority

Sustainability.

# **General Capabilities**

Literacy, ICT capability, Critical and creative thinking, Ethical understanding, and Personal and social capability.

(source: 2021 National Science Week Teacher Resource Book, ASTA, pp. 74)