SCIENCE GALLERY MELBOURNE

CURRICULUM LINKS

SWARM: Drone Workshop

Level 7-8

Critical and Creative Thinking

Suspend judgements temporarily and consider how preconceptions may limit ideas and alternatives (VCCCTQ033)

Ethical

Discuss the role of context and experience in ethical decision-making and actions (VCECD018)

Personal and Social Capability

Explore their personal values and beliefs and analyse how these values and beliefs might be different or similar to those of others (VCPSCSO038)

Design and Technologies

Examine and prioritise competing factors including social, ethical, economic and sustainability considerations in the development of technologies and designed solutions to meet community needs for preferred futures (VCDSTS043)

Investigate the ways in which designed solutions evolve locally, nationally, regionally and globally through the creativity, innovation and enterprise of individuals and groups (VCDSTS044)

Digital Technologies

Define and decompose real-world problems taking into account functional requirements and sustainability (economic, environmental, social), technical and usability constraints (VCDTCD040)

Science

Scientific knowledge and understanding of the world changes as new evidence becomes available; science knowledge can develop through collaboration and connecting ideas across the disciplines and practice of science (VCSSU089)

Level 9-10

Critical and Creative Thinking

Suspend judgements to allow new possibilities to emerge and investigate how this can broaden ideas and solutions (VCCCTQ044)

Ethical

Discuss issues raised by thinking about consequences and duties, in approaches to decision-making and action, and arguments for and against these approaches (VCECD022)

Personal and Social Capability

Analyse how divergent values and beliefs contribute to different perspectives on social issues (VCPSCSO047)

Design and Technologies

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 (VCDSTS054)

Explain how designed solutions evolve with consideration of preferred futures and the impact of emerging technologies on design decisions (VCDSTS055)

Science

Advances in scientific understanding often rely on developments in technology and technological advances are often linked to scientific discoveries (VCSSU115)

The values and needs of contemporary society can influence the focus of scientific research (VCSSU116)

Level 7-8

Science (continued.)

Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations (VCSSU090)

Mathematics

Demonstrate that the angle sum of a triangle is 180° and use this to find the angle sum of a quadrilateral (VCMMG263)

Classify triangles according to their side and angle properties and describe quadrilaterals (VCMMG262)

Identify corresponding, alternate and co-interior angles when two straight lines are crossed by a transversal (VCMMG264)

Visual Arts

Explore visual arts practices as inspiration to explore and develop themes, concepts or ideas in artworks (VCAVAE033)

Explore how artists use materials, techniques, technologies and processes to realise their intentions in artworks (VCAVAE034)

Analyse how ideas and viewpoints are expressed in artworks and how they are viewed by audiences (VCAVAR038)

Identify and connect specific features of visual artworks from different cultures, historical and contemporary times, including artworks by Aboriginal and Torres Strait Islander peoples (VCAVAR039)

Level 9-10

Mathematics

Investigate Pythagoras' Theorem and its application to solving simple problems involving right angled triangles (VCMMG318)

Apply trigonometry to solve right-angled triangle problems (VCMMG320)

Visual Arts

Explore the visual arts practices and styles as inspiration to develop a personal style, explore, express ideas, concepts and themes in art works (VCAVAE040)

Explore how artists manipulate materials, techniques, technologies and processes to develop and express their intentions in art works (VCAVAE041)

Analyse and interpret artworks to explore the different forms of expression, intentions and viewpoints of artists and how they are viewed by audiences (VCAVAR045)