

TECHNOLOGIES

LEARNING AREA OVERVIEW

Learning Area Statement:

“Technologies enrich and impact the lives of people and societies globally. Australia needs enterprising individuals who can make discerning decisions about the development and use of technologies and who can independently and collaboratively develop solutions to complex challenges and contribute to sustainable patterns of living. Technologies play an important role in transforming, restoring and sustaining societies and natural, managed and constructed environments”.

(ACARA, 2021) <https://www.australiancurriculum.edu.au/f-10-curriculum/technologies/introduction/>

BIG IDEAS:

Preferred Futures • Project Management • Mindsets: Design, Systems and Computational Thinking • ICT Capabilities • Ethics/Sustainability



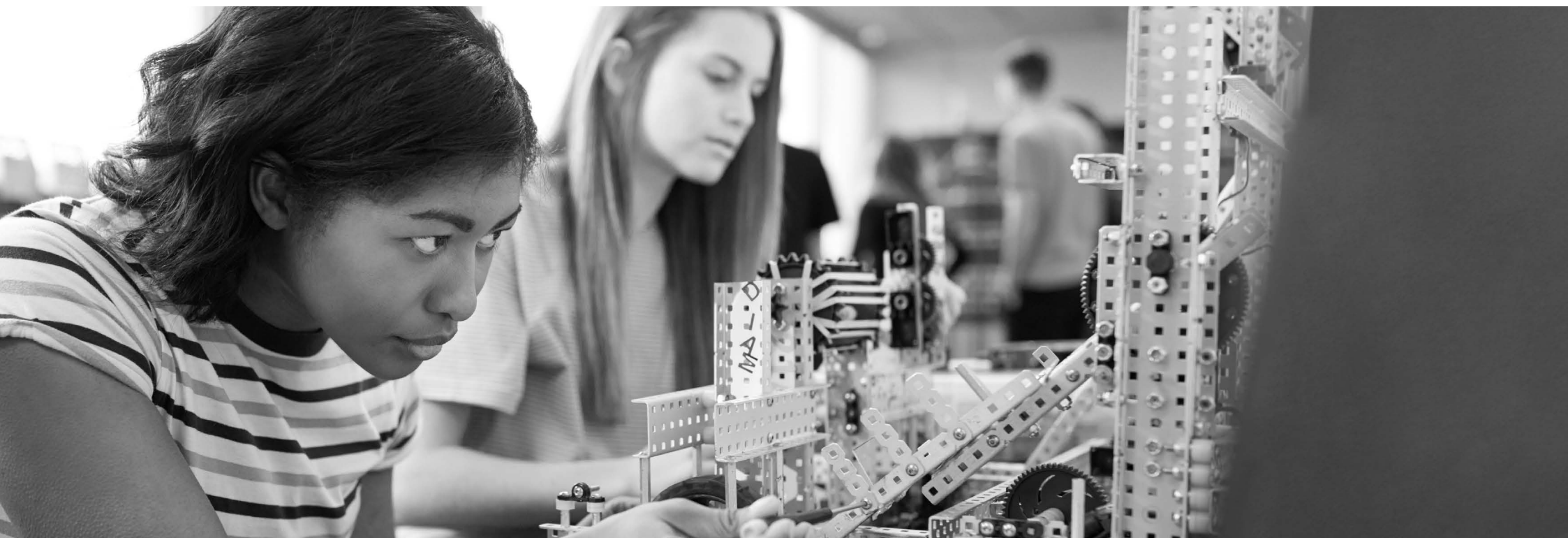
Catholic
Education
Tasmania

independent
schools
tasmania

Planned expiry of current courses*:

EXPIRING END 2021	EXPIRING END 2022	EXPIRING END 2023	EXPIRING END 2024	EXPIRING END 2025	EXPIRING END 2026	EXPIRING END 2027
Engineering Design 2 Technical Graphics Foundation 2 Technical Graphics 3	Basic Computing 1	Electronics Foundation 2 Essential Skills - Using Computers and the Internet 2 Computer Science 3 Electronics 3 Information Systems and Digital Technologies 3	Workshop Techniques - Introduction 1 Food and Cooking Essentials 1 Computer Applications 2 Computer Graphics and Design - Foundation 2 Computer Graphics and Design 3 Housing and Design 3	Automotive and Mechanical Technologies 2 Design and Production 2 Food and Hospitality Enterprise 2	Preliminary Technologies Stages 1-4 Agricultural Enterprise 2 Food, Cooking and Nutrition 2 Agricultural Systems 3 Food and Nutrition 3	Nil

* Subject to development, accreditation and course renewal processes



Current Complementary Offerings Include:



HAP

- Programming Fundamentals
- Programming



UCP

- Object Design



CERT I, II, III

Cert I

- Aquaculture
- Agri-food Operations
- Automotive Workshop Practices
- Automotive Vocational Preparation
- Engineering

Cert II

- Agriculture
- Aquaculture
- Horticulture
- Hospitality
- Kitchen Operations
- Automotive and Mechanical Technologies
- Automotive Servicing
- Engineering Pathways
- Electrotechnology

Cert III

- Agriculture
- Hospitality



ASBA

Australian School-based Apprenticeships

An Australian School-based Apprenticeship (ASbA) is a paid, employment-based training arrangement.

Students in Year 10, 11 or 12 are able to combine work, training and education to gain a nationally recognised qualification, usually at Certificate II or III level – across almost every industry sector and training package.

What could an ASbA look like in the Technologies learning area?

This learning area complements ASbA pathways. For example, a learner could be employed as a school-based apprentice one or two days a week in the manufacturing industry.

For further information please visit the Department of Education's Website - <https://www.education.tas.gov.au/parents-carers/parent-fact-sheets/australian-school-based-apprenticeship-asba/>



KEY TASMANIAN INDUSTRIES

- Food and Agribusiness
- Forestry and Related Industries
- Building and Construction
- Advanced Manufacturing
- Renewable Energy
- Information, Communication & Technology
- Defence
- Antarctic and Southern Oceans

Planned course provision*

PRELIM	LEVEL 1	LEVEL 2	LEVEL 3 (and further pathways)	LEVEL 3/4 (and further pathways)
Preliminary Technologies (Stages 1 - 4)	Design and Technology	Engineering Design	Engineering Design	
		Automotive and Mechanical Technologies	VET Pathway @ Cert 2	
		Design Principles	Design Principles - Computer Graphics and Design	
			Design Principles - Spatial Design	
		Electronics and Advanced Technologies	Electronics and Advanced Technologies	
	Digital Projects	Materials Design and Production	UCP Object Design	
		Essential Skills Digital Literacy (5)		
		Digital Technologies	Digital Technologies - Computer Science	
	Food and Agriculture		Digital Technologies - Digital Management and Leadership	
		Agriculture	Agriculture	
Food and Nutrition		Food and Nutrition		
	Food and Hospitality	VET Pathway @ Cert 2		

KEY - Focus Areas

■ Transdisciplinary Projects	■ Professional Studies	■ Discipline-based Study
■ Work-based Learning	■ Personal Futures	

* Subject to development, accreditation and course renewal processes.
 † An alternative for Computer Applications will be developed as part of the Life Ready Learner module suite. View the Planned Course Provision Document for details.

Current pathways in – pathways out

PATHWAYS IN		PATHWAYS OUT		
<p>Australian Curriculum</p> <p>Learners can study Design and Technologies, and Digital Technologies as part of the Year 9 and 10 Band of the Australian Curriculum: Technologies[§].</p> <p>[§] Technologies curriculum is not mandatory at Years 9 and 10</p> <p>https://www.australiancurriculum.edu.au/f-10-curriculum/technologies</p>	<p>Australian Curriculum – Packages of Learning</p> <p>Packages of Learning are aligned to an identified growth industry and adopt an integrated approach to teaching the Australian Curriculum in years 9 and 10.</p> <ul style="list-style-type: none"> • Advanced Manufacturing • Agriculture, Food & Natural Resources • Architecture & Construction • Hospitality & Tourism 	<p>The Technologies - Design and Digital courses may provide a pathway to certificate or diploma courses offered by TasTAFE and/ or through a private provider, such as:</p> <table style="width: 100%; border: none;"> <tr> <td style="vertical-align: top;"> <p>Design:</p> <ul style="list-style-type: none"> • Food specialisation courses • Materials specialisation courses • Automotive and engineering specialisation courses • Agriculture, Aquaculture and Horticulture courses </td> <td style="vertical-align: top;"> <p>Digital:</p> <ul style="list-style-type: none"> • Digital specialisation courses • Software specialisation </td> </tr> </table> <p>Pathways to Tertiary study</p> <p>The University of Tasmania has a broad range of offerings at both undergraduate and postgraduate level for learners in the Technologies area.</p>	<p>Design:</p> <ul style="list-style-type: none"> • Food specialisation courses • Materials specialisation courses • Automotive and engineering specialisation courses • Agriculture, Aquaculture and Horticulture courses 	<p>Digital:</p> <ul style="list-style-type: none"> • Digital specialisation courses • Software specialisation
<p>Design:</p> <ul style="list-style-type: none"> • Food specialisation courses • Materials specialisation courses • Automotive and engineering specialisation courses • Agriculture, Aquaculture and Horticulture courses 	<p>Digital:</p> <ul style="list-style-type: none"> • Digital specialisation courses • Software specialisation 			

Curriculum priorities



ENGAGEMENT

Strengthening engagement for learners with innovative curriculum at point of need and place



PATHWAYS

Strengthening pathways for learners through a tailored and future-focussed curriculum that leads into further education, training and work



WORK AND LIFE

Preparing learners for work and life with contemporary curriculum that leads to productive and fulfilling lives

Planned course provision by year*

2022

PRELIM	LEVEL 1	LEVEL 2	LEVEL 3 (and further pathways)	LEVEL 3/4 (and further pathways)
Preliminary Technologies (Stages 1 - 4)	Workshop Techniques Introduction (10)	Engineering Design		
		Automotive and Mechanical Technologies (15)		
		Computer Graphics and Design Foundation (15)	Computer Graphics and Design (15)	
			Housing and Design (15)	
		Electronics Foundation (15)	Electronics (15)	
	Basic Computing (10)	Design and Production (15)	UCP Object Design	
		Essential Skills - Using Computers and the Internet (5)		
		Computer Applications (5)	Computer Science (15)	
			Information Systems and Digital Technologies (15)	
		Food and Cooking Essentials (10)	Food and Hospitality Enterprise (15)	Food and Nutrition (15)

* Subject to development, accreditation and course renewal processes

Planned course provision by year*

2023

PRELIM	LEVEL 1	LEVEL 2	LEVEL 3 (and further pathways)	LEVEL 3/4 (and further pathways)
Preliminary Technologies (Stages 1 - 4)	Workshop Techniques Introduction (10)	Engineering Design	Engineering Design	
		Automotive and Mechanical Technologies (15)		
		Computer Graphics and Design Foundation (15)	Computer Graphics and Design (15)	
			Housing and Design (15)	
		Electronics Foundation (15) Design and Production (15)	Electronics (15) UCP Object Design	
	Digital Projects	Essential Skills - Using Computers and the Internet (5) Computer Applications (5)	Computer Science (15)	
		Agricultural Enterprise (15)	Information Systems and Digital Technologies (15)	
	Food and Cooking Essentials (10)	Food Cooking and Nutrition (15) Food and Hospitality Enterprise (15)	Agricultural Systems (15) Food and Nutrition (15)	

2024

PRELIM	LEVEL 1	LEVEL 2	LEVEL 3 (and further pathways)	LEVEL 3/4 (and further pathways)
Preliminary Technologies (Stages 1 - 4)	Workshop Techniques Introduction (10)	Engineering Design	Engineering Design	
		Automotive and Mechanical Technologies (15)	Computer Graphics and Design (15)	
		Computer Graphics and Design Foundation (15)	Housing and Design (15)	
		Electronics and Advanced Technologies Design and Production (15)	Electronics and Advanced Technologies UCP Object Design	
		Digital Projects	Essential Skills Digital Literacy (5) Computer Applications (5) Digital Technologies	Digital Technologies - Computer Science Digital Technologies - Digital Management and Leadership
		Agricultural Enterprise (15)	Agricultural Systems (15)	
	Food and Cooking Essentials (10)	Food Cooking and Nutrition (15) Food and Hospitality Enterprise (15)	Food and Nutrition (15)	

* Subject to development, accreditation and course renewal processes.

† A replacement for Computer Applications will be developed as part of the Life Ready Learner module suite. View the Planned Course Provision Document for details.

Planned course development activity by year*

2022

Early Development	Development and Accreditation	Resource Development and Professional Learning	Implementation		NO LONGER AVAILABLE
TRANCHE 3	TRANCHE 2	TRANCHE 1B	TRANCHE 1A	TYPE	
1 Design and Technology	2 Digital Technologies	1 Digital Projects	2 Engineering Design	■	Engineering Design (EDN215118)
1 Food and Agriculture	2 Electronics and Advanced Technologies	3 Engineering Design			Technical Graphics - Foundation (TEG215120)
2 Design Principles	2 Essential Skills Digital Literacy				Technical Graphics (TEG315120)
3 Design Principles - Computer Graphics and Design	3 Digital Technologies - Computer Science				
3 Design Principles: Spatial Design	3 Digital Technologies - Digital Management and Leadership				
	3 Electronics and Advanced Technologies				

2023

Early Development	Development and Accreditation	Resource Development and Professional Learning	Implementation		NO LONGER AVAILABLE
TRANCHE 4	TRANCHE 3	TRANCHE 2	TRANCHE 1B	TYPE	
2 Automotive and Mechanical Technologies	1 Design and Technology	2 Digital Technologies	1 Digital Projects	★	Basic Computing (ICT110114)
2 Materials Design and Production	1 Food and Agriculture	2 Electronics and Advanced Technologies	3 Engineering Design	★	
2 Food and Hospitality	2 Design Principles	2 Essential Skills Digital Literacy			
	3 Design Principles - Computer Graphics and Design	3 Digital Technologies - Computer Science			
	3 Design Principles - Spatial Design	3 Digital Technologies - Digital Management and Leadership			
		3 Electronics and Advanced Technologies			

KEY - Type

■ Evolution of previously existing TASC-Accredited Course

★ New Contemporary Course

* Subject to development, accreditation and course renewal processes.

Planned course development activity by year*

2024

Early Development	Development and Accreditation	Resource Development and Professional Learning	Implementation		NO LONGER AVAILABLE
TRANCHE 5	TRANCHE 4	TRANCHE 3	TRANCHE 2	TYPE	
P Preliminary Technologies	2 Automotive and Mechanical Technologies	1 Design and Technology	2 Digital Technologies	★	
2 Food and Nutrition	2 Materials Design and Production	1 Food and Agriculture	2 Electronics and Advanced Technologies	■	Electronics Foundation (ELT215114)
2 Agriculture	2 Food and Hospitality	2 Design Principles	2 Essential Skills Digital Literacy (5)	★	Essential Skills - Using Computers and the Internet (ESC205114)
3 Food and Nutrition		3 Design Principles - Computer Graphics and Design	3 Digital Technologies - Computer Science	■	Computer Science (ICT315118)
3 Agriculture		3 Design Principles - Spatial Design	3 Digital Technologies - Digital Management and Leadership	★	Information Systems and Digital Technologies (ITS315118)
			3 Electronics and Advanced Technologies	■	Electronics (ELT315114)

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