

Stage 6 Technology syllabus links

This document is part of the [Stage 6 Literacy in context – Writing](#) resource. It outlines the suggested [Stage 6 Technology syllabus](#) outcomes linked to the resource activities.

Teachers are strongly advised to always use the syllabus documents on the [NESA website](#). That way teachers are assured of using the most up to date and complete syllabuses for their subject.

Board developed courses are listed first, followed by the board developed life skills courses.

Agriculture

Objectives and outcomes

Students will develop:

1. knowledge and understanding of the physical, chemical, biological, social, historical and economic factors that interact in agricultural production systems

A student:

- **P1.1** describes the complex, dynamic and interactive nature of agricultural production systems
- **P1.2** describes the factors that influence agricultural systems
- **H1.1** explains the influence of physical, biological, social, historical and economic factors on sustainable agricultural production

Students will develop:

2. knowledge, understanding and skills required to manage agricultural production systems in a socially and environmentally responsible manner

A student:

- **P2.1** describes the biological and physical resources and applies the processes that cause changes in plant production systems
- **P2.2** describes the biological and physical resources and applies the processes that cause changes in animal production systems

- **P2.3** describes the farm as a basic unit of production
- **H2.1** describes the inputs, processes and interactions of plant production systems
- **H2.2** describes the inputs, processes and interactions of animal production systems

Students will develop:

3. knowledge of, and skills in, decision-making and the evaluation of technology and management techniques used in sustainable agricultural production and marketing

A student:

- **P3.1** explains the role of decision-making in the management and marketing of agricultural products in response to consumer and market requirements
- **H3.1** assesses the general business principles and decision-making processes involved in sustainable farm management and marketing of farm products
- **H3.2** critically assesses the marketing of a plant OR animal product
- **H3.3** critically examines the technologies and technological innovations employed in the production and marketing of agricultural products
- **H3.4** evaluates the management of the processes in agricultural systems

Students will develop:

4. skills in effective research, experimentation and communication

A student:

- **P4.1** applies the principles and procedures of experimental design and agricultural research
- **H4.1** justifies and applies appropriate experimental techniques, technologies, research methods and data presentation and analysis in relation to agricultural problems and situations

Students will develop:

5. knowledge and understanding of the impact of innovation, ethics and current issues on Australian agricultural systems

A student:

- **P5.1** investigates the role of associated technologies and technological innovation in producing and marketing agricultural products
- **H5.1** evaluates the impact of innovation, ethics and current issues on Australian agricultural systems

Design and Technology

Objectives and outcomes

Students will develop:

1. knowledge and understanding about design theory and design processes in a range of contexts

A student:

- **P1.1** examines design theory and practice, and considers the factors affecting designing and producing in design projects
- **H1.1** critically analyses the factors affecting design and the development and success of design projects
- **H1.2** relates the practices and processes of designers and producers to the major design project

Students will develop:

2. knowledge, understanding and appreciation of the interrelationship of design, technology, society and the environment

A student:

- **P2.1** identifies design and production processes in domestic, community, industrial and commercial settings
- **P2.2** explains the impact of a range of design and technology activities on the individual, society and the environment through the development of projects
- **H2.1** explains the influence of trends in society on design and production
- **H2.2** evaluates the impact of design and innovation on society and the environment

Students will develop:

3. creativity and an understanding of innovation and entrepreneurial activity in a range of contexts

A student:

- **H3.1** analyses the factors that influence innovation and the success of innovation

Students will develop:

4. skills in the application of design processes to design, produce and evaluate quality design projects that satisfy identified needs and opportunities

A student:

- **P4.3** evaluates the processes and outcomes of designing and producing
- **H4.1** identifies a need or opportunity and researches and explores ideas for design development and production of the major design project
- **H4.3** evaluates the processes undertaken and the impacts of the major design project

Students will develop:

5. skills in research, communication and management in design and production

A student:

- **P5.1** uses a variety of management techniques and tools to develop design projects
- **P5.2** communicates ideas and solutions using a range of techniques
- **P5.3** uses a variety of research methods to inform the development and modification of design ideas
- **H5.1** manages the development of a quality major design project
- **H5.2** selects and uses appropriate research methods and communication techniques

Students will develop:

6. knowledge and understanding about current and emerging technologies in a variety of settings

A student:

- **P6.1** investigates a range of manufacturing and production processes and relates these to aspects of design projects
- **P6.2** evaluates and uses computer-based technologies in designing and producing
- **H6.1** justifies technological activities undertaken in the major design project through the study of industrial and commercial practices
- **H6.2** critically assesses the emergence and impact of new technologies, and the factors affecting their development

Engineering Studies

Objectives and outcomes

Students will develop:

1. understanding of the scope of engineering and the role of the engineer

A student:

- **P1.1** identifies the scope of engineering and recognises current innovations
- **P1.2** explains the relationship between properties, structure, uses and applications of materials in engineering
- **H1.1** describes the scope of engineering and critically analyses current innovations
- **H1.2** differentiates between the properties and structure of materials and justifies the selection of materials in engineering applications

Students will develop:

2. knowledge and understanding of engineering principles and an appreciation of the responsibilities of engineers in society

A student:

- **P2.1** describes the types of materials, components and processes and explains their implications for engineering development
- **P2.2** describes the nature of engineering in specific fields and its importance to society
- **H2.1** determines suitable properties, uses and applications of materials, components and processes in engineering
- **H2.2** analyses and synthesises engineering applications in specific fields and reports on the importance of these to society

Students will develop:

3. communication skills appropriate to engineering practices

A student:

- **P3.2** develops written, oral and presentation skills and applies these to engineering reports
- **H3.2** uses appropriate written, oral and presentation skills in the preparation of detailed engineering reports

Students will develop:

4. knowledge and understanding of developments in technology and an appreciation of their influence on people and engineering practice

A student:

- **P4.1** describes developments in technology and their impact on engineering products
- **P4.2** describes the influence of technological change on engineering and its effect on people
- **P4.3** identifies the social, environmental and cultural implications of technological change in engineering
- **H4.1** investigates the extent of technological change in engineering
- **H4.2** applies knowledge of history and technological change to engineering-based problems
- **H4.3** applies understanding of social, environmental and cultural implications of technological change in engineering to the analysis of specific engineering problems

Students will develop:

5. skills in the application of engineering methodology

A student:

- **P6.1** applies knowledge and skills in research and problem-solving related to engineering
- **P6.2** applies skills in analysis, synthesis and experimentation related to engineering
- **H6.1** demonstrates skills in research and problem-solving related to engineering
- **H6.2** demonstrates skills in analysis, synthesis and experimentation related to engineering

Food Technology

Objectives and outcomes

Students will develop:

1. knowledge and understanding about food systems in the production, processing and consumption of food and an appreciation of their impact on society

A student:

- **P 1.1** identifies and discusses a range of historical and contemporary factors which influence the availability of particular foods
- **P 1.2** accounts for individual and group food selection patterns in terms of physiological, psychological, social and economic factors
- **H1.1** explains manufacturing processes and technologies used in the production of food products
- **H1.2** examines the nature and extent of the Australian food industry
- **H1.3** justifies processes of food product development and manufacture in terms of market, technological and environmental considerations
- **H1.4** evaluates the impact of the operation of an organisation within the Australian Food Industry on the individual, society and environment

Students will develop:

2. knowledge and understanding about the nature of food, human nutrition and an appreciation of the importance of food to health

A student:

- **P 2.1** explains the role of food nutrients in human nutrition
- **P 2.2** identifies and explains the sensory characteristics and functional properties of food
- **H2.1** evaluates the relationship between food, its production, consumption, promotion and health

Students will develop:

3. skills in researching, analysing and communicating food issues

A student:

- **P 3.1** assesses the nutrient value of meals/diets for particular individuals and groups
- **P 3.2** presents ideas in written, graphic and oral form using computer software where appropriate
- **H3.1** investigates operations of one organisation within the Australian food industry

- **H3.2** independently investigates contemporary nutrition issues

Students will develop:

4. skills in experimenting with and preparing food by applying theoretical concepts

A student:

- **P4.2** plans, prepares and presents foods which reflect a range of the influences on food selection
- **P4.3** selects foods, plans and prepares meals/diets to achieve optimum nutrition for individuals and groups
- **H4.1** develops, prepares and presents food using product development processes

Students will develop:

5. skills in designing implementing and evaluating solutions to food situations

A student:

- **P 5.1** generates ideas and develops solutions to a range of food situations
- **H5.1** develops, realises and evaluates solutions to a range of food situations

Industrial Technology

Objectives and outcomes

Students will develop:

6. knowledge and understanding of the focus area industry and of manufacturing processes and techniques used by industry

A student:

- **P1.1** describes the organisation and management of an individual business within the focus area industry
- **P1.2** identifies appropriate equipment, production and manufacturing techniques, including new and developing technologies
- **H1.1** investigates industry through the study of businesses in one focus area
- **H1.2** identifies appropriate equipment, production and manufacturing techniques and describes the impact of new and developing technologies in industry
- **H1.3** identifies important historical developments in the focus area industry

Students will develop:

7. knowledge and understanding of safe and cooperative work practices and of the need for a safe and cooperative work environment

A student:

- **P2.1** describes and uses safe working practices and correct workshop equipment maintenance techniques
- **H2.1** demonstrates proficiency in the use of safe working practices and workshop equipment maintenance techniques

Students will develop:

8. competence in designing, managing and communicating within a relevant industry context

A student:

- **P3.1** sketches, produces and interprets drawings in the production of projects
- **P3.2** applies research and problem-solving skills
- **P3.3** demonstrates appropriate design principles in the production of projects
- **H3.1** demonstrates skills in sketching, producing and interpreting drawings
- **H3.2** selects and applies appropriate research and problem-solving skills
- **H3.3** applies and justifies design principles through the production of a Major Project

Students will develop:

5. knowledge and skills in communication and information processing related to the industry focus area

A student:

- **P5.1** uses communication and information processing skills
- **P5.2** uses appropriate documentation techniques related to the management of projects
- **H5.1** selects and uses communication and information processing skills
- **H5.2** examines and applies appropriate documentation techniques to project management

Students will develop:

6. an appreciation of quality products and the principles of quality control

A student:

- **P6.1** identifies the characteristics of quality manufactured products
- **P6.2** identifies and explains the principles of quality and quality control
- **H6.1** evaluates the characteristics of quality manufactured products
- **H6.2** applies the principles of quality and quality control

Students will develop:

7. an appreciation of the relationships between technology, the individual, society and the environment

A student:

- **P7.1** identifies the impact of one related industry on the social and physical environment
- **P7.2** identifies the impact of existing, new and emerging technologies of one related industry on society and the environment
- **H7.1** explains the impact of the focus area industry on the social and physical environment
- **H7.2** analyses the impact of existing, new and emerging technologies of the focus industry on society and the environment

Information Processing and Technology

Objectives and outcomes

Students will develop:

1. knowledge and understanding of the nature and function of information systems

A student:

- **P1.1** describes the nature of information processes and information technology
- **P1.2** classifies the functions and operations of information processes and information technology
- **H1.1** applies and explains an understanding of the nature and function of information technologies to a specific practical situation
- **H1.2** explains and justifies the way in which information systems relate to information processes in a specific context

Students will develop:

2. knowledge and understanding of interrelationships among information processes

A student:

- **P2.1** identifies and describes the information processes within an information system
- **P2.2** recognises and explains the interdependence between each of the information processes
- **H2.1** analyses and describes a system in terms of the information processes involved
- **H2.2** develops and explains solutions for an identified need which address all of the information processes

Students will develop:

3. an understanding and appreciation of social and ethical issues pertaining to information systems, technologies and processes

A student:

- **P3.1** identifies and describes social and ethical issues
- **H3.1** evaluates and discusses the effect of information systems on the individual, society and the environment
- **H3.2** demonstrates and explains ethical practice in the use of information systems, technologies and processes

Students will develop:

4. an understanding and appreciation of the emerging nature of information systems, technologies and processes within a historical context

A student:

- **P4.1** describes the historical development of information systems and relates these to current and emerging technologies
- **H4.1** proposes and justifies ways in which information systems will meet emerging needs

Students will develop:

5. skills in the discriminatory selection and ethical use of appropriate resources and tools to support information systems

A student:

- **P5.1** selects and ethically uses computer based and non-computer based resources and tools to process information
- **H5.1** justifies the selection and use of appropriate resources and tools to effectively develop and manage projects
- **H5.2** assesses the ethical implications of selecting and using specific resources and tools, recommends and justifies the choices

Students will develop:

6. skills and techniques to creatively and methodically plan, design and implement information systems to address needs

A student:

- **P6.1** analyses and describes an identified need
- **P6.2** generates ideas, considers alternatives and develops solutions for a defined need
- **H6.1** analyses situations, identifies needs, proposes and then develops solutions
- **H6.2** selects, justifies and applies methodical approaches to planning, designing or implementing solutions

Students will develop:

7. skills in management, communication and teamwork in relation to individual and group activities

A student:

- **P7.1** recognises, applies and explains management and communication techniques used in individual and team-based project work
- **P7.2** uses and justifies technology to support individuals and teams
- **H7.1** implements and explains effective management techniques
- **H7.2** uses methods to thoroughly document the development of individual and team projects

Software Design and Development

Objectives and outcomes

Students will develop:

1. knowledge and understanding about how software solutions utilise and interact with other elements of computer systems

A student:

- **P1.1** describes the functions of hardware and software
- **P1.2** describes and uses appropriate data types
- **P1.3** describes the interactions between the elements of a computer system
- **H1.1** explains the interrelationship between hardware and software
- **H1.2** differentiates between various methods used to construct software solutions
- **H1.3** describes how the major components of a computer system store and manipulate data

Students will develop:

2. knowledge and understanding of the historical developments that have led to current practices in software design and development, and of emerging trends and technologies in this field

A student:

- **P2.1** describes developments in the levels of programming languages
- **P2.2** describes the effects of program language developments on current practices
- **H2.1** explains the implications of the development of different languages
- **H2.2** explains the interrelationship between emerging technologies and software development

Students will develop:

3. knowledge and understanding of legal, social and ethical issues and their effect on software design and development

A student:

- **P3.1** identifies the issues relating to the use of software solutions
- **H3.1** identifies and evaluates legal, social and ethical issues in a number of contexts
- **H3.2** constructs software solutions that address legal, social and ethical issues

Students will develop:

4. skills in designing and developing software solutions

A student:

- **P4.1** analyses a given problem in order to generate a computer-based solution
- **P4.2** investigates a structured approach in the design and implementation of a software solution
- **P4.3** uses a variety of development approaches to generate software solutions and distinguishes between these approaches
- **H4.1** identifies needs to which software solutions are appropriate
- **H4.2** applies appropriate development methods to solve software problems
- **H4.3** applies a modular approach to implement well-structured software solutions and evaluates their effectiveness

Students will develop:

5. skills in management appropriate to the design and development of software solutions

A student:

- **P5.1** uses and justifies the need for appropriate project management techniques
- **P5.2** uses and develops documentation to communicate software solutions to others
- **H5.1** applies project management techniques to maximise the productivity of the software development
- **H5.2** creates and justifies the need for the various types of documentation required for a software solution
- **H5.3** selects and applies appropriate software to facilitate the design and development of software solutions

Students will develop:

6. skills in teamwork and communication associated with the design and development of software solutions

A student:

- **P6.1** describes the skills involved in software development
- **P6.2** communicates with appropriate personnel throughout the software development process
- **P6.3** designs and constructs software solutions with appropriate interfaces
- **H6.1** assesses the skills required in the software development cycle
- **H6.2** communicates the processes involved in a software solution to an inexperienced user

- **H6.3** uses and describes a collaborative approach during the software development cycle
- **H6.4** develops and evaluates effective user interfaces, in consultation with appropriate people

Textiles and Design

Objectives and outcomes

Students will develop:

1. knowledge and understanding of the functional and aesthetic requirements of textiles for a range of applications

A student:

- **P1.1** describes the elements and principles of design and uses them in a variety of applications
- **H1.1** critically analyses and explains the factors that have contributed to the design and manufacture of the Major Textiles Project

Students will develop:

2. practical skills in design and manipulation of textiles through the use of appropriate technologies

A student:

- **P2.1** demonstrates the use of a variety of communication skills, including computer based technology
- **P2.3** manages the design and manufacture of textile projects
- **H2.1** communicates design concepts and manufacturing specifications to both technical and non-technical audiences
- **H2.3** effectively manages the design and manufacture of a Major Textiles Project to completion

Students will develop:

3. the ability to apply knowledge and understanding of the properties and performance of textiles to the development and manufacture of textile items

A student:

- **P3.2** justifies the selection of fabrics, yarns and fibres for end-uses
- **H3.1** explains the interrelationship between fabric, yarn and fibre properties
- **H3.2** develops knowledge and awareness of emerging textile technologies

Students will develop:

4. skills in experimentation, critical analysis and the discriminatory selection of textiles for specific end-uses

A student:

- **H4.1** justifies the selection of fabric, yarn, fibre and fabric finishing techniques for specific end-uses
- **H4.2** selects and justifies manufacturing techniques, materials and equipment for a specific end-use

Students will develop:

5. knowledge and understanding of Australian Textile, Clothing, Footwear and Allied Industries

A student:

- **P5.1** examines the status of the Australian Textile, Clothing, Footwear and Allied Industries within the global context
- **P5.2** investigates the range of career options in design, consumerism, manufacturing and retail sectors of the Australian Textile, Clothing, Footwear and Allied Industries
- **H5.1** investigates and describes aspects of marketing in the textile industry
- **H5.2** analyses and discusses the impact of current issues on the Australian textiles industry

Students will develop:

6. an appreciation of the significance of textiles in society

A student:

- **P6.1** identifies and appreciates the factors that contribute to the quality and value of textiles in society
- **H6.1** analyses the influence of historical, cultural and contemporary developments on textiles

Agriculture Life Skills

Objectives and outcomes

Students will develop:

1. develop knowledge and understanding of a design process

A student:

- **ALS1** recognises that a process is used in agricultural enterprises
- **ALS2** explores factors that influence agricultural enterprises

Students will develop:

2. develop knowledge and skills in a range of technologies for a variety of purposes in an agricultural enterprise

A student:

- **ALS3** demonstrates awareness that technology can be used for a variety of purposes in agricultural enterprises
- **ALS4** demonstrates skills in the context of an agricultural enterprise
- **ALS5** uses a design process in the context of an agricultural enterprise

Students will develop:

3. develop knowledge and understanding of the production process used in agricultural enterprises

A student:

- **ALS6** explores a farm as an agricultural enterprise
- **ALS7** identifies animals and plants in agricultural enterprises
- **ALS8** investigates environmental factors that affect agricultural enterprises

Students will develop:

4. apply knowledge, understanding and skills in the production, management and marketing of agricultural products

A student:

- **ALS9** participates in the production process in an agricultural enterprise
- **ALS10** demonstrates safe practices in the use and care of equipment and materials, and in the treatment and care of animals and plants
- **ALS11** investigates marketing strategies for agricultural products

Students will develop:

5. develop an appreciation of past and current issues impacting on Australian agricultural enterprises

A student:

- **ALS12** demonstrates an awareness of responsible agricultural practices
- **ALS13** explores technological innovation and current issues in producing and marketing agricultural products

Design and Technology Life Skills

Objectives and outcomes

Students will develop:

1. develop knowledge and understanding of a design process

A student:

- **DTLS1** recognises that a process is used to develop design solutions
- **DTLS2** explores factors that influence the development of design solutions

Students will develop:

2. develop knowledge and skills in a range of technologies for a variety of purposes and in the production of a design project

A student:

- **DTLS3** demonstrates awareness that technology can be used for a variety of purposes in a design process
- **DTLS4** demonstrates skills and techniques in the context of a design project
- **DTLS5** uses a design process in the production of a project

Students will develop:

3. develop knowledge and understanding of the factors that impact on design

A student:

- **DTLS6** explores the features of a range of designs
- **DTLS7** identifies materials, technologies and techniques for a range of applications
- **DTLS8** evaluates the suitability of design for a range of applications

Students will develop:

4. develop skills in the application of design processes to design, produce and evaluate quality design projects and satisfy identified needs

A student:

- **DTLS9** selects and uses materials, tools and techniques in producing a design project
- **DTLS10** demonstrates safe practices in the use and care of tools and in the implementation of techniques

Students will develop:

5. develop knowledge, understanding and appreciation of the interrelationship between design, technology, the individual, society and the environment

A student:

- **DTLS11** identifies and explores relationships between design and technology, the individual, society and the environment

Food Technology Life Skills

Objectives and outcomes

Students will develop:

1. develop knowledge and understanding of a design process

A student:

- **FTLS1** recognises that a process is used to develop food design solutions
- **FTLS2** explores factors that influence the development of food design solutions

Students will develop:

2. develop knowledge and skills in a range of technologies for a variety of purposes and in the production of a design project

A student:

- **FTLS3** demonstrates awareness that technology can be used for a variety of purposes in a food design process
- **FTLS4** demonstrates skills and techniques in the context of a food project
- **FTLS5** uses a design process in the production of a food project

Students will develop:

3. develop knowledge and understanding of the properties and characteristics of food for a range of applications

A student:

- **FTLS6** identifies the sensory characteristics and functional properties of a range of food items
- **FTLS7** evaluates the suitability of the sensory characteristics and functional properties of food items for a range of applications

Students will develop:

4. develop an understanding of the nature of food, nutrition and the relationship of food to health

A student:

- **FTLS8** recognises the nutritional value of a variety of foods
- **FTLS9** applies knowledge of the nutritional value of foods to meet a range of dietary and lifestyle needs
- **FTLS10** recognises the impact of food on health and makes informed food choices

Students will develop:

5. develop skills in the selection and use of food, equipment and techniques to produce a variety of food items

A student:

- **FTLS11** selects and uses appropriate ingredients, equipment and techniques in producing quality food items
- **FTLS12** uses hygienic and safe practices in the selection, handling and storage of food
- **FTLS13** demonstrates safe practices in the use of equipment and appliances

Students will develop:

6. develop an appreciation of the significant role of food in society

A student:

- **FTLS14** identifies and explores factors that contribute to the quality and role of food in society

Industrial Technology Life Skills

Objectives and outcomes

Students will develop:

1. develop knowledge and understanding of a design process

A student:

- **ITLS1** recognises that a process is used to develop design solutions
- **ITLS2** explores factors that influence design

Students will develop:

2. develop knowledge and skills in a range of technologies for a variety of purposes and in the production of a project in a selected focus area

A student:

- **ITLS3** demonstrates awareness that technology can be used for a variety of purposes in a design process
- **ITLS4** demonstrates skills and techniques in the context of a project
- **ITLS5** uses a design process in the production of a project

Students will develop:

3. develop knowledge and understanding of a focus area industry

A student:

- **ITLS6** explores a range of industrial products and their features
- **ITLS7** identifies materials and technologies for a range of applications
- **ITLS8** investigates marketing strategies for industrial products

Students will develop:

4. develop skills in producing quality products in a focus area industry

A student:

- **ITLS9** selects and uses appropriate materials, tools and processes in the production of a project
- **ITLS10** demonstrates safe practices in the use and care of tools

Students will develop:

5. develop an appreciation of the relationships between technology, the individual, society and the environment

A student:

- **ITLS11** identifies and explores relationships between a focus area industry, the individual, society and the environment

Information Processes and Technology Life Skills

Objectives and outcomes

Students will develop:

1. develop knowledge and understanding of a design process

A student:

- **IPTLS1** recognises that a process is used to develop information systems
- **IPTLS2** explores factors that influence the design of information systems

Students will develop:

2. develop knowledge and skills in a range of technologies for a variety of purposes and in the production of a design project

A student:

- **IPTLS3** demonstrates awareness that technology can be used for a variety of purposes in the design of information systems
- **IPTLS4** demonstrates skills and techniques in the context of an information systems project
- **IPTLS5** uses a design process in the production of an information systems project

Students will develop:

3. develop knowledge and understanding of the functional requirements of information systems for a range of applications

A student:

- **IPTLS6** explores a range of information systems technology
- **IPTLS7** evaluates the suitability of information technology for a range of applications

Students will develop:

4. apply knowledge and understanding of the nature and performance of information systems

A student:

- **IPTLS8** demonstrates knowledge and understanding of information processes within information systems
- **IPTLS9** demonstrates knowledge and understanding of the relationship between information processes

Students will develop:

5. develop skills in the selection and use of tools and processes to produce and care for an information system for an identified need

A student:

- **IPTLS10** selects and uses appropriate technology for information processes
- **IPTLS11** selects and uses appropriate tools and techniques in using and caring for information systems
- **IPTLS12** demonstrates safe practices in the use of information systems technology

Students will develop:

6. develop an appreciation of social and ethical issues and the significance of information systems in society

A student:

- **IPTLS13** identifies and explores relationships between information systems, the individual, society and the environment

Textiles and Design Life Skills

Objectives and outcomes

Students will develop:

1. develop knowledge and understanding of a design process

A student:

- **TDLS1** recognises that a process is used to develop textile design solutions
- **TDLS2** explores factors that influence textile design

Students will develop:

2. develop knowledge and skills in a range of technologies for a variety of purposes and in the production of a design project

A student:

- **TDLS3** demonstrates awareness that technology can be used for a variety of purposes in a textile design process
- **TDLS4** demonstrates skills and techniques in the context of a textile project
- **TDLS5** uses a design process in the production of a textile project

Students will develop:

3. develop knowledge and understanding of the functional and aesthetic requirements of textiles for a range of applications

A student:

- **TDLS6** explores a range of textiles and their features
- **TDLS7** identifies textiles for a range of applications
- **TDLS8** evaluates the suitability of textile features for a range of applications

Students will develop:

4. apply knowledge and understanding of the properties and performance of textiles

A student:

- **TDLS9** selects fabrics, yarns and fibres for a specific purpose

Students will develop:

5. develop skills in the selection and use of textile materials, equipment and techniques to produce and care for textile items

A student:

- **TDLS10** selects and uses appropriate materials, equipment and techniques in producing textile items
- **TDLS11** selects and uses appropriate equipment and techniques in caring for textile items
- **TDLS12** demonstrates safe practices in the use of equipment

Students will develop:

6. develop an appreciation of the significance of textiles in society

A student:

- **TDLS13** identifies and explores factors that contribute to the quality and value of textiles in society

Computing Applications (CEC)

Objectives and outcomes

Students will develop:

1. skills in the use and understanding of a range of computer software and related terminology

A student:

- **1.1** describes the function and application of a variety of computer software
- **1.2** applies computing terminology appropriately in practical situations
- **1.3** uses appropriate computer software in a given context

Students will develop:

2. knowledge and understanding of the development of computer-based systems, their operations and functions

A student:

- **2.1** describes aspects of human activity which have developed into computer applications
- **2.2** explains the principles and functions of specific hardware components
- **2.3** evaluates the suitability of hardware in a particular context

Students will develop:

3. skills in demonstrating the methods, processes and application of project management techniques to solve problems in a range of contexts

A student:

- **3.1** applies a range of project management techniques in the development of a solution
- **3.2** analyses and documents the steps involved in problem-solving and applies them to producing computer-based solutions
- **3.3** implements, tests, debugs and evaluates solutions using current common application packages

Students will develop:

- 4.** knowledge and understanding of the ethics and impact of computer-based technology and emerging trends on society

A student:

- **4.1** identifies and reflects on the social and technological implications when making decisions about the use of computer software
- **4.2** evaluates the use of a computer-based solution compared to non-computer solutions
- **4.3** identifies social and ethical issues related to the use of computer software

Students will develop:

- 5.** skills in critical evaluation of the appropriateness of computer software in a variety of contexts

A student:

- **5.1** evaluates the suitability of software applications in a particular context

Marine Studies (CEC)

Objectives and outcomes

Students will develop:

1. knowledge, understanding and appreciation that promote sound environmental practices in the marine environment

A student:

- **1.1** relates with a respectful and caring attitude to the ocean and its life forms
- **1.2** identifies the roles of individuals or groups involved in maritime activities
- **1.3** recalls aspects of the maritime environment using relevant conventions, terminology and symbols learned throughout the course
- **1.4** recognises Aboriginal and Torres Strait Islander values and attitudes towards the sea
- **1.5** demonstrates an awareness of the value of the ocean as a source of historical information

Students will develop:

2. the ability to manage activities cooperatively and communicate in a marine context

A student:

- **2.1** appreciates the importance of effective management practice
- **2.2** works effectively within a group
- **2.3** communicates information by writing reports, giving short talks and contributing to discussions

Students will develop:

3. an ability to apply the skills of critical thinking, research and analysis

A student:

- **3.1** evaluates information, situations, equipment manuals and written or manual procedures
- **3.2** collects and organises data by accurately reading instruments, signals and charts; by systematic recording, summarising, tabulating and graphing
- **3.3** generates information from data by calculating, inferring, interpreting and generalising
- **3.4** carries out planned research activities using appropriate measurements, observations, classification and recording skills

Students will develop:

4. knowledge and understanding of marine industries and their interaction with society and with leisure pursuits

A student:

- **4.1** identifies marine vocations and a range of leisure pursuits
- **4.2** appreciates marine environments as sources of employment and leisure

Students will develop:

5. knowledge, understanding and skills of safe practice in the marine context

A student:

- **5.1** values the rules and operating principles of marine equipment and applies them
- **5.2** applies information including weather, regulations, procedures and skills to ensure safe use of the marine environment
- **5.3** interprets and follows instructions, with accuracy
- **5.4** selects, organises, assembles, dismantles, cleans, and returns equipment