

B O A R D O F S T U D I E S
NEW SOUTH WALES

Textiles and Design

Stage 6

Syllabus

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Contents

1	The Higher School Certificate Program of Study.....	5
2	Rationale for Textiles and Design in the Stage 6 Curriculum	6
3	Continuum of Learning for Textiles and Design Stage 6 Students	7
4	Aim	8
5	Objectives	8
6	Course Structure	9
7	Objectives and Outcomes	10
7.1	Table of Objectives and Outcomes.....	10
7.2	Key Competencies	11
8	Content: Textiles and Design Stage 6 Preliminary Course.....	12
9	Content: Textiles and Design Stage 6 HSC Course.....	20
10	Course Requirements	27
11	Post-school Opportunities	29
12	Assessment and Reporting	30
12.1	Requirements and Advice	30
12.2	Internal Assessment	31
12.3	External Examination	31
12.4	Board Requirements for the Internal Assessment Mark in Board Developed Courses	32
12.5	Assessment Components, Weightings and Tasks.....	33
12.6	HSC External Examination Specifications	35
12.7	Summary of Internal and External Assessment.....	38
12.8	Reporting Student Performance Against Students	39

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1 The Higher School Certificate Program of Study

The purpose of the Higher School Certificate program of study is to:

- provide a curriculum structure which encourages students to complete secondary education;
- foster the intellectual, social and moral development of students, in particular developing their:
 - _ knowledge, skills, understanding and attitudes in the fields of study they choose
 - _ capacity to manage their own learning
 - _ desire to continue learning in formal or informal settings after school
 - _ capacity to work collaboratively
 - _ respect for the cultural diversity of Australian society;
- provide a flexible structure within which students can prepare for:
 - _ further education and training
 - _ employment
 - _ full and active participation as citizens;
- provide formal assessment and certification of students' achievements;
- provide a context within which schools also have the opportunity to foster students' physical and spiritual development.

2 Rationale for Textiles and Design in the Stage 6 Curriculum

The *Textiles and Design Stage 6 Syllabus* provides a curriculum structure that reflects the important role that textiles play in society. Textiles protect, provide comfort, have social meaning, respond to cultural influences and perform a range of necessary functions in the textiles industry and other industries.

This syllabus investigates the science and technology of textiles through a study of properties and performance, allowing students to make informed consumer choices in the textiles area. Technological and practical skills are developed and enhanced through the use of textile-related technologies, including those that are computer-based. The concept of design elements and principles, as being both functional and aesthetic and as part of the creative design process, are examined within the specialised field of textiles.

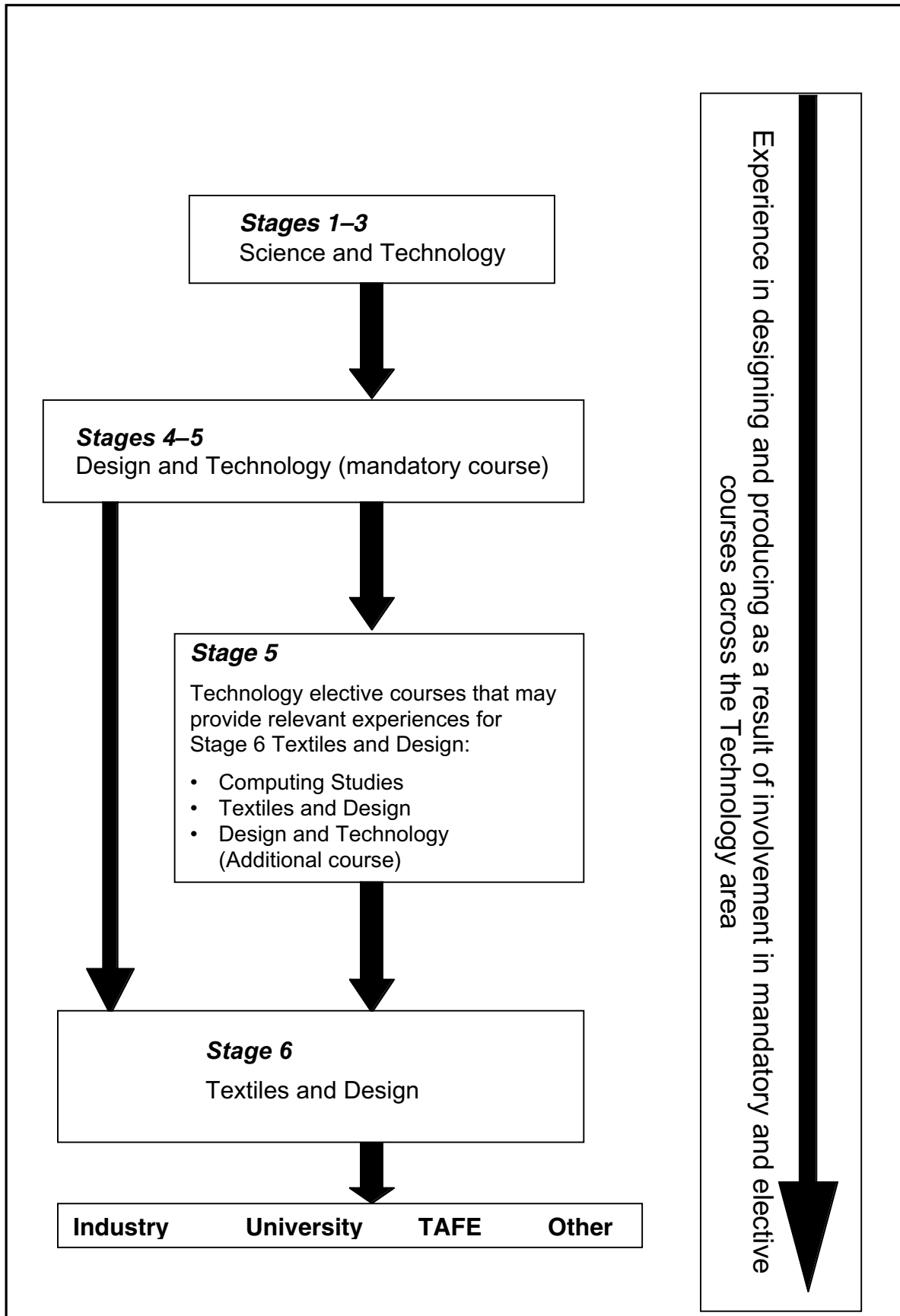
This course investigates textiles in society and promotes a greater understanding of the significance of different cultures and their specific use of textile materials.

Through the area of study relating to the Australian Textile, Clothing, Footwear and Allied Industries, the course offers students the opportunity to explore advances in technology, current issues facing the industry and employment opportunities.

Textiles and Design develops a body of knowledge, skills and values that contribute to the overall education of students and which can provide opportunities for small business and leisure activities useful throughout life. It develops student creativity and project management skills that promote self-esteem and satisfaction. Students develop an understanding that textiles in industry, small business and in leisure activities has an emphasis on project work and students emulate this through the designing, planning and manufacturing of a Major Textiles Project.

The course provides pathways into further education and training or employment in textile related fields, allowing students who undertake Textiles and Design Stage 6 to contribute positively to industry and society.

3 Continuum of Learning for Textiles and Design Stage 6 Students



4 Aim

Textiles and Design Stage 6 is designed to enable students to understand and appreciate the nature and significance of textiles and to develop confidence and competence in the selection, design, manufacture and application of textile items.

5 Objectives

Students will develop:

1. knowledge and understanding of the functional and aesthetic requirements of textiles for a range of applications
2. practical skills in design and manipulation of textiles through the use of appropriate technologies
3. the ability to apply knowledge and understanding of the properties and performance of textiles to the development and manufacture of textile items
4. skills in experimentation, critical analysis and the discriminatory selection of textiles for specific end-uses
5. knowledge and understanding of Australian Textile, Clothing, Footwear and Allied Industries
6. an appreciation of the significance of textiles in society.

6 Course Structure

<p style="text-align: center;">Preliminary Course 120 indicative hours</p>	<p style="text-align: center;">HSC Course 120 indicative hours</p>
<p>Design 40%</p> <ul style="list-style-type: none"> • Elements and principles of design • Types of design • Communication techniques • Manufacturing methods • Preliminary Textile Project 1 focuses on the generation and communication of ideas, design modification, manipulative skills, evaluation of ideas and the project, and management of time and resources <p>Properties and Performance of Textiles 50%</p> <ul style="list-style-type: none"> • Fabric, yarn and fibre structure • Types, classification and identification of fabrics, yarns and fibres • Fabric, yarn and fibre properties • Preliminary Textile Project 2 focuses on an analysis of fabric, yarn and fibre properties, experimental procedures, product design, fabric choice, manipulative and management skills, communication methods and the recording of information <p>Australian Textile, Clothing, Footwear and Allied Industries 10%</p> <ul style="list-style-type: none"> • Industry overview – past, present, future • Quality and value of textiles 	<p>Design 20%</p> <ul style="list-style-type: none"> • Historical design development • Fabric decoration • Influence of culture on design • Contemporary designers <p>Properties and Performance of Textiles 20%</p> <ul style="list-style-type: none"> • End-use applications • Innovations and emerging textile technologies <p>Australian Textile, Clothing, Footwear and Allied Industries 10%</p> <ul style="list-style-type: none"> • Appropriate textile technology and environmental sustainability • Current issues • Marketplace <p>Major Textiles Project 50%</p> <p>Students select one focus area through which they develop a project, which includes supporting documentation and textile item/s:</p> <ul style="list-style-type: none"> • apparel • furnishings • costume • textile arts • non-apparel <p>Students will demonstrate the development of manipulative, graphical, communication, research, decision-making, management and manufacturing skills</p>

7 Objectives and Outcomes

7.1 Table of Objectives and Outcomes

Objectives	Preliminary Outcomes	HSC Outcomes
<p>Students will develop:</p> <p>1. knowledge and understanding of the functional and aesthetic requirements of textiles for a range of applications</p>	<p>A student:</p> <p>P 1.1 describes the elements and principles of design and uses them in a variety of applications</p> <p>P 1.2 identifies the functional and aesthetic requirements and features of a range of textile items</p>	<p>A student:</p> <p>H 1.1 critically analyses and explains the factors that have contributed to the design and manufacture of the Major Textiles Project</p> <p>H 1.2 designs a textile item/s that demonstrates an understanding of functional and aesthetic requirements</p> <p>H1.3 identifies the principles of colouration for specific end-uses</p>
<p>2. practical skills in design and manipulation of textiles through the use of appropriate technologies</p>	<p>P 2.1 demonstrates the use of a variety of communication skills, including computer-based technology</p> <p>P 2.2 develops competence in the selection and use of appropriate manufacturing techniques and equipment</p> <p>P 2.3 manages the design and manufacture of textile projects</p>	<p>H 2.1 communicates design concepts and manufacturing specifications to both technical and non-technical audiences</p> <p>H 2.2 demonstrates proficiency in the manufacture of a textile item/s</p> <p>H2.3 effectively manages the design and manufacture of a Major Textiles Project to completion</p>
<p>3. the ability to apply knowledge and understanding of the properties and performance of textiles to the development and manufacture of textile items</p>	<p>P 3.1 identifies properties of a variety of fabrics, yarns and fibres</p> <p>P 3.2 justifies the selection of fabrics, yarns and fibres for end-uses</p>	<p>H3.1 explains the interrelationship between fabric, yarn and fibre properties</p> <p>H3.2 develops knowledge and awareness of emerging textile technologies</p>

4. skills in experimentation, critical analysis and the discriminatory selection of textiles for specific end-uses	P4.1 identifies and selects textiles for specific end-uses based on analysis of experimentation	H 4.1 justifies the selection of fabric, yarn, fibre and fabric finishing techniques for specific end-uses H 4.2 selects and justifies manufacturing techniques, materials and equipment for a specific end-use
5. knowledge and understanding of Australian Textile, Clothing, Footwear and Allied Industries	P 5.1 examines the status of the Australian Textile, Clothing, Footwear and Allied Industries within the global context P 5.2 investigates the range of career options in design, consumerism, manufacturing and retail sectors of the Australian Textile, Clothing, Footwear and Allied Industries	H 5.1 investigates and describes aspects of marketing in the textile industry H 5.2 analyses and discusses the impact of current issues on the Australian textiles industry
6. an appreciation of the significance of textiles in society	P 6.1 identifies and appreciates the factors that contribute to the quality and value of textiles in society	H 6.1 analyses the influence of historical, cultural and contemporary developments on textiles

7.2 Key Competencies

Textiles and Design provides a context within which to develop general competencies considered essential for the acquisition of effective, higher-order thinking skills necessary for further education, work and everyday life.

Key competencies are embedded in the *Textiles and Design Stage 6 Syllabus* to enhance student learning. The key competencies of **collecting, analysing and organising information** and **communicating ideas and information**, reflect processes of design research and idea development and are explicit in the objectives and outcomes of the syllabus. The other key competencies are developed through the methodologies of the syllabus and through classroom pedagogy. Students work as individuals and as members of groups to conduct experiments and investigations, and through this, the key competencies, **planning and organising activities** and **working with others and in teams**, are developed. When students develop, modify and construct items from patterns, they are developing the key competency **using mathematical ideas and techniques**. During investigations, students will need to use appropriate technologies and so develop the key competency of **using technology**. Finally, experimentation with a range of materials, processes and techniques, contributes towards the students' development of the key competency **solving problems**.

8 Content: Textiles and Design Stage 6 Preliminary Course

Area of Study: Design

Studies in design allow students to develop knowledge and understanding of the functional and aesthetic aspects of design applied to a variety of textile materials, methods, techniques and end-uses. Practical design investigations, experiments and product manufacturing activities contribute to the development of a student's creative ability while analysis and evaluation activities develop the skills students need to become discriminating individuals and consumers.

Outcomes

A student:

- P1.1 describes the elements and principles of design and uses them in a variety of applications
- P1.2 identifies the functional and aesthetic requirements and features of a range of textile items
- P2.1 demonstrates the use of a variety of communication skills, including computer-based technology
- P2.2 develops competence in the selection and use of appropriate manufacturing techniques and equipment
- P2.3 manages the design and manufacture of textile projects
- P4.1 identifies and selects textiles for specific end-uses based on analysis of experimentation.

Students learn about:	Students learn to:
<p>Elements of design, including:</p> <ul style="list-style-type: none"> • line and direction • shape and size • texture • colour and value <p>Principles of design, including:</p> <ul style="list-style-type: none"> • proportion • balance • rhythm • emphasis • contrast and harmony • unity <p>Types of design</p> <ul style="list-style-type: none"> • functional <ul style="list-style-type: none"> _ items designed for a specific purpose that may include examples from the following focus areas: apparel, furnishings, costume, textile arts and non-apparel • aesthetic <ul style="list-style-type: none"> – surface decoration or design that enhances the appearance of textile related items • factors determining appropriate design, eg economics, environment, manufacturing techniques, sustainability, decoration <p>Communication techniques</p> <ul style="list-style-type: none"> • graphical <ul style="list-style-type: none"> examples should include: <ul style="list-style-type: none"> _object drawing: views of items from different perspectives, including orthogonal (2D) and pictorial (3D) representations _fashion drawing: figure sketching, rendering using a range of appropriate media _industry production drawing specifications: correct dimensions and proportions, accurate details on drawings and pattern pieces _computer-aided drawing: appropriate software to assist in design development 	<ul style="list-style-type: none"> • experiment with and apply the elements and principles of design across a range of textile applications • describe and analyse elements and principles of design for one item in each focus area: <ul style="list-style-type: none"> _ apparel _ furnishings _ costume _ textile arts _ non-apparel • describe and illustrate the difference between functional and aesthetic design in a range of textile environments • analyse the role of design in meeting the functional and aesthetic requirements of textile products • evaluate a range of textile items to determine appropriate design features • develop competence in graphically communicating design ideas • use a variety of appropriate mediums, including computer-based technologies, for a range of communication purposes

Students learn about:	Students learn to:
<ul style="list-style-type: none"> • verbal <ul style="list-style-type: none"> _ criteria for effective communication: audience, purpose, context, language • written <ul style="list-style-type: none"> _ criteria for effective communication: appropriate text type and font, use of space, audience, purpose, context <p>Manufacturing methods</p> <ul style="list-style-type: none"> • machinery skills relating to: • seams, seam finishes, opening and closure treatments and other appropriate manufacturing techniques • fabrics, using woven, non-woven and knit materials with light, medium and heavy weight fabrics • pattern modification <ul style="list-style-type: none"> – interpreting, using and modifying patterns <p>Preliminary Textile Project 1</p> <ul style="list-style-type: none"> • documentation <ul style="list-style-type: none"> – generation and communication of ideas – modification of designs – evaluation of ideas and project – management of time and resources • project construction utilising appropriate methods, techniques and equipment (manipulative skills) 	<ul style="list-style-type: none"> • develop skills in communicating ideas using a variety of verbal and written methods for appropriate applications, including computer-based technologies • select and use appropriate manufacturing techniques to assemble textile products • interpret, use and modify patterns for specific end-uses • apply the elements and principles of design to the analysis and development of the project • select, analyse and record design idea development for a textile project • outline and justify the steps involved in the development and management of a textile project • use computer software to assist in the design development of the project

Area of Study: Properties and Performance of Textiles

For students to understand and appreciate the properties and end-uses of textiles, a knowledge of fabrics, yarns and fibres is required. Experimentation with a range of fabrics will give students the opportunity to select appropriate fabrics for a textile item.

Outcomes

A student:

- P2.1 demonstrates the use of a variety of communication skills, including computer-based technology
- P2.2 develops competence in the selection and use of appropriate manufacturing techniques and equipment
- P2.3 manages the design and manufacture of textile projects
- P3.1 identifies properties of a variety of fabrics, yarns and fibres
- P3.2 justifies the selection of fabrics, yarns and fibres for end-uses
- P4.1 identifies and selects textiles for specific end-uses based on analysis of experimentation.

Students learn about:	Students learn to:
<p>Fabric structure</p> <ul style="list-style-type: none"> • woven <ul style="list-style-type: none"> – warp, weft, selvedge • knitted <ul style="list-style-type: none"> – course, wale • non-woven <p>Fabric types and classification</p> <ul style="list-style-type: none"> • woven, including plain, twill, sateen and satin, Jacquard, crepe and pile weaves • knitted, including single knit, double knit, tricot, rachel, pile knit, lace and net • non-wovens, including felts, staple and filament webs and films <p>Fabric and fibre properties and testing</p> <ul style="list-style-type: none"> • using a range of functional and aesthetic tests, record and evaluate results <ul style="list-style-type: none"> – aesthetic, including lustre, drape – durability, including abrasion resistance, strength – comfort, including absorbency, elongation, thermal properties – appearance, including resiliency, dimensional stability, elasticity – care, including the effect of chemicals, sun resistance, colour fastness, shrink resistance <p>Yarn structure and characteristics</p> <ul style="list-style-type: none"> • spun staple <ul style="list-style-type: none"> – including carded and combed, woollen and worsted yarns • filament <ul style="list-style-type: none"> – including smooth and textured yarns • twist level <ul style="list-style-type: none"> – including low and high twist levels • novelty yarns <ul style="list-style-type: none"> – including slub, bouclé and core spun yarns <p>Yarn properties</p> <ul style="list-style-type: none"> • aesthetic • durability • strength • comfort • care 	<ul style="list-style-type: none"> • use and apply appropriate fabric terminology when analysing specific end-uses • identify a variety of fabric structures • describe fabric properties affected by fabric structure • explore current trends in fashion fabrics • select fabrics for specific end-uses • evaluate fabric properties using classroom testing procedures • use and apply appropriate yarn terminology when analysing specific end-uses • identify the characteristics of yarn structure that affect fabric properties • describe yarn properties and their effect on fabric performance • demonstrate an understanding of yarn properties when selecting fabrics for specific end-uses

Students learn about:	Students learn to:
<p>Fibre structure</p> <ul style="list-style-type: none"> • molecular, including amorphous, crystalline, monomer, polymer • morphological, including surface characteristics and cross sectional appearance, staple fibre, filament, multifilament <p>Fibre types and classification</p> <ul style="list-style-type: none"> • natural fibres, including: <ul style="list-style-type: none"> – cellulosic: cotton – protein: wool • regenerated, including: <ul style="list-style-type: none"> – viscose rayon • synthetic, including: <ul style="list-style-type: none"> – polyester – nylon • fibre blends, including: <ul style="list-style-type: none"> – cotton/polyester – nylon/elastomeric <p>Preliminary Textile Project 2</p> <ul style="list-style-type: none"> • documentation <ul style="list-style-type: none"> – experimental procedures – analysis and evaluation of fabric, yarn and fibre properties – product design and fabric choice – communicating and recording information – management skills • project construction for a textile item or textile fabric and item <ul style="list-style-type: none"> – manufacturing techniques (manipulative skills) 	<ul style="list-style-type: none"> • identify how molecular and morphological structure contribute to the properties of fibres <ul style="list-style-type: none"> • describe the properties of at least TWO natural, ONE regenerated, TWO synthetic fibres and TWO fibre blends <ul style="list-style-type: none"> • identify and classify fibres using the microscope and burning tests <ul style="list-style-type: none"> • make decisions about fabric choice to construct a textile item employing a range of manufacturing techniques appropriate to the fabric selected and the end-use <i>OR</i> • make decisions about fabrics, yarns and fibres for the construction of a textile fabric and item employing a range of manufacturing techniques appropriate to the fabric selected and the end-use <ul style="list-style-type: none"> • use computer software to assist in the development of the project documentation

Area of Study: Australian Textile, Clothing, Footwear and Allied Industries

Studies in this area will enable students to develop an understanding of the factors affecting the selection and quality of textile products from a local and global perspective. The changing nature of career options is investigated.

The Australian Textile, Clothing, Footwear and Allied Industries encompass the following sectors:

Textile – textile production (including spinning, weaving, knitting, hosiery, carpet), cotton ginning, early stage wool processing, textile, clothing, footwear mechanics

Clothing – headwear, clothing production, leather goods production, textile, clothing, footwear mechanics

Footwear – footwear repair, footwear production, textile, clothing, footwear mechanics

Allied Industries – laundry, dry cleaning, textile fabrication (including sail making and canvas), hide skin and leather processing, leather goods production, textile, clothing, footwear mechanics.

Outcomes

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
- P6.1 identifies and appreciates the factors that contribute to the quality and value of textiles in society.

Students learn about:	Students learn to:
<p>Industry overview</p> <ul style="list-style-type: none"> • an overview of the development of the textiles industry with particular reference to: <ul style="list-style-type: none"> – sectors of the Australian Textile, Clothing, Footwear and Allied Industries – issues affecting the industry, including environmental sustainability, Occupational Health and Safety legislation, technological changes – trends and opportunities in the industry – training and career opportunities – the contribution of textiles to local and global markets – textile consumption in Australia – the role of textiles in everyday lives • an overview of the development of the textile industry through the 19th, 20th and 21st centuries with reference to social and economic impact, employment and workforce issues and technological developments <p>Quality of textiles</p> <ul style="list-style-type: none"> • influences on the quality of textiles and clothing, including: <ul style="list-style-type: none"> – design – trademarks – fabric quality – legislation – quality assurance checks – quality control measures – role of the manufacturer and consumer in determining quality <p>Value of textiles</p> <ul style="list-style-type: none"> • factors contributing to the value of textiles, including: <ul style="list-style-type: none"> – perceived value: heirloom, handcrafted, unique, designer label, technologically advanced – cultural value: religious and social significance – economic value: as a percentage of Gross National Product and employment, value added textiles – value adding to products for other industries, including agricultural and industrial uses 	<ul style="list-style-type: none"> • outline the development of ONE sector of the Australian Textile, Clothing, Footwear and Allied Industries • discuss issues that may influence the Australian Textile, Clothing, Footwear and Allied Industries in the future • investigate current and future employment opportunities in the Australian Textile, Clothing, Footwear and Allied Industries • briefly outline differences in the textile industry across the 19th, 20th and 21st centuries • investigate methods of quality assurance in the marketplace • discuss factors contributing to the quality and value of textiles in a range of end-uses

9 Content: Textiles and Design Stage 6 HSC Course

Area of Study: Design

Studies in this area will enable students to develop an understanding and appreciation of the influences of historical, cultural and contemporary aspects of design in society.

Outcomes

A student:

- H1.1 critically analyses and explains the factors that have contributed to the design and manufacture of the Major Textiles Project
- H1.2 designs a textile item/s that demonstrates an understanding of functional and aesthetic requirements
- H1.3 identifies the principles of colouration for specific end-uses
- H2.1 communicates design concepts and manufacturing specifications to both technical and non-technical audiences
- H2.2 demonstrates proficiency in the manufacture of a textile item/s
- H2.3 effectively manages the design and manufacture of a Major Textiles Project to completion
- H6.1 analyses the influence of historical, cultural and contemporary developments on textiles.

Students learn about:	Students learn to:
<p>Historical design development</p> <ul style="list-style-type: none"> • overview of design developments in society through ONE of the focus areas: <ul style="list-style-type: none"> – apparel – furnishings – costume – textile arts – non-apparel <p>Fabric decoration</p> <ul style="list-style-type: none"> • principles of applying colour to fabrics, yarns and fibres • methods of fabric decoration, including printing, dyeing, applique and embroidery <p>Influence of culture on design</p> <ul style="list-style-type: none"> • textile production and textile art forms • textiles as a medium for self-expression and communication between people • effects of the culture on textile design in contemporary society • external factors that have influenced textile design • cultural influences, including geographic location, technological development, resources available, religious practices, workers' skills and status <p>Contemporary designers</p> <ul style="list-style-type: none"> • factors that determine the success or failure of designers: <ul style="list-style-type: none"> – external factors, including economic, political, social, ecological and technological – internal factors, including expertise, facilities and financial • changing trends in society that influence: <ul style="list-style-type: none"> – apparel designers – interior designers – costume designers – textile art designers – non-apparel designers – sources of inspiration for designers 	<ul style="list-style-type: none"> • briefly outline the historical development of a selected focus area and discuss its influence on contemporary society • investigate, through experimentation, the basic principles of dyeing and printing textiles • select and apply appropriate methods of fabric decoration for a specific end-use • investigate and analyse the influence of ONE culture on contemporary design • analyse significant cultural and historical influences and apply them to Design inspiration for the Major Textiles Project • undertake an investigation of at least ONE contemporary designer, analysing the designer's influence on current trends

Students learn about:	Students learn to:
<p>Major Textiles Project</p> <ul style="list-style-type: none"> • the project is to be selected from ONE of the following focus areas: <ul style="list-style-type: none"> – apparel – furnishing – costume – textile arts – non-apparel <p>Visual design development</p> <ul style="list-style-type: none"> • inspiration, development and evaluation of design ideas • functional and aesthetic design <p>Manufacturing specification, including:</p> <ul style="list-style-type: none"> • description <ul style="list-style-type: none"> – written description, pattern company and pattern number (if applicable) • production drawings <ul style="list-style-type: none"> – front and back views, pattern shapes and pattern markings • technical production plans <ul style="list-style-type: none"> – fabric swatches, quantity of material, notions required, itemised cost, total cost, order of construction 	<p>Design inspiration</p> <ul style="list-style-type: none"> • explain the relationship between the Major Textiles Project and the nominated focus area • <p>• research, analyse and visually communicate appropriate design ideas for the Major Textiles Project</p> <p>• develop and produce manufacturing specifications for the Major Textiles Project</p> <p>• manage time effectively in the completion of a quality Major Textiles Project</p>

Area of Study: Properties and Performance of Textiles

This area of study allows students to develop knowledge and understanding of scientific and technological developments. A critical approach towards the effects of innovations and emerging technologies is a major area of study.

Outcomes

A student:

- H3.1 explains the interrelationship between fabric, yarn and fibre properties
- H3.2 develops knowledge and awareness of emerging textile technologies
- 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 learn about:	Students learn to:
<p>End-use applications</p> <ul style="list-style-type: none"> • the influences of fabric, yarn and fibre properties and fabric finishes on the selection of textile end-uses in each of the focus areas: apparel, furnishings, costume, textile arts, non-apparel <p>Innovations and emerging textile technologies</p> <ul style="list-style-type: none"> • innovations and technological advances in: <ul style="list-style-type: none"> i) the use of textiles to enhance performance <ul style="list-style-type: none"> – fibre, eg microfibre – yarn, eg bicomponent – fabric, eg washable webs ii) machinery to improve construction or save time, eg computer linked sewing machine iii) decorative techniques to enhance design, eg digital imaging heat transfers iv) finishing techniques to enhance fabric performance, including soil-resistant finishes and finishing techniques for a special purpose, such as fire retardant finishes • the advantages and disadvantages of innovations and related textile technologies on the: <ul style="list-style-type: none"> – consumer – manufacturer – employee – environment <p>Major Textiles Project</p> <p>Investigation, experimentation and evaluation</p> <ul style="list-style-type: none"> • materials, equipment and manufacturing processes • selection of appropriate fabric, yarn and fibre 	<ul style="list-style-type: none"> • analyse and evaluate the functional criteria for items from one focus area to determine the contributing fabric, yarn and fibre properties and fabric finishes • identify and discuss areas of textile production that utilise new textile technologies • investigate and use, as appropriate, a range of innovative advances in textile materials and techniques • evaluate the impact of technological advances in machinery on the changing nature of the industry • investigate TWO innovations in finishing techniques to determine their impact on fabric performance • investigate TWO innovations in fabric, yarn or fibre development and their impact on society and the environment • make effective decisions based on the application of knowledge • evaluate and document the properties and performance of the fabric/s, yarn/s and fibre/s selected for the Major Textiles Project • produce a high quality functional and aesthetic textile item

Area of Study: Australian Textile, Clothing, Footwear and Allied Industries

Studies in this area will enable students to make decisions about factors affecting the consumer, producer, manufacturer and retailer.

Outcomes

A student:

- 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
- H6.1 analyses the influence of historical, cultural and contemporary developments of textiles.

Students learn about:	Students learn to:
<p>Appropriate textile technology and environmental sustainability</p> <ul style="list-style-type: none"> • selection of appropriate technology in the industry <ul style="list-style-type: none"> – resources, alternatives and limitations • appropriate and sustainable textile resources <ul style="list-style-type: none"> – recycling – pollution – government legislation <p>Current issues</p> <ul style="list-style-type: none"> • current issues that affect the industry, including: <ul style="list-style-type: none"> – globalisation of design, manufacture, distribution and marketing – restructuring of the industry: imports/exports, level of protection, increased skill level of workers – changing consumer demands and lifestyle: sun protection factor clothing, clothing made from organic sources (eg clothing made from organic cotton) – manufacturing strategies: niche and mass produced goods <p>Marketplace</p> <ul style="list-style-type: none"> • aspects of marketing of textile products, including: <ul style="list-style-type: none"> – product planning – place and distribution channels – price structure – promotion strategies • product life cycle • target markets <p>Major Textiles Project</p> <p>Manufacturing specification</p> <ul style="list-style-type: none"> • product label <ul style="list-style-type: none"> – legal requirements, including care instructions, fibre content, size, where it is made, brand name 	<ul style="list-style-type: none"> • discuss how the selection of resources and processes will impact upon the environment • identify the problems of pollution and recycling of materials associated with the industry • evaluate the impact of government legislation on the industry • investigate and debate a range of issues that impact upon the Australian Textile, Clothing, Footwear and Allied Industries • compare TWO different product marketing strategies for ONE focus area (apparel, furnishings, costume, textile arts, non-apparel) and explain why they are appropriate for a specific textile product • design and produce a label/s suitable for the Major Textiles Project item/s

10 Course Requirements

The *Textiles and Design Stage 6 Syllabus* includes a Preliminary course of 120 hours (indicative time) and an HSC course of 120 hours (indicative time).

There is no prerequisite study for the Preliminary course. Completion of the Preliminary course is a prerequisite to the study of the HSC course.

Preliminary Course

Preliminary Textile Projects and Practical Applications

Students will undertake TWO preliminary textile projects as part of the Preliminary course.

Preliminary Project 1 – Drawn from the area of study of Design, this project focuses on the generation and communication of ideas, design modification, manipulative skills, evaluation of ideas and the project, and management of time and resources.

Preliminary Project 2 – Drawn from the area of study of Properties and Performance of Textiles, this project focuses on an analysis of fabric, yarn and fibre properties, experimental procedures, product design, fabric choice, manipulative and management skills, communication methods and the recording of information.

Through the preliminary textile projects and the documentation that supports project development, students should be involved in initiating activities, planning procedures, experimenting, collecting data, communicating, formulating conclusions and evaluating ideas that they can substantiate with factual evidence.

In the Preliminary course, students will also undertake practical applications related to content being addressed. Examples of these may include experimental work, development of manufacturing skills, graphical, communication and sketching skills.

HSC Course

Major Textiles Project

Students will undertake a Major Textiles Project worth 50 percent of the HSC mark. The project focus is selected from ONE of the following areas:

- apparel
- furnishings
- costume
- textile arts
- non-apparel.

The selected focus area allows students to explore in detail one area of interest through a creative textile design process that integrates the areas of Design, Properties and Performance of Textiles and the Australian Textile, Clothing, Footwear and Allied Industries.

The Major Textiles Project has TWO components:

(a) supporting documentation:

- design inspiration
- visual design concept development
- project manufacture specification
- investigation, experimentation and evaluation

(b) textile item/s

Guidelines for the Major Textiles Project

The Major Textiles Project:

- may consist of one or more related items within the selected focus area
- must be individually produced by the candidate. Group projects are not permitted
- must be certified on the appropriate form, provided by the Board of Studies, as the original work of the candidate and identifiable only through the candidate and centre numbers
- must be completed by the student and certified by the supervising teacher as the student's own work
- must include supporting documentation
- must conform to the following packaging specifications. The overall volume of the packaging container, which includes both the supporting documentation and the item/s, must not exceed 0.2m^3 . Examples of package sizes that equal the maximum volume are $1\text{m} \times 1\text{m} \times 0.2\text{m}$ and $1.2\text{m} \times 0.5\text{m} \times 0.33\text{m}$. Note that the maximum length of any side must not exceed 1.2m .

11 Post-school Opportunities

The study of Textiles and Design Stage 6 provides students with knowledge, understanding and skills that form a valuable foundation for a range of courses at university and other tertiary institutions.

In addition, the study of Textiles and Design Stage 6 assists students to prepare for employment and full and active participation as citizens. In particular, there are opportunities for students to gain recognition in vocational education and training. Teachers and students should be aware of these opportunities.

Recognition of Student Achievement in Vocational Education and Training (VET)

Wherever appropriate, the skills and knowledge acquired by students in their study of HSC courses should be recognised by industry and training organisations. Recognition of student achievement means that students who have satisfactorily completed HSC courses will not be required to repeat their learning in courses in TAFE NSW or other Registered Training Organisations (RTOs).

Registered Training Organisations, such as TAFE NSW, provide industry training and issue qualifications within the Australian Qualifications Framework (AQF).

The degree of recognition available to students in each subject is based on the similarity of outcomes between HSC courses and industry training packages endorsed within the AQF. Training packages are documents that link an industry's competency standards to AQF qualifications. More information about industry training packages can be found on the National Training Information Service (NTIS) website (www.ntis.gov.au).

Recognition by TAFE NSW

TAFE NSW conducts courses in a wide range of industry areas, as outlined each year in the *TAFE NSW Handbook*. Under current arrangements, the recognition available to students of Textiles and Design in relevant courses conducted by TAFE NSW is described in the *HSC/TAFE Credit Transfer Guide*. This guide is produced by the Board of Studies and TAFE NSW and is distributed annually to all schools and colleges. Teachers should refer to this guide and be aware of the recognition available to their students through the study of Textiles and Design Stage 6. This information can be found on the TAFE NSW website (www.tafensw.edu.au/mchoice).

Recognition by other Registered Training Organisations

Students may also negotiate recognition into a training package qualification with another Registered Training Organisation. Each student will need to provide the RTO with evidence of satisfactory achievement in Textiles and Design Stage 6 so that the degree of recognition available can be determined.

12 Assessment and Reporting

12.1 Requirements and Advice

The information in this section of the syllabus relates to the Board of Studies' requirements for assessing and reporting achievement in the Preliminary and HSC courses for the Higher School Certificate.

Assessment is the process of gathering information and making judgements about student achievement for a variety of purposes.

In the Preliminary and HSC courses, those purposes include:

- assisting student learning
- evaluating and improving teaching and learning programs
- providing evidence of satisfactory achievement and completion in the Preliminary course
- providing the Higher School Certificate results.

Reporting refers to the Higher School Certificate documents received by students that are used by the Board to report both the internal and external measures of achievement.

NSW Higher School Certificate results will be based on:

- **an assessment mark** submitted by the school and produced in accordance with the Board's requirements for the internal assessment program
- **an examination mark** derived from the HSC external examinations.

Results will be reported using a course report containing a performance scale with bands describing standards of achievement in the course.

The use of both internal assessment and external examinations of student achievement allows measures and observations to be made at several points and in different ways throughout the HSC course. Taken together, the external examinations and internal assessment marks provide a valid and reliable assessment of the achievement of the knowledge, understanding and skills described for each course.

Standards Referencing and the HSC Examination

The Board of Studies will adopt a standards-referenced approach to assessing and reporting student achievement in the Higher School Certificate examination.

The standards in the HSC are:

- the knowledge, skills and understanding expected to be learned by students – the *syllabus standards*
- the levels of achievement of the knowledge, skills and understanding – the *performance standards*.

Both *syllabus standards* and *performance standards* are based on the aims, objectives, outcomes and content of a course. Together, they specify what is to be learned and how well it is to be achieved.

Teacher understanding of standards comes from the set of aims, objectives, outcomes and content in each syllabus together with:

- the performance descriptions that summarise the different levels of performance of the course outcomes
- HSC examination papers and marking guidelines
- samples of students' achievement on assessment and examination tasks.

12.2 Internal Assessment

The internal assessment mark submitted by the school will provide a summation of each student's achievements measured at points throughout the course. It should reflect the rank order of students and relative differences between students' achievements.

Internal assessment provides a measure of a student's achievement based on a wider range of syllabus content and outcomes than may be covered by the external examination alone.

The assessment components, weightings and task requirements to be applied to internal assessment are identified on page 34. They ensure a common focus for internal assessment in the course across schools, while allowing for flexibility in the design of tasks. A variety of tasks should be used to give students the opportunity to demonstrate outcomes in different ways and to improve the validity and reliability of the assessment.

12.3 External Examination

In Textiles and Design Stage 6, the external examination includes a written paper and submission of a Major Textiles Project for external marking. The specifications for the examination in Textiles and Design Stage 6 are on page 35.

The external examination provides a measure of student achievement in a range of syllabus outcomes that can be reliably measured in an examination setting.

The external examination and its marking and reporting will relate to syllabus standards by:

- providing clear links to syllabus outcomes
- enabling students to demonstrate the levels of achievement outlined in the course performance scale
- applying marking guidelines based on established criteria.

12.4 Board Requirements for the Internal Assessment Mark in Board Developed Courses

For each course, the Board requires schools to submit an assessment mark for each candidate.

The collection of information for the HSC internal assessment mark must not begin prior to the completion of the Preliminary course.

The Board requires that the assessment tasks used to determine the internal assessment mark must comply with the components, weightings and types of tasks specified in the table on page 34.

Schools are required to develop an internal assessment program that:

- specifies the various assessment tasks and the weightings allocated to each task
- provides a schedule of the tasks designed for the whole course.

The school must also develop and implement procedures to:

- inform students in writing of the assessment requirements for each course before the commencement of the HSC course
- ensure that students are given adequate written notice of the nature and timing of assessment tasks
- provide meaningful feedback on each student's performance in all assessment tasks
- maintain records of marks awarded to each student for all assessment tasks
- address issues relating to illness, misadventure and malpractice in assessment tasks
- address issues relating to late submission and non-completion of assessment tasks
- advise students in writing if they are not meeting the assessment requirements in a course and indicate what is necessary to enable the students to satisfy the requirements
- inform students about their entitlements to school reviews and appeals to the Board
- conduct school reviews of assessments when requested by students
- ensure that students are aware that they can collect their Rank Order Advice at the end of the external examinations at their school.

12.5 Assessment Components, Weightings and Tasks

Preliminary Course

The suggested components, weightings and tasks for the Preliminary course are set out below.

Syllabus Content Area	Assessment Components	Weighting	Tasks
Design	<ul style="list-style-type: none"> • Knowledge of design • Skills in: <ul style="list-style-type: none"> – investigating and researching – experimenting – designing – manipulating – analysing and evaluating – managing – communicating 	40	Tasks will include: <ul style="list-style-type: none"> • Preliminary Textile Project 1: drawn from the area of <i>Design</i>. The supporting documentation focuses on the generation and evaluation of ideas and modification of design (suggested weighting 15% of total Preliminary mark)
Properties and Performance of Textiles	<ul style="list-style-type: none"> • Knowledge of properties and performance of textiles • Skills in: <ul style="list-style-type: none"> – investigating and researching – experimenting – manipulating – analysing and evaluating – decision-making 	50	<ul style="list-style-type: none"> • Preliminary Textile Project 2: drawn from the area of <i>Properties & Performance of Textiles</i>. The supporting documentation focuses on experimental procedures and the analysis of fabric, yarn and fibre properties (suggested weighting 15% of total Preliminary mark) • Other assessment tasks might include: <ul style="list-style-type: none"> – oral presentation on possible career options in the Australian Textile, Clothing, Footwear and Allied Industries – experimental activities with manufacturing techniques – design activities that focus on the elements and principles of design – report on new technologies in textile manufacturing – presentation of graphic design skills – examination-type tasks, such as an examination or class topic tests
Australian Textile, Clothing, Footwear and Allied Industries	<ul style="list-style-type: none"> • Knowledge of the Australian Textile, Clothing, Footwear and Allied Industries • Skills in: <ul style="list-style-type: none"> – investigating and researching – communicating – analysing and evaluating 	10	
Marks		100	

HSC Course

The internal assessment mark for Textiles and Design Stage 6 is to be based on the HSC course only. Final assessment should be based on a range and balance of assessment instruments.

Syllabus Content Area	Assessment Components	Weighting	Tasks
Major Textiles Project	<ul style="list-style-type: none"> • Skills in: <ul style="list-style-type: none"> – investigating and researching – experimenting – designing – manipulating – analysing and evaluating – managing – communicating <p>Criteria for assessing the Major Textiles Project are on p 36</p>	50	<p>Note: Aspects of the Major Textiles Project that are used for school-based assessment should not use the HSC exam marking criteria for internal assessment</p> <p>Tasks might include:</p> <ul style="list-style-type: none"> • an oral presentation to a potential retailer/manufacturing group about the design concept of the Major Textiles Project • the use of a project diary to assess managing and planning for the Major Textiles Project • examination questions based on the Major Textiles Project
Design	<ul style="list-style-type: none"> • Knowledge of design • Skills in: <ul style="list-style-type: none"> – investigating and researching – analysing and evaluating – experimenting – communicating 	20	
Properties and Performance of Textiles	<ul style="list-style-type: none"> • Knowledge of properties and performance of textiles • Skills in: <ul style="list-style-type: none"> – investigating and researching – experimenting – manipulating – analysing and evaluating – decision-making 	20	<p>Other tasks might include:</p> <ul style="list-style-type: none"> • creation of designs for specific purposes • a research assignment on a contemporary designer, an innovation in fibre, fabric or finishes or an emerging textile technology • experimental activities with fabric, colour and decorative techniques • HSC examination-type tasks, such as a trial examination or class topic test
Australian Textile, Clothing, Footwear and Allied Industries	<ul style="list-style-type: none"> • Knowledge of the Australian Textile, Clothing, Footwear and Allied Industries • Skills in: <ul style="list-style-type: none"> – investigating and research – analysis and evaluation 	10	
Marks		100	

12.6 HSC External Examination Specifications

The examination consists of a written paper worth 50 marks and a Major Textiles Project worth 50 marks.

Written paper (50 marks)

Time allowed: 1½ hours.

The written paper will consist of THREE sections.

Section I (10 marks)

There will be TEN multiple-choice questions.

All questions are compulsory.

The questions will be based on all areas of the syllabus.

All questions will be answered on the answer sheet provided.

Section II (25 marks)

This section will contain THREE questions.

All questions will be compulsory.

Question 11 will be worth 5 marks and based on the Area of Study: *Australian Textile, Clothing, Footwear and Allied Industries*.

Question 12 will be worth 10 marks and based on the Area of Study: *Design*.

Question 13 will be worth 10 marks and based on the Area of Study: *Properties and Performance of Textiles*.

Each question will consist of a number of parts requiring short, structured responses.

All questions must be answered in the space provided.

Section III (15 marks)

There will be TWO questions requiring an extended structured response.

Students must answer ONE question.

Both questions will be of equal value.

Question 14 will be based on the Area of Study: *Design*.

Question 15 will be based on the Area of Study: *Properties and Performance of Textiles*.

Major Textiles Project (50 marks)

The Major Textiles Project has two components:

- (a) supporting documentation
- (b) textile item/s.

Criteria for Examining the Major Textiles Project

The Major Textiles Project consists of two components: the supporting documentation and the textile items/s related to a selected focus area. The criteria for examining the Major Textiles Project are shown below.

Component	Criteria	Maximum Specifications	Mark
Supporting Documentation	Design inspiration <ul style="list-style-type: none"> relevance to focus area justification of creative and/or innovative design relationship to historical/cultural or contemporary factors communication techniques to support written information 	4 pages (A4) or 2 pages (A3)	5
	Visual design development <ul style="list-style-type: none"> drawings/sketches inspiration, development and evaluation of design ideas analysis of functional and aesthetic design evidence of creativity throughout visual design development * quality presentation of visual design development * <p><i>* These areas of visual design development should be evident throughout and students are not required to write notes under these headings</i></p>	6 pages (A4) or 3 pages (A3)	5
	Manufacturing specification* <ul style="list-style-type: none"> description* production drawings* technical production plans* product label* <p><i>* Refer to p 37 for detail</i></p>	6 pages (A4) or 3 pages (A3)	5
	Investigation, experimentation and evaluation experiment extensively with, and justify the use of: <ul style="list-style-type: none"> materials equipment manufacturing processes evaluate the properties and performance of: <ul style="list-style-type: none"> fabric yarn fibre 	8 pages (A4) or 4 pages (A3) <i>documentation of project maximum folio size A3</i>	10
Textile Item/s	<ul style="list-style-type: none"> appropriate design, including aesthetic and functional aspects level of creativity/innovation degree of difficulty degree of proficiency in manufacture of quality textile item/s management of item/s to completion 	refer to note below	25

Note: The overall volume of the packaging container, which includes both the supporting documentation and the item/s, must not exceed 0.2m^3 . Examples of package sizes that equal the maximum volume are $1\text{m} \times 1\text{m} \times 0.2\text{m}$ and $1.2\text{m} \times 0.5\text{m} \times 0.33\text{m}$. Note that the maximum length of any side must not exceed 1.2m

Manufacturing Specification

The maximum specifications for this section must not exceed 6 pages (A4) or 3 pages (A3).

As part of the supporting documentation, students are required to complete the manufacturing specification section using the headings listed below.

- Description
 - written description of item/s
 - pattern company and pattern number (if applicable)
 - modifications made to pattern (if applicable).

- Production drawings
 - must include front and back views
 - pattern shapes and pattern markings.

- Technical production plans
 - fabric swatches
 - quantity of material
 - notions required
 - itemised cost
 - total cost
 - order of construction.

- Product label (as commonly applicable to the item/s from the selected focus area)
 - care instructions
 - fibre content
 - size
 - where it is made
 - brand name.

12.7 Summary of Internal and External Assessment

Internal Assessment	Weighting	External Assessment	Weighting
Major Textiles Project (specified skills)	50	Section I A written examination consisting of:	
Properties and Performance of Textiles (knowledge and specified skills)	20	<ul style="list-style-type: none"> – multiple-choice – short answers – structured essays 	10 25 15
Design	20	Section II A Major Textiles Project, including:	
Australian Textile, Clothing, Footwear and Allied Industries (knowledge and specified skills)	10	(a) supporting documentation (b) textile item/s	25 25
Marks	100	Marks	100

12.8 Reporting Student Performance Against Standards

Student performance in an HSC course will be reported against standards on a course report. The course report contains a performance scale for the course describing levels (bands) of achievement, an HSC mark located on the performance scale, an internal assessment mark and an examination mark. It will also show, graphically, the statewide distribution of examination marks of all students in the course.

Each band on the performance scale (except for band 1) includes descriptions that summarise the attainments typically demonstrated in that band.

The distribution of marks will be determined by students' performances against the standards and not scaled to a predetermined pattern of marks.