

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

# **Textiles and Design**

## **Stage 6 Syllabus**

## **Original published version updated:**

April 2000 – Board Bulletin/Official Notices Vol 9 No 2 (BOS 13/00)

November 2000 – Board Bulletin/Official Notices Vol 9 No 8 (BOS 58/00)

November 2007 – Notification to Principals D2007/4588

June 2009 – Assessment and Reporting information updated

© 2009 Copyright Board of Studies NSW for and on behalf of the Crown in right of the State of New South Wales.

This document contains Material prepared by the Board of Studies NSW for and on behalf of the State of New South Wales. The Material is protected by Crown copyright.

All rights reserved. No part of the Material may be reproduced in Australia or in any other country by any process, electronic or otherwise, in any material form or transmitted to any other person or stored electronically in any form without the prior written permission of the Board of Studies NSW, except as permitted by the *Copyright Act 1968*. School students in NSW and teachers in schools in NSW may copy reasonable portions of the Material for the purposes of bona fide research or study.

When you access the Material you agree:

- to use the Material for information purposes only
- to reproduce a single copy for personal bona fide study use only and not to reproduce any major extract or the entire Material without the prior permission of the Board of Studies NSW
- to acknowledge that the Material is provided by the Board of Studies NSW
- not to make any charge for providing the Material or any part of the Material to another person or in any way make commercial use of the Material without the prior written consent of the Board of Studies NSW and payment of the appropriate copyright fee
- to include this copyright notice in any copy made
- not to modify the Material or any part of the Material without the express prior written permission of the Board of Studies NSW.

The Material may contain third party copyright materials such as photos, diagrams, quotations, cartoons and artworks. These materials are protected by Australian and international copyright laws and may not be reproduced or transmitted in any format without the copyright owner's specific permission. Unauthorised reproduction, transmission or commercial use of such copyright materials may result in prosecution.

The Board of Studies has made all reasonable attempts to locate owners of third party copyright material and invites anyone from whom permission has not been sought to contact the Copyright Officer, ph (02) 9367 8289, fax (02) 9279 1482.

Published by  
Board of Studies NSW  
GPO Box 5300  
Sydney NSW 2001  
Australia

Tel: (02) 9367 8111

Internet: <http://www.boardofstudies.nsw.edu.au>

ISBN 978 174147 7078

2009413

# 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



# **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.

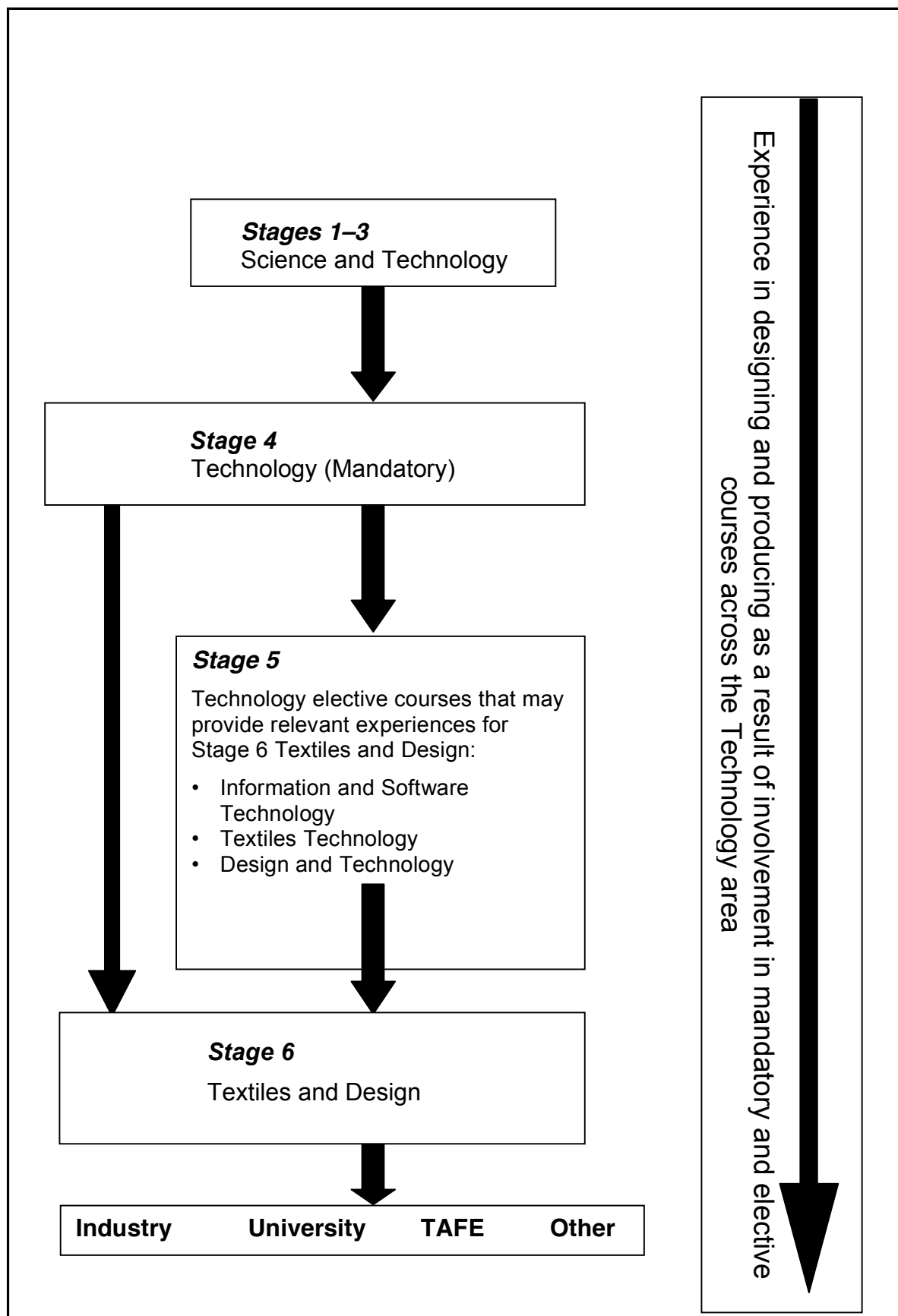
This course investigates textiles in society and promotes a greater understanding of the significance of different cultures and their specific use of textile materials.

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

<b>Preliminary Course 120 indicative hours</b>	<b>HSC Course 120 indicative hours</b>
<p><b>Design</b> <span style="float: right;"><b>40%</b></span></p> <ul style="list-style-type: none"> <li>• Elements and principles of design</li> <li>• Types of design</li> <li>• Communication techniques</li> <li>• Manufacturing methods</li> <li>• 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</li> </ul> <p><b>Properties and Performance of Textiles</b> <span style="float: right;"><b>50%</b></span></p> <ul style="list-style-type: none"> <li>• Fabric, yarn and fibre structure</li> <li>• Types, classification and identification of fabrics, yarns and fibres</li> <li>• Fabric, yarn and fibre properties</li> <li>• 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</li> </ul> <p><b>Australian Textile, Clothing, Footwear and Allied Industries</b> <span style="float: right;"><b>10%</b></span></p> <ul style="list-style-type: none"> <li>• Industry overview – past, present, future</li> <li>• Quality and value of textiles</li> </ul>	<p><b>Design</b> <span style="float: right;"><b>20%</b></span></p> <ul style="list-style-type: none"> <li>• Fabric colouration and decoration</li> <li>• Historical design development</li> <li>• Cultural factors that influence design and designers</li> <li>• Contemporary designers</li> </ul> <p><b>Properties and Performance of Textiles</b> <span style="float: right;"><b>20%</b></span></p> <ul style="list-style-type: none"> <li>• End-use applications</li> <li>• Innovations and emerging textile technologies</li> </ul> <p><b>Australian Textile, Clothing, Footwear and Allied Industries</b> <span style="float: right;"><b>10%</b></span></p> <ul style="list-style-type: none"> <li>• Appropriate textile technology and environmental sustainability</li> <li>• Current issues</li> <li>• Marketplace</li> </ul> <p><b>Major Textiles Project</b> <span style="float: right;"><b>50%</b></span></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"> <li>• apparel</li> <li>• furnishings</li> <li>• costume</li> <li>• textile arts</li> <li>• non-apparel</li> </ul> <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>

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

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

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

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

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

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

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

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

## 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><b>End-use applications</b></p> <ul style="list-style-type: none"> <li>• 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</li> </ul> <p><b>Innovations and emerging textile technologies</b></p> <ul style="list-style-type: none"> <li>• innovations and technological advances in:                             <ul style="list-style-type: none"> <li>i) the use of textiles to enhance performance                                     <ul style="list-style-type: none"> <li>– fibre, including microfibre</li> <li>– yarn, including bicomponent</li> <li>– fabric, including washable webs</li> </ul> </li> <li>ii) machinery to improve construction or save time, including computer-linked machines, computer-aided design (CAD) and computer-aided manufacture (CAM)</li> <li>iii) decorative techniques to enhance design, including digital printing</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• analyse and evaluate the functional criteria for items from one focus area to determine the contributing fabric, yarn and fibre properties and fabric finishes</li> <li>• identify and discuss areas of textile production that utilise new textile technologies</li> <li>• investigate and use, as appropriate, a range of innovative advances in textile materials and techniques</li> <li>• evaluate the impact of technological advances in machinery on the changing nature of the industry</li> </ul>

<p>iv) finishing techniques to enhance fabric performance, including soil-resistant finishes and finishing techniques for a special purpose, such as fire retardant finishes</p> <ul style="list-style-type: none"> <li>• the advantages and disadvantages of innovations and related textile technologies on:             <ul style="list-style-type: none"> <li>– the consumer</li> <li>– the manufacturer</li> <li>– the employee</li> <li>– the environment</li> </ul> </li> </ul> <p><b>Major Textiles Project</b></p> <p><b>Investigation, experimentation and evaluation</b></p> <ul style="list-style-type: none"> <li>• materials, equipment and manufacturing processes</li> <li>• selection of appropriate fabric, yarn and fibre</li> </ul>	<ul style="list-style-type: none"> <li>• investigate TWO innovations in finishing techniques to determine their impact on fabric performance</li> <li>• investigate an innovation in fabric development, yarn development and fibre development and the impact of each on society and the environment</li> <li>• investigate and experiment with materials, equipment and manufacturing processes for the production of a Major Textiles Project</li> <li>• make effective decisions based on the application of knowledge</li> <li>• evaluate and document the properties and performance of the fabric/s, yarn/s and fibre/s selected for the Major Textiles Project</li> <li>• produce a high quality functional and aesthetic textile item</li> </ul>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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

## **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  $0.2\text{m}^3$ . 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  $1.2\text{m}$ .
- should be packaged in a lightweight material.

## 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](http://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](http://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

Advice on appropriate assessment practice in relation to the Textiles and Design syllabus is contained in *Assessment and Reporting in Textiles and Design Stage 6*. That document provides general advice on assessment in Stage 6 as well as the specific requirements for the Preliminary and HSC courses. The document contains:

- suggested components and weightings for the internal assessment of the Preliminary course
- mandatory components and weightings for the internal assessment of the HSC course
- the HSC examination specifications, which describe the format of the external HSC examination.

The document and other resources and advice related to assessment in Stage 6 Textiles and Design are available on the Board's website at [www.boardofstudies.nsw.edu.au/syllabus\\_hsc](http://www.boardofstudies.nsw.edu.au/syllabus_hsc)