



SAMPLE COURSE OUTLINE

MATERIALS DESIGN AND TECHNOLOGY

GENERAL YEAR 12

Acknowledgement of Country

Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

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Unit description:

Students develop an understanding of the elements and fundamentals of design and consider human factors involved in the design, production and use of their projects. They develop creative thinking strategies and work on design projects within specified constraints. Students learn about the classification and properties of a variety of materials and make appropriate materials selection for design needs.

Students learn about manufacturing and production skills and techniques. They develop the skills and techniques appropriate to the materials being used and gain practice in planning and managing processes through the production of design project. They learn about risk management and ongoing evaluation processes.

Sample course outline

Materials Design and Technology – General Year 12

A sample course outline has been provided for each of the three contexts (Metal, Textiles and Wood) with common content replicated in each.

Context: Metal

Unit 3

Semester 1

Week	Key teaching points
1–2	Materials
	Nature and properties of materials • investigate metals ▪ ferrous ▪ functional differences between low, medium, high carbon steels, cast iron, cast steel • metal structure ▪ physical characteristics of mild steel • metal alloy types and classifications ▪ ferrous – steel, cast iron ▪ non-ferrous – aluminium alloys, copper alloys, nickel alloys • identification of the different common cross sections and sizes of metals from the following list ▪ wire ▪ rod ▪ flat ▪ square ▪ hexagonal ▪ octagonal bar ▪ sheet ▪ plate ▪ round tube ▪ square tube ▪ rectangular hollow section ▪ angle • aesthetic properties ▪ lustre ▪ colour ▪ texture • physical properties ▪ ductility ▪ malleability ▪ hardness ▪ tensile strength ▪ density ▪ conductivity ▪ melting point
	Materials in context • the uses and classification of the major metal types for: ▪ furniture products ▪ building and construction materials ▪ consumer products • the environmental impact of metals production ▪ raw material extraction and processing – steel and aluminium ▪ end-of-life of a product – recycling and safe disposal

Week	Key teaching points
3–4	Safety • correct use of personal protective equipment (PPE) where applicable • work health and safety practices appropriate to tasks being undertaken in workshops • apply risk management strategies in the workshop/studio • assess the condition of tools and machinery Use of technology Skills and techniques • select and apply appropriate and accurate marking out tools and techniques for measuring and marking out in sheet metal, bar and tube projects, that include the use of: ▪ rule ▪ square ▪ scribe ▪ centre punch ▪ inside/outside callipers ▪ combination squares • select and safely apply technical skills using a range of tools and machinery, that may include: ▪ hand tools for shaping ▪ files and filing ▪ hacksaws and blades ▪ metal lathe ▪ vice and clamps ▪ hand tools for cutting ▪ electric hand drill ▪ drill press/pedestal drill
5–8	Production management • production planning ▪ using tools, equipment and machinery to complete production ▪ follow instructions from plans ▪ maintain safety requirements • ongoing evaluation techniques: progress/decision changes made to the project Use of technology Skills and techniques • with supervision, operate machinery and tools appropriate to context • apply methods of drilling different metals ▪ preparations for drilling ▪ drill speeds ▪ lubricants for different metals • select and apply appropriate methods of fixing metals together through permanent and non-permanent joining, that could include: ▪ welding ▪ types of nuts and bolts ▪ riveting ▪ screws • name and operate a powered cutting machine or mechanical cutting device • name and operate machines for folding and shaping metals • apply correct methods of metal welding ▪ metal preparation ▪ welding operations ▪ set up ▪ testing • apply appropriate finishing techniques using brush or cloth and/or spray gun followed by correct clean up procedure

Week	Key teaching points
9	Design Design fundamentals and skills • evaluate ▪ final product against design brief, initial design and performance criteria related to needs, values and beliefs of the end user Use of technology Skills and techniques • ICT, portfolio development and communication skills ▪ photography – final product ▪ documenting presentations and evaluations
10–11	Design Design fundamentals and skills • investigate ▪ designs in practice ▪ needs, values and beliefs of the designer/developer ▪ sources of design inspiration ▪ performance criteria for products ▪ application of design fundamentals and factors affecting design ○ aesthetics ○ measurements ○ function ○ environmental impact and considerations ○ cost ○ safety • devise ▪ using communication and documentation techniques ○ sketching and drawing ○ rendering ○ annotating ▪ understanding the elements and principles of design where applicable in context ○ line ○ contrast ○ shape ○ proportion ○ form ○ balance ○ texture ○ colour

Week	Key teaching points
12–15	Design Design fundamentals and skills • devise ▪ rapid concept development techniques to generate design ideas and concepts ▪ final design concept using design brief and performance criteria ▪ review of best idea using design brief and performance criteria ▪ design solution ○ develop best concept using annotated hand or computer-generated graphics (front, back views and detailed sketches as necessary) ○ 2D illustrations (working/technical drawings) ○ 3D illustration (presentation drawings) ○ inspiration/concept/storyboard Use of technology Skills and techniques • context appropriate drawing and relevant technical information to produce the final product to demonstrate: ▪ sketching rapid concept developments ▪ 3D presentation drawings ▪ rendering techniques ▪ 2D working drawings or using templates ▪ inspiration/concept and storyboard • production plans ▪ materials list ▪ costing for all materials components ▪ stages of production • select appropriate materials and calculate the quantities of materials required to complete the project

Context: Metal

Unit 4

Semester 2

Week	Key teaching points
1–2	Materials Nature and properties of materials - the properties of materials - non-ferrous – copper, aluminium - the properties of steel using the following terms - malleable - ductile - hardness - brittleness - corrosion resistance - thermal conductivity - electrical conductivity - relationship between properties and end uses of metals - identification of thread types, taps and dies - applications of at least two of the following metal finishes - painting - galvanising - lacquering - enamelling - tin plating - electroplating - anodising - plastic or powder coatings Materials in context - examples of re-cycling methods for different metal materials
3–4	Design Design fundamentals and skills - investigate - needs, values and beliefs of the designer/developer - needs, values and beliefs of the client/target audience/market - performance criteria related to needs, values and beliefs of the end user - application of design fundamentals and factors affecting design - aesthetics - environmental impact and considerations - function - safety - cost

Week	Key teaching points
5–8	Use of technology Skills and techniques • develop context-appropriate drawings and relevant technical information to produce the final product ▪ sketching rapid concept developments ▪ 3D presentation drawings ▪ 2D working drawings or using templates ▪ inspiration/concept/storyboard development and presentation Design Design fundamentals and skills • devise ▪ communication and documentation techniques ○ sketching and drawing ○ rendering ○ annotating ○ sampling ○ modelling ▪ applying of elements and principles of design where applicable in context ▪ rapid concept development techniques, images and annotation ▪ design development ○ review and justification of best ideas using design brief and performance criteria ○ best ideas developed using annotated hand or computer-generated graphics (front, back views and detailed sketches as necessary) ○ 2D illustrations (working/technical drawings) ○ 3D illustration (presentation drawings) ○ inspiration/concept/storyboard development and presentation ▪ production plan ○ materials list ○ estimated and actual costing for all materials and component ○ production plan deadlines

Week	Key teaching points
9–14	Use of technology Skills and techniques • use workroom/studio terminology appropriate to context • select appropriate materials and calculate the correct amount required to order and purchase materials to complete the project • operate machinery and tools appropriate to context • identify, remove and report blunt, dull or damaged tools and machinery appropriate to context • handle and store sectional tube, bar and sheet metal and material correctly • select and apply appropriate and accurate marking out tools and techniques for measuring and marking out in sheet metal, bar and tube projects • ensure safety guards and devices are fitted correctly before operating a machine • select and safely apply technical skills using a range of tools and machinery that could include: ▪ cutting, shaping and folding techniques ▪ adjusting and changing components of machinery ▪ welding equipment, both gas and electric ▪ metal lathe and basic manual and/or automatic turning operations • prepare metal surfaces for finishing • apply a metal finish Safety • correct use of personal protective equipment (PPE) where applicable • conduct risk assessment for using specific tools/machinery • demonstrate work health and safety practices appropriate to tasks being undertaken in workshops • apply risk management strategies in the workshop/studio • recognise need and purpose of materials safety data (MSD) with regard to storage and handling of hazardous substances and hazardous operations appropriate to situation Production management • production planning ▪ using tools, equipment and machinery to complete production ○ adhere to sequential instructions ○ apply safety and risk management ▪ record changes to materials lists or costing • evaluation techniques: notes and use of photography to record decision changes made to the project, where applicable considering client consultation

Week	Key teaching points
15	Design Design fundamentals and skills • evaluate ▪ design and production processes ▪ production plan/journal/diary and accompanying photographic evidence to record evaluation ▪ product against design brief, initial design and performance criteria related to needs, values and beliefs of the end user Use of technology Skills and techniques • photography – final product • annotated photographs of all views of the final product and all features of the final product • documenting presentations and evaluations • ICT, portfolio development and communication skills in: ▪ client and market research techniques ▪ client presentation techniques

Context: Textiles

Unit 3

Semester 1

Week	Key teaching points
1–2	Materials Nature and properties of materials • fibre types and classification ▪ natural fibres ○ cellulosic – cotton, linen ○ protein – wool, silk ▪ manufactured fibres ○ regenerated – rayon, acetate ○ synthetic – polyester, nylon • investigation of natural fibres – cotton, wool ▪ fabric names ▪ care ▪ properties • fabric structures ▪ woven – warp, weft, selvedge ▪ knitted – course, wale ▪ non-woven – felt, web • aesthetic properties ▪ lustre ▪ drape ▪ handle • physical properties ▪ durability ▪ strength ▪ abrasion resistance ▪ resilience ▪ elasticity ▪ dimensional stability ▪ shrink resistance • chemical properties ▪ absorbency ▪ thermal properties ▪ flammability ▪ sun resistance ▪ colourfastness

Week	Key teaching points
3–4	Safety • correct use of personal protective equipment (PPE) where applicable • work health and safety practices appropriate to tasks being undertaken in workshops • apply risk management strategies in the workshop/studio • assess the condition of tools and machinery Materials in context • specific textiles and their uses ▪ apparel ▪ textile arts ▪ furnishings ▪ non-apparel items ▪ costumes • environmental impact of the textile industry ▪ growing, extraction and processing – cotton and wool ▪ end-of-life of a product – recycling and safe disposal
5–8	Production management • production planning ▪ using tools, equipment and machinery to complete production ○ follow instructions from plans ○ maintain safety requirements ▪ ongoing evaluation techniques: progress/decision changes made to the project Use of technology Skills and techniques ▪ ICT skills related to design development and presentation ▪ demonstrate drawing skills ▪ sketching – rapid concept development ▪ 3D presentation drawings – using templates ▪ 2D working drawings – using templates ▪ inspiration/concept and storyboard • apply pattern skills ▪ use a commercial pattern ▪ pattern layout ▪ take basic body measurements ▪ cutting out ▪ design and wearing ease ▪ transfer pattern markings ▪ select pattern using body measurements ▪ pattern adaptations as required ▪ pattern parts • demonstrate how to correctly operate and adjust: ▪ sewing machine ▪ overlocker • demonstrate machine skills ▪ threading ▪ changing machine feet ▪ straight stitch ▪ changing machine needle ▪ zig zag ▪ use overlocker for neatening • select and apply appropriate construction and pressing techniques ▪ joining ▪ closures ▪ shaping ▪ finishing • select and apply fabric decoration, embellishment and manipulation techniques as required • with supervision, operate machinery and tools appropriate to context

Week	Key teaching points
9	Design Design fundamentals and skills • evaluate ▪ final product against design brief, initial design and performance criteria related to needs, values and beliefs of the end user Use of technology Skills and techniques • ICT, portfolio development and communication skills ▪ photography – final product ▪ documenting presentations and evaluations
10–11	Use of technology Skills and techniques • ICT skills related to design development and presentation Design Design fundamentals and skills • investigate ▪ designs in practice ▪ needs, values and beliefs of the designer/developer ▪ sources of design inspiration ▪ performance criteria for products ▪ application of design fundamentals and factors affecting design ○ aesthetics ○ measurements ○ function ○ environmental impact and considerations ○ cost ○ safety • devise ▪ using communication and documentation techniques ○ sketching and drawing ○ rendering ○ annotating ▪ understanding the elements and principles of design where applicable in context ○ line ○ contrast ○ shape ○ proportion ○ form ○ balance ○ texture ○ colour

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12–15	Design Design fundamentals and skills • devise ▪ rapid concept development techniques to generate design ideas and concepts ▪ final design concept using design brief and performance criteria ▪ review of best idea using design brief and performance criteria ▪ design solution ○ develop best concept using annotated hand or computer-generated graphics (front, back views and detailed sketches as necessary) ○ 2D illustrations (working/technical drawings) ○ 3D illustration (presentation drawings) ○ inspiration/concept/storyboard • production plans ▪ materials list ▪ costing for all materials components ▪ stages of production Use of technology Skills and techniques • context appropriate drawing and relevant technical information to produce the final product to demonstrate: ▪ sketching rapid concept developments ▪ 3D presentation drawings ▪ rendering techniques ▪ 2D working drawings or using templates ▪ inspiration/concept or storyboard development and presentation • select appropriate materials and calculate the quantities of materials required to complete the project

Context: Textiles

Unit 4

Semester 2

Week	Key teaching points
1–2	Materials Nature and properties of materials • fibre types and classification ▪ natural fibres ○ cellulosic – cotton, linen ○ protein – wool, silk ▪ manufactured fibres ○ regenerated – rayon, acetate ○ synthetic – polyester, nylon • fibres ▪ synthetics fibres – polyester ▪ regenerated fibres – rayon ○ classification and origin ○ fabric names ○ properties ○ environmental impacts ○ care • decorative techniques used to enhance appearance ▪ dyeing ▪ printing • fabric structures ▪ woven – plain, satin, twill, jacquard, pile ▪ knit – warp, weft ▪ non-woven – felt, interfacings • relationship between properties and end uses of textiles Materials in context • identification of examples of recycling methods for different fabric materials

Week	Key teaching points
3–4	Use of technology Skills and techniques • ICT, portfolio and communication skills • apply drawing skills • apply pattern skills ▪ select, use and adapt commercial patterns and instructions • operate sewing machine and overlocker Design Design fundamentals and skills • investigate ▪ needs, values and beliefs of the designer/developer ▪ needs, values and beliefs of the client/target audience/market ▪ performance criteria related to needs, values and beliefs of the end user ▪ application of design fundamentals and factors affecting design ○ aesthetics ○ function ○ cost ○ environmental impact and considerations ○ safety
5–8	Use of technology Skills and techniques • develop context appropriate drawings and relevant technical information to produce the final product ▪ sketching rapid concept developments ▪ 3D presentation drawings ▪ 2D working drawings or using templates ▪ inspiration/concept or storyboard development and presentation Design Design fundamentals and skills • devise ▪ communication and documentation techniques ○ sketching and drawing ○ rendering ○ annotating ○ sampling ○ modelling ▪ applying of elements and principles of design where applicable in context ▪ rapid concept development techniques, images and annotation ▪ design development ▪ review and justification of best ideas using design brief and performance criteria ○ best ideas developed using annotated hand or computer-generated graphics (front, back views and detailed sketches as necessary) ○ 2D illustrations (working/technical drawings) ○ 3D illustration (presentation drawings) ○ inspiration/concept/storyboard development and presentation ▪ production plan ○ materials list ○ estimated and actual costing for all materials and components ○ production plan deadlines

Week	Key teaching points
9–14	Use of technology Skills and techniques • use workroom/studio terminology appropriate to context • select appropriate materials and calculate the correct amount required to order and purchase materials to complete the project • operate machinery and tools appropriate to context • identify, remove and report blunt, dull or damaged tools and machinery appropriate to context • investigate, select and apply construction and pressing techniques for manufacturing products ▪ joining ▪ shaping ▪ closures ▪ finishing • investigate a range of embellishment and manipulation techniques selected from: ▪ appliqué ▪ dyeing ▪ shirring ▪ patchwork ▪ gathering, pleating, tucking ▪ printing ▪ beading ▪ quilting ▪ lace application ▪ felting ▪ hand and machine embroidery Safety • correct use of personal protective equipment (PPE) where applicable • conduct risk assessment for using specific tools/machinery • demonstrate work health and safety practices appropriate to tasks being undertaken in workshops • apply risk management strategies in the workshop/studio • recognise need and purpose of materials safety data (MSD) with regard to storage and handling of hazardous substances and hazardous operations appropriate to situation Production management • production planning ▪ using tools, equipment and machinery to complete production ○ adhere to sequential instructions ○ apply safety and risk management ▪ record changes to materials lists or costing • evaluation techniques: notes and use of photography to record decision changes made to the project, where applicable considering client consultation

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Context: Wood

Unit 3

Semester 1

Week	Key teaching points
1–2	Materials Nature and properties of materials • wood types and classification ▪ natural wood ○ hardwood – jarrah, Australian oak ○ soft wood – radiata pine, Douglas fir ▪ man-made board ○ plywood – interior, exterior, marine ○ medium density fibreboards – plain, veneered ○ particle board • difference between rough sawn and DAR timbers • identification of common timber sizes, lengths, widths and thicknesses • physical properties ▪ durability ▪ strength ▪ abrasion resistance ▪ flexibility ▪ dimensional stability ▪ shrink resistance • classification of adhesives for timber ▪ PVA ▪ epoxy ▪ cyanoacrylate ▪ latex/rubber based Materials in context • the uses and classification of the major timber types for: ▪ furniture products ▪ building and construction materials ▪ consumer products • the environmental impact of producing timber ▪ growth/harvesting ▪ milling/conversion ▪ end-of-life of a product – recycling and safe disposal

Week	Key teaching points												
3–4	Safety • correct use of personal protective equipment (PPE) where applicable • work health and safety practices appropriate to tasks being undertaken in workshops • apply risk management strategies in the workshop/studio • assess the condition of tools and machinery Use of technology Skills and techniques • use hand tools and/or machinery to fabricate at least two of the following joints <table border="0"> <tr> <td>▪ widening joint</td><td>▪ housing joint</td></tr> <tr> <td>▪ finger joint</td><td>▪ mortise and tenon</td></tr> <tr> <td>▪ cross-halving joint</td><td>▪ bridle joint</td></tr> <tr> <td>▪ dovetail joint</td><td>▪ biscuit joint</td></tr> </table>	▪ widening joint	▪ housing joint	▪ finger joint	▪ mortise and tenon	▪ cross-halving joint	▪ bridle joint	▪ dovetail joint	▪ biscuit joint				
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5–8	Production management • production planning ▪ using tools, equipment and machinery to complete production ▪ follow instructions from plans ▪ maintain safety requirements • ongoing evaluation techniques: progress/decision changes made to the project Use of technology Skills and techniques • with supervision, operate machinery and tools appropriate to context • select and safely apply technical skills using a range of tools and machinery that could include: <table border="0"> <tr> <td>▪ bandsaw</td><td>▪ biscuit joiner</td></tr> <tr> <td>▪ drill press</td><td>▪ domino joiner</td></tr> <tr> <td>▪ various grinders or carving tools</td><td>▪ table saw</td></tr> <tr> <td>▪ sanding machines</td><td>▪ mortise machine</td></tr> <tr> <td>▪ portable or fixed routers</td><td>▪ wood lathe</td></tr> <tr> <td>▪ radial arm saw or drop saw or compound mitre saw</td><td></td></tr> </table> • select and use the correct type and grade of abrasive paper • prepare correctly a surface for finishing • apply appropriate finishing techniques using brush or cloth and/or spray gun	▪ bandsaw	▪ biscuit joiner	▪ drill press	▪ domino joiner	▪ various grinders or carving tools	▪ table saw	▪ sanding machines	▪ mortise machine	▪ portable or fixed routers	▪ wood lathe	▪ radial arm saw or drop saw or compound mitre saw	
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Week	Key teaching points
10–11	Use of technology Skills and techniques • ICT skills related to design development and presentation Design Design fundamentals and skills • investigate ▪ designs in practice ▪ needs, values and beliefs of the designer/developer ▪ sources of design inspiration ▪ performance criteria for products ▪ application of design fundamentals and factors affecting design ○ aesthetics ○ environmental impact and considerations ○ function ○ safety ○ cost ○ measurements • devise ▪ using communication and documentation techniques ○ sketching and drawing ○ rendering ○ annotating ▪ understanding the elements and principles of design where applicable in context ○ line ○ contrast ○ shape ○ proportion ○ form ○ balance ○ texture ○ colour

Week	Key teaching points
12–15	Design Design fundamentals and skills • devise ▪ rapid concept development techniques to generate design ideas and concepts ▪ final design concept using design brief and performance criteria ▪ review of best idea using design brief and performance criteria ▪ design solution ○ develop best concept using annotated hand or computer-generated graphics (front, back views and detailed sketches as necessary) ○ 2D illustrations (working/technical drawings) ○ 3D illustration (presentation drawings) ○ inspiration/concept/storyboard • production plans ▪ materials list ▪ costing for all materials components ▪ stages of production Use of technology Skills and techniques • context appropriate drawing and relevant technical information to produce the final product to demonstrate: ▪ sketching rapid concept developments ▪ 3D presentation drawings ▪ rendering techniques ▪ 2D working drawings or using templates ▪ inspiration/concept or storyboard development and presentation • demonstrate drawing skills ▪ drawing, reading and interpreting plans/ patterns/templates ▪ isometric and pictorial hand sketches for project development ▪ dimensioned orthogonal drawing in 3rd angle for working drawing • select appropriate materials and calculate the quantities of materials required to complete the project

Context: Wood

Unit 4

Semester 2

Week	Key teaching points
1–2	Materials Nature and properties of materials - properties and characteristics of Western Australian hardwoods - jarrah - marri - karri - sheoak - the properties of timbers - density - hardness and softness - durability - weight - figure - texture - grain - moisture content - relationship between properties and end uses of timbers - types and classification of finishes: water-based, turps (oil) based, solvent-based, epoxy base, oils, waxes and polishes to include: - physical appearance - physical properties - chemical properties - identification of methods of application and uses of finishes Materials in context - identification of examples of re-cycling methods for different wood materials
3–4	Use of technology Skills and techniques - ICT, portfolio development and communication skills in: - client and market research techniques - client presentation techniques Design Design fundamentals and skills - investigate - needs, values and beliefs of the designer/developer - needs, values and beliefs of the client/target audience/market - performance criteria related to needs, values and beliefs of the end user - application of design fundamentals and factors affecting design - aesthetics - environmental impact and considerations - function - safety - cost

Week	Key teaching points
5–8	Use of technology Skills and techniques • ICT, portfolio and communication skills • apply drawing skills • develop context appropriate drawings and relevant technical information to produce the final product ▪ sketching rapid concept developments ▪ 3D presentation drawings ▪ 2D working drawings or using templates ▪ inspiration/concept or storyboard development and presentation Design Design fundamentals and skills • devise ▪ communication and documentation techniques ○ sketching and drawing ○ rendering ○ annotating ○ sampling ○ modelling ▪ applying of elements and principles of design where applicable in context ▪ rapid concept development techniques, images and annotation ▪ design development ○ review and justification of best ideas using design brief and performance criteria ○ best ideas developed using annotated hand or computer-generated graphics (front, back views and detailed sketches as necessary) ○ 2D illustrations (working/technical drawings) ○ 3D illustration (presentation drawings) ○ inspiration/concept/storyboard development and presentation ▪ production plan ○ materials list ○ estimated and actual costing for all materials and components ○ production plan deadlines

Week	Key teaching points
9–14	Use of technology Skills and techniques • use workroom/studio terminology appropriate to context • select appropriate materials and calculate the correct amount required to order and purchase materials to complete the project • operate machinery and tools appropriate to context • identify, remove and report blunt, dull or damaged tools and machinery appropriate to context • handle and store timbers and material correctly • demonstrate correct procedures for setting up, adjusting and safely operating machinery • identify and use correctly fitted dust extraction and safety guards • identify and use different methods of fastening timbers ▪ permanent fastening ▪ semi-permanent/knock down fittings • identify and use correct grades of abrasive necessary for a task • demonstrate the basic operation and maintenance of a spray gun Safety • correct use of personal protective equipment (PPE) where applicable • conduct risk assessment for using specific tools/machinery • demonstrate work health and safety practices appropriate to tasks being undertaken in workshops • apply risk management strategies in the workshop/studio • recognise need and purpose of materials safety data (MSD) with regard to storage and handling of hazardous substances and hazardous operations appropriate to situation Production management • production planning ▪ using tools, equipment and machinery to complete production ○ adhere to sequential instructions ○ apply safety and risk management ▪ record changes to materials lists or costing • evaluation techniques: notes and use of photography to record decision changes made to the project, where applicable considering client consultation

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15	Design Design fundamentals and skills • evaluate ▪ design and production processes ▪ production plan/journal/diary and accompanying photographic evidence to record evaluation ▪ product against design brief, initial design and performance criteria related to needs, values and beliefs of the end user Use of technology Skills and techniques • photography – final product • annotated photographs of all views of the final product and all features of the final product • documenting presentations and evaluations