

<i>Subject content</i>	<i>Boardworks presentations</i>
Unit 1: Written Paper	
Materials and Components	
Classification and working properties of materials	
Paper/card	Paper, Card and Board
Timber based materials	Timber Based Materials
Ferrous and non-ferrous metals	Ferrous and Non Ferrous Metals
Plastics	Plastics
Ceramics	Ceramics
Textiles	Textile Products
Food	Food Products
Electronic and Control components	Systems and Control Control Components
Manipulating and combining materials	Product Manufacture
New materials	

<i>Subject content</i>	<i>Boardworks presentations</i>
Design and Market Influences	
Evolution of Product Design	Evolution of Product Design
Design in practice	
Product development	Designing for Different Needs Product Analysis Developing Your Portfolio
Communication and representation of ideas	CAD/CAM Developing Your Portfolio
Design methodology	Product Analysis Evolution of Product Design Developing Your Portfolio
Packaging	Designing and Developing Ideas Structures of Food Properties of Food
Product marketing	
Design in the human context	
Human factors	Anthropometrics and Ergonomics Designing for Different Needs

Subject content	Boardworks presentations
Safety	Quality Control Scales of Production and Manufacturing Systems
Quality	Quality Control
Ethical, environmental and sustainability issues	Scales of Production and Manufacturing Systems
Consumer issues	Quality Control
Processes and Manufacture	
Product manufacture	Product Manufacture
Industrial and commercial practice Methods of production	Scales of Production and Manufacturing Systems CAD/CAM
Manufacturing systems	Systems and Control Scales of Production and Manufacturing Systems
Use of ICT (Information and communication technology)	CAD/CAM

Subject content	Boardworks presentations
Unit A551: Introduction to Design and Making	
Demonstrate and writing a design brief	Developing Your Portfolio Designing for Different Needs
Drawing up a specification	Developing Your Portfolio Designing for Different Needs
Generating design proposals	Developing Your Portfolio Designing for Different Needs Quality Control
Unit A552: Designing and Making Innovation Challenge	Developing Your Portfolio Designing for Different Needs
Unit A553: Making, Testing and Marketing Products	
Prototype manufacture	CAD/CAM Product Manufacture Developing Your Portfolio
Testing, evaluating and marketing	Developing Your Portfolio Designing for Different Needs Scales of Production and Manufacturing Systems

Subject content	Boardworks presentations
Unit A554: Designing Influences	
Designing Influences Section A	
Social, moral and cultural issues	Evolution of Product Design Designing for Different Need
Environmental factors	Designing for Different Needs
Ergonomics and anthropometrics	Anthropometrics and Ergonomics
Aesthetics	Evolution of Product Design
Consumer law	Quality Control
Globalisation of design and manufacturing	Scales of Production and Manufacturing Systems
Sustainable technologies	Designing for Different Needs
Sustainable design imperatives and design tools	Designing for Different Needs
Economics of manufacturing	Scales of Production and Manufacturing Systems

Subject content	Boardworks presentations
Marketing and advertising	
Computer-aided design and manufacturing	CAD/CAM
Colour theory	
Systems and structures	Systems and Control
Energy	
Scientific principles	Control Components
Health and safety	Quality Control
Design potential and impact of new and emerging technologies	Designing for Different Needs
Design Influences Section B	Evolution of Product Design