

Unit Title:	Develop preliminary specification and plans from a design brief
OCR unit number	1
Level:	2
Credit value:	3
Guided learning hours:	24
Unit reference number	A/503/5851

Unit purpose and aim

The focus of this unit is to develop the learner's ability to understand, assess and interpret a design brief from a given client. Learners will undertake a series of mind mapping exercises identifying key areas such as; user requirements, product requirements and market research.

The learner will interpret their findings to produce product design specifications to British standards.

Learning Outcomes	Assessment Criteria	Teaching content
<p>The Learner will:</p> <p>1 Understand the requirements of client design briefs</p>	<p>The Learner can:</p> <p>1.1 Identify the key requirements of a client brief</p> <p>1.2 Identify the characteristics of the target market</p> <p>1.3 Explain the purpose of the product</p>	<ul style="list-style-type: none"> • Mind mapping to establish the characteristics of the target market <ul style="list-style-type: none"> ○ age range ○ sex ○ social status ○ main interests ○ advertising channels • Establish purpose of the intended product <ul style="list-style-type: none"> ○ intended function ○ design problem parameters ○ establishing strengths and weaknesses of existing products ○ gaps in the market

Learning Outcomes	Assessment Criteria	Teaching content
2 Know the design development cycle and its phases	2.1 Describe the key stages of the design development cycle	<ul style="list-style-type: none"> • Main stages of the design development cycle. <ul style="list-style-type: none"> ○ interpreting the client brief ○ carry out research ○ design specification ○ develop concepts ○ design development ○ prototyping ○ final design / CAD work ○ testing ○ plan production and manufacture ○ evaluate
3 Understand the time and resource requirements for a specific design brief	3.1 Assess the design development requirements for a specific product 3.2 Evaluate the accuracy of planning throughout the design process	<ul style="list-style-type: none"> • Requirements of a design development plan: <ul style="list-style-type: none"> ○ Resource – equipment, materials, staff. ○ Time – Produce a simple production plan identifying the planned delivery time of the product eg Gantt chart, Microsoft Project • Evaluate design development plan throughout the duration of a particular design project
4 Be able to produce a preliminary design specification	4.1 Identify the functional requirements of the product 4.2 Communicate the requirements of a product through a design specification	<ul style="list-style-type: none"> • Preliminary design specification should meet British standards and cover the following: <ul style="list-style-type: none"> ○ functional requirements ○ use/modes of operation ○ environmental considerations ○ operational performance ○ reliability ○ physical properties ○ health and safety ○ cost

Assessment

This unit is centre assessed and externally verified. In order to achieve the unit you must produce a portfolio of evidence which, on request, will need to be made available to the OCR external verifier. Portfolios of work must be produced independently and centres must confirm to OCR that the evidence is authentic.

Evidence requirements

Learners will produce a client-focused presentation of the requirements of a client brief, the stages of the design cycle with appropriate time planning and a final design specification in one of the following forms:

- Written report
- Presentation with supporting documents (eg PowerPoint)
- Video record of a verbal presentation

Guidance on assessment and evidence requirements

The content of the specification should be formed based on the analysis of a company themed/sponsored design brief. Learners should undertake research and make informed choices on areas such as target market, safety and the environmental issues associated with the given product.

Tutors should aim to deliver this unit with an industrial theme. Learners should be given a client design brief, set by or themed around a specific employer. The learners should spend time in groups and individually assessing the requirements of the brief. Learners should use a range of research and investigation techniques and present their findings to their peers/tutors/industry sponsor.

To aid the evaluation of the design development plan, learners may want to keep a diary to identify the success of the plan and establish any under or over-estimations.

National Occupational Standards (NOS) mapping/signposting

NOS can be viewed on the relevant Sector Skills Council's website or the Occupational standards directory at www.ukstandards.co.uk.

Occupational standards	Unit number	Title
Engineering Technical Support suite 2 2007	TS2-19	Assisting in Obtaining Resources for Engineering Activities
Freelancing in the Creative and Cultural Industries	FL7	Conduct research to develop your freelance work in creative and cultural industries
Freelancing in the Creative and Cultural Industries	FL8	Manage projects as a freelancer in creative and cultural industries
Freelancing in the Creative and Cultural Industries	FL9	Manage your time as a freelancer in creative and cultural industries

Cultural Industries		cultural industries FL9
Freelancing in the Creative and Cultural Industries	FL10	Plan innovation for your freelance work in creative and cultural industries
Freelancing in the Creative and Cultural Industries	FL53	Understand what the customer or client wants and negotiate a brief for your freelance work in creative and cultural industries
Design	DES4	Communicate the importance of the design brief
Design	DES5	Follow a design process
Design	DES11	Provide written information in relation to your design work
Design	DES17	Writing a design brief
Design	DES18	Interpret the design brief and follow the design process
Design	DES21	Articulate, present and debate ideas in a creative environment
Design	DES39	Manage a design project
	DES42	Negotiate and make deals with design clients
	DES43	Assess design services
Design and Draughting	O15NDD0 2ECRS1.1 1	Identify and assess factors that impact on engineering design briefs

Functional skills signposting

This section indicates where learners may have an opportunity to develop their functional skills.

Functional Skills Standards					
English		Mathematics		ICT	
Speaking and Listening		Representing		Use ICT systems	✓
Reading	✓	Analysing		Find and select information	✓
Writing	✓	Interpreting		Develop, present and communicate information	✓

Resources

Equipment

For effective delivery of this unit centres should have access to the following resources and equipment.

- Computer system with Internet access, word processing, spreadsheet and business presentation software.
- Access to plain paper of various sizes.
- Access to a library of resources.
- Access to British Standard documentation for design specifications.

Additional information

For further information regarding administration for this qualification, please refer to the OCR document '*Admin Guide: Vocational Qualifications*' (A850) on the OCR website www.ocr.org.uk .