

3D Design

Number of Exams:

1

Controlled Assessments:

1

What are the aims of this course?

This qualification is intended for learners who are interested in working in a practical way within the context of Product Design, and wish to develop skills and knowledge that will prepare them for further study and employment within this sector. It will particularly appeal to learners who are looking for a course that is practical in nature. The course will give learners the opportunity to develop an understanding of:

- Materials, components and technologies and the ability to select these appropriately
- How to read, interpret and work from drawings, plans and instructions
- Quality and how this can be achieved by making to fine tolerances
- Key technical terminology related to materials and properties
- Commercial and industrial practices within the chosen areas industries

What will I learn?

Techniques:

Learners must demonstrate the ability to work creatively with processes and techniques appropriate to Product Design such as: computer-aided design, model making, prototyping, constructing, assembling. An understanding of the relationship between form and function is essential.

In addition, learners will be required to demonstrate skills in the following:

- Develop ideas through investigations informed by selecting and critically analysing sources
- Apply an understanding of relevant Three-Dimensional Design practices in the creative and cultural industries to their work
- Refine their ideas as work progresses through researching, selecting, analysing, constructing and presenting products
- Record their ideas, observations, insights and independent judgements, in ways that are appropriate to the Three-Dimensional Design title, such as cutting and constructing material in three-dimensions

Course Outline

Unit Titles	Content	% Unit is Worth
Portfolio (01) 120 marks non-exam assessment (internally assessed and externally moderated)	Component 01: Portfolio Learners should produce: • a portfolio of practical work showing their personal response to either a centre- or learner-set starting point, brief, scenario or stimulus.	60%
Externally set task (02) 80 marks 10 hours non-exam assessment (internally assessed and externally moderated)	What's assessed Practical application of: • Core technical principles • Specialist technical principles • Designing and making principles	40%

- Use appropriate specialist vocabulary through either visual communication or written annotation, or both, within three-dimensional design
- Use drawing skills for different needs and purposes, appropriate to the area(s) of study used. Drawing may take the form of sketching, scale model(s) and computer-aided design using appropriate media and materials
- Realise personal intentions in Three-Dimensional Design, through the sustained application of the three-dimensional design making process working with wood, metal and plastic.

Progression and Career Opportunities

The skills and knowledge gained will allow learners to progress to a wide range of courses in both general and vocational qualifications. It is a particularly good preparation for an A-level in Design and Technology and Product Design, related level 3 vocational qualifications, or an apprenticeship in a related area of employment. This qualification prepares learners by developing an in depth knowledge of wood, plastic and metal based materials and their practical use within the materials industry. Learners will also develop valuable transferable skills in teamwork and communication that will be of value to them no matter what career they choose to follow.

Further Information

3Ddesign roles and employment: Product designer, tool maker, plumber, pattern maker, carpenter/joiner, quality control manager, metal fabricator, CNC operator, architectural welder, welder, furniture maker, production manager, jeweller.

Specification Link:

<https://www.ocr.org.uk/qualifications/gcse/art-and-design-j170-j176-from-2016/>

For further information please contact:

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