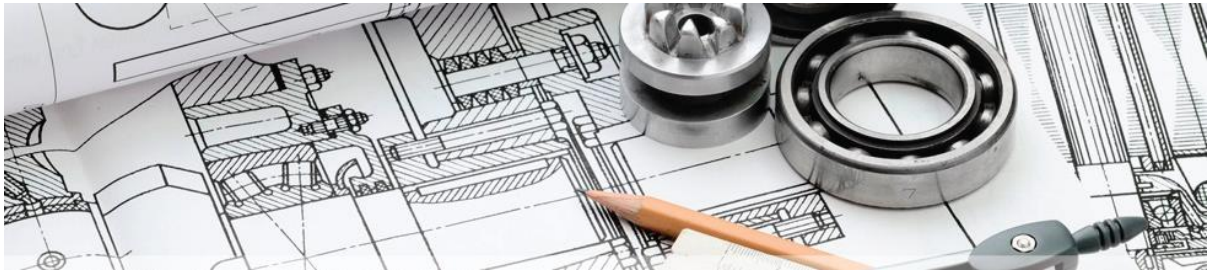


## GRAPHICS, DESIGN & MANUFACTURE



### COURSE CONTENT –What will I learn?

The Graphics, Design & Manufacture course provides you with a broad practical introduction to graphics, design and manufacturing technologies. The course provides you with opportunities to develop and enhance practical and graphic creativity, practical problem-solving skills, and an appreciation of safe working practices in a workshop or similar environment.

Graphics, Design & Manufacture is practical, exploratory and experiential in nature. Throughout the course, you will develop basic design skills, use graphic communication within the design process, and develop practical skills in making, constructing and testing models. You will also gain some knowledge of basic engineering ideas and the ability to apply your knowledge and skills to solve simple problems in familiar contexts.

The aims of the course allow you to:

- develop skills in producing and interpreting sketches, drawings and diagrams
- develop skills in practical model making and construction
- develop skills in testing and simple evaluation of models
- apply safe working practices in a workshop or similar environment
- develop knowledge of basic engineering ideas

The course will introduce you to ideas and skills which you may then choose to take forward through further study in the technologies curriculum area.

### TEACHING METHODS – What will I do?

The Course consists of three core elements; each of these elements will be taught concurrently using a series of integrated design briefs.

#### Graphics for Design

In this element, you will develop skills in producing drawings, sketches and diagrams to support the design process and allow you to present your work with high visual impact. You will learn to use both computer-aided and manual graphic communication tools and presentation techniques.

#### Designing and Modelling

Here you will follow, with guidance, a simple design process. You will make simple physical models from design drawings, refining your design based on a simple evaluation of these models. Through these designing and modelling activities, you will develop awareness of sustainability issues and recycling.

## **Constructing and Testing**

In this element, you will develop an understanding of manufacturing processes. You will construct and test prototype products using a variety of materials, manufacturing them to a high standard in the workshop. You will learn to evaluate your work using a range of techniques and draw conclusions based on these test results, applying this knowledge to your future design tasks.

In each of the units, you will develop and maintain safe working practices in a workshop and/or similar environment.

## **ASSESSMENT**

Your work will be assessed using a series of integrated design briefs and tasks, drawing upon and assessing elements of each unit concurrently. You will be expected to draw upon your developing range of knowledge and skills to produce a response to each brief.

## **HOMEWORK**

You will be expected to complete some research tasks to support your design work and undertake case study tasks to develop your understanding of graphic techniques, practical materials and processes. This will take the form of regular homework tasks throughout the duration of the course.

## **PROGRESSION IN THE SENIOR PHASE**

Completion of this course and/or its units may allow you to follow these courses in your senior phase:

- National 4/5 Design and Manufacture
- National 4/5 Graphic Communication
- National 4/5 Practical Woodworking