

## DCG/graphics

### Leaving Certificate technology subjects

Within the Leaving Certificate, technology education is provided through the subjects Architectural Technology, Engineering Technology, Design and Communication Graphics, and Technology, thereby providing progression with junior cycle. These subjects contribute to a broad, balanced and general education of students, with particular reference to their vocational, further education and training aspirations on completion of the Leaving Certificate. At a more practical level, the technology subjects at senior cycle share a number of common features.

The syllabuses are constructed on the basis of core areas of study and optional areas of study, reflecting the different topics and sections within the subject area are offered at two levels, Ordinary and Higher have been designed for completion in 180 hours of class contact time place a strong emphasis on practical learning activity include a range of assessment components aimed at assessing student achievement in both practical and theoretical aspects of the subjects.

### Design and Communication Graphics (*Technical Graphics at Junior Certificate*)

#### Aims:

1. To develop the cognitive and practical skills associated with communication graphics, problem solving and critical thinking
2. To develop the capacity and ability of students in the area of visual/spatial reasoning
3. To provide a learning environment where students can plan, organise and present appropriate design solutions using a variety of skills, techniques and media
4. To provide a basis for lifelong learning.
5. To develop an appreciation for, and understanding of, aesthetic principles and their importance in design and the human environment.

### Majority of work carried out Using CAD/CAM such as:

2d Design & Solidworks

## Syllabus Structure

The syllabus comprises three fundamental areas of study:

- Plane and Descriptive Geometry
- Communication of Design and Computer Graphics
- Applied Graphics

The optional areas of study (Part Two) are offered within Applied Graphics where students are introduced to graphic applications in the fields of engineering, science and the human environment.

These optional areas of study are

- Dynamic Mechanisms
- Structural Forms
- Assemblies
- Geologic Geometry
- Surface Geometry

## Assessment Components

The syllabus will be assessed in relation to the syllabus objectives and the specified student learning outcomes. All material specified within the areas of study is examinable.

There are two assessment components

- \*1. A course assignment (40% of marks, of which CAD will form a significant and compulsory component)
2. A terminal examination paper (60% of marks)

*\*Course assignment handed in in January, 40% of final mark potentially obtained by this stage*