

## Leaving Certificate Technology.

This is both a Theoretical and Practical based Subject.

### Theoretical Material

- ✓ Material Technology
  - Here we learn about all the different categories of Material, including SMART Materials and even testing methods. You learn about their properties, characteristics and about how they are used in industry.
- ✓ Structures
  - Here we learn about forces acting on structures, the different type of structures there are and ideas/techniques which are used within structures.
- ✓ Electricity
  - This section is about definitions associated with electricity and different forms which it can come in, and of course its uses.
- ✓ Electronics and Control
  - Major section in the current climate. Learning about all the components, circuits understanding how to build them, test them and how they operate. We learn also in this section how to control machines with computers both in practice and in theory.
- ✓ Mechanisms
  - We learn about all the different mechanisms available to us so as to help us build our projects. We also learn about their advantages and disadvantages. Some of this section is based on mathematical questions used to work out the amount/type of mechanism required.
- ✓ Project Management
  - The techniques used to complete a project on time, budget and to meet the customer specifications
- ✓ Quality Management
  - Definitions based on quality control. Techniques used to implement quality. Quality Gurus who have helped improve quality drastically in the recent years.
- ✓ Health and Safety
  - Working together in practical session ensuring everything is completed in a safe environment, and knowing exactly why this is the case.
- ✓ Information Communication Technology (ICT)
  - Another important section in the current era. Learning definitions, applications and implementing these applications to further our learning.
- ✓ Design Portfolio
  - Completing a booklet to explain your project in-depth.

### Practical Material

- ✓ Construct a fully functioning 3 dimensional model for a specific brief
  - You are given a situation where you must build a 3D model using your knowledge of plastic, wood, metals etc to show a WORKING model of what you have learned. Example: Last year students had to build a Solar power car. (Maximum Dimension for this car is 500mm, so it is only a model)