# Engineering

A Senior Cycle Option Subject which follows on naturally from Junior Cycle Engineering,

but can be started as a new subject in 5<sup>th</sup> Year with the right APTITUDE and ATTITUDE.

# Study topics

Chemistry of Materials

Properties of Materials

Iron and Steel

Non-Ferrous Metals

Alloys

**Plastics** 

Metrology

Testing of Materials

Manufacturing

Design

Heat Treatment

Machining

**Precision Grinding** 

Theory of Metal Cutting

Welding

Adhesive Bonding

Electronics

**Pneumatics** 

Computer numerical

control (CNC)

Special Topic

# Special Topic 2024

The Design,
Operation and
Technology of
Container Ships



# Two Year Programme

5<sup>th</sup> Year

6th Year

**Sept – Dec:** All practical

To acquire necessary skills.

Jan – May: Group Project

**Summer Exams:** 

Practical test - 50%

Written test - 50%

**Sept – Oct:** All Theory

Best time to get a run at the course.

**Nov – Mar:** Project work - 25%

(Different each year)

**Feb** - (Mock Exams)

**Apr** - Practical Test - 25%

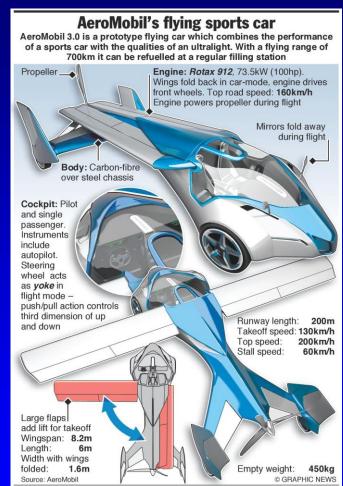
**June -** Written Test - 50%

# LCH Project 2019

Design and make a model of the AeroMobil

The model must have:

- 1. Forward propulsion
- 2. Retractable wings
- 3. A unique feature



# LCO Project 2024

Make a Model Club Car.

The model must have:

- 1. An electrical drive system
- 2. A storage compartment



## Assessment

**Higher Level** 

**Ordinary Level** 

Project 25%

Project 30%

Practical 25%

Practical 30%

Theory 50%

Theory 40%

Note: The Practical Test is common to both levels.

#### **Textbook**

Leaving Cert Engineering written by:

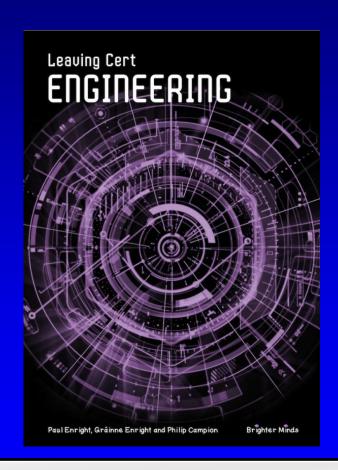
Paul Enright,

**Grainne Enright** 

& Philip Campion

published by:

**Brighter Minds** 



# Reasons to do Engineering

#### **Good reasons:**

Did JC Engineering or MT Wood and liked it
Have good Technological abilities
Like how the assessment is arranged
Would like to study Engineering in College???
Fancy a career in some area of Engineering

#### Not so good reasons:

Like the sound of the word "Engineering"
It's all about engines, vroom, vroom!
Friends are doing it and I don't want to be left out

### Like more info?

Come to G14 and have a look around.	Speak to JON or JM
Chat to 5 <sup>th</sup> or 6 <sup>th</sup> yr. Engineering students.	Have a look at the Textbook & Website.

www.newparkmetalwork.com

# ANY QUESTIONS?

Thanks for your attention!