

Subject Choice (Teacher Input):

Subject	Subject Teacher Advice	Student Advice (I wish I had known...)
Engineering	<p>The content of Engineering is split between a practical (hands on experience) element and a theory (written knowledge) element. Students who take Engineering will be expected, over a period of two years, to complete practical projects which include the use of hand tools and electrical machinery. They will be required to fine-tune these skills to enable them to complete their exam project and six hour practical (assembly) exam. Students will use machines such as: Drilling; Milling, Lathes, Band Saws, Various Welding procedures and computer aided machinery. Theory exam is worth 50%.</p> <p>Students will also be expected to design for themselves various parts of any projects they undertake. This will be of extreme benefit to them in designing their 2 final year examination projects (25% each).</p> <p>The main headings of the theory aspect are as follows: (A) Metals (B) plastics (C) materials testing (D) welding (E) machining techniques (F) alloy technology (G) mechanisms and electronics.</p> <p>Engineering is useful for the following careers which do not require a 3rd Level Degree but do require an apprenticeship or equivalent:</p>	<p>It is essential that any student taking a subject for the Leaving Certificate has taken Applied Technology for Junior Cert.</p> <p>It also helps if they have taken technical graphics or at least technology or woodwork. The reason for this is that some aspects of these subjects overlap.</p> <p>Students will find the transition much easier if they have done well in Junior Certificate technology.</p> <p>The practical classes are great and fun.</p>

	<p>Mechanic, panel beater, sheet metal worker/ fabricator, welder, fitter, turner, plumber, electrician, steel fixer etc.....</p> <p>Engineering is useful for the following careers which do require a 3rd Level Degree: Engineering teacher, mechanical engineer, electrical/ electronic engineer, structural/ civil engineering, AI, machine learning, Robotics, marine engineer, computer aided manufacture, architecture, designer etc....</p>	
MFL	<p>Studying a foreign language is optional for the LC.</p> <p>While there may be a college entry requirement to have a foreign language, this is not across the board.</p> <p>Students who have struggled with a foreign language since 1st yr should think very hard about choosing it for their LC. They should meet with their Guidance Counsellor this year to discuss future plans and personal ability/past grades in their foreign language.</p> <p>If a student chooses to study a foreign language, they are committing to working hard both in class and at home.</p> <p>Internet translation is prohibited. All creative work must be completed by the student themselves.</p>	<p>Oral exam - 25%</p> <p>Aural component - 20%</p> <p>Written - 55%</p>
HL Maths	<p>The LC exam is made up of two 2.5 hour exams, Paper 1 and Paper 2. In 5th year we cover all the topics needed for Paper 1.</p>	<p>The pace is faster than anything you've ever experienced before.</p> <p>You need to be very comfortable with the JC knowledge as it'll be assumed that you remember it.</p>

	<p>The pace of the class is very fast and prior knowledge of JC material is assumed. There is no time in 5th year to go over JC work.</p> <p>Lots of students think that they will attempt HL as they want the 25 bonus points in their LC. We would advise that you get a Higher Merit or Distinction grade in your JC to think about doing HL in 5th year. There is a lot of independent thinking and work required. The teacher will assume you remember all your JC HL material.</p> <p>Homework could take 5th years about an hour to complete every night. Can you afford that time? You may be better off spending time/effort on other subjects to ensure you get the 25 points using other subjects rather than assuming you'll get them in Maths.</p> <p>Check with your Career Guidance teacher whether your chosen course requires you to have done HL Maths. Note: If you fail Maths (at any level) in your LC you may not be allowed entry into the course of your choice.</p>	<p>The questions are not written as straightforward as JC questions. There is a lot more figuring out what the question is actually asking before you can start.</p> <p>You will spend a lot of your HW time doing Maths.</p>
Biology	<p>Biology is often chosen just so students can have a Science subject at Leaving Cert.</p> <p>This is a big mistake. While it is not as mathematical as the other Science options it is far from easy and requires a particular set of skills in order for students to be successful in obtaining good grades.</p> <p>Students need to have a good standard of English in</p>	<p>Leaving Cert Biology is very different from Junior Cycle Biology.</p> <p>It's not just about the human body.</p> <p>Biology is not the easy Science option. While it is less mathematical than Chemistry and Physics it requires students to have a high standard of English in terms of comprehension.</p>

	<p>terms of comprehension and the ability to retain a huge volume of very specific information. Students need to have a large vocabulary and the ability to interpret higher order questions.</p> <p>Students need to be a master of all the topics as everything in Biology is interconnected.</p> <p>There are 22 mandatory experiments covered over the two years and a whole section of the exam paper is based solely on this practical element of the course.</p> <p>If students have a genuine interest in the Human body and the natural world, then they will find the course interesting and engaging. It is a subject that would be essential in a diverse range of careers from the obvious medical occupations but also within areas around sports and the health & beauty industries. There is a small crossover with LCPE, HE and Geography.</p>	<p>The course is very long and content heavy, with students needing to retain large volumes of information. The pace needed to cover the course is fast. Students need to be a master of all the topics as everything in Biology is interconnected.</p> <p>If you don't understand one aspect of the course this will affect your ability to cope with other areas.</p> <p>Language skills are needed in order to decipher between words and terms that can sound and be spelled similarly yet have different meanings.</p> <p>The exam is long (3 hours) and the marking scheme is very specific - so you can't bluff or waffle. The language used in the exam questions can be difficult to interpret and understand.</p> <p>While there is a practical element to the course, there wouldn't necessarily be an experiment each week.</p> <p>Biology requires consistency in terms of effort. There is a lot of learning involved. Have to start working from day one - 5th year</p>
Art	<p>Art is a creative subject that requires students to have a good ability in observational drawing and painting as a basis for Leaving Cert Art.</p> <p>70% of the course is exploring ideas, researching and responding in an artistic way through drawing.</p>	<p>Students should have studied art at junior level to have a good foundation for this course, it is expected that you have the ability to draw and paint and have a competency in one of the crafts, sculpture, ceramics, design, lino printing etc.</p> <p>You should have the ability to do independent research as</p>

	<p>The exam consists of a ten week intensive project in January of sixth year where students complete a portfolio of art and a finished artefact. This is followed by a five hour exam where students must complete a finished art piece at this time as well.</p> <p>Art History or Visual art studies is a 2 ½ hour written exam in June. This forms 30% of the overall marks. Students study a variety of topics in 3 sections, 1 : European art, an essay style question covering the Renaissance, Mannerism, realism up to Impressionism and Modern art, 2 : Irish art that covers topics like Newgrange, High crosses , Georgian architecture and contemporary Irish art , 3 : Today's world where students rely on the elements of art and principles of design to answer six questions</p>	<p>an integral part of the course.</p> <p>Creative thinking and critical analysis in terms of what makes art good is also an important feature.</p> <p>If you are thinking of taking this subject and have never studied it before, we will ask you to sit a drawing test, so you can compare your standard to the average art student. We will also ask you to bring any sketchbook works or paintings to show you have an interest.</p> <p>Career A percentage of students progress to art college where they become our future fashion designers, graphic designers, sculptors, jewellery makers, ceramicists, animators, set designers, film makers, artists, photographers and of course art teachers.</p>
DCG	<p>Senior Cycle DCG requires good spatial awareness and visualisation skills.</p> <p>The course is split into two elements, practical drawing and a project. The drawing aspect is worth 60% of the subject, whereas the project is worth 40%. The project takes place between September and December of 6th Year. The Leaving Cert exam is a 3 hour exam, consisting of 3 long questions and 3 short questions.</p> <p><u>Board Drawing (60%)</u></p> <p>The majority of 5th year is spent learning about various drawing techniques and exam topics. Topics include Orthographic Projection, Auxiliary Projection, Axonometric Projection, Perspective Projection,</p>	<p>Due to the fact that a lot of content covered in DCG is underpinned by Junior Cycle Graphics, it is imperative that students who pick DCG for Senior Cycle would have completed Junior Cycle Graphics. Any students who wish to take up DCG from scratch must talk to the subject teacher(s) before selecting it on their option form.</p> <p>It is quite a rewarding and enjoyable subject for those who select it. Visualization and spatial awareness are very important skills to have with DCG, as all the topics require independent thinking and logically portraying information/content. Students who struggle with calculating, independent working and problem solving will find DCG difficult.</p>

	<p>Conic SEctions, Intersecting Planes, Intersecting Solids, Developments & Structural Forms. A lot of this material is progressed on from Junior Cycle Graphics, therefore students who pick DCG should have completed Junior Cycle Graphics.</p> <p><u>The Project (40%)</u> The project is based on 3D modelling 2 objects, as set out in the brief by the Department of Education. The software that is used is Solidworks. Students 3D model the required object, produce the associated working drawings and views and also produce some research pages to accompany this. At the end of the project, it is bound into a physical portfolio as well as electronically, for submission.</p>	<p><u>Possible future careers</u> Construction Management Architecture Quantity Surveying Engineering (biomedical, structural, civil, electrical, software) Interior Design Furniture Design Fashion Design Product Design Graphic Design CAD Animation All types of trade</p>