

**BALLINODE COMMUNITY  
COLLEGE  
SUBJECT CHOICE  
INFORMATION BOOKLET  
LEAVING CERTIFICATE**



Dear Student,

You are about to make a very important decision, namely, Subject Choice. You will be asked to select a number of subjects, usually **eight** for your Leaving Certificate.

To make a good decision it is essential to have good information. At Ballinode Community College, we arrange the following to help you make an informed subject choice:

- Careers classes on Subject Choice
- Individual appointments with Guidance Counsellor
- Interest & Multiple Intelligences Tests
- Individual subject departments will speak to you in relation to their subject
- Interest Assessment- Careers Portal to see what types of careers may suit your interests
- Talks from students who have been, or are presently, studying the subjects which interest you

We would also recommend that you:

- study this booklet
- Discuss Subject Choice with your teachers, parents/guardians
- do research (e.g. [www.careersportal](http://www.careersportal))
- consult textbooks and past papers of subjects you are interested in

Choose your 'package' of subjects to satisfy your interests and to keep as many career options open as possible. Keep the following guidelines in mind:

- Ensure that you have the **essential subjects for your job/course** (check essential Careers portal and college websites for minimum entry requirements and specific course requirements)
- Select your remaining subjects to maximise your results. Look back over previous school reports to see what subjects you did well in. (If you like a subject, you are more likely to do well in it).
- Choose subjects you have a genuine interest in.

By getting as much accurate and up to date information as possible you will make a good Subject Choice decision.

You will be sent an online survey to complete your subject choice.

**The deadline for subject choice is to be confirmed**

Best of luck

L.Moran

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Guidance Counsellor

## ***Senior Cycle Subjects at Ballinode College***

The following Exam subjects are compulsory:

- Irish
- English
- Maths

In addition All students will study:

- LCVP – Link Modules

Students may choose **four** subjects from the following list:

Where less than 5 students choose a subject, that subject will be withdrawn as a choice

1. Art
2. Biology
3. Business
4. History
5. Home Economics
6. Spanish
7. Design & Communications Graphics
8. Engineering
9. Construction

### ***Subject Choice***

Students are invited to choose **four** subjects from the list above. They do this by listing their choice of subjects in order of preference. Subjects will be offered for this cycle (Leaving Certificate) depending on students' interest.

In the event of a subject being under-subscribed the school authorities may, if necessity, withdraw it from the available options. With regard to subject availability, every effort is made to offer each student their preferences. However, due to timetabling restrictions, it may not be possible to offer all students their top preferences.

It is advised that students select subjects that they like and those that they are good at. Having a genuine interest in the subjects you are going to take for the Leaving Certificate is very important. It can be difficult enough at the best of times to motivate yourself to study, but it can be twice as difficult if you are studying subjects which you don't particularly like.

Students are normally expected to sit seven subjects in the Leaving Certificate.

When you have made your final selection you should examine them very carefully to see that you have kept your career options open. You should check to see if you have the essential requirements for third-level courses in which you have an interest. It is too late to find out in your Leaving Certificate year that you do not have an essential subject when you come to fill out your College Applications forms.

## Summary of Points System

The Points System is basically a selection system used to select students for a course when there are more *qualified* applicants than places on the course. Qualified here means they have satisfied both the Minimum Entry Requirements and any Specific Subject Requirements for the course.

- A student's points total is calculated from his/her six best subjects.
- Points are calculated from one sitting of the Leaving Cert. only, in other words you cannot combine Leaving Certs for the calculation of points.
- **All subjects give equal points, except for Higher Level Mathematics, where 25 bonus points are awarded.**

<i>Grade</i>	<i>Points Value</i>
H1 / O1	100 / 56
H2 / O2	88 / 46
H3 / O3	77 / 37
H4 / O4	66 / 28
H5 / O5	56 / 20
H6 / O6	46 / 12
H7 / O7	37 / 0
H8 / O8	0 / 0



## English

English is a core subject and is compulsory in all schools. At Leaving Cert level, the English course aims to develop:

- The ability to critically analyse information, as preparation for the responsibilities and challenges of adult life;
- A respect and appreciation for language used accurately and appropriately, and a competence in a wide range of oral and written language skills;
- An awareness of the value of literature for widening horizons, for enhancing their sense of cultural identity, and for personal enjoyment.

The exams at both higher and ordinary require students to sit two papers. Junior Cert. results are often a good indication of what level a student should choose for English. A large number of students take English at higher level but should not underestimate the amount of work required to obtain a high grade.

### **Third Level Entry Requirements**

Universities generally require a student to pass English

This subject is a requirement for entry into a number of third level courses.

### **Subject content:**

#### Core Elements

-Language

-Literature: students are required to study one literary text from a list of prescribed texts.

Students are required to study three other texts in the Comparative manner, according to the comparative modes prescribed for that year.

Students are required to study at least six poets from the eight poets

*Compulsory elements:* At Higher Level a Shakespearean Play must be one of the texts chosen for study on its own or as an element of the Comparative study.

*Optional Elements:* At Ordinary Level the study of a Shakespearean play is optional.

### **Exam Structure**

Paper I: Higher and Ordinary Level - 170 mins. - 200 marks.

Paper II: Higher and Ordinary Level - 200 mins. - 200 marks.

The study of English at Higher Level places significant demands on the Leaving Certificate student. The syllabus is very broad in its range of prescribed materials and can be quite time consuming.

The Higher Level (course) exam rewards good writing skills and an independent learner.

The extended composition features largely on both papers at Higher Level and students are expected to write between 750-1000 words in the time available, in these compositions.

There is the assumption at Higher Level that students will read widely and independently over the two years.

An interest in social, political and current affairs is vital and highly developed writing skills and critical analyses skills are prerequisite at Higher level.

There is a vast difference in the study of English at Higher Level for Junior Certificate and the Study of English at Higher Level for the Leaving Certificate.

## Mathematics

Maths provides students with the opportunity to gain an understanding of and familiarity with several branches of mathematics. The branches, or 'strands' in question have been chosen because they have applications in everyday life, are useful in other disciplines, and provide a foundation for further education. As a result, maths is very accessible to students at all levels. As a wide-ranging subject with many fields and applications, mathematics gets used everywhere, and everyone can find some use for it. No longer just the language of science, mathematics contributes in direct and fundamental ways to business, finance, health and defence.

### **What level of Mathematics would be suitable for me?**

Mathematics is available for study at three levels, Foundation, Ordinary, and Higher. Students are encouraged to study at the level appropriate to their needs and aspirations. There are many careers which require or benefit greatly from having a higher level of mathematics, and it's a good idea to research these before coming to a decision.

### **Aiming for Higher Level:**

Mathematics at higher level is designed to suit the needs of all students, whether they're continuing their study of mathematics to third level or studying it as a compliment to another subject (such as Business or Physics). The course familiarises students with the ideas of abstraction and rigorous proof, giving learners a feeling for the great mathematical concepts, as well as covering practical everyday topics which students are meeting in their lives outside school.

Higher level maths is considered the most time consuming subject of all and often requires more hours of study than other subjects to get a good result. The course is demanding, but very rewarding. From a careers perspective, students considering a career in any area of science, medicine, engineering, business, or finance should be studying higher level maths if at all possible, as large portions of the higher level course will be reviewed or assumed at third level. There are of course many other careers and courses which benefit from a knowledge of higher level maths.

**Some examples of courses** that require higher level maths for entry: Computer Science TCD, Economics and finance UCD, Industrial biochemistry UL, Actuarial Studies: DCU, UCD.

**Bonus Points:** The higher education institutions have introduced a bonus scheme for higher level Leaving Certificate maths whereby an additional 25 points will be added to an applicants points score

### **Aiming for Ordinary Level:**

The course starts with practical and familiar problems, and gradually introduces more abstract ideas. Most Leaving Cert students sit the ordinary level maths exam, often dropping down from higher level having become more aware of their ability level and due to increased pressure in sixth year. Passing ordinary level maths is extremely important, as the majority of CAO courses require at least a D3; and students who don't meet this requirement are often left with few to no third level education options.

**Third Level Entry Requirements** Is a requirement for entry as outlined above

### **Subject Content:**

Maths divides the course into five 'strands' of maths which are studied at all levels, in greater depth at higher levels. : *Statistics and Probability*      *Geometry and Trigonometry*      *Numbers*  
*Algebra*      *Functions*

## LCVP (LINK MODULES Compulsory)

### **About the LCVP**

This two-year program's primary goal is to prepare young people for adult life by ensuring that they are educated in the broadest sense, with an ability to cope and thrive in an environment of rapid change. Participants in the program are encouraged to develop skills and competencies fundamental to both academic and vocational (job) success. The skills and qualities learnt are equally relevant to the needs of those preparing for further education, seeking employment or planning to start their own business.

Typically, LCVP students take seven Leaving Certificate Subjects plus the Link Modules

### **LCVP Programme Requirements**

- Minimum of 5 Leaving Cert Subjects
- 2 subjects from Subject Groupings below
- Modern European Language
- Good standard of English
- An aptitude for Business

### **Course Content:**

#### **Link Module I – Preparation for the World of Work**

Students will research and investigate local employment opportunities, develop job seeking skills such as letter writing, CV presentation, interview techniques; gain valuable practical experience of the world of work; interview and work shadow a person in a career area that interests them.

#### **Link Module II – Enterprise Education**

Students will be involved in organising visits to local business and community enterprises; meet and interview enterprising people on site and in the classroom; plan and undertake interesting activities that will build self-confidence, creativity, initiative and develop teamwork, communication and computer skills.

### **Assessment of the Link Modules (LCVP)**

LCVP students follow the same subject syllabi and are assessed in the same way as their peers in the Leaving Certificate. For the LCVP they are assessed by Written Examination (40%) and by Portfolio of Coursework (60%).

The Portfolio of coursework must be submitted on the first Wednesday in March. The written examination takes place the first Wednesday in May of the Leaving Certificate Year. The examination is of two and a half hours duration and consists of three sections which are outline below.

The structure of the Written Examination is as follows:

**Section A** Audio Visual Presentation

**Section B** Case Study (received in advance by students)

**Section C** General Questions (4 out of 6)



The **Portfolio** of Coursework accounts for 60% of total marks. Students assemble the portfolio over the two years of the programme and it is assessed at the end of the final year of the Leaving Certificate.

**Portfolio Content:**

- Curriculum Vitae
- Career Investigation
- Enterprise/Action Plan
- Summary Report
- Optional Items: (any two)*
- Diary of Work Experience
- Enterprise Report
- Recorded Interview/Presentation
- Report on My Own Place

**Certification**

LCVP students receive the same certificate as other Leaving Certificate students but their Certificate includes an additional statement of the results of the Link Modules.

Grades for the Link Modules are as follows:

<b>Grade</b>	<b>Per cent</b>
Distinction	80% – 100%
Merit	65% – 79%
Pass	50% – 64%

The Link Modules are recognised for points purposes by the Institutes of Technology and the Universities. The points are allocated as follows:

Distinction	66 points	H4
Merit	46 points	H6
Pass	28 points	O4

## Choice Subjects

### Spanish(A Modern Foreign Language)



Spanish is the only modern foreign language available as a Leaving Certificate subject here in Ballinode College. As such, if you are aiming to go to university you will find that a number of them require a third language. These include such popular as universities like UCD, UCC and NUI Galway. A modern European language like Spanish will also be required for application to cadetships in the defence forces. Studying Spanish language, recognised as one of easier ones to learn, is the ideal pathway for these goals. Leaving Certificate Spanish hopes to bring students closer to fluency in the Spanish language, as well as developing a good knowledge of Spanish literature, culture, and geography. Spanish follows a common syllabus framework for the teaching and examining of modern languages in the Leaving Certificate.

#### **Career Possibilities:**

Career opportunities are broad and include the IT industry, teaching, business, translation, the hospitality industry, sales and marketing, tourism and careers in the EU, media, business and marketing. As mentioned, a modern European language like Spanish will also be required for application to cadetships in the defence forces.

### **Third Level Entry Requirements**

While not choosing a language will not affect entry to the majority of third level institutions, it will restrict choice, as students will be excluded from the *majority* of courses in the four NUI universities.

This subject is a requirement for entry into a number of third level courses, where Spanish forms a central part of the course. These include European studies, Languages, Tourism and International Business/Law. The NUI universities - University College Cork, NUI Galway, University College Dublin and Maynooth University - must also pass a third language to take courses in the arts, human science, law, social science, commerce, medicine and health sciences and some other degrees. Also it is worth noting that a number of the courses at St Angela's here in Sligo have this requirement.

### **Subject Content**

Course content for Higher and Ordinary levels is similar. However, oral and written skills are particularly important at higher level. Modern languages require students to be proficient in the following skills

- \* Oral/speaking
- \* Written
- \* Aural/listening
- \* Reading

Grammar and Cultural Awareness are essential elements of this course.

### **Exam Structure:**

**Oral Examination (25%)** the Spanish oral exam consists of two parts, personal questions and role-plays and typically last between 12 and 15 minutes depending on the student.

Part 1: The examiner will use personal questions to assess knowledge of **tenses** in the following order; present, past and future and/or conditional tenses.

Part 2: this comes after the personal questions when the examiner asks a student one role-play from five prepared.

**Listening Examination (20%)**

**Written exam (55%)**

## **Business**

This is a practical and vocationally-oriented course that introduces students to the world of Business in a straightforward and logical way. It aims to create an awareness of the importance of Business activity and to develop a positive and ethical attitude towards it. The importance of people in Business is highlighted. The course sets out to illustrate the process of setting up a business and developing a new product or service. It emphasises the importance of good management and deals with skills and activities necessary for good management practice. It also deals with the impact of technology, foreign trade, global firms and competition and with business structures and the national economy. The course is theory based and therefore requires a lot of learning, analysing and being able to apply it to today's business world.

### **Career Possibilities**

Business is useful for careers in areas such as Banking, Administration, Industrial relations, Enterprise Insurance, Management, Marketing and Law.

### **Third Level Entry Requirements**

This subject is not a requirement for business courses nor is it an essential requirement for any courses in the CAO system. However, this subject is of benefit to anyone who studies it for the Leaving Cert. whether or not a career in business is what they desire.

### **Subject Content**

This subject is concerned with understanding the environment in which business operates in Ireland and in the wider world. It also involves equipping the students with a positive view of enterprise and its applications in the business environment, in both the public and private sectors. There are 7 core units covering the following topics: Introduction to people in business; Enterprise; Managing 1 & 2; Business in action; Domestic Environment and International Environment. There is a common syllabus covering Higher and Ordinary level.

### **Exam Structure:**

*Higher Level* – 3 hour paper (400 marks); 3 sections.

Section 1 – Short questions (8/10) 80 marks.

Section 2 – Applied Business Question – 80 marks (compulsory).

Section 3 – Long Questions (60 marks per question (4/7))

The subject is suited to students who are willing to work hard and caters for all abilities. It is not necessary for students to have studied Junior Certificate Business Studies, but this would be a help. The course content is factual and requires a lot of learning, containing only a few mathematical elements. Ideally, students would have an interest in business and current affairs and would have an up to date knowledge of economic environment. An organized and consistent attitude to homework and study would be essential in this subject.

## Biology

The course uses practical activity and investigation to develop your skills and knowledge. The scope of biology is wide and varied and covers not only the traditional study of plants and animals but also areas such as molecular biology and biotechnology which have clear relevance to modern society. Biology is the study of life. Through the study of biology students employ the processes of science to explore the diversity of life and the inter-relationships between organisms and their environment. They become aware of the use of living organisms and their products to enhance human health and the environment.

The course covers a wide range of topics, including cell structure and diversity, metabolism, genetics and human and flowering plant anatomy and physiology. An ecology field trip is arranged in the 5th Year. Particular emphasis is placed on the practical aspects of biology, and there are a number of mandatory activities that each student must carry out for themselves. The syllabus requires a lot of memory work

### **What type of student might Biology suit?**

Students who enjoyed science in the Junior Certificate might wish to consider studying biology at Senior Cycle. The course is a continuation of what was studied at Junior Cycle but in more detail.

### **Career Possibilities**

The types of courses and careers where the study of Biology at second level might be helpful would include the following;

Medicine, Veterinary, Dentistry, Nursing and associated careers.

Agriculture, Applied Biology, Biochemistry, Biotechnology, Botany, Ecology, Earth Science and Environmental Science, Genetics, Marine Science and Aquaculture, Microbiology and Zoology, Psychologist, Astronomer, Teacher and Researcher.

### **Subject Requirement for 3rd Level?**

It is counted as a science subject in any course which has a science subject as a requirement.

Third Level Entry Requirements

This subject is a requirement for entry into a number of third level courses. Examples include: Genetics in UCC and Human Health and Disease in TCD.

### **Subject Content**

The course is divided into three units

Unit 1 The study of life (ecology and food science)

Unit 2 The Cell (Genetics, photosynthesis, respiration and enzymes)

Unit 3 The organism (a study of body systems, plant biology and microbiology)

There are 22 mandatory practical activities.

### **Exam Structure**

The examination at higher and ordinary level is three hours duration. The exam paper is divided into three units.

It is recommended that a student taking Leaving Certificate Biology has a good understanding of Junior Science.

Each student must have an aptitude and interest for laboratory work. A considerable amount of learning and study is necessary to do well in this subject.

## Home Economics

The learning experiences in Home Economics develop flexibility and adaptability in students, prepare them for a consumer-oriented society and provide a learning foundation for a wide range of careers in food, textiles, science, design, social studies and tourism. The subject is an applied subject combining theory with practice. It should be considered that the practical work is marked as a coursework journal, worth 20% of the final exam. As a result the time allocated to practical cookery is considerably reduced.

### Career Possibilities

This subject provides a good foundation in careers including Health, Education, Tourism, Clothing and Design and the Food industry.

### Third Level Entry Requirements

This subject is not an essential requirement for any courses in the CAO system.

### Subject Content

The syllabus consists of Core Areas and Three Electives:

#### *The Core Areas*

1. Food Studies - 45%
2. Resource Management and Consumer Studies - 25%
3. Social Studies - 10%

#### *Electives:*

1. Home Design and Management - 20%
2. Textiles, Fashion and Design - 20%
3. Social Studies - 20%

Students opt for one Elective area only. Those choosing the Textiles, Fashion and Design elective must produce a garment which will be inspected and graded. The Elective areas are extensions of the content contained in the Core Areas and provide students with the opportunity to study certain topics in more depth.

As part of the Core Areas, a mandatory section comprises of *Practical Coursework* which must be completed during the first year and will be sent to the Department of Education and Science for inspection. This is 20% of the final examination marks.

### Exam Structure

1. Written Exam paper – 80%
2. Practical Coursework - 20% (this is submitted in journal form in October of Leaving Cert year)

It would be advisable but not necessary, for students opting for Leaving Certificate Home Economics to have completed the Junior Certificate course. Some of the areas covered on the Junior Cert Home Economics course are continued at Leaving Certificate level.

Much of the course is **theory based** – students are often under the illusion that “it’s all cooking” and find it quite a shock when they realise even the Practical Section has to be written up and presented – because there is no Practical Examination at Leaving Cert. Level.

It is a wide course, covering many life skills. Students enjoy the subject but they must be willing to learn and to undertake quite a substantial theoretical subject.

There is both an Honours and Ordinary level within the subject. There is also a link with some other subjects, namely Biology, Business Studies.

## History

The study of history involves learning about the experience of human life in the past through the investigation of evidence. This study will give you insights into ways of life and ways of thinking which may be very different to your own and will develop your understanding of the human condition and human motivation and investigate how aspects of life have changed over time. You will learn about how such change has taken place in Irish history and history of Europe and the wider world. Your study will deal with political, social, economic, cultural, religious and scientific history. The course is quite large and requires constant attention throughout the year. When writing, students are taught to produce focused, logical, and supported arguments.

### **What kind of student might History suit?**

Students who enjoy and appreciate history, who would like to develop an awareness of their historical inheritance and gain insights into their own identity and traditions. Students who enjoy researching, analysing and writing about the past through essay writing and project work.

### **Career Possibilities**

History develops an ability to think independently and employers tend to look for people who are open-minded, independent people. History is excellent for careers in journalism, the Arts, tourism, government and teaching. The study of history helps create good business people, professionals and political leaders.

### **Third Level Entry Requirements**

This subject is not an essential requirement for any courses in the CAO system.

### **Subject Content:**

The Leaving Cert History course is divided into two distinct fields of study; Early Modern (1492-1915) and Late Modern (1815-1993). You study two International courses and two Irish courses. We traditionally study (Late Modern)

1. Dictatorship and Democracy 1920-45 e.g. Mussolini, Hitler and Stalin
2. America 1945 – 1989 e.g. Martin Luther, Vietnam War, The Moon Landing
3. Ireland 1870 – 1914
4. Ireland 1912 – 1949

Having studied Junior Cert History you have a good foundation for Leaving Cert History as a lot of the topics have been covered. However there are some new topics to cover in the American course where you learn about race relations, the moon landings and Hollywood.

### **Exam Structure:**

*Written examination paper (80%)*

In the exam you write 3 essay style questions worth 60%

1 document question (20%). 3 documents are prepared in advance and 1 will appear in the paper

*Research topics (20%):* 1,500 words at Higher Level and 800 words at Ordinary Level on an area of history which interests you. It is submitted in April of your exam year.

## Art

The Art course for Leaving Certificate consists of two main parts practical work and art history and appreciation. The practical side of the course is about developing the student's ability in a range of artistic fields and disciplines. The syllabus permits a huge range of media, from the fine arts such as drawing and painting, to crafts and design including printmaking, modelling, advertising design, calligraphy, batik and pottery.

Students are expected to spend the duration of the course practicing and developing their skills in several of these areas.

### **Subject content and exam structure:**

The art course features three areas project work, life drawing and Art History and Appreciation Project 50%

Over a twelve week period students complete a project based on a theme, the project consists of a sketch book and two finished pieces, one fine art piece and one craftwork/design piece.

The project allows students to explore the theme through a variety of materials and techniques and to use a design process to develop ideas leading towards two finished pieces. In all areas there is an underlying use of observational studies which enables students to build up a range of work and develop their skills and knowledge.

Life drawing 12.5%

The life drawing section consists of two areas, a drawing of the head and shoulders and a full figure drawing.

Art history and appreciation 37.5%

This section is divided into three areas, Irish art, European art, and art appreciation.

The course content is extremely broad, and covers everything from prehistoric art to the modern day, but students are free to focus their studies on a few narrow areas of interest such as renaissance or Celtic art.

Diagrams and illustrative sketches are encouraged in the exam.

*Note* that the Leaving Cert Art course has nothing to do with the portfolio submissions which art and design colleges often require. The course does not aim to build a portfolio, and all marks are given for work done on the day. However, it is common to take Art while preparing a portfolio, and much of the practice work done in class can be included.

### **What kind of student might Art suit?**

Students who have shown an aptitude for art, such as by getting high grades in Junior Cert Art. Anyone considering a career in a creative discipline such as Architecture, Marketing, Film and Entertainment, Web Design, Fashion, Game Design, or Advertising.

### **Career Possibilities**

Art is useful for careers in animation, art teaching, computer design, fashion design, interior design, photography and art therapy.

### **Third Level Entry Requirements**

For most level art and design courses, a portfolio is required as well as the Leaving Cert. Note: Each college has its own date for submission of a portfolio and you will not be notified by the college or the CAO, you will need to research the deadline yourself. Portfolios take a lot of time to complete and so some students take night classes, summer courses to complete them. There are also a number of portfolio preparation courses offered through PLC colleges.



## DCG – Design and Communication Graphics

### What kind of student might DCG suit?

DCG is similar to technical graphics from Junior Cert. In DCG you will learn how to draw precise 3D objects, logos and plans on paper and on computer. You will think in a more logical way and develop problem solving and creative thinking skills. You will use these skills to create objects on our 3D printer, Laser cutter and CNC machines. The main difference from TG is students will now be using a Computer aided design program – Solidworks to draw up objects in 3d to a much greater extent. They will also use computers for research and presentations. Students now will have an additional computer based project to complete that will be worth 40% of their total grade. Most students who work hard get at least 30% in the project. We have a number of students each year who work hard and receive the full 40%.

### Career Possibilities/ Third Level Entry Requirements

DCG is useful in any career where problem-solving or visualisation of 3D objects is needed. It is particularly of benefit if you are thinking of a career in architecture, engineering(mechanical, civil, aeronautical, electronic), construction, computing, animation and game design, product design, web design, mechatronics, 3d printing, teaching or apprenticeships.

### Who would this subject suit?

This subject would suit students who have a love of drawing and problem solving. It would help students with their Maths due to the strong link between concepts in these subjects.

Skills Developed in DCG

- Communication skills
- Creative thinking skills
- Problem solving skills
- Maths skills
- Computer skills

### Subject content:

This course consists of practical drawing skills, sketching skills and computer skills. Students are taught how to use skills to solve visual problems graphically on paper and with 3D computer graphics and will create a project in sixth year worth 40% of their grade. Some of the things you will learn include:

- how to read and interpret drawings and diagrams
- how to produce neat drawings using drawing equipment
- how graphics relate to the design and manufacture of products
- how to create models of objects on the computer using Solidworks and manufacture them on the 3D printer, Laser Cutter and CNC as appropriate
- How to use freehand sketching and shading to represent objects
- Use programs such as Word and Powerpoint to present a neat project

### Exam Structure:

60% final exam – 40% Project



## Engineering

Engineering is a subject which is mixed between the theory of different Materials and Technology's to workshop processes and use of machines. Engineering is a hands-on subject, in the 2 years of study students will learn about a range of different processes in the working world from mechanisms to welding. In 5<sup>th</sup> year students will learn about a range of new machines along with making advanced projects which incorporate mechanisms along with electronic control. In 6<sup>th</sup> year students will further this by designing and making their own project from a single brief. Through the different projects and theory lenses students will learn how to use Solidworks , CNC Lathes, Manual Lathes, Milling Machine, 3D printer and laser cutter along with advancing skills in hand tools and other processes.

### What kind of student might Engineering suit?

Having studied Metalwork at Junior Cycle level is important but not essential, for the design part of subject in 6<sup>th</sup> year studying DCG is just as important for project work. Engineering is a 50/50 balance between theory and practical based learning therefore being hands on with a good work ethic is important.

### Career Possibilities

All types of Fields of Engineering from Mechanical to Electrical to Civil Engineering, Engineering Teaching, Design Fields, Product Design, Architecture, apprenticeships with electricians, plumbers, fabricators, fitters etc.

### Third Level Entry Requirements:

Very important for any of the above type job.

### Subject content:

The syllabus for Leaving Cert Engineering has two sections:

1. Workshop Processes. This is all the practical processes which may be applied in the school workshop integral with the related theory. This section will carry 300/200 marks in the examination at both levels. Ordinary and Higher: There is 150 marks for a practical examination and 150 marks for workshop/laboratory work and projects. 200 for OL.
2. Materials and Technology. This section represents the wider knowledge and technology as a whole. In the written examinations this section carries 200 marks at Ordinary level and 300 marks at Higher level Leaving Cert Engineering.

### Exam Structure:

**Higher level** – Theory Written Exam 300 Marks (50%) Course Work 150 Marks (25%) Practical day Exam 150 Marks (25%)

**Ordinary Level** –Theory Written Exam 200 Marks (40%) Course Work (Project) 150 Marks (30%) Practical (four- hour exam) 150 Marks (30%) Total 500 Marks 100%

## Construction

Construction studies at leaving cert investigates a range of different areas of the construction fields, from housing plans to materials and their properties. Over the course of 2 years construction is broken into the theory and practical, in theory section students will learn about everything from working drawings, models and scaling houses, Building Construction Methods, Energy Efficiency of a Building.

In practical students will learn how to design and make models, furniture, and general woodworking skills. In 6<sup>th</sup> year students will learn to make their own model the skills learned in previous years.

### **What kind of student might Construction suit?**

Having studied woodwork, it is not essential at JC but important, studying DCG in 5<sup>th</sup> year is just as important for the design section at leaving cert. Construction is a hands-on subject with a mix of technical Drawing Sections /modelling, woodwork, and technology solutions. The student must be able to work on their own initiative in relation to practical and problem-based learning inside the subject.

### **Career Possibilities**

Construction /Woodwork Teacher, Civil Engineering, Architecture, Construction Management, Trades, Quantity Surveyor, Building Contractor etc.

### **Third Level Entry Requirements**

Important for any of the above type jobs.

#### **Subject content:**

Construction Studies Course Content

Planning and Design  
Drawings and Documents  
Site Preliminaries and Foundations  
Walls, Partitions  
Floors, Roofs  
Fireplaces  
Windows and Doors  
Stairs  
Roofs  
Plastering and Painting  
Plumbing and Heating  
Services  
Drainage  
Sustainable Buildings

### **Exam Structure:**

**Higher level** – Theory Written Exam 300 Marks (50%) Course Work 150 Marks (25%) Practical day Exam 150 Marks (25%) Total 600 Marks

**Ordinary Level** –Theory Written Exam 200 Marks (40%) Course Work (Project) 150 Marks (30%) Practical (four- hour exam) 150 Marks (30%) Total 500 Marks 100%

## **USEFUL WEBSITES**

College application site  
[\*www.cao.ie\*](http://www.cao.ie)

Information on college courses  
[www.qualifax.ie](http://www.qualifax.ie)

Information on educational and career development  
[www.careersportal.ie](http://www.careersportal.ie)

***Step 1: Students will choose their top four subjects***

<b>My subject Choices</b>
1.
2.
3.
4.

***Step 2: The subjects are then grouped together depending on popularity***

***Step 3: The student will then chose on subject from each band until the choice that suits most students is arrived at***