

Choosing Subjects at Senior Cycle

# Choosing subjects at senior cycle

## Coláiste Mhuire Mullingar



Choosing Subjects at Senior Cycle

## **Subject Choice for Senior Cycle**

### **Information booklet compiled by the Guidance Dept**

*The information contained in this document, to the best of our knowledge, is true and accurate at the time of publication, but all information should be checked in the college prospectus/website and/or Guidance Counsellor before any decisions are made.*

This booklet begins the process of helping you think through what decision you will make about your future education after Junior Cert. Next year represents a new phase in your education. Over the coming weeks as well as working hard preparing you for your Junior Cert, you will need to give some thought to the options that best suit you over the coming years.

It is hoped that the information and ideas provided in this booklet will encourage you to discuss the issues involved with your parents.

The following is an outline of the steps that the school will take you through on the road to the final decision concerning what subject /course options you wish to take after the Junior Cert.

#### **Step 1**

A seminar will be held with students to introduce and to help explain the courses / subjects on offer by the school after Junior Cert.

#### **Step 2**

We will discuss / read this document in class. You will be asked to bring this document home so that it can form the basis of further reflection.

#### **Step 3**

An information evening will be hosted by the school for parents to go through the information in this booklet. *(not available during pandemic)*

#### **Step 4**

The school will proceed to draw up subject lines based on the demand and the resources available to the school.

#### **Step 5**

The school Guidance Counsellor will discuss your options with you in the light of your aptitudes, interest and abilities.

#### **Step 6**

You will be given the subject list and asked to select the subjects and or course you wish to take next year

### **Which Course after Junior Certificate**

1. **Transition Year**
2. **Leaving Certificate**

# Choosing Subjects at Senior Cycle

We would ask you to think through the subject and course options outlined in this document regardless of whether you are considering opting for Transition Year or Leaving Certificate.

It is not unusual for students to change their minds on their future plans. Others may not succeed in getting the course / job / career they are seeking. Therefore all students should become familiar with all the options that the school is offering.

## What is Transition Year?

The Transition Year Programme (TYP) is an optional one-year standalone full-time programme which we acknowledge may not be suitable for every student. It is aimed at those in the 15-16 year age group. The TYP has a strong focus on personal and social development and on education for active citizenship. Coláiste Mhuire offers an innovative and challenging curriculum. Our programme is designed to enable students grow and develop; it promotes maturity, independent learning and prepares students by helping them develop skills for life. We encourage the personal, social, and educational development of students and prepare them for their role as autonomous, participative, and responsible members of society. Students become immersed in activities, develop new skills and talents, engage in enterprise, and become socially conscious and responsible while developing their academic aptitudes.

The TYP enables students to make the transition from the more dependent type of learning associated with Junior Cycle towards self-directed learning styles in an independent environment associated with Senior Cycle. It encourages the development of a wide range of transferable critical thinking, creative & innovative skills.

Transition Year is a worthwhile experience for the student who is committed to participating fully in the programme. Our programme supports wellbeing and affords students the opportunity to develop a new-found confidence. It enables them mature personally and academically through interaction with the local community and through engaging in social awareness projects. Students have the opportunity to broaden their horizons, develop new friendships and create lifelong memories.

## Transition Year in Coláiste Mhuire

- The Transition Year Programme will be part of the Senior Cycle but is NOT year one of a three-year Leaving Certificate.
- TY comes at a cost of €450 which is payable in instalments.
- TY assessment is a mix of project, classroom and reflection based activities.
- TY will help prepare you for the Leaving Certificate.
- TY will be a challenging, enjoyable and fun-filled experience.

# Choosing Subjects at Senior Cycle

## **Core Subjects**

Coláiste Mhuire will offer a core curriculum for the TYP to include subjects such as English, Irish Studies, Maths, Religion, Drama & Performing Arts, Languages, Science, Physical Education, Arts & Crafts, Career Guidance, Computer Studies etc.

TY students will have the opportunity to sample subjects they may not have studied at Junior Cert and this will enable them discover and develop skills and competencies that will help inform their subject choices for Leaving Cert.

Sample subjects may include Business Studies, Accounting, Economics, Drama, Home Economics, Technology, Dance, Biology, Chemistry, Physics, Art, History, Geography, Law, Music, Photography and Enterprise. Subjects offered may vary from year to year depending on class size and student requests which allow them to have an input into the programme offered in TY.

## **TY Modules / Activities**

Coláiste Mhuire's TY modules will be developed within the school and by external agencies. Modules can include: Gaisce, BT Young Scientist, Film Production, First Aid, Self Defence, Mini Company, Driver Theory, Road Safety, Tourism, Art, Creative Writing, Journalism, Fundraising, Social Dancing, Health for Life Education, Leadership Workshop, Debating, Public Speaking etc.

## **Work Experience**

Orientation to adult and working life is a major aim of the Transition Year programme. Work Shadowing, Community Service, and Enterprise Education are ways of achieving this aim.

Coláiste Mhuire TY students will have four weeks of work placements throughout the school term.

Examples of work placements: National Schools, Pharmacies, Leisure Centres, Hotels, Coffee Shops, Retail Shops, Accountants, An Garda Síochána, Defense Forces, Law Firms, Engineering Companies, Electricians, Carpentry etc.

## **How are parents involved?**

Parents understanding and support of student learning in TY in Coláiste Mhuire is a key factor in ensuring a successful Transition Year experience. An information evening will be arranged for parents of 3rd Year students to discuss the Transition Year programme and the suitability of their son for the programme. Parents should attend and contribute. Parents will be encouraged to make their particular expertise available to the school during the TYP. It is most important that parents encourage their sons to avail of the numerous opportunities offered by this unique programme.

# Choosing Subjects at Senior Cycle

## **What about exams?**

Assessment is a key part of any worthwhile learning programme and Coláiste Mhuire's Transition Year Programme gives students an opportunity to move beyond the narrow focus of end of year written exams. The emphasis will be on varied and on-going assessment with students themselves becoming involved in identifying their own learning strengths and weaknesses. Students will be assessed through assignments, projects, presentations, exhibitions and class tests and receive end of term report cards.

## **How do I apply for Transition Year?**

Firstly, you will need to consider whether you are serious about doing Transition Year and then, in consultation with your parents, decide to submit your application. You will have to make your decision, however, before the Leaving Certificate Subject Options are made known to all 3<sup>rd</sup> Year students.

# LEAVING CERT ESTABLISHED

## How to Choose Subjects

In selecting your subjects there are three main questions to consider:

1. What subjects do you like?
2. Which subjects are you better at?
3. What subjects do you need for a particular college, course or career that you may be considering?

## Points to Note

- All subjects count equally for points i.e. A H1 in Home Economics is as valuable as a H1 in Physics. (However, one might be more useful and relevant than the other but they are both scored the same for points)
- Bonus Points are awarded for Higher Level Maths - 25 points are added to your Maths (only if you secure an H 6 or higher) and then the top six subjects are calculated.
- All subjects demand serious work and commitment

## New Subjects

### Choosing Subjects at Senior Cycle

If a student is making their subject choices Some subjects are new but you may already be doing a related subject which will help you decide. For example, if you like Business Studies, then there is a good chance that will do well at Business, or Accounting. Look at your test results and reports. **Note, a business subject is not a requirement for studying business at Third Level.**

### **If you're not sure of your eventual career choice make sure to keep your options open**

If unsure, it is advisable to do one science

subject in order to meet any science requirement for general Health / Science / Engineering courses.

**It's very difficult to do well in a subject you don't like.** Interest is vital for success. Another important consideration is your aptitude for the subject. Ask yourself, "am I good at it?" Talk to your Junior Certificate teachers; ask their advice on your aptitude for a subject or branch of a subject (Science and Business split in Senior Level into three distinct subject areas).

and has not as yet decided what career they wish to follow after school, I would advise them to keep all their options open by taking a Science and European language subject from among their four optional subjects.

## Checking Out

Try to decide which career areas you might be interested in. There are many self-awareness exercises you can do which might help with this. The following all have Interest Inventories that can help you narrow down your interests:

[www.careersportal.ie](http://www.careersportal.ie) (register before you take the Interest Profiler or you won't get an individualised list of occupations)

[www.qualifax.ie](http://www.qualifax.ie) (go to interest assessment)

[www.prospects.ac.uk](http://www.prospects.ac.uk) – “what jobs suit me”.

You can also ‘google’ other Interest Inventories.

## There are three types of requirements: College Requirements, Course Requirements and Points Requirements

### 1. College Requirements:

All Higher Educational Institutes (HEI) have general entry requirements common to all their courses, for example, the minimum entry requirement for the universities that are part of the National University of Ireland (NUI) is **6 subjects**, including English, Irish and a third language (third language requirement for certain NUI courses only). In two of these subjects, students must have achieved **two H5 and four O6/H7** grades.

### Choosing Subjects at Senior Cycle

**Note. Requirements can change therefore it is important to check the college prospectuses for the most up to date information**

### 2. Course Requirements:

Certain courses will require additional Leaving Certificate achievements, for example:

- Level 8 Engineering Courses require Higher Maths (generally H4)
- Primary Teaching requires Higher Irish (H5 2018, H4 2019 onwards)
- Journalism & Communications requires Higher English
- Veterinary,/Dentistry/Dietetics/some Medicine courses require Chemistry
- Commerce - Accountancy in NUI Galway requires Higher Accounting
- Theoretical Physics, TCD requires Physics H3
- Biotechnology in NUI Galway requires a third language.

**Note. There are other requirements for different courses. Also requirements can change therefore it is important to check the college prospectuses for the most up to date information.**

### 3. Points Requirements:

Every course has cut-off points determined each year by that year's Leaving Certificate Applicants. Places in courses are awarded on the basis of Applicant results in descending order from the top result until all places are filled. The points of the last Applicant to gain a place are the points for the particular year and these are released by the CAO office.

#### The following subjects will be on offer for Leaving Certificate

CORE	OPTIONS	OPTIONS
English	French/German	Biology
Irish	History	Chemistry
Maths	Geography	Physics
SPHE/GUIDANCE/ICT/PE	Music	Agricultural Science
Religion (non -exam)	Art	Computer Science
	Home Economics	Accounting
	Economics	Technology
	Construction Studies	Business
	Design & Communication Graphics (DCG)	

### Choosing Subjects at Senior Cycle

#### **The Language Group** French

German

#### **The Business Group** Accounting

Business

#### **The Humanities Group** Geography

History

#### **The Artistic Group** Art

Music

#### **The Social Group**

Home Economics S&S

#### **The Practical Group**

Design & Communication Graphics

Technology

Construction Studies

## The Science Group

Computer Science

Physics

Biology

Chemistry

Agricultural Science

## SUBJECT AREAS

# THE CORE GROUP

These subjects are compulsory, for some or all of these are required for entry into Universities and Institutes of Technology

### Irish

Higher Level Irish is necessary for Primary Teaching i.e. H5 in Irish is an essential subject for entry to NUI Colleges including UCD, UCC, NUI Maynooth and Galway and a H4 from 2019 onwards. For NUI colleges you must have at least an O6 unless you have an exemption.

### English

Honours English will enhance answers in all other subjects but it is not a general entry requirement for most courses. All universities require a Pass in English except DCU which requires a Pass in either Irish or English. I.Ts require pass in English *or* Irish

### Mathematics

Honours Maths is necessary for Engineering at Honours Degree level. Ordinary Level Maths is sufficient for some engineering Degree in Institutes of Technology (ITs).

## Choosing Subjects at Senior Cycle

### The Language Group

French



German



### Syllabus

The Leaving Certificate course covers all aspects of language – written, spoken, grammar and culture.

#### Oral Exam

- General Conversation
- Role play

#### Aural

- Interviews
- Dialogues
- News Reports
- Weather Forecasts

### **Written**

- Grammar examined only through writing, however a knowledge of grammar is relevant for understanding of the written comprehensions
- Reading Comprehensions
- Written Expression

### **Examination**

The Leaving Certificate Exam is offered at 2 levels: Higher and Ordinary

Oral 25% Aural 20% Written 25% Reading 30% (HL)

Oral 20% Aural 25% Written 15% reading 40% (OL)

### **Recommendations**

A language is a slowly acquired subject, not something you can 'swot' at the last minute. If you are struggling to get a pass in the language at Ordinary Level in the Junior Certificate you will find Leaving Certificate very difficult.

**You do not need a third language for all third level studies**

A third language is needed for entry into the National Universities of Ireland. These are UCD, UCC, NUI Maynooth and Galway. Royal College of Surgeons, St Angela's College, National College of Art and Design, Shannon College of Hotel Management. Again there are exceptions to this rule so check with the guidance counsellor or college prospectus about particular courses.

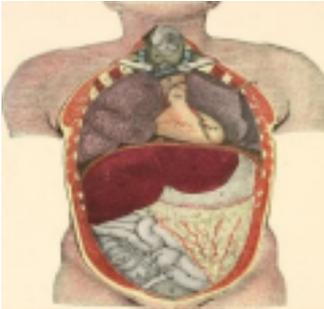
### **Possible Career Options**

A foreign language is helpful for working in/as: Business/ Marketing, Translator, Teaching, Flight Attendant/ Air Traffic Controller, Cadets, Hotel and Tourism industry

## Choosing Subjects at Senior Cycle

# THE SCIENCE GROUP

## BIOLOGY



6 to do 4

### Recommendations

Biology is a subject requiring a good understanding, memory and application of material learned. Students should realise that this is a full two year course.

### Syllabus

The Biology Syllabus covers the following areas:

- ❖ Human Biology
- ❖ Plant Biology
- ❖ Ecology
- ❖ Cell Biology
- ❖ Enzymes
- ❖ Genetics
- ❖ Microbiology
- ❖ Reproduction

It requires students to complete 22 Mandatory Experiments

### Examination

3 hour written exam in June

Section A (25%) Short Answer questions – 6 to do 5

Section B (15%) Experiments – 3 to do 2

Section C (60%) Long Answer questions –

### Requirement for Courses

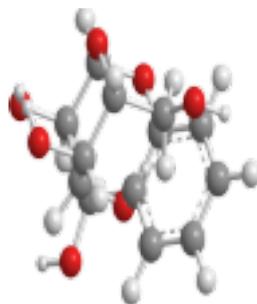
It is advisable if you are considering a career in nursing. It is an essential requirement for entry to Genetics in UCC and Human Health and Disease in Trinity. Biology is often a core subject in Science related courses.

### Possible Career Options

- ❖ Physiotherapy
- ❖ Sports Science
- ❖ Beauty Therapy
- ❖ Food Science
- ❖ Forensics
- ❖ Laboratory Technician
- ❖ Medicine
- ❖ Nursing
- ❖ Occupational Therapy
- ❖ Optician
- ❖ Research
- ❖ Teaching

Choosing Subjects at Senior Cycle

# CHEMISTRY



## Syllabus

Chemistry is the science of the materials that make up our physical world. Chemistry Covers areas such as

- ❖ Atomic Structure
- ❖ Periodic Table Bonding,
- ❖ Valency & Formulae,
- ❖ Moles and Stoichiometry Acids,
- ❖ Bases and Redox Reactions
- ❖ Volumetric Analysis
- ❖ Rates of Reaction
- ❖ Molecular and Ionic Equilibria
- ❖ Water
- ❖ Electrochemistry
- ❖ Organic Chemistry: Hydrocarbons
- ❖ Fuels and Thermochemistry

## Examination

**Time:** 3 hours (180 minutes)

**Marks** 400 (8 questions ,5 marks each)

Structure

**Section A** Answer 2 out of 3 questions

**Section B** Answer 6 out of 8 questions

## Recommendations

The study of chemistry has been identified by FORFAS as a matter of great importance to the further development of our economy, given the number of Pharmaceutical and Fine-Chemical companies based in Ireland. The study of chemistry has led to the development of the food processing and

clothing industries, the availability of clean air and water, the production of improved fuels and other energy sources. In other words it involves everything we use, wear, consume, including medicines, plastics, preservatives, etc. Abstract reasoning is important i.e. can you imagine electrons moving around? A good level of maths competency also important.

## Requirement for Courses

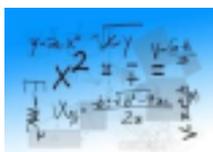
Chemistry is an essential requirement for 6 courses in Ireland. Minimum Grades required at Higher Level for Pharmacy in Trinity and UCC, Human Nutrition/Dietician in DIT/Trinity and Veterinary Medicine in UCD. It is also a requirement for Medicine and Dentistry in UCC together with a minimum Higher Level grade in Physics or Biology.

## Possible Career Options

- ❖ Chemistry Teacher
- ❖ Chemical Engineer
- ❖ Dentist
- ❖ Dietician
- ❖ Doctor
- ❖ Laboratory Assistant
- ❖ Pharmacist
- ❖ Physiotherapy

Choosing Subjects at Senior Cycle

# PHYSICS



## Syllabus

The syllabus emphasises the relevance of Physics and its application in everyday life. The course involves the same maths level as Ordinary Level Leaving Certificate standard. The Course involves many practical Experiments and Theory. It includes the study of heat, light, electricity and applied electricity, magnetism, radioactivity and nuclear physics, semiconductors and their applications as well as sound and mechanics.

## Examination

3 Hour written exam in June  
Section A (120 marks) Answer 3 from 4 questions on Mandatory Experiments  
Section B (180 marks) Answer 5 from 8 questions on theory, problem solving and experiments.

## Recommendations

Physics is a key subject for anyone interested in technology. Physicists play a vital role in the development of many new technologies

and the laws of physics find application in almost every branch of science and engineering. For example the pumping action of the heart, the speed of switching circuits in a computer, the stresses on a bridge are all subject to the Laws of Physics.

## Requirement for Courses

Physics is an essential requirement for Theoretical Physics in Trinity College. It is highly advisable for anyone considering courses or careers in engineering. Some paramedical careers will involve the study of Physics but it is not a requirement, e.g. Radiography, Analysis, Medicine, along with Biology.

## Possible Career Options

Architecture  
Electronics  
Engineering  
Optician  
Physical Science (e.g. Astrophysics)  
Physiotherapy  
Radiographer

Physicists can be found in all types of careers and not just restricted to Physics and Engineering. The problem solving skills attained are much valued in all areas such as finance and education.

## Choosing Subjects at Senior Cycle

# Agricultural Science



The Agricultural Science Syllabus covers the following areas:

## Syllabus

- ❖ Pig Production
- ❖ Grassland
- ❖ Plant and Animal
- ❖ Soil
- ❖ Genetics
- ❖ Dairy Production

## Examination

A written exam

Individual investigative study worth 25% .

It involves:

- ❖ Study is based on a thematic brief set by SEC at the beginning of the two year course
- ❖ Conducted over two years.
- ❖ It enables students to see at a practical level, how science underpins and supports agricultural practices
- ❖ Written exam- worth 75%,
  - Short answer questions

- ❖ Poultry
- ❖ Tillage
- ❖ Beef Production
- ❖ Forestry
- ❖ Sheep Production
  - Structured questions
  - Synoptic questions

## Recommendations

- ❖ Students should have to ability to work independently, authentically and be interested in agriculture.
- ❖ Students should enjoy gaining practical experience and carrying out investigations. Students should be innovative and industrious with regards to the practical folder preparation and subsequent practical oral exam. **Not a specific requirement for any third level course.** It will be accepted as a lab science subject for most courses in most colleges. There are some exceptions: agricultural science may

## Choosing Subjects at Senior Cycle

## Possible Career Options

- ❖ Health control and consumer protection
- ❖ Rural community resource worker
- ❖ Food Scientist
- ❖ Horse breeding

both be used for scoring purposes but

- ❖ Horticulture

- ❖ Organic farming

- ❖ Applied Science-Animal care

- ❖ PhD/Masters Research ❖

Agricultural Science teacher

Biology may not be presented with Agricultural Science as the two higher level science subjects required for Dental Science, Earth Sciences, Medicine, Medicinal Chemistry, Physiotherapy or Science.

# The Business Group



## ACCOUNTING

### Syllabus

The current Accounting Leaving Certificate syllabus overlaps in content with Stage 1 of the professional Accountancy examination

The syllabus covers many different areas such as:

- ❖ Financial Accounting
- ❖ Suspense Accounts
- ❖ Club Accounts
- ❖ Service Accounts ❖
- ❖ Cash Flow Statements
- ❖ Analysis & Interpretation of Financial Statements
- ❖ Management Accounting
- ❖ Incomplete Records
- ❖ Published Accounts ❖
- ❖ Company Accounting

## Choosing Subjects at Senior Cycle

### Recommendations

As a subject it provides students with specific business and knowledge which should be very useful on leaving school. It suits students who are numerical and quick thinking.

### Requirement for Courses

Accounting is not required to obtain a place on any Third Level course (apart from Commerce & Accounting in NUIG) but, naturally, it would help if you wanted to do such a course elsewhere.

- ❖ Business Law
- ❖ Clerical Work
- ❖ Insurance

3 Hour written exam in June

### Possible Career Options ❖

- Accountancy
- ❖ Auctioneering
- ❖ Auditing
- ❖ Banking
- ❖ Quantity Surveyor

### Examination

**Section A** (120 marks) Answer either Question 1 or two other questions.

## Section B (200)

Answer 2 out of 3 questions

## Section C (80)

Do one of two questions.

# BUSINESS

## Syllabus

### *People in Business*

- ❖ Managers
- ❖ Investors
- ❖ Producers
- ❖ Suppliers
- ❖ Trade Unions
- ❖ Entrepreneurs
- ❖ Consumer Rights
- ❖ *Management Skills/Activities* ❖ ❖ Communications

### Leadership

- ❖ Motivation



## Choosing Subjects at Senior Cycle

Need to be interested in what's happening in the business world on a National and International level, how they operate.

- ❖ Planning & Organising

- ❖ *Management in Action*

- ❖ Insurance

- ❖ Taxation

- ❖ Marketing

- ❖ Finance

- ❖ Social Responsibility

- ❖ *Business Structures*

- ❖ Sole Traders

## Examination

HL – 3 hr written paper in June, Including Case Study

OL – 2 ½ hr written paper in June

## Requirement for courses

Business is not an essential requirement for business courses or any other courses, however it is recommended if considering



studying business at third level.

- ❖ Partnerships
- ❖ Private Limited Companies
- ❖ Public Limited Companies
- ❖ Co-Operatives

## Recommendations

- ❖ *Government Involvement in Business*

- ❖ International Trade
- ❖ European Union
- ❖ Structures
- ❖ Workings

### **Possible career options**

- ❖ Administration
- ❖ Banking

- ❖ Business
- ❖ Marketing
- ❖ Advertising
- ❖ HR/PR
- ❖ Insurance
- ❖ Teaching
- ❖ Enterprise

# **Economics**

## **Syllabus**

- ❖ Market Economy
- ❖ Economic growth & development
- ❖ Market Structures
- ❖ Globalisation
- ❖ The consumer
- ❖ Employment & Unemployment
- ❖ National income
- ❖ Government intervention in the market
- ❖ Monetary policy and price level
- ❖ International trade and competitiveness

### **Examination**

#### Higher Level

Written paper 80%

Research paper 20% **The** research study will be based on a brief issued annually by the State Examinations Commission (SEC)

#### **Jobs**

- ❖ Economic Consultant
- ❖ Market Research Analyst
- ❖ Actuary
- ❖ Credit Analyst
- ❖ Financial Analyst

# History

## Syllabus

Students study 4 topics:  
2 Topics from Later Modern Irish History  
1815-1993  
2 Topics from the History of Europe and the wider  
world 1815-1992

A Research Topic is submitted prior to examination: Students choose their own topic for study which must have historical significance.



## Examination 2hr 50 min

Written paper 80%

3 questions each worth 100 marks from the topics

- ❖ Stalin's Show Trials information.
- ❖ The Jarrow March
- ❖ The Nuremberg Rallies
- ❖ Research Study 20%

## Recommendations

Embracing the world of politics, economics, religion and philosophy, history can be a most enjoyable challenge. History suits a student with a thirst for knowledge and an ability to express themselves accurately and to support their arguments with relevant

above

Document question based on 3 case studies from "Dictatorship and Democracy in Europe" Module

## Possible Career Options

- ❖ Arts Degree ❖ Politics
- ❖ Law
- ❖ Research
- ❖ Journalism ❖ Archivist
- ❖ Archaeologist ❖ Genealogist ❖ Librarian

# Geography

## Syllabus

This course is divided into three parts:

### Core

Geographical Investigation

Physical Geography

Regional Geography

### 2 Electives

Economic Activities or Human Environment

### 4 Options (Higher Level only)

Any one of the following:

Global Interdependence (Field Trip)

GeoEcology

Culture and Identity

The Atmosphere – Ocean

Environment

**Examination** 2hrs 50 min

Written Paper 80%

Geographical Investigation 20%

## Recommendations

A study of geography will help students develop an understanding of their physical and human surroundings. It examines the changing interrelationships between the physical and human worlds. Through their study of Geography, students will develop the key skills of literacy, numeracy and uniquely, graphicacy. It help them make informed

Transportation management

Urban Planner/Community

Development

judgements about issues at local, national, and international levels.

A thirst for knowledge and an appreciation and interest in reading and watching relevant programmes on television and DVD.

Geography is a cross-curricular subject, requiring a number of skills, including:

Presentation of data

Analysis of results

Map interpretation

Identification and description of national and international regions

## Possible Career Options

Agriculture

Cartographer

Climatologist

Environmental Management

Geography Teacher

Geology

Sociology

Surveying

Town Planning

# The ARTISTIC GROUP

## MUSIC



### Syllabus

Listening Students study and listen to a wide variety of world music including:

Set works – ranging from Bach/Mozart the Beatles/ Queen

Irish Music – Old & New

Other Styles – including Classical, ♣ Jazz, Rock, Pop & Fusion

### Composing

Students learn the basic elements of composition with a focus on:

16 Bar Melody

Adding Harmony to an existing melody

### Performing

- ❖ Each student prepares 2- 8 pieces of music to be performed as a Solo Performance and/or as a member of a group. Conducting or Research
- ❖ 25/50% of the Marks can go to Music Technology – i.e. using the computer to write and play music.

### Recommendations

Students considering taking Music at Senior Cycle must have a basic knowledge of Music Theory. Very important to either sing, play an

instrument and/or have a keen interest in music technology and history.

### Requirements for Courses

At NUI Maynooth, HC or equivalent is required for taking Music through Arts (MH001). UCC, DIT, TCD and WIT require all intending students of Music to take a special entrance test where performance is often a feature.

### ❖ Possible Career Options

- ❖ Music Teacher – post primary

school Music Therapist

- ❖ Performer/ Professional Musician ❖

Band, Group,

- ❖ Orchestra.

- ❖ Sound Engineer ❖ D.J/ Music

Production

# ART



## Syllabus

There are 3 assessment components to Leaving Certificate Art:

- ❖ Practical coursework
- ❖ Practical examination
- ❖ Written examination

## Examination

Practical coursework - 50% H&O

Practical examination - 20% H&O

Written examination - 30% H&O

### Examination:

Designed to test the use of primary sources including observational drawings, life drawing and drawing from the imagination. Will receive the SEC brief in term 2 of year 2 of Leaving Cert.

Students will create a second realised work based on the same idea and work they developed and researched for their overall coursework project.

The written exam will have a range of questions suited to visual studies and the application of practical knowledge.

## Careers

- ❖ Art teacher
- ❖ Product designer
- ❖ Curator
- t ❖ Art director
- ❖ Art specialist
- ❖ Art Therapist
- ❖ Multimedia specialis

Choosing Subjects at Senior Cycle

# THE SOCIAL GROUP

## HOME ECONOMICS

### **Syllabus**

This subject overlaps many others. As you can imagine with a subject as broad as this, there is quite an amount of reading to be done in and around the subject along with the practical work.

- ❖ Food Science & Nutrition
- ❖ Consumer Studies & Home Management
- ❖ Social Studies

### **Examination**

Practical 20%

5 Tasks/ Assignments (To be completed by early Nov of 6th Year)

Written Paper 80%

Section A: Short Answer Questions on all aspects of the course.

Section B: Compulsory question on Food Science & Nutrition. All other questions are of choice Section C Students answer a question from the Social Studies Elective or the Home, Design and Management Elective

Home Economics covers a wide range of social issues, along with cookery skills and

knowledge. It is a very relevant and topical subject. The variety of topics covered provides an interesting and rich fund of knowledge and skills valuable for self-development and for life

Students taking Home Economics do not have to have taken it for the Junior Certificate, although it helps if you have. It is suited to students with a strong attention to detail, or well organised and good at planning.

### **Possible Career Options**

- ❖ Social Work
- ❖ Occupational Therapy
- ❖ Nursing
- ❖ Teaching
- ❖ Beautician
- ❖ Catering/Chef
- ❖ Childcare
- ❖ Food Science
- ❖ Hospitality Industry
- ❖ Home Economist
- ❖ Food Production/Industry

# The Practical Group

## Design & Communications Graphics

### Syllabus

Technical Drawing provides students with the opportunity for visualizing and comprehending information presented verbally or graphically.

communicated using freehand sketching skills, traditional draughting equipment and CAD. ❖  
Projection Systems

- ❖ Conic Sections
- ❖ Intersection and Development of Surfaces
- ❖ Descriptive Geometry of Lines and Planes
- ❖ Dynamic Mechanisms
- ❖ Structural Forms
- ❖ Surface Geometry
- ❖ Geologic Geometry
- ❖ Assemblies

### Examination

Assignment 40%  
Terminal Paper 60%  
Exam 3 Hour

### Possible Career Options

Problem solving and creative thinking skills are developed through the analysis and solution of both 2- and 3- dimensional graphics. Graphics and design are

- ❖ Geographer
  - ❖ Architecture
  - ❖ Cartographer
  - ❖ Town Planner
  - ❖ Engineer
  - ❖ Designer

### Recommendations

If you are interested in taking this subject to Leaving Certificate level you will have taken Tech Graphics to Junior Certificate level. There is a great emphasis in the Leaving Certificate course on comprehension, analysis and problem solving. In simple terms you must be able to understand what has to be done, analyse how you are going to approach it and then proceed to solve the problem.

Although it is not an essential subject for either Architecture or Engineering it is regarded as a useful asset if you are thinking of a technical course.

# TECHNOLOGY

## Syllabus

The Core is a broad general introduction to the nature of Technology that provides students with a consolidation, extension and refinement of the knowledge, skills and techniques acquired in the junior certificate. It is intended that all elements in the core are learned in an integrative manner by means of a design and make approach in the context of safety and the impact of technology on society.

- ❖ A Process of Design
- ❖ Project & Quality Management
- ❖ Materials and Production
- ❖ Communication and Graphic Media ❖  
Information & Communications  
Technology

## Recommendations

### Choosing Subjects at

### Senior Cycle ❖ Engineering

Students do not need to have taken

- ❖ Structures and Mechanisms
- ❖ Energy, Electricity and Electronics

### Optional Modules

- ❖ Electronics and Control
- ❖ Applied Control Systems
- ❖ Information & Communication  
Technology Manufacturing Systems ❖  
Materials Technology

## Examination

### Practical 50%

Projects must be designed and manufactured by the students during class time

### Written Paper 50%

Technology at Junior  
Cert to qualify for this course.

It would however be an  
advantage if students had one  
of Tech Drawing, or  
Technology.

### Possible Career Options

Technology is not required by any  
course but will be accepted in place of  
a Laboratory Science Subject for  
Engineering in NUIG

- ❖ Software Development ❖ Artist
- ❖ Designer
- ❖ Industrial Designer

# CONSTRUCTION STUDIES

Construction Studies introduces Senior Cycle students to the knowledge and skills associated with construction technology and construction materials and practices. This is achieved through theoretical study and integrated practical projects which provide a basis for the thorough exploration of materials and processes.

## Syllabus

Students will study the following topics during the two years of the course:

- ❖ Planning and design
- ❖ Drawings and documents
- ❖ Site preliminaries and foundations
- ❖ Walls and partitions
- ❖ Floors, roofs
- ❖ Fireplaces
- ❖ Windows and doors
- ❖ Stairs
- ❖ Plastering and painting
- ❖ Plumbing and heating
- ❖ Services
- ❖ Drainage
- ❖ Junior Certificate Woodwork and/or Technical Graphics would be desirable subjects to have taken at Junior Certificate though not compulsory.

❖ Have a curiosity about the built environment and its sustainability.

## Careers

- ❖ Civil Engineering
- ❖ Trade Apprenticeship
- ❖ Electrical Engineering
- ❖ Interior Design
- ❖ Mechanical Engineering
- ❖ Teaching
- ❖ Quantity Surveyor
- ❖ Architecture
- ❖ Renewable Energy Consultant
- ❖ Furniture Design
- ❖ Town Planner
- ❖ Cabinet Maker
- ❖ Estate Agent
- ❖ Archaeology

- ❖ Heat and thermal effects in buildings,
- ❖ Illumination and sound in buildings

## Examination

There are three parts to the assessment, a term based practical project accompanied with a portfolio, a four hour practical skills based exam and a final written exam. The breakdown of marks varies at higher level and ordinary level as outlined below:

### Higher

### Ordinary

1 Main project 25% 30% 2 Practical exam 25% 30% 3 Written exam 50% 40%

## Recommendations

❖ It is recommended that a student taking Leaving Certificate Construction Studies has a general interest in buildings and the built environment.

❖ Each student should have an aptitude and interest for design and practical work

# COMPUTER SCIENCE

Computer science is the study of computers and algorithmic processes. Leaving Certificate Computer Science includes how programming and computational thinking can be applied to the solution of problems, and how computing technology impacts the world around us. It is about finding solutions to almost any problem you can imagine.

## **Syllabus**

*Strand 1 – Practices and principals*

- ❖ Computational thinking
- ❖ Computers and society
- ❖ Design and development

*Strand 2 – Core concepts*

- ❖ Abstraction
- ❖ Basic Algorithms
- ❖ Computer Systems
- ❖ Data
- ❖ Evaluation & Testing

*Strand 3 – Computer science in practice*

- ❖ Interactive Information Systems
  
  
  
  
  
  
  
  
  
  
- ❖ Network Systems Administrator

- ❖ Database Administrator

- ❖ Analytics
- ❖ Modelling & Simulation
- ❖ Embedded Systems

## **Examination**

- ❖ Individual final year project
- ❖ End of course examination

## **Recommendation**

There is a very strong emphasis on problem solving. Key skills such as personal effectiveness, communication, critical thinking and more are developed through programming concepts, using languages such as Python and JavaScript. Students will also learn about the ethical and social impact of computing technologies, Artificial Intelligence, Big Data, and more, on humans and society.

## **Careers**

- ❖ Software application developer
- ❖ Computer Systems Analyst
- ❖ Software Systems Developer
- ❖ Web Developer
- ❖ Computer Science careers are projected to grow 12% through 2024

# CAO POINTS

The Department of Education & Skills introduced a new Points Scale in 2017

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

## How the Points System Works

Points are awarded on the basis of the student's **six best results** in their Leaving Certificate. *These results must come from one sitting of the Leaving Certificate.* It is possible to combine results obtained over several sittings for requirements *it is not possible to combine for points.*

The new scale has 8 grades at both Higher and Ordinary levels- the highest grade is a Grade 1, the lowest grade a Grade 8.

There are certain subjects that are essential for entry to particular courses, colleges and careers. It is important you are aware of these. Generally they are very few and can be checked online.

If you have not decided on your future career you are not alone. The majority of students will not have identified their career path at this stage. In this situation you should choose subjects that will keep your career options open, selecting one subject from each area. There are lots of combinations that would keep your options open.

### Two examples:-

Eg.1 Business Subject, Science Subject, Language, Practical Subject

Eg.2 History/Geography, Science Subject, Practical Subject, Language

## What not to do

- ❖ Don't choose a subject because your friend is doing it.

- ❖ Don't choose a subject based on the teacher you might have.
- ❖ Don't choose a subject because you think it will be a doss – There is no such thing as an easy Leaving Certificate subject

## What to do

- ❖ Pick subjects you like and are good at.
- ❖ Talk to your parents about the subjects you feel would suit you best.
- ❖ Listen to what the subject teachers tell you about the Leaving Certificate course content and the difficulties you will face if you choose a subject for Leaving Certificate that you struggled with at Junior Certificate.
- ❖ Look at the Leaving Certificate textbooks and notes to get a feel for what lies ahead. ❖ Choose subjects you can cope with and you don't find too difficult in order to maximise your performance at Leaving Certificate.

## A Third Language

Must be included for arts, human sciences, most law, social science, commerce, medicine and health sciences. A third language is also a requirement for entry into the Cadetship in the Army or Air Corps.

**Always check the language requirement for the course to which you are applying as this can change from one year to the next.**

Trinity College Dublin (TCD) accepts Irish as a second language requirement. UL and DCU and the Institutes of Technology do not require a foreign language for entry purposes to most of their courses, apart from those which involve the study of such a language. If you were born outside the Republic of Ireland (26 counties) and you study Irish for the Leaving Certificate you can present Irish as your language requirement for entrance to NUI universities.

Log onto [www.careersportal.ie](http://www.careersportal.ie) and follow the link in the brown box to Leaving Cert. subjects. At the bottom of the page click on 'Detailed guide to Leaving Certificate subjects.' This contains a wealth of up to date information on every Leaving Certificate subject. **Useful Websites for your research**

- ❖ [www.careersportal.ie](http://www.careersportal.ie)  
Information on Leaving Certificate subjects and career options. Interest Inventories, Career Matching and Job Descriptions
- ❖ [www.ncca.ie](http://www.ncca.ie)  
Syllabus content for each Leaving Certificate Subject
- ❖ [www.qualifax.ie](http://www.qualifax.ie)  
Third Level Entry Requirements & Course Descriptions, Qualifax also has a section on Leaving Certificate subject choice.
- ❖ [www.cao.ie](http://www.cao.ie)  
Third Level Entry Requirements & Course Descriptions
- ❖ [www.skool.ie](http://www.skool.ie)

❖ [www.leavingcert.net](http://www.leavingcert.net)

In addition to these each University and College in the CAO and UCAS system has its own website giving detailed information on their courses and facilities.

This booklet has been designed to assist you in making your subject choices. At the end of the day, however, it is *you* who must make the choices that suit you best.

***It is essential that all entry requirements are checked regularly as they are subject to change by the Higher Education Institutes.***