



SUBJECT OPTIONS AVAILABLE IN WOODBROOK COLLEGE

ABSTRACT

The following is some information on choosing options, understanding what the subject consists of and some information as to why to choose specific subjects. This is not a definitive guide and there will always be someone here to help if you are not sure in which direction to go.

2022-2023

Contents

| | Page |
|---|----------|
| Junior Cycle | 2 |
| Business | 3 |
| Graphics | 3 |
| Home Economics | 4 |
| MFL: French, German & Spanish | 4 |
| Music | 5 |
| Wood Technology | 6 |
| Visual Art | 6 |
| | |
| Senior Cycle | 8 |
| Accounting | 9 |
| Art | 10 |
| Biology | 10 |
| Business | 11 |
| Chemistry | 12 |
| Construction Studies | 12 |
| Design & Communication Graphics | 13 |
| Economics | 13 |
| Modern Language: French, German & Spanish | 14 |
| Geography | 15 |
| History | 16 |
| Home Economics | 17 |
| LC Physical Education | 18 |
| Music | 19 |
| LCVP | 20 |
| Physics | 22 |

Junior Cycle

The new junior cycle allows for new ways of learning and a broader range of skills to be properly assessed. The aim is to place the student at the center of the learning process.

Principles, Key Skills and Statements of Learning

Underpinning the new junior cycle are a set of principles, key skills, and statements of learning. These will ensure that your child receives a rich educational experience that has both breadth and depth. Your child will have access to a varied curriculum of knowledge, skills, and values.

Principles

Eight principles underpin the framework for Junior Cycle. These inform the planning for, as well as the development and implementation of junior cycle programmes in all schools. The eight principles of Junior Cycle are:

1. Learning to Learn
2. Choice and Flexibility
3. Quality
4. Creativity and Innovation
5. Engagement and Participation
6. Continuity and Development
7. Inclusive Education
8. Wellbeing

Skills

Eight skills permeate across the entire curriculum. The skills are:

1. Being Literate
2. Managing Myself
3. Staying Well
4. Managing Information and Thinking
5. Being Numerate
6. Being Creative
7. Working With Others
8. Communicating

Engagement with these skills across the curriculum will enable students to:

- be more actively engaged with learning
- take greater ownership of their learning
- have a critical engagement with digital technology
- be encouraged to problem solve and think creatively

Assessment:

There are two Classroom-Based Assessments in Business Studies. They are assessed at a Common Level. They relate to specified learning outcomes and are scheduled to be undertaken by students in a defined time within class contact time to a national timetable (as advised by the NCCA) in the school calendar. This timetable for Classroom-Based Assessments for all subjects will be provided on an annual basis at <http://www.ncca.ie/junior-cycle> and at www.curriculumonline.ie/Junior-cycle. Following the second of these assessments, students will complete an Assessment Task which is marked by the State Examinations Commission as part of the state-certified examination in the subject. The Classroom-Based Assessments for the subject is available in the subject descriptors on www.curriculumonline.ie/Junior-cycle. A terminal exam is then held in third year which is schedules and assessed by the Department of Education and Science in June.

The following core subjects are taught for all students, Irish, English, Math, Science, History, Geography, Religious Education and three short courses in the following subjects, Physical Education, CSPE and SPHE. There are then three optional subjects chosen from the following list. A more detailed description of the subjects is given further in this booklet.

| | | | | |
|----------------|----------|---------|-----------------|----------|
| Art | Business | French | German | Graphics |
| Home Economics | Music | Spanish | Wood Technology | |

Optional subjects should be chosen based on an interest in the subject. While this may be difficult it is important to understand for instance that not taking a Modern Foreign Language (MFL) would result in not being able to apply to specific colleges or courses.

The range of optional subjects may change from time to time dependent on demand.

BUSINESS STUDIES

Young people are growing up in a globalised and dynamic world. New opportunities and challenges will emerge in their lifetimes that are virtually unimaginable today. Developing technologies, environmental and societal challenges, demographics, global competition and changing consumer demand will drive these changes. Studying business helps to equip students with the understanding, skills, and attitudes to participate fully in an interconnected world.

Business studies encourages students to develop an appreciation of how their lives are shaped by economic and social factors. They are enabled to make informed decisions, to better manage their personal financial resources and to be adaptable, creative, and enterprising. Business studies also improves their knowledge and understanding of good business practice and of business as a productive activity.

Entrepreneurship enhances the quality of our collective and individual lives, often changing the way we work, communicate and live. Business studies provides an awareness, insight, and positive attitude to entrepreneurship, demonstrating how it can improve our goods, services, and institutions.

Business studies encourages students to develop skills for learning, skills for work and skills for life. It supports the development of analytical and critical thinking skills, encouraging students to be problem solvers. It reinforces the development of students' numeracy, literacy, and digital technology skills by providing a real-life context for their application.

Business studies explores the interdependence of economic prosperity, societal well-being and the environment and encourages students to think and act as responsible and ethical citizens. They will be provided with a set of foundational skills, understandings, and personal attributes, which will help them to engage with the dynamic business environment and fulfil their potential in their personal and professional lives, now and into the future.

GRAPHICS

Each subject of the technology suite offers the student different experiences which contribute towards their education in technology education. As a result, preparing students for learning in the technology subjects is not just about teaching towards the technology but towards the skills that are fundamental to the technology subjects and are transferable into other areas of their learning. Skills that encourage the student to solve problems through creation, innovation, communication, collaboration, and exploration, all of which are developed in an active learning environment where students can advance their ideas from conception to realisation.

Graphics is recognised as the underpinning language of the technology disciplines and is transferable across a wide range of subjects such as mathematics, science and art. Students will use a variety of media to communicate their ideas and designs through this unique language. Throughout the course, students will explore the geometric world to gain an appreciation of the importance of graphics in the world around them. They will develop cognitive and practical skills such as graphical communication, spatial visualisation, creative problem-solving, design capabilities and modelling, both physically and using computer-aided design.

Students will develop their creativity as they investigate and solve design challenges. During the problem-solving process, they will work with their peers to refine their ideas from an abstract concept to a final, detailed, drafted design. Abstraction, and spatial reasoning are fundamental to this process; graphics provides multiple and varied opportunities for students to develop these high level cognitive and creative skills in engaging contexts.

Accurate technical drawings are essential in the design and manufacture of components and artefacts. The need for precise communication in the preparation of a functional document distinguishes technical drawing from the expressive drawing of the visual arts. Producing accurate drawings requires significant attention to detail and a patient and resilient mind-set. Students will continually review and reflect on their working drawings developing strategies for improvement as they progress.

HOME ECONOMICS

The central focus of Home Economics as a field of study is achieving optimal, healthy, and sustainable living for individuals, families, and society. Individuals and families in every society are continually faced with new and emergent issues that can impact on their wellbeing. Such issues include concerns relating to food, nutrition, diet, and health; family and social concerns; consumer issues; sustainability in the home; responsible family resource management; and textiles and clothing.

In Home Economics, students learn how to address these practical, real world, perennial problems of individuals, families, households, and society in socially responsible ways. Practical perennial problems or concerns are endured from generation to generation by families and require critical decision-making skills to resolve them. Home Economics education uses a systems approach to empower individuals and families with the knowledge and skills to address these real-life concerns of everyday living. Home Economics draws on diverse disciplines integrating social, physical, and human sciences. It strives to solve everyday challenges using a blend of knowledge and skills acquired from multiple disciplines. Home Economics education develops students' essential life skills and personal independence. It supports the development of students who are critical, creative thinkers and encourages students to be problem solvers capable of making ethically and socially responsible decisions.

MODERN FOREIGN LANGUAGES (MFL)

The study of modern foreign languages enables students to build on their language learning in English and Irish in primary school and further develops their skills in and enjoyment of using languages. Language learning is accessible to all students and contributes to their cognitive, personal, and social growth by enhancing their communicative and thinking skills, as well as their participation in a global society. Being able to communicate in the mother tongue and in foreign languages are also among the eight key competences for lifelong learning identified by the European Union and European Council in 2006^[1].

Language learning develops students' general language awareness. It enhances their ability to analyse how language works, to compare languages, and to reflect on how they learn languages. This has a positive effect on their first language skills and on future language learning.

In learning foreign languages, students are actively engaged in activities and tasks which integrate the five language skills of listening, reading, spoken production, spoken interaction and writing. As a result, they communicate with increasing independence, confidence, and creativity. As learning is a social activity as well as a personal one and as communication is central to language, learning languages offers students ample opportunities to work with others to develop their language skills and achieve appropriate goals.

A fundamental feature of languages is that they give students access to new worlds and different ways of thinking. The resulting development of socio-cultural knowledge and intercultural awareness also enhances students' cognitive development. By reflecting on other cultures and making comparisons they develop a deeper understanding of their own while appreciating diversity.

Language learning also broadens students' horizons and enables them to develop a lifelong learning

skill for education, leisure, and work, and to develop a positive attitude towards other languages and cultures. Modern technologies play a key role in making language learning and language use increasingly more accessible and enjoyable for learners, by facilitating access to information and communication with people at a global level.

The society we live in has become multilingual. Ireland needs to increase its language capacity and to foster plurilingualism (a person's ability to communicate in more than one language). While English is an international language, knowledge of other languages gives us cultural and competitive advantages.

Many studies attest to the benefits of bilingualism and plurilingualism. Students who have been exposed to language learning from an early age perform better than those who have not, not only in verbal skills, but also in mathematics. They display enhanced abilities in areas such as problem-solving, multi-tasking, creativity and pattern recognition[2].

Please note that this specification has been developed as a framework to be used for teaching junior cycle French, German, Italian and Spanish as modern foreign languages.

The language exponents provide a detailed example of how a teacher will use the specification to plan for teaching and learning.

MUSIC

Learning about and through the arts is fundamental to an education that aspires to nurture and support the development of the whole person. Awareness of, involvement in, and appreciation of the arts enables students to encounter a rich world of creativity, imagination, and innovation (Arts in Education Charter, 2012). The UN Declaration of Human Rights (Article 27) affirms the rights of everyone to 'participate in the cultural life of the community and to enjoy the arts.'

Through engaging with music, students are offered opportunities to develop new skills, while drawing on their previous experiences. These previous experiences are often central to our existence as music is everywhere. From the moment we are born we are in a musical world. Music is a natural early connection between infant and caregivers. International research shows that from the very early months of a child's life there is a human propensity to respond and engage with music. With music, students can immerse themselves intellectually, emotionally, physically, and kinaesthetically in the learning experience. Music performance and composition are collaborative and interpersonal activities, where social skills are developed through the sharing of ideas, skills, or instruments.

Music can provide an environment for the student where they are safe to explore, experiment and be allowed to take creative risks. The subject can engage students in learning that engages, inspires, challenges, provokes, exhilarates, and liberates. Students are encouraged to collaborate in the formation of ideas and the presentation of these ideas and to critically reflect on their work and the work of others. Through listening to the music of others, and assimilating this into their own ideas, students learn how musical works are created. Through understanding how to evaluate and critique the works of others, students learn to be self-reflective and improve on their own musical creations.

As a creative endeavour, music can facilitate the development of imaginative and exploratory experiences, where individuality and personality are provided with the opportunity to grow and be given a voice. The study of music offers lifelong opportunities to develop the imagination in unique ways, through listening to familiar and unfamiliar works, coming to know and understand sounds internally, creating sound pictures or stories and expressing feelings and emotions in sound.

Learning music is intrinsically motivating, meaningful and a rewarding activity for young people because it is hands-on; fully engaging the students in activities that relate to and have a connection with the world experienced by them outside the classroom. Music fosters both the specific skills related to the subject, and a range of transferable skills that may apply to other individual and collaborative endeavours. Through movement, sound, symbol, and image, engaging with music can transform people's creative ideas into expressive works that communicate feelings, meanings, and interpretations to a wider audience.

Music is important as a catalyst for building cultural capital within the individual student and the class

collective. Through encountering and engaging with an array of music activities, we can ensure that we continue to develop future citizens that are culturally engaged, culturally aware and culturally connected. Being culturally aware heightens student understanding of both national and international cultural identities. With an increasingly diverse and pluralist population, this understanding of others through a cultural lens will encourage students to develop as responsible and ethical citizens.

Music is a source of understanding history, reflecting the social and cultural context and the era of its creation. Music can portray the cultural identity of a country, the mood of the people or the thoughts of the individuals who live there. Music education brings the young person to an awareness and appreciation of their own unique cultural environment and ethos. In engaging students with the rich background of their native musical traditions as well as other musical genres, music education contributes to the students' knowledge and understanding of others, their times, their cultures, and traditions.

WOOD TECHNOLOGY

Each subject of the technology suite offers the student different experiences which contribute towards their education in technology education. As a result, preparing students for learning in the technology subjects is not just about teaching towards the technology but towards the skills that are fundamental to the technology subjects and are transferable into other areas of their learning. Skills that encourage the student to problem-solve through creation, innovation, communication, collaboration, and exploration, all of which are developed in an active learning environment where students can advance their ideas from conception to realisation.

Wood Technology is a subject that will allow students to explore and learn about a key natural resource that nature has provided. Trees and wooden material have a unique relationship with nature and humankind. The sustainable use and management of this natural resource is important as the world faces the challenges of the 21st century. From habitats to construction or recreation to oxygen creation this resource can play a significant role in wellbeing of our planet. To this end it is important that citizens be given the opportunity to become knowledgeable about this resource, exploring its heritage and potential as a material for the future. In Wood Technology, students will explore the natural and made world through the medium of design, seeking out opportunities to apply the material/resource creatively and innovatively in making and shaping their environment. Wood as a material resource has seen much innovation and change. Technological advances have created significant opportunities to expand the use of wood as a resource for a broad range of applications. However, the uniqueness of this material and craft is that many of the traditional applications and processes are still of value, transcending the test of time. Learning in this subject will be active and student centred, with learners collaborating in the pursuit of knowledge and in the safe management of the technology classroom environment. Through the challenges posed by the design-based philosophy of the subject, students will develop the relevant knowledge, skills, and values to bring ideas from conception to reality in a way that will allow them to be expressive, creative, and innovative.

VISUAL ART

Visual Art is a subject that promotes teaching and learning through art, craft, and design. For adolescents and young adults, this involves becoming familiar with and applying the elements of art and principles of design, and the knowledge and skills associated with these processes, their histories, and their contemporary practices. Visual Art also recognises and rewards several different forms of intelligence, including emotional intelligence; it develops personal qualities of expression and empathy.

Visual Art encompasses art, craft and design and involves practical work in a wide range of media leading to a specific outcome, e.g., an artwork, a design, architectural study, an installation, or an event. Making art develops the learner's imagination through developing an idea or concept and allows them to exercise personal responsibility for specific tasks.

Visual Art is ambiguous; there is no single 'correct answer' in Visual Art: The subject promotes divergent thinking and develops the learner's ability to interpret, make judgements and express opinions on a work. It also promotes respect for the work and the opinions of others.

Visual Art is concerned with the personal, cognitive, and physical fulfilment of the learner in both the present moment - producing work that gives personal pleasure and reward in the short-term, as well as in preparation for longer-term, more distant goals.

The qualities that Visual Art develops are crucial components of the rounded general education that all young people should experience. These personal characteristics and attributes include creativity, critical judgement, working with others or working individually, providing, and receiving constructive criticism, and respecting differences.

Visual Art provides the learner with a space within which it is safe to experiment, to fail and to learn. It allows learners to collaborate on ideas and work. It facilitates and encourages the questions a learner may raise in travelling a path that may not lead to an anticipated outcome or that may produce a different outcome to what was planned. It gives them the capacity to understand and to express ideas, feelings, and opinions: both their own and those of others.

Contemporary culture is highly visual. Visual literacy is an essential requirement of active citizenship. It enhances the young person's ability to interpret, critique and decode visual messages. The capacity to engage in critical thinking in the art class fosters the young person's competence and confidence in responding to and engaging with the visual culture of the contemporary world and with the natural and built environments. It opens their minds to the traditions and values of other cultures and influences. Visual literacy and the ability to appreciate visual culture adds to the wealth of learning available through historical artefacts and to an understanding of the evolution of works of art, craft, or design across the development of human society.

In Visual Art, students build on the progress and skills they have already achieved in primary school to help them further improve. Students of the subject will develop the transversal skills, such as creativity, collaboration, ability to question, risk- assessment, problem identification, problem-solving and management of their own emotions; skills that form a natural learning mechanism that can enhance their own development. Students learn how best to use traditional and contemporary technologies for both creative and operational purposes. All these skills and dispositions are key to future learning in senior cycle, higher education, and in the world of work.

Senior Cycle

Q What are you aiming to do when choosing your subjects?

A You are aiming to choose a meaningful, manageable package of subjects (i.e., A set of subjects which will give you a sense of direction, will provide self-motivation and most importantly is achievable)

Q What decisions must you make?

A Ultimately 3 decisions: a) The total number of subjects b) The actual subjects c) The levels at which each subject is taken

THOUGHT, PLANNING, RESEARCH AND ACCURATE INFORMATION IS A PRE- REQUISITE TO MAKING THE ABOVE DECISIONS

The following is designed as a guideline to help you make the above decisions

1. What subjects are available?

We have the following compulsory subjects at Leaving Certificate: Irish, English, Math, PE, Religious Education, and a combination of LCVP and Guidance. There are then four options from the following available subjects which are introduced in 5th year if the demand is there for them.

| | | | | | |
|------------------------|----------------|---------|-------------------------|-----------|----------------|
| Accounting | Art | Biology | Business | Chemistry | Construction |
| Design & Communication | Economics | French | Geography | German | Graphics (DCG) |
| History | Home Economics | Music | Physical Education (PE) | Physics | Spanish |

2. What subjects are you interested in?

Genuine interest is important in terms of motivation

3. What subjects are you good at?

Test results and chatting to teachers may help gauge your Ability within subject areas but remember attitude is as important as ability.

4. What careers/career areas are of interest to you?

5. What courses would give you training and skills for your career choice?

6. What subjects are either essential or desirable for courses/ areas of work after Leaving Certificate

- Certain subjects are essential for entry to courses, colleges, and careers
- If interested in a specific area check out the admission requirements in the specific colleges.

Check courses on www.careersportal.ie or www.qualifax.ie

7. Do you have a definite career direction? If so, choose a combination of appropriate subjects to enhance career prospects but be aware of the cost of not doing a subject particularly a language or a science subject. What should you do if you are unclear and wish to keep options as open as possible?

It may be advisable to choose subjects from different groups:

- Science: Physics, Chemistry, Biology
- Applied Sciences: Construction Studies, Design and Communication Graphics (DCG)
- Languages: French, German, Spanish
- Social Studies: History, Geography, Art, Physical Education, Home Economics

e) Business Studies: Accounting, Business, Economics

Remember

- The number of courses and jobs which require specific subjects are quite small, but these need to be researched.
- It may be a mistake
 - (a) Not opting for a language subject
 - (b) Not opting for a science subject
 - (c) Not opting for a business subject

Practically all science, medical, paramedical, and engineering courses require at least one laboratory science subject (Biology, Chemistry, Physics). A number are now looking for 2 science subjects. Some courses at certificate level in ITC's do not need a science subject as a requirement.

- If you wish to choose a Science medical, or a Paramedical career, it is advisable to choose a second Science subject.
- If high points are a priority, then choose subjects which you can achieve high marks in, making sure, of course, that you choose essential subjects

Good attitude, healthy participation, organised planning, strong work ethic = Excellent results, vision, and a great life

Subject Options

ACCOUNTING

Accounting is an essential element of any business. A good logical mind and an ability to manipulate figures is all that is needed. While it is in no way a mathematical course, an aptitude for figures is desirable. The syllabus is divided into two sections, financial accounting, and management accounting. Accounting involves the recording of financial information by an individual, voluntary organisation or business, the presentation of this financial information and the interpretation and uses of this financial information. Students will be able to interpret accounts (ratios), prepare cash flow statements and learn how to present accounts of clubs of societies as well as other very relevant areas

Management accounting on the other hand is essential in helping managers make very important decisions, which will affect the future of their businesses. It is divided into costing and budgeting. Costing, examine product costing (how do companies decide what price to charge for their products) and how will they allocate costs relating to these products and marginal costing (if managers alter costs selling price or volume what effects will this have on profits). This technique helps managers to become more focused and fine-tune their companies to best practice. Budgeting looks at cash budgets (money in and money out) and functional budgets (what the company would hope to achieve in different areas of their business).

A STUDENT WILL BENEFIT FROM STUDYING ACCOUNTING BY LEARNING HOW TO:

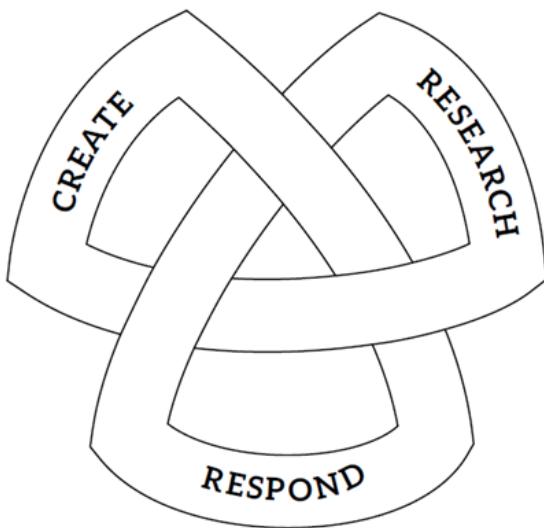
- Collect, organise, record and present financial information
- Analyses and interpret financial information
- Think clearly and logically
- Prepare your own accounts if you set up your own business
- Prepare students for the performance of the role of Treasurer in clubs and societies

ACCOUNTING IS USEFUL FOR CAREERS IN:

Accounting, Auctioneering, Auditing, Advertising, Banking, Bookkeeping, Building Society Clerk, Business Law, A vast array of Clerical Work, Company Secretary, Hospital Administration, Hotel Management, Insurance,

Market Research, Purchasing Officer, Quantity Surveyor, Receptionist, Sales Representative, Taxation Consultant, Teaching, Computers.

ART



The Leaving Certificate Art specification is presented in three inter-related and inter-dependent strands.

Research Strand

Students will learn how to become visual researchers. As part of the research process, they will learn to select a stimulus, choose relevant primary sources, and develop and explain their ideas and work further.

Create Strand

Learners will be engaged in the process of making/creating art from conception to realisation using a range of skills and media. They will create work based on a starting stimulus, respond to it, and develop it as their work progresses.

Respond Strand

Learners need to understand that in Art they can react to artwork, whether it is their own or another's. Learners will also learn about and learn from aspects of Visual Studies, which will help to increase their knowledge of Art and so inform their opinions of their work and the work of others.

Areas of Practice

There are a broad number of areas of practice available within Art for learners to study across a range of traditional, contemporary, new and/or digital media or a combination of these. At Woodbrook College students can engage in Painting, Graphic Design, Lino, Batik, Clay, 3D Construction, Photography, Digital Media and more.

Assessment Structure

| Assessment Component | Weighting | Level |
|-----------------------|-----------|---------------------|
| Practical coursework | 50% | Higher and Ordinary |
| Practical Examination | 20% | Higher and Ordinary |
| Written examination | 30% | Higher and Ordinary |

ART IS USEFUL FOR CAREERS IN:

Advertising, Graphic Design, Photography, Teaching, Content Creators, Architecture, Bookbinding, Crafts, Fashion, Florist, Environmental Designer, Furniture Design, Curator for Gallery and Museums, Industrial Design, Interior Decoration, Marketing, Visual Merchandiser, Occupational Therapist, National Teacher, Picture Restoration, Printing and Publishing, Sculptor, Sign-writer, Video Production, Media Studies, Textile Design, Television, Theatre, Town and Country Planning, Lecturing in History of Art.

BIOLOGY

More than any other Science, Biology is part of everyday experience. When you visit a Nature Reserve, watch the behaviour of a pet animal, or collect a prescription from the chemist, there is a close encounter with biology. Switch on the TV for a documentary on covid, transplant surgery, or open a familiar textbook, and peeling off the surface layer of the biological onion reveals some fascinating science underneath.

At another level, read about the success of a new biotechnology company, or a new campaign by Greenpeace, and the economic and political importance of the subject can be seen.

The L.C. Biology course bears very little resemblance to Junior Certificate Science Biology and

- It is far more detailed
- It is mostly learning work and must be done every night

The Major areas of study are:

- Unit 1 The study of life (ecology and food science)
- Unit 2 The cell (genetics, photosynthesis, respiration, and enzymes)
- Unit 3 The organism (study of body systems, plant biology and microbiology)

From the employer's viewpoint there are some qualities developed during the study of Biology, which make it especially valuable as a preparation for other jobs:

1. Because of the complexity of living things, studying them usually involves dealing with a wide range of variables and complex sources of data
2. Fieldwork, and some laboratory work, can be a team activity. Taking personal responsibility and learning to work together with others in a group, are qualities valued highly by employers
3. Speaking the language of science is an asset in this era of technology

BIOLOGY IS USEFUL FOR CAREERS IN:

Health Professionals, Environmental Officers, Publishing, Journalism and Broadcasting, Library work and Information Science, Environmental Conservation, Marine and Freshwater Biology, Animal Nurse, Education, Horticulture, Zoologists, Food Industry: Production Management, the Brewing Industry.

BUSINESS

This subject provides students with a general introduction to business, and it sows the seeds of initiative and enterprise. It contains elements of law, finance, and economic issues. This enables students upon leaving school to choose from a variety of disciplines in third level. Leaving Certificate Business also provides students with business start-up knowledge and skills, which then allow self-employment to become a positive career option.

WHY SHOULD LEAVING CERTIFICATE BUSINESS BE STUDIED?

- Provides students with a valuable insight into the world of business, which complements their other studies on the curriculum.
- Develops an understanding of the role people play in business.
- Is a practical and vocationally oriented subject, which deals with real issues relating to the community, business enterprises, industrial relations, and the environment.
- Helps students develop an awareness of their own enterprise and communication skills.
- Introduces the various management skills and activities used in both the household and business.
- Explores the stages involved in developing a product or service and in setting up a business, with the legal requirements to be put in place to do so.
- Highlights the relationship between business and the wider economy both at home and abroad, including the European Union.

WHAT ARE THE BENEFITS OF STUDYING BUSINESS?

- It is an interesting subject, which deals with topics as diverse as marketing, social responsibilities of business, global selling, and communications.
- The diverse strands in L.C. Business highlights a variety of potential career opportunities.
- L.C. Business provides a foundation for the many business modules included in courses of study in Universities, Institutes of Technology and Post-Leaving Certificate Courses (P.L. Cs).
- Business is an important subject in the Leaving Certificate Vocational Programme complementing the mandatory Link Modules of Enterprise and Preparation for Work/Work experience.
- The subject encourages students to reflect on the wider social and ethical issues in business.
- It is a subject, which through active learning, encourages students to seriously consider the possibility of self-employment.

- L.C. Business is a subject, which students enjoy, and which prepares them for adult and working life.

BUSINESS IS USEFUL FOR CAREERS IN:

Banking, Finance, Administration, Insurance, Law, Management and Marketing.

CHEMISTRY

Chemistry gives you excellent training for many jobs, both scientific and non-scientific. To be successful in the subject you need to be able to think logically, and be creative, numerate, and analytical. These skills are much sought after in many walks of life and would enable you to pursue a career in, say, computing and finance, as well as careers, which use your chemistry directly.

HERE ARE SOME GOOD REASONS FOR CHOOSING CHEMISTRY AS A CAREER:

1. New ideas and materials are constantly being used in technology to improve the society in which we live. You could work in a field where research and innovation are of primary importance to standards of living, so you could see the practical results of your work in everyday use around you.
2. Chemistry offers many career opportunities whether working in a public service such as a water treatment plant, or high-level research and development in industry.
3. You should remember that, as the society we live in becomes more technically advanced the need for suitably qualified chemists, will increase. Although Chemistry stands as a subject, it acts as the bond between physics and biology. Thus, by entering the world of chemistry you will be equipping yourself to play a leading role in the complex world of tomorrow.

CHEMISTRY IS USEFUL FOR CAREERS IN:

Pharmacy, Nursing, Chemical Engineering, Industrial Chemistry, Food Science, Veterinary Science, Medicine, Applied Science, Metallurgy, Materials Science, Dentistry, Agriculture, Forestry Mining, Polymer Science, Dairy Science, Textile Science, Forensic Science, Photographic Processing, Teaching, Pollution Control, Cosmetic Science, Geochemistry, Quality Control, Biotechnology, Health Care and Pharmaceutical industries.

CONSTRUCTION STUDIES

As the name implies this subject is the study of Construction and its effect on Irish building customs, practices, and the environment. The subject investigates many aspects including materials, skills, services, lighting, heating, and ventilation.

AIMS OF THE COURSE: To

- Introduce pupils to the knowledge of skills involved in construction technology.
- Develop the pupil's ability to communicate ideas and information by appropriate methods.
- contribute to their general education
- provide a basis for those who wish to study any of the careers outlined below.

COURSE OUTLINE:

Students will study every aspect of the design and construction of single and two storey dwellings. The following topics will be covered: site selection, planning control, site preparation, foundations, floors, walls, roofs, fireplaces, chimneys, stairs, plumbing, electrical circuits, drainage, analysis of materials and principles of heat, light, and sound in buildings. Students will also prepare for a practical joinery/cabinet making examination and plan and execute a project for evaluation, based on one of the following areas: construction details, furniture making, building science, or written /drawn.

Exam Structure

Section A 3hour written paper (300marks)

Section B 4-hour practical woodwork exam (150 marks)

Section C Building project (150 marks)

CONSTRUCTION STUDIES IS USEFUL FOR CAREERS IN:

Urban and Rural Planning, Archaeology, Estate Agency, Environmental Protection, Surveying, Architecture, Landscape Architecture, Agriculture, Forestry, Transport and Communication, Local Government, Education, Teaching, Garda, Development Control, Quantity Surveyor, Acoustic Control, Property Developer, Geology, Marketing, Fire Officer, Health Officer, Trade Apprenticeships.

DESIGN & COMMUNICATION GRAPHICS

Design & Communication Graphics (formerly called Technical Drawing) makes a unique contribution to the student's cognitive and practical skills development.

These skills include graphics communication, creative problem solving, spatial abilities/visualisation, design capabilities, computer graphics and CAD modelling. These skills are developed through three principal areas of study: plane and descriptive geometries, applied graphics and design and communication graphics.

1. Plane & Descriptive Geometry includes the study of the following elements:

Projection Systems

- Plane Geometry
- Conic Sections
- Descriptive Geometry of Lines and Planes
- Intersection and Development of Surfaces

2. Applied Graphics where students will study two optional areas of study. They are:

Dynamic Mechanisms

- Surface Geometry
- Structural Forms
- Assemblies
- Geologic Geometry

3. Design & Communication: Students will be able to generate drawings and design ideas electronically.

A comprehensive study of Computer Aided Drawing (CAD) through the design and communications graphics elements will enable students to accurately model designs and solutions and to communicate these within the electronic environment. This element, along with CAD, will encourage students to become creative problem solvers.

EXAM STRUCTURE:

- A. A course assignment (40% of marks, of which CAD will form a significant and compulsory component).
- B. A terminal examination paper (60% of marks)

DESIGN & COMMUNICATION GRAPHICS is useful for Careers in the following Areas: Architecture, Engineering, Building, Graphic Design, Clothing/Footwear Design

ECONOMICS

Economics is a subject you are already familiar with even though you are probably unaware of this fact.

Everyday our newspapers, magazines, radio, and television programmes keep us in touch with a wide range of economic issues – unemployment, inflation, taxation, interest-rates, privatisation, currency exchange rates, E>U, Structural Funds, Third World issues. the list is endless. Economics is a subject that is 'alive' and educates students for citizenship.

WHY STUDY ECONOMICS?

- a. When you study Economics, you will gain a good understanding of current affairs both nationally and internationally, and you will be well prepared to form reasoned opinions on a wide range of matters.
- b. Economics gives you superb training for a wide range of jobs. The subject teaches you how to collect and analyse information, to think clearly and logically. These are invaluable skills from an employer's point of view.
- c. Economics is a module contained in a wide range of courses at third level institutions and to have studied it at second level is of tremendous benefit. This is especially true for girls as relatively few girls nationwide take the subject.

NOTE: It is not necessary to have studied Business Studies for Junior Cert. to pursue Economics at Leaving Cert.

Exam Structure

A Written examination 80% B Research study 20%

ECONOMICS IS USEFUL FOR CAREERS IN:

Journalism, Politics, Stock broking, Foreign Trade, Advertising, Trade Unions, Marketing and Market Research, Law, Engineering, Administration, Taxation, Banking, Research (TV and Politics), Quantity Surveying, Auctioneering, Hotel Management, Education. One may specialise in Economics and work as a full-time Economist with large companies, Government departments, Stock broking firms or organisations such as the I.F.A., E.S.R.I. or Banks.

Modern Languages

There are many reasons for studying a foreign language at Leaving Cert. Level, both for personal development and for future career options. You do not need to study a foreign language for all third level courses. You do need a foreign language to study in the National University of Ireland and its constituent colleges UCD, UCC, NUI Galway, and NUI Maynooth. So, to get into any of

the courses offered by these colleges you must have a pass in a modern Continental language with just a few exceptions

- Engineering & Science courses in Maynooth do not require a modern language
- Engineering Science & Bachelor of Agriculture Courses in UCD do not require a modern language.

You do not need a language for Trinity College (who will accept Irish as a second language) or the University of Limerick, DCU, TU Dublin and all the Institutes of Technology unless the course includes the study of a language.

Many other colleges have it as a requirement for specific courses such as European Studies or Marketing but not for general entry. Many Science and Engineering courses include the study of either Technical French or German, with most allowing the study of the language ab initio (from scratch)

GERMAN / FRENCH / SPANISH

Studying a modern language enables students to communicate effectively by fostering the four language skills of listening, speaking, reading, and writing.

- Provides students with the knowledge of the grammatical workings of the language which will
- Offers insights into the culture and civilisation of other Countries.
- Encourages an openness of mind to the customs and culture of other peoples.

Grade O6 at Ordinary level is required for:

- Entry to NUI Colleges (UCD, UCC, NUI Galway & Maynooth – NCAD (National College of Art & Design) will accept Art instead of a language for entry).
- Leisure Management (DIT)
- Defence Forces Cadets

- Business and Languages, Computing and Languages, Office Information Studies (or OC) (Dundalk IT)
- Medicine (RCSI)
- Hotel management DIP. (DIT)
- Business and Languages (IT Sligo)
- Front Office Administration (Athlone IT).

Knowledge of a continental language will always be useful and is essential for many courses at 3rd level e.g., Applied Languages, Marketing, Clinical Speech, Primary Teaching (N.U.I) European Studies, Computer Studies, and Linguistics.

Exam Structure for French, German, and Spanish

- Oral (speaking)
- Written
- Aural (listening)
- Reading

| Section | Higher level | Ordinary level |
|-------------------------|--------------|----------------|
| Speaking | 25% | 20% |
| Listening Comprehension | 20% | 25% |
| Reading comprehension | 30% | 40% |
| Writing | 25% | 15% |

LANGUAGES ARE USEFUL FOR CAREERS IN:

Travel agency and Tourism, International Marketing, Transport and Communications, Journalism, Interpreter, Translator, Hotel Management, Department of Foreign Affairs, & Export careers.

GEOGRAPHY

Geography is a subject which is a relevant and useful part of daily life, when you take a walk in the countryside, go to the beach, visit a heritage centre, or even go shopping, you are “experiencing” Geography. The internet, daily newspapers and magazines, radio and television programmes keep us in close contact with geographical issues – weather forecasts, earthquakes, industrial developments, the use and abuse of natural resources, tourism, poverty, unemployment, emigration, famine, pollution, rezoning controversies, shopping centre developments, EU enlargement, urban renewal, and sustainable development. These are just some of the issues, which are part of a subject that is “alive” and changing by the day.

WHY STUDY GEOGRAPHY?

1. Geography keeps you up to date with current affairs in a rapidly changing world. The subject encourages in students a sensitive awareness of our environment and provides a good understanding of important issues and problems in modern society.
2. When you study Geography you will acquire a wide range of skills, which are extremely valuable from an employer’s point of view. Students learn how to observe, record, and analyse information, draw conclusions, and present

sensible solutions to problems with realistic plans for action. These skills are rightly valued in the workplace.

3. Fieldwork is an integral part of the subject, so students learn to work as members of a team taking responsibility to complete a specific task. From an employer’s point of view this is a very important characteristic in a worker.

EXAM STRUCTURE

A Written Examination (80%)

B Geographical Investigation report (20%)

GEOGRAPHY IS USEFUL FOR CAREERS IN:

Urban and Rural Planning, Tourism, Travel Agency, Archaeology, Meteorology, Estate Agency, Environmental Protection, Surveying, Cartography, Landscape Architecture, Agriculture, Forestry, Transport and Communications, Architecture, Marketing, Leisure Industry, Local Government, Education, Airline Industry.

HISTORY

History at Leaving Certificate level is a most enjoyable and challenging subject. It deals with a range of human activities: political, administrative, social, economic, cultural, religious, and scientific. It deals with areas both within states and internationally. It is concerned with the whole human family, with women's experiences as well as men's, with ordinary people as well as leaders in society.

The new Leaving Certificate syllabus, introduced in 2004, emphasises acquiring historical knowledge and developing the historical skills of inquiry and evaluation of evidence. It covers a general study of a period along with in-depth case studies of events. It covers a study of Irish history with the study of the history of Europe and the wider world.

Course Content:

The course content will cover two main areas:

1. The History of Ireland
 2. History of Europe and the wider world,
 3. The Research Study
-
1. Politics and Society in Northern Ireland (1949 – 1993)
 - The Coleraine University Controversy
 - The Sunningdale Agreement
 - The Apprentice Boys of Derry
 - b. The Pursuit of Sovereignty and the Impact of Partition, 1912 – 1949
 - The Treaty Negotiations, October – December 1921 (Politics & Administration)
 - Belfast During World War II (Society and Economy)
 - The Eucharist Congress, 1932 (Culture and Religion)
 2. The History of Europe and the Wider World, 1920 – 1989, two topics:
 - a. Dictatorship and Democracy in Europe, 1920 – 1945
 - Stalin's Show Trials (Politics & Administration)
 - The Jarrow March, October 1936 (Society and Economy)
 - The Nuremberg Rallies (Culture, Religion & Science)
 - b. The United States and the World, 1945 – 1989
 - The Montgomery US Boycott, 1956 (Society and Economy)
 - Lyndon Johnson and Vietnam, 1963 -1968 (Politics & Administration)
 - The Moon Landing, 1969 (Culture, Religion & Science)
 3. The Research Study

The Research Study involves the study of a subject of historical significance, chosen by the student under the direction of the teacher. The Study, of up to 1,500 words, allows the student to develop research skills and experience the gathering, notations and editing of evidence, relating to a study unique to the student.

EXAM STRUCTURE

A Written Examination (80%) B Research project (20%)

WHY STUDY HISTORY?

- The research skills developed through the study of history are widely applicable in the world of work today
- Because it develops students' appreciation of the inheritance and knowledge of their country's past, it has relevance to the heritage, genealogy, and tourism sectors
- Not least of the reasons for studying history is the enjoyment stimulation that such study provides. As it encompasses all human life, it develops in many people a lifelong interest in their historical inheritance and awareness of a past that continues to inform and illuminate the present.

HISTORY IS USEFUL FOR CAREERS IN:

Because it develops students' ability to read and think critically; the study of history helps to prepare students for a wide range of career options, e.g., business, journalism, local government, public administration, archaeology, law, librarianship, sociology, teaching, etc.

HOME ECONOMICS

The Home Economics syllabus provides students with knowledge, understanding, skills and attitudes necessary for managing their own lives, for further and higher education and work. 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.

Why Study Home Economics

Students should study this subject to:

- Be able to research, study, analyse and interpret material.
- Be able and willing to learn Nutrition and Culinary skills.
- Be able to communicate well.
- Be organised.
- Be able to discuss topics and work in teams.

What kind of student would Home Economics suit?

This subject suits a practical student who enjoys making things, doing things, and knowing how things work.

It is advisable 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.

- Practical cookery assessed through written exams only
- Textile Electives—fashion design, social studies, home design and management
- There is a lot more Sociology e.g., Family /marriage/ relationships/ family problems e.g., alcoholism, gambling, the elderly, housing, problems facing teenagers/ childcare development
- In-depth Study of Nutrition, Resource Management and Consumer Studies

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 must be written up and presented – because there is no Practical Examination as at Junior Cycle Level.

EXAM STRUCTURE

A Written Examination (80%) B Practical Course work (20%)

HOME ECONOMICS IS USEFUL FOR CAREERS IN

This subject provides a good foundation for careers in a wide range of areas including Health, Nutrition, Education, Tourism, Textiles, Design, the Food industry, Science and Social Studies

Leaving Certificate Physical Education (LCPE)

Leaving Cert PE, students will have an opportunity to study PE for certification. The course is designed to appeal to students who have an interest in and a commitment to participation and performance in physical activity.

Leaving Certificate PE Assessment Components

Performance Assessment 30% Physical Activity Project 20% Written Examination 50%

Structure

The course is structured to have a balance between developing optimal performance in selected physical activities and understanding of the theoretical perspectives that impact on performance and participation in physical activity. Active participation is central to teaching and learning in Leaving Certificate PE.

The theoretical section is separated into two strands, students will study 4 topics in each strand for a total of 8 topics studied.

Strand 1 Towards optimum performance

In this set of topics students study the factors that influence physical performance, including how they can be applied to their own performance.

1. Learning and improving skill and technique
2. Physical and psychological demands of performance
3. Structures, strategies, roles, and conventions
4. Planning for optimum performance

Strand 2 Contemporary issues in physical activity

Students learn about the culture of sports, its role in society and how people experience physical activity and sport. There are six possible topics, but only four are set for each Leaving Cert cycle.

These topics are run every year

- Promoting physical activity
- Ethics and fair play

These topics rotate, with two of the following four appearing in each Leaving Cert cycle

- Physical activity and inclusion
- Technology, media, and sport
- Gender and physical activity
- Business and enterprise in physical activity and sport

For the physical section students will select three activities. There are 6 categories of physical activity and students must select one from three different categories.

The six categories of physical activity are:

1. Adventure activities – Orienteering, Kayaking, Rock-climbing, Sailing, Rowing/Sculling
2. Artistic and aesthetic activities – Artistic gymnastics, Rhythmic gymnastics, Dance
3. Athletics – Running, Throwing, Jumping
4. Aquatics – Lifesaving, Survival swimming, Two swimming strokes, Water-polo, Synchronised swimming
5. Games – Gaelic football, Hurling/Camogie, Rugby Union, Soccer, Basketball, Hockey, Netball, Olympic handball, Badminton, Tennis, Volleyball, Table tennis, Handball, Squash, Cricket, Softball, Rounders
6. Personal exercise and fitness – training, aerobics, spinning, indoor rowing, weight training, core stability, circuit training

Students will focus on three goals in the three selected physical activities.

1. Develop the standard of their performance
2. Be creative in their personal performance as an individual performer and/or as a member of a team/group.
3. Be consistent in the quality of their performance.

Student candidates interested in studying PE for their Leaving Cert should have the following essential attributes:

- Strong work ethic and take responsibility for their own learning,
- Ability to work independently and collaborate effectively in a team with classmates,
- Determined and resilient,
- Show a positive attitude to physical activity, sport and learning in PE lessons,
- Regularly have been an active participant in PE lessons during Junior Cycle and / or Transition Year (TY),
- Shown a commitment to learning in PE through the Junior Cycle and TY projects students were asked to do,
- Shown a commitment to developing their practical performance in PE lessons during Junior Cycle and TY.

The following are desirable attributes:

- 1) Ability to work effectively with digital and ICT hardware and software,
- 2) Show a commitment to participation in physical activity and sport by being a regular active member of a sports club outside of school (i.e., football club, GAA club, rugby club, athletics club, swimming club, boxing club etc....),
- 3) Researched and presented a project at the PE Xpo competition.

Exam Structure

A Physical Activity Project (20%) B Performance Assessment (30%) C Written Examination (50%)

PHYSICAL EDUCATION IS USEFUL FOR CAREERS IN

Potential careers that could be pursued if you study Leaving Cert PE:

Sports coach, personal trainer, S & C coach, sports development, Athletic trainer, teaching, medical and health, physical therapist and most importantly a lifelong participation in physical activity.

MUSIC

Leaving Certificate Music is a two-year course. You **DO NOT** have to have studied music at Junior cycle to access this subject. Leaving cert music combines performing, listening, composition, elements of music and music technology.

There are 3 main sections: The structure of the course and exam layout is as follows:

Listening paper: 25% (examined in June)

- This paper is made up of questions on **Set works** studied in class. ‘Bohemian Rhapsody’ by Queen is an example of one of the works to be studied.
- There is also a short question on **Irish Music** and on general listening called **Aural Skills**.

Composition paper: 25% (examined in June)

- This paper consists of two questions on composing. One question is where you are asked to compose a **melody** and in the second you are asked to provide a **harmony** (like adding guitar or ukulele chords) to a piece of music.

Practical exam: 50% (examined in March/April)

- The practical exam element has many options. Take note that this section is worth **50%** of the final exam and is completed earlier in the year.
- Option 1: **Perform 6 pieces/songs on one instrument** (Voice is an instrument)
- Option 2: **Perform 8 pieces/songs.** 4 on one instrument & 4 on another
- Option 3: **Perform 4 songs and do music technology – (Most popular option)**
- Option 4: **1 short performance and mainly music technology**

Notes about the practical element:

- NO FORMAL training is required for performance
- Students can **choose** whatever songs/pieces they wish to perform
- Students can perform in groups or in bands including with family members or others outside of the school setting

Notes about music technology:

- Students learn how to input music via computer into notation software such as ‘MuseScore’ and how to edit their work
- Students learn how to compile or compose a backing track using notation software or audio editing software’s such as ‘Audacity’

Careers & Job Opportunities using music:

- Instrumental Performer, Singer, Composer, Arranger, Sound Engineer, Music Teacher, Instrumental Teacher, Primary School Teacher, Music Therapist, DJ, Video Game Composer, Film Composer, Performance Agent, Songwriter, Concert Promoter, Music Journalist and many more.
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LEAVING CERTIFICATE VOCATIONAL PROGRAMME (LCVP)

The Leaving Certificate Vocational Programme (LCVP) is a full Leaving Certificate subject which combines academic study with an exciting focus on enterprise, work, and the community.

To Qualify for the LCVP

- You must take a minimum of 5 leaving certificate subjects (at Higher, Ordinary or Foundation level) including Irish.
- Two of the above must be from a list of Vocational Subject Groupings.
- You must study either a continental language or a vocational language module (40 hours over 2 years)
- Take the two link modules, Preparation for the World of Work and Enterprise Education.

In every other way the LCVP is the same as the established Leaving Certificate. Most students take 7 subjects plus the Link modules. The link modules have 2 periods a week.

- The Preparation for the World of Work link module is designed to provide students with an insight

- into the world of work and with opportunities to develop their interpersonal, communication and organisational skills.
- The Enterprise Education Link module encourages students to develop qualities such as initiative, resourcefulness, creativity, and self-confidence.

The link modules

LCVP students are required to take the link modules, Preparation for the World of Work and Enterprise Education, over the 2 years of the programme. These modules, which are almost entirely activity driven, are delivered as an integrated unit along with the Vocational Subject Groupings. Link Module activities provide a setting in which connections can be made between a student's vocational subjects and the world outside the school

The link Modules are recognised for points as part of your 6 best subjects by Institutes of Technology and the Universities.

The grades for the Link Modules are:

- Distinction (80 -100%) 66 points
- Merit (65-79%) 46 points
- Pass (50 –64%) 28 points

LINK MODULE 1: PREPARATION FOR THE WORLD OF WORK

This module is designed to develop student's general understanding of the world of work, introducing them to career research and providing them with the knowledge and skills to find employment. As part of this module each student is expected to compile a CV, complete a career investigation, and engage in a work experience or work-shadowing placement.

LINK MODULE 2: ENTERPRISE EDUCATION

This module aims to develop creativity, resourcefulness, self-confidence, and initiative. Students are encouraged to interview enterprising people, investigate local

enterprises and to set up their own enterprise projects as vehicles of learning. The content of the module is flexible to allow a school to utilise local resources and enable learning to take place in a wide variety of settings as possible.

You can see that the link Modules are activity based so there is little extra study involved. Students will just have to work in class though they will have to type it up at school or at home.

Core Items Optional items

| | |
|---------------------------|------------------------------------|
| All items to be presented | Two items to be presented from |
| 1. Curriculum Vitae | 1. Diary of Work Experience |
| 2. Career Investigation | 2. Enterprise Report |
| 3. Summary Report | 3. Recorded Interview/Presentation |
| 4. Enterprise/Action Plan | 4. Report on 'My Own Place' |

The Link Modules are assessed by the Department of Education and Science.

- There is a 2.5 hour written Exam worth 40%
- A portfolio which counts for 60%.

Vocational Subject Groupings 2021 / 2023

- Construction Studies and Design and Communication Graphics
- Physics and Construction Studies or Design & Communication Graphics
- Accounting, Business, Economics, choose any two
- Physics and Chemistry
- Biology and Chemistry or Physics

6. Home Economics and Biology
7. Home Economics and Art
8. Art and Design and Design and Communication Graphics

Services Groupings

9. Design & Communication Graphics, and Accounting or Business or Economics
10. Construction Studies and Accounting or Business or Economics
11. Art Design and Accounting or Business or Economics.
12. Home Economics and Accounting or Business or Economics

IMPORTANT ADVICE

The information above gives a broad overview of each subject and it is very important to do further research on each subject.

1. It is advisable to talk to teachers about the subject and course content.
 2. Look up the subjects on careers-portal.
 3. Look at the syllabus.
 4. Look up courses on careers-portal and check subject requirements.
 5. Contact Ms. O' Neill if you have any questions.
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PHYSICS

Physics explains everything from the smallest atoms to the largest galaxies in the universe; it involves living as well as non-living things. Through Physics we begin to understand why things behave as they do, and with Physics we attempt to solve stimulating and important scientific, practical, and social problems.

Knowledge of physics is needed to:

- set up satellite communications
- construct a computer
- make new materials
- study pollution of air, land, and water
- harness energy of all kinds
- Investigate 'black holes'
- detect flaws inside structures
- take scans for the human body
- reduce noise in vehicles
- solve crimes

and to understand so many other things which affect everyone's life, every day. Successful physicists need imagination and creativity. They also need mathematical ability. It is not enough to describe an event using words, as words can sometimes be ambiguous. Therefore, mathematics is used since every term has a precise meaning. Explanations and theories require to be tested so a physicist may need to be practical. He/she will often have to design and build equipment and then be able to record events objectively and accurately.

CAREERS FOR PHYSICS GRADUATES:

A Physics degree is broad based, which allows great freedom of choice. The skills acquired such as problem solving, information handling, critical reasoning, logical thought, clear communication, and use of computers as an analysis tool, are valued in many fields of employment. You could end up as a professional physicist but equally the study of physics fits you for a job in communication, medical physics, manufacturing, teaching, journalism, public service, management, finance and many more.

Physics graduates take up positions right across the technology and engineering sectors and the range of job titles below reflects this: Aeronautical engineer, astronomer, ballistics expert, econophysicist, electronic engineer, environmental physicist, forensic scientist, lecturer/teacher, medical physicist, meteorologist, researcher, nuclear scientist, research scientist, engineer, software designer, telecom engineer, wind analyst etc.