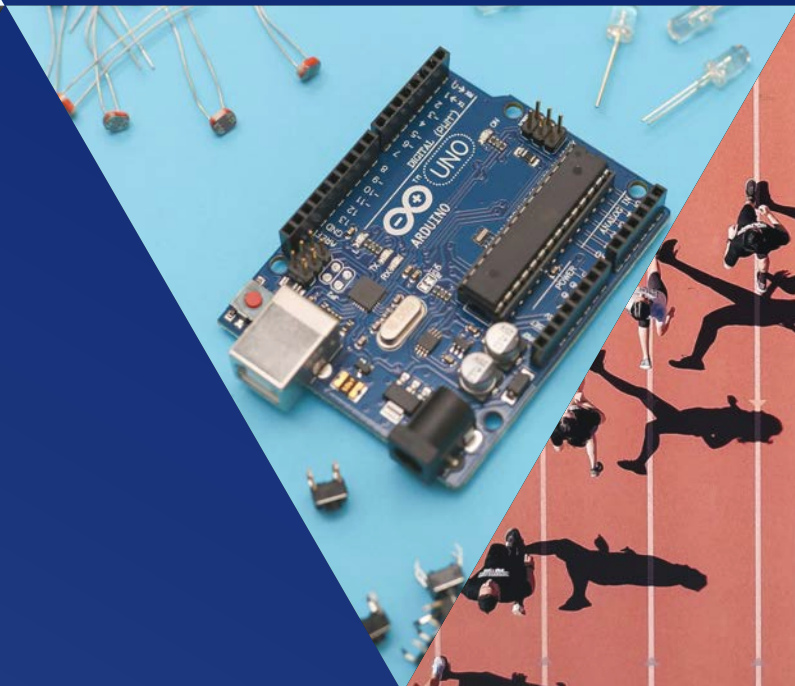




SACRED
HEART
COLLEGE

SENIOR SCHOOL

A STEP TOWARDS YOUR CHOICE





BIOLOGY

Biology is the study of life. It is the science of living organisms, including their structure, function, growth, evolution and distribution. Areas of study include the diversity of living organisms, the many systems making up the human body, food and diet, plant structure, genetics, biotechnology and environmental biology. Biology explains how living organisms, including ourselves, function and behave. Biology is all around us and within us.

There are several careers that require a knowledge of Biology, such as surgeons and medical doctors, nurses, midwives, physiotherapists, psychologists, science educators and nutritionists.

There are other careers in which it is helpful to know Biology, such as pharmacists, hairdressers, chefs, carers and careers in agriculture.

Students of Biology need to have knowledge of basic Maths and Science and will develop a scientific approach to problem-solving. Laboratory experiments are intrinsic to the study of Biology and are carried out in Year 9 to Year 11. 30% of the global SEC mark will be assessment, most of which will be experiments.

CHEMISTRY

UNRAVELLING THE SECRETS OF MATTER

Welcome to the world of chemistry, where we explore the fascinating science of matter and its transformations. At this stage in your academic journey, you're on the brink of making important choices about your subjects, and chemistry is a subject that opens doors to countless possibilities.

Why Study Chemistry?

Chemistry is the science that helps us understand the building blocks of our universe. It explains the properties of substances, the changes they undergo, and how they interact with each other. From the air we breathe to the water we drink; chemistry is all around us.

What to Expect

In your chemistry classes, you'll dive into topics like the periodic table, chemical reactions, and the structure of atoms and molecules. You'll also get to conduct exciting experiments that bring the concepts to life.

Real-World Applications

Chemistry is not just confined to the classroom. It plays a crucial role in various fields, from medicine to environmental science. It's the foundation of innovations like new medicines, sustainable energy sources, and even delicious recipes.

Is Chemistry Right for You?

If you're naturally curious, love solving mysteries, and enjoy hands-on experiments, chemistry could be your calling. It's the subject that lets you uncover the secrets of the tiny particles that make up our world, and it's perfect for those who are always asking, "Why does that happen?"

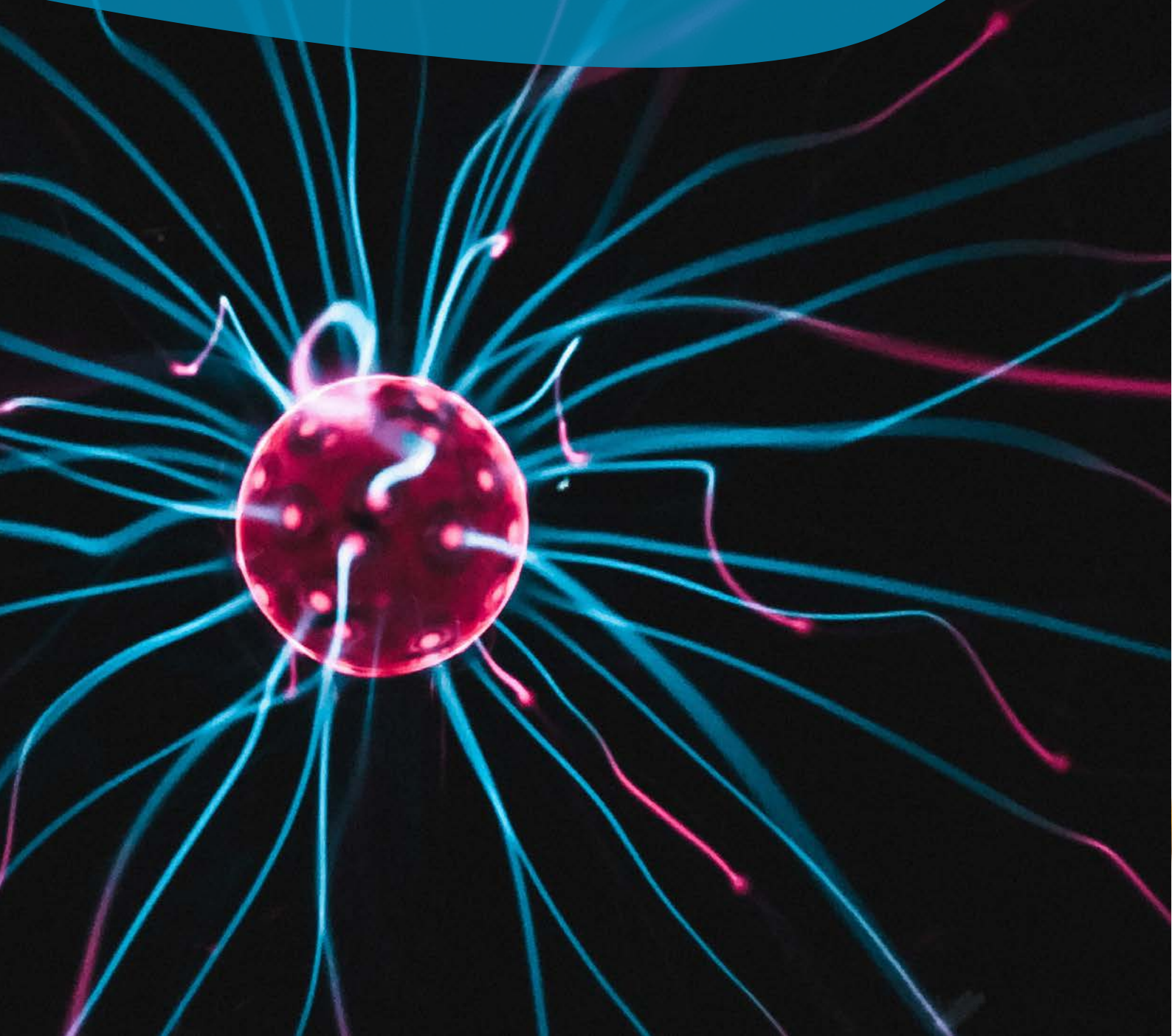


PHYSICS

Physics is the study of the world around us. It helps us to explain the world in which we live by giving answers to the questions: How do we see? How do we hear each other? How can we sit on a chair and not fall through? Why do things get lost in space?, amongst other things.

Physics topics range from the practical nature of the study of electricity and motion to the more abstract study of the universe. Other topics include the study of

light, sound, heat, magnetism and forces. Students, who generally do well in Maths, will do well in Physics. This is not, however, because Physics includes complicated Maths. The Maths used in Physics is simple algebra and graph-drawing. Physics involves problem solving which requires the same logical reasoning that is needed for Maths.



ACCOUNTS

Almost every business is set-up with the scope of making money for its owners. To achieve this aim, they will have to trade with other people and businesses, which means selling goods and/or services. This involves money and the control of money in a business is vital if it is to be successful and a profit is to be made.

The owners of the business need to know how much money is coming into the business from the sale of goods and/or services. They also need to know how much it is costing to run the business. In other words, they need to 'account' for every Euro coming into and going out of the business. This process is known as **accounting** and keeping books provides the basic method used by accountants in the financial control of a business. Thus, Accounting serves the business decision maker to reach sound conclusions.

Studying accounts doesn't only lead to career as an accountant but also in banking services, insurance, management, public policy and marketing. Studying accounts will help you gain advantage of knowing income and expenses by monitoring, controlling and planning your own personal finances. In addition, one will gain knowledge on diverse investments, payroll and VAT. These skills are used in everyday life. During your studies, you will develop communication skills, teamwork, critical analysis and numerical skill. You will also learn to take decisions and communicate them to others by using numerical facts.



ECONOMICS

Like a household, a society faces many decisions. A society must decide what jobs will be done and who will do them. It needs some people to grow food, other people to make clothing, and still others to design computer software. Once society has allocated people (as well as land, buildings and machines) to various jobs, it must also allocate the output of goods and services that they produce. It must decide who will eat salmon and who will eat potatoes. It must decide who will ride a BMW and who will take a bus.

The management of society's resources is important because resources are scarce. Scarcity means that society has limited resources and therefore cannot give every member everything he or she wants, a society cannot give every individual the highest standard of living to which he or she might desire.

Economics is the study of how society manages its scarce resources. In most societies, resources are allocated not by a single central planner but through

the combined actions of millions of households and firms. Economists also study how people interact with one another. For instance, they examine how buyers and sellers of a good together establish the price at which the good is sold and the quantity that is sold.

Finally, economists study growth in average income, the fraction of the population that cannot find work, and the rate at which prices are rising.

The study of Economics helps to prepare students to make sensible economic choices both in their own life and the participation policy decisions as citizens of a country and the world.



ART

Art is a very unique subject and at the Sacred Heart College it has always been given importance. Through Art, students develop their creativity, confidence and above all learn how to observe, study and appreciate all that surrounds us.

In the three years of preparation students will work with various media and techniques such as print making, collage, painting and drawing.

The ART Matsec assessment for school candidates consists of a 2-hour still-life exam (70%) and the coursework (30%) which is developed over a span of three years.

Work from Observation (Still Life): This paper is composed of man-made and natural forms. Students need to observe and draw the objects respecting the rules of perspective and proportion while creating an interesting composition using textures and contrasts.

In order for students to develop and improve their basic drawing skills and creativity, they need to practice and produce work continuously as part of their school based assessment.

When possible, school outings are organised for Art students to visit post-secondary colleges, and exhibitions, as knowledge about artists and history of Art is useful for students when researching for their project.

The Profession/Career Aspect:

Candidates who seek to take up art as a profession can further their studies at advanced and degree level. Art can also lead one to various career choices for example: Architect, fashion/graphic/interior/industrial designer, make-up artist, animation/game designer, art historian, curator, artist, art educator, sculptor, illustrator, photographer and art therapist, etc.



Indira Caruana - 2020
Still-Life: Shoes
Acrylic painting



Tatyana Mazzelli - 2022
The Spider's Web
Water Colours and Aquarelles



Ellie Mae Gove Van Der Weele - 2023
Study of a church
Pen and Ink wash



Elise Grech - 2023
Study of The Palace Garden
by Lucy Willis
Water Colours

COMPUTING

What is Computing?

The aim of Computing is to develop practical skills in the use of various computer systems, apply information technology to problem solving, provide a broad view of the range and variety of computer systems, and introduce the students to the fundamental concepts of computer science.

The topics covered will include:

- Introduction to various digital devices
- Computer Number Systems
- I/O Devices
- Machine Logic
- Memory and storage
- Networks
- Computer Processors
- Programming of microcontrollers
- Problem Solving
- Programming Languages
- Software
- Operating Systems
- Python Programming
- Databases

Scan Me!



Computing serves as a basis for further studies at intermediate and advanced level in Computing or Information Technology. There also exist numerous degree courses related to Computing.

MCAST offers diploma, advanced diploma and degree courses in Computer Systems and Networks, Software Development, Multimedia Software Development, iGaming, Business Analytics, Business Analytics and Digital Games Development.

The University of Malta also offers degree courses in different areas such as Artificial Intelligence, Computing and Business, Software Development, Computer Engineering and Computing Science.

These are just two local educational institutions offering Computing related courses, leading to a degree.



HOME ECONOMICS

Home Economics, also known as Human Ecology, is a science designed to equip students with a broad range of knowledge, skills and all the competencies needed to maximise learning and work opportunities.

The goal is to help students cultivate wellbeing and embrace sustainable living, in a framework of equity, social justice, diversity and inclusivity. The area of study focuses on food, nutrition, health; child development; money, energy, housing, textiles, time, the natural environment, and an individual's physical, economic, mental, social and aesthetic needs.

Home Economics also prepares students for an ever-changing and ever-challenging technology-based society where they will be required to manage their own lives and that of their families, keeping in mind household, community and global wellbeing. This ensures that all students can obtain the necessary skills and attitudes to be active citizens and critical thinkers, both during their school years and beyond.

The course of study is enriched with a Coursework Component of 30% which gives the students a unique opportunity to experience learning first hand through practical and investigative tasks. The remaining 70% is made up of Controlled Assessment (written exam).

Home Economics is the perfect blend between scientific principles and a practical, critical-thinking and problem-solving approach, calling upon health, physical, communication and social sciences, together with organisational and entrepreneurial skills. This translates into a higher chance of employability in different sectors, career paths, as well as further studies at intermediate, advanced, bachelor, masters and doctorate level.



PHYSICAL EDUCATION

P.E. covers various **practical disciplines** as well as **theory areas**. Students are also required to complete a **set of tasks: such as presentations and practicals** throughout the three years. The **practical areas** include: Ball Games, Gymnastics, Educational Dance, Athletics, Swimming and Outdoor Education.

Since all disciplines require very good skill and fitness level, we **emphasize** that students **need to train with a club**. Fitness Testing, Athletics and Swimming

also demand very good level of strength and endurance in order to cope with timings and distances. Therefore, extra training is a must.

The **theory part** is divided into **sections covering** different areas such as the sports' rules, tactics and techniques of the different disciplines covered; Health, Fitness and Wellbeing; Anatomy and Physiology; sports in society; how people should build up their training sessions and how to test fitness levels.



EUROPEAN STUDIES

The aims of European Studies are basically two: European Studies aims to create awareness on the Europe and the European Union, which is one of the most important political and economic blocs in the world. Understanding the dynamics of the European Union is essential for understanding international institutions, including the United Nations, NATO and the World Trade Organisation.

European Studies practices a multidisciplinary approach and includes a vast range of topics that increase the overall general knowledge on different disciplines. These topics include human rights, welfare state, demographic and social realities, trade and commerce, cultural heritage and environmental issues.

European Studies can be furthered at the University of Malta in full time courses leading to the Bachelor of European Studies degree and to qualifications at M.A. and Ph.D. level. This course can lead to careers in journalism, public information offices, diplomacy and international institutes within the European Union and other government organisations.

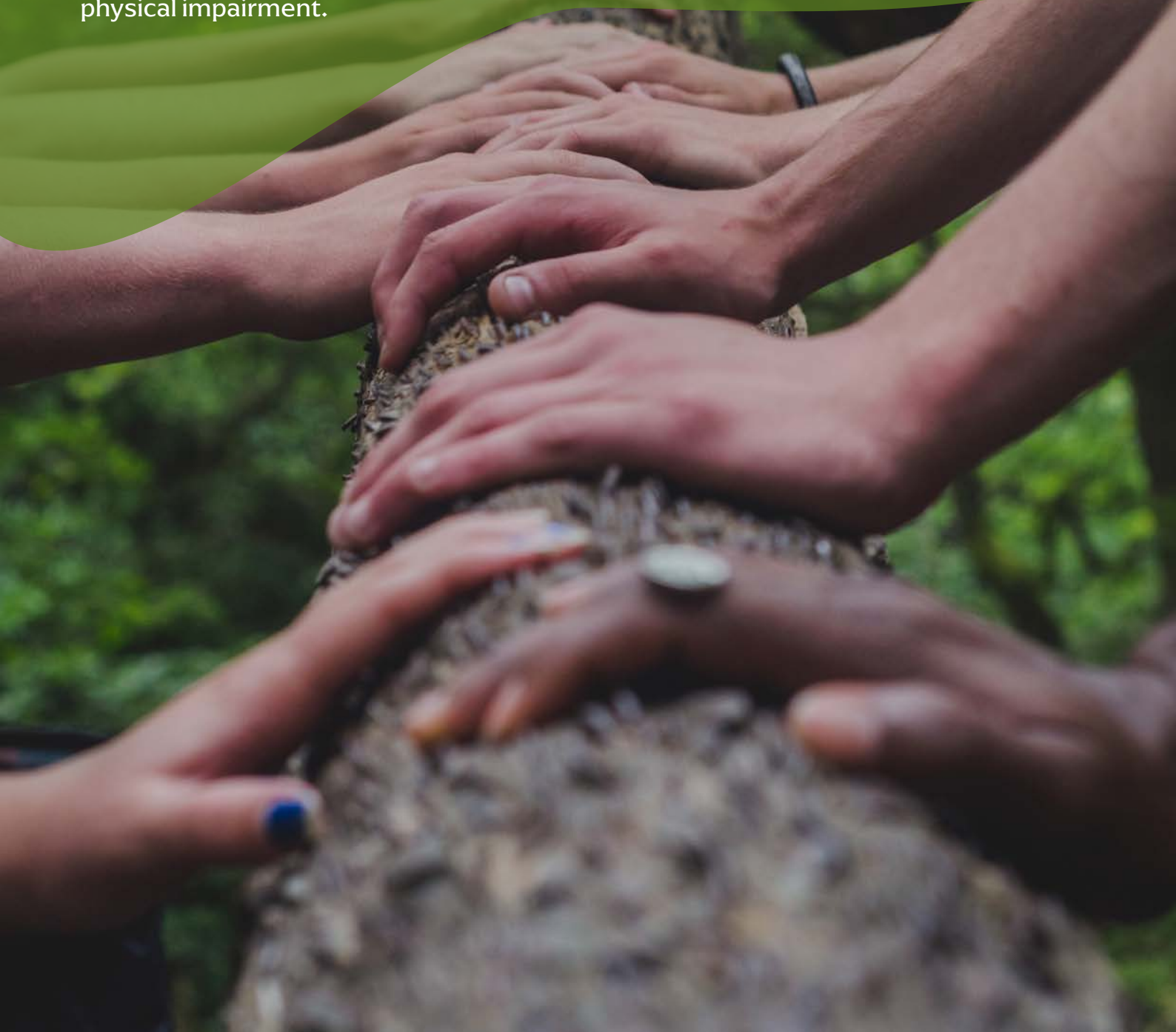


HEALTH AND SOCIAL CARE

Working in the Health and Social Care professions gives many varied opportunities to make a difference to people's lives in a very positive way. Learners will come to understand the way the body works, the organisation of the body and how the organ systems work together to function healthily. They will investigate the effects of common health problems on the body systems and the care service users receive when this occurs. Learners will explore how life factors impact well-being and practice how to care for vulnerable people such as babies, old people and persons with physical impairment.

They will learn how important good communication and interpersonal skills are to develop positive relationships with people using care services. They will also come to appreciate the importance of understanding well the care values of equality, diversity, dignity and individual rights that underpin the support given to care users.

Health and Social Care practitioners are always in high demand, and the subject is a good springboard for various careers.



DESIGN AND TECHNOLOGY

Year 7 and Year 8 at Sacred Heart College, brought students in contact with Design and Technology for the first time in their school careers. They had access to a wide range of equipment and focused their effort to learn how to exploit different materials such as woods, plastics and electronics. Students were also shown how to structure their design process by recording information and presenting ideas in a design folio.

During this experience students will be exposed to different materials (wood, plastics, metals and textiles), systems (gears, levers, linkages, discrete electronic components and programmable ICs) and graphics (sketches and colour), whilst learning on how to communicate ideas, collect information and present ideas, be critical towards others' and their own work, helping to instilling an entrepreneurial mindset.

Once the subject is chosen, students will follow a similar structure. Each year students will focus on a particular area of technology and carry out a design and build project. These projects will account for 30% of the global SEC mark.



KING'S TRUST INTERNATIONAL PROGRAMME

King's Trust International Achieve is an exceptional educational programme for young students. It supports learners in their personal development, guiding them to live healthy lifestyles, and boosting their confidence in society. It prepares them for employment and teaches everyday life skills such as money management. It makes them aware of how to help others and contribute to the community. Learning happens through various activities such as cooking, teamwork projects, physical activities, and educational outings.

Assessment is ongoing and there is no homework or exams. Learners can conclude the program with an Award or a certificate. The 'King's Trust Level 2 Certificate' is of the same level as one qualification at MQF Level 3 (O Level) and is most suitable for entry into MCAST or the Institute of Tourism Studies. It is only not applicable to Junior College. This study program helps students develop a good understanding of who they are, progress, and **ACHIEVE**.



King's Trust