St. Michael's College

Post 16 Guide

www.saintmichaels.org.uk

Principal's Welcome

Dear Student,

Thank you for your interest in coming to study at St. Michael's College. St. Michael's is a College of over 700 students all pursuing a variety of courses that match their interests and career aspirations. We are proud of the young men who come to study in our College in terms of both their academic and extra curricular achievements. St. Michael's pupils have, for decades, pursued careers across a wide range of disciplines and have went on to make an exceptional contribution to both their employer and community.

I hope you will take the opportunity to explore our Post 16 Prospectus. Its purpose is to provide you with the information you need on what the College has to offer and give you detailed information on the range of courses available in the Sixth Form in 2023 - 24. Whatever you are seeking educationally from the next stage of your life, our Post 16 provision aims to meet your needs.

Pupils choosing to study in St. Michael's College achieve consistently excellent results in GCSE and A Level courses. The College offers a broad and well balanced curriculum, including an extensive offer in terms of both vocational and academic subjects. We offer 26 courses in Post 16 to meet the needs of all our students. You will have the option to choose from a range of academic courses, including AS & A2 courses and BTEC qualifications in Construction, Sport, Business and ICT. Our extensive links with other schools and South West College also opens the door to many other courses across Enniskillen.

The Pastoral team in Sixth Form is led by Mrs. Joanne O'Neill, our Head of Pastoral Care, and includes Heads of Year 13 and Year 14 who in turn lead a team of Form Teachers to care for our Sixth Form pupils. Our Careers Department offers full support for all those seeking to make the next step in their academic journey or career. Classes, along with information and guidance are available for pupils pursuing places in University, College, Higher Level Apprenticeship admission or indeed those entering the world of work.

There is a wide range of extra-curricular options on offer across a range of sporting activities. St. Michael's has recently achieved All Ireland champion status in both Gaelic Football and Cross Country.

We provide our students with this range of extra curricular opportunities so that they have the opportunity to develop personal qualities, skills, sportsmanship and empathy. Post 16 students take modules in our enrichment programme that includes Social and Spiritual Awareness and Cross Community Development all of which are an important aspects of the overall Catholic Ethos of our College. We encourage a spirit of volunteering as we work with charities including Trocaire and Concern.

I wish you every success in your GCSE's and in choosing your Post 16 pathway. After reading through this prospectus if you have any further questions please feel free to contact us or visit the Post-16 admissions section on our College website. If you decide you wish to join us here in St. Michael's College, I look forward to meeting with you in August 2023.

Mr M Henry
(Principal)

Head Boy and Deputy Head Boys' Welcome

Fáilte romhaibh a chairde,

Welcome to this St. Michael's College Sixth Form Guide for prospective students. I, Odhrán Harbinson, Head Boy of the College, joined by Deputy Head Boys Ryan Gilleece and Charlie Meade are delighted to provide an introduction to this guide.

We would like to express how privileged we feel regarding our own experiences at the College over the past seven years, having been given countless opportunities to achieve and succeed, inside and out of the classroom.

St. Michael's College is a school that caters for everyone, striving for distinction in fields such as sport, music, academics and much more. Aside from this, St. Michael's has a community that is second to none, with a relaxed, warm rapport between students and staff across the school. Wearing the uniform of St. Michael's has a deeper meaning, it represents excellence, not only for what we achieve, but for what we aspire to be.

For those of you looking to the future the decision to uproot and transition to a new school for your sixth form is undoubtedly a daunting one, but we can assure you that the staff and students of St. Michael's will do everything in their power to make your transition a happy and successful one.

We wish you good luck in your upcoming GCSE examinations this June and in your endeavours in the future and we look forward to welcoming you to St. Michael's College next year.

Le gach dea-ghuí

Odhrán Harbinson (Head Boy)

Charlie Meade and Ryan Gilleece (Deputy Head Boy)

What our Pupils have to say

LANTY FEELY

I attended St Mary's High School, Brollagh before coming to St Michael's College. It was a small rural school with a really friendly atmosphere. I studied Maths, English, French, Geography, Digital Technology, Art and Science. I decided on St. Michael's as I wanted to stay in school and meet new people and enjoy fun experiences. I wanted to complete my education by achieving my A Levels.

I am studying Business Studies, Digital Technology and BTEC Sport. I am enjoying all of these subjects and I am currently achieving my target grades. All of my teachers have been very helpful.

I have enjoyed playing MacRory Cup football and had fun training with a new team and making more friends. I have made a lot of new friends and everyone has been so welcoming. I have enjoyed all of my subjects and in particular learning new things. I want to go on to University. I am going to apply to UCAS and find a University and course that suits me.

AIDAN MCNALLY

I attended St Aidan's Secondary School before I decided to come to St Michael's College in Enniskillen. When I was at St Aidan's I studied subjects such as Construction and Digital Technology.

I wanted to come to St Michael's to continue the good education I have had. Many of the past pupils of St Michael's have went on to University and I had heard many great things about the teachers and the pupils.

I have enjoyed meeting new people at St. Michael's, and I have enjoyed each of my classes. I am studying BTEC Construction and BTEC Business. I feel that I have learned a lot of things in both subjects. After Sixth Form I hope to go to University and study Quantity Surveying.

DAIRE GALLAGHER

Before St Michael's College I attended St Mary's College, Irvinestown. I studied Construction as one of my main subjects. I enjoyed St Mary's and had a good deal of success. I was the Head Boy in my final year.

I wanted to attend St Michael's as, to me, it seemed to be the best place to further my education and to achieve good AS and A Level results. I had heard from past pupils that it is a good school to attend and to progress in your learning.

In the College I am studying Double Award Construction and Life and Health Science A Level. I made the choice to study these subjects as I am interested in a career in the construction industry. I find all the sciences very interesting, so the Life and Health Science course seemed like a better path than studying straight sciences.

In the College I have enjoyed meeting new people and studying my new subjects. After I leave the College I hope to go on to University to do something in the construction industry such as Architecture or Quantity Surveying.

Extra-Curricular Opportunities

St. Michael's College offers a range of opportunities to Sixth Form students in addition to the formal academic curriculum. Sport, Music, Volunteering, Leadership opportunities not to mention links with the Diocese of Clogher and Charities are some of the many ways St. Michael's pupils can get involved in developing their skills, talents and abilities.

Extra-curricular activities aim to develop the whole person and are a vital part of the offering of the College. They offer pupils the chance to develop leadership and organisation skills while at the same time making a valuable contribution to the College, local community and wider world.

From Sport and the possibility of lifting a trophy such as the MacRory or securing an All Ireland Cross Country Medal to charitable work leading to the provision of food hampers and financial support for the work of Trócaire and Concern in developing countries; students have the opportunity to involve themselves in a range of wider pursuits across the College.

Leadership Team

Senior Prefects, The Student Council, Peer Mentoring

Music

There is an array of extra-Curricular activities to get involved in within the Music Department. Senior Choir, Traditional Music Groups, Brass Band, String, Woodwind, Drums, Guitar Tuition, Rock Bands, as well as our annual Carol Service, Spring Concerts and other performances.

Sports and Physical Activities

St. Michael's College provides a broad and extensive range of Sports and Physical Activities for our Post 16 students.

Our newly refurbished gym is used both during school and after school by our pupils and has proved to be very popular among all students. They get great benefit from it.

Students at Post 16 are given the opportunity to play a number of team sports including of course gaelic football, rugby and soccer.

Cross Country and Athletics are very popular at Post 16 and a large number of our students participate in these sports. Our new 4G Track has added great value to these activities and indeed the track is extensively used by other students who are not directly involved in the sports teams.

Subjects on Offer

We offer a wide range of courses in the sixth form including A Level and BTEC. Subjects you may choose from include:

St. Michael's College works with partner schools and South West College as part of the Fermanagh Area learning Community to offer a range of other subjects

Biology

The CCEA specification builds on the knowledge and understanding of Biology as represented in the GCSE Double Award Science course or the GCSE Science Biology course. The specification includes elements of Biochemistry and Statistics so a good understanding of Chemistry and Mathematics at GCSE is desirable.
Skills Developed

The work involved in A Level Biology develops a student's ability to handle quantitative data, to solve numerical and practical problems, to use and manipulate a wide range of equipment and in presenting their findings, to communicate effectively both orally and in writing. Studying Biology develops a logical and analytical mind and promotes good social skills through teamwork and inter-group co-operation.

Assessment

Advanced subsidiary (AS) consists of three modules:

AS Module 1: Molecules and cells Molecules, Enzymes, DNA technology, Cells and cell physiology, Tissues and organs

37.5% of AS, 15% of A Level Marks

AS Module 2: Organisms and biodiversity, Transport and exchange mechanisms in plants and animals, Adaptation of organisms, Biodiversity, Human impact on Biodiversity

37.5% of AS, 15% of A Level Marks

AS Module 3: Assessment of practical skills in AS Biology
External written practical exam
Internal practical assessment

25% of AS, 10% of A Level Marks

Advanced GCE (A2) consists of a further three modules:

A2 Module 1: Physiology and Ecosystems Homeostasis, Immunity, Co-ordination and control in plants and animals Ecosystems

24% of A Level

A2 Module 2: Biochemistry Genetics and Evolutionary Trends, Respiration, Photosyntheses, DNA as a genetic code, Patterns of inheritance, Mechanisms of change, Taxonomy

24% of A Level

A2 Module 3: Assessment of Investigational and Practical skills in Biology
External written exam
Internal practical assessment

12% of A Level

Career Opportunities

A selection of careers which require a Biological background includes:
Agriculture, Horticulture, Forestry, Food Processing Industry, Catering Industry, Medical - Medicine, Dentistry, Veterinary Science, Pharmacy, Physiotherapy, Occupational Therapy, Speech Therapy, Chiropody, Radiotherapy, Biochemistry, Nursing, Optometry, Education, Psychology, Bio-Geography, Zoology, Genetics, Sports Studies, Biomedical Engineering, Engineering, Biotechnology and Laboratory Technician.

Business Studies - A Level

This qualification engages students in the study of a range of business topics impacting on today's society. Students will take a holistic approach to studying the diverse nature of business organisations. The qualification is underpinned by 3 core business issues: globalisation, digital technology and stakeholder influence. The qualification will require students to develop decision marking skills and engage in critical thinking and analysis of core business functions, which will equip them for further study and employment in business-related areas.

Aims

The specification aims to encourage students to:

- Develop a lifelong interest in business;
- Gain a holistic understanding of business and the international marketplace;
- Develop a critical understanding of organisations and their relationship with key stakeholders;
- Evaluate the role of technology in business communication, business operation and decision-making;
- Generate enterprising and creative solutions to business problems and issues;
- Understand the ethical dilemmas and responsibilities faced by organisations and business decision markers;
- Develop advanced study skills that help them prepare for 3rd level education and
- Acquire a range of relevant business and generic skills including decision making, problem solving and interpretations of management information.

Module	Title	Assessment	Weighting
AS 1	Introduction to Business	External written paper	50% AS 20% A2
AS 2	Growing the Business	External written paper	50% AS 20% A2
A2 1	Strategic Decision Making	External written paper	30% A2
A2 2	The Competitive Business Environment	External written paper	30% A2

Career Opportunities

Business Studies can open up a wide range of opportunities for further and higher education and lead to a rewarding career such as accountancy or law, banking, city markets, systems/business analysts, insurance and the media. Actuarial Mathematics and Statistics, Biomedical Sciences, Finance, Quantity Surveying, Property Investment and Development or Management. It also assists students with a wide range of degree courses which may contain a business related module or you may of course decide to use the knowledge and skills gained through studying this course with a view to starting up your own business.

BTEC Business

Equivalent in size to one A Level.
The BTEC Level 3 Business Extended Certificate is for learners who are interested in learning about the business sector alongside other fields of study, with a view to progressing to a wide range of higher education courses, not necessarily in business-related subjects.

It is designed to be taken as part of a programme of study that includes other appropriate BTEC Nationals or A Levels.
BTEC Business provides transferable knowledge and skills that prepare learners for progression to university.

The transferable skills that universities value include:

- the ability to learn independently
- the ability to research actively and methodically
- being able to give presentations and being active group members.

BTEC learners can also benefit from opportunities for deep learning where they are able to make connections among units and select areas of interest for detailed study. BTEC Nationals provide a vocational context in which learners can develop the knowledge and

skills required for particular degree courses, including:

- effective writing
- analytical skills
- creative development
- preparation for assessment methods used in degrees.

Learners can focus on their career aspirations, or work area within the specification in which there are six specialist pathways consisting of Finance, Management, Marketing, Law, Administration, and Human Resources. At the same time this gives those who require more generic business knowledge the scope of units to do so

Scheme of Assessment

Unit (number & title)	Unit size (GLH)	Extended Certificate (360 GLH)
1 Exploring Business	90	M
2 Developing a Marketing Campaign	90	M
3 Personal & Business Finance	120	M
8 Recruitment & Selection Process	60	O

Mandatory Units

Units externally assessed

4 units of which 3 are mandatory and 2 are external.
Mandatory content (83%).
External assessment (58%).

Chemistry

Skills Developed

Studying Chemistry develops a logical and analytical mind and promotes development in many of the Key Skills. The work involved in A Level Chemistry develops a student's ability to understand and handle complex concepts, to solve numerical and practical problems, to use and manipulate a range of equipment. It also provides an opportunity for students to develop oral and written communication skills.

Advanced Subsidiary (AS)

Unit AS 1: Basic Concepts in Physical and Inorganic Chemistry
(1 hour 30 minutes)
AS 1 - 40% of AS; 16% of A' Level

Unit AS 2: Further Physical and inorganic Chemistry and an Introduction to Organic Chemistry
(1 hour 30 minutes)
AS 2 - 40% of AS; 16% A' Level

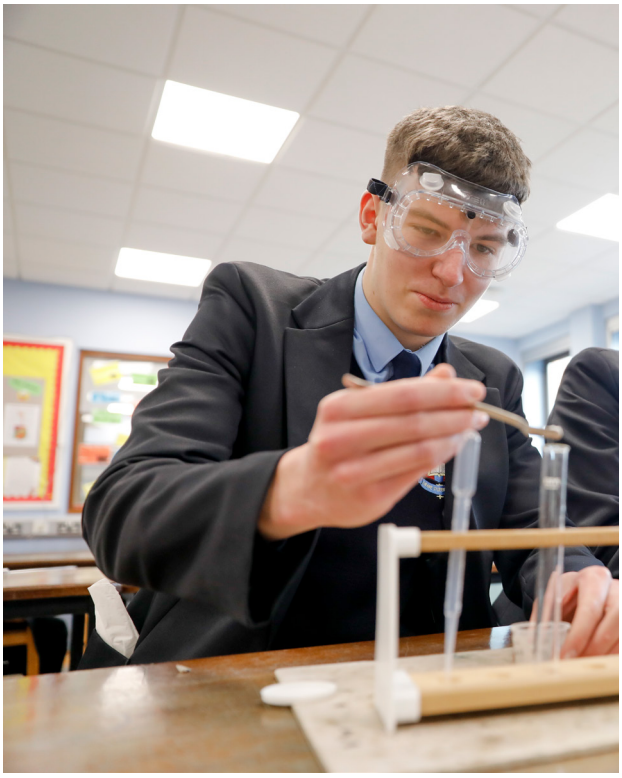
Unit AS 3: Basic Practical Chemistry
(2 hours and 30 minutes)
AS 3 - 20% of AS; 8% of A'Level

Advanced GCE (A2)

Unit AS 1: Further Physical and Organic Chemistry
(2 hours)
A2 1 - 40% of A2; 24% of A' Level

Unit AS 2: Analytical, Transition Metals, Electrochemistry and Organic Nitrogen
(2 hours)
A2 2 - 40% of A2; 24% A' Level

Unit AS 3: Further Practical Chemistry
(2 hours and 30 minutes)
A2 3 - 20% of A2; 12% of A'Level



Career Opportunities

One of the most important reasons for studying Chemistry is the wide choice of careers it opens up. Chemistry is essential for many careers including the following: Medicine, Biochemistry, Chemical Engineering, Dentistry, Veterinary Medicine, Food Science, Environmental Science, Pharmacy, Agriculture, Food Technology, Chemistry and Industrial Chemistry.

BTEC Construction (Double Award)

At St. Michael's college we offer the Pearson BTEC level 3 National Diploma in Construction and the Built Environment which is equivalent to 2 A-levels.
BTEC Level 3 Nationals are vocational qualifications providing specialist, work related learning. They have been developed in consultation with employers, universities and professional bodies to prepare learners for employment and /or a continuation of study. The course provides training in professional areas that directly link to the changing needs of construction employers and professionals, coupled with an understanding of the key issues of sustainability and health and safety practices within the construction industry.

Overview of the course:

The course is made up of 720 Guided Learning Hours (GLH).
It is delivered across 10 Units; 8 units are assessed internally in the form of portfolio-based assignments and 2 are assessed externally in written examinations.
The BTEC Level 3 National Construction qualification takes a unit-by-unit approach and offers a combination of assessment styles.
Unit 1 & 2 carries a combined weighting of 33% with the remainder divided equally between the 8 other units.

Overview of Units delivered:

Unit	Title	Year of study	Type of Assessment
1	Construction Principles	13	External
2	Construction Design	14	External
4	Construction Technology	14	Internal
5	Health & Safety	13	Internal
6	Surveying in Construction	13	Internal
7	Graphical Detailing in Construction	13	Internal
8	Building Regulations & Control in construction	14	Internal
9	Management of a Construction Project	13	Internal
10	Building Surveying in Construction	14	Internal
19	Quantity Surveying	14	Internal

Skills developed:

Pupils will develop a range of cognitive and problem solving skills. Critical thinking will be required to approach problems using research of expert knowledge and creative solutions from a range of systems and technology.
Interpersonal skills will also be developed as pupils will require clear communication and presentation skills. Pupils will demonstrate their ability to work collaboratively and develop negotiation skills along with self-management, adaptability, resilience and self-monitoring.

Career opportunities:

Pupils may choose to go on to study at degree level, do further vocational training or enter employment within the construction industry.

Specific career opportunities may include:

- Architect
- Building Control officer
- Building Surveyor
- Civil Engineer
- Contracts manager
- Construction / Site Management
- Electrician
- Engineering Technician
- Environmental Planner
- Health & Safety Officer

Digital Technology - A Level

Students who are enthusiastic about Technology related matters in general and particularly those who are interested in the application of digital platforms in the real world should study Digital Technology.
At AS level you will learn about the ways in which computer systems can be developed as well as studying the essential digital technology concepts involved. You will complete two AS units, each with a written exam. These contribute overall to 40 percent of the A level award.
At A2 level you will complete two additional units, one with a written exam, the other involving coursework. These contribute to 60 percent of the A level award. For the written exam you will study computerised information systems in detail. In the coursework unit you will have the opportunity to apply the digital technology knowledge and skills that you have acquired to develop and implement a computerised information system.

Qualification & Specification Details

The full advanced GCE A Level award is based on students' marks from the AS (40%) and the A2 (60%)

Unit	Area of Study
AS 1 Approaches to system Development	In this unit you will learn about: • the system development process with particular focus on the analysis, design and implementation stages; • alternative development approaches, which will be compared; • software projects; • security issues; and • programming concepts.
AS 2 Fundamentals of Digital Technology	In this unit you will learn about: • data representation ; • data and information; • computer architecture; • hardware and software components; • processing systems; and • web technology and multimedia.
A2 1 Information Systems	In this unit you will learn about: • networks; • databases; • expert systems; • applications of digital technology; • mobile technologies; • cloud computing; and • individual, social and legal considerations.
A2 2 Application Development	In this unit you will complete a detailed project. The project brief will be provided annually by CCEA. You will identify and research a realistic problem. You will then design a solution, implement and test your solution, and document and evaluate your solution.

Career Note

Although the study of A level Digital Technology is not considered absolutely necessary for university entry into a computing related course it is a clear advantage for those who have done so. In terms of careers after A level studies, the skills students will develop on this course will stand them in good stead in many careers that use computing applications. With a specific emphasis in the job market emerging on the ability to write code for software packages this subject can be a great start to students' future career prospects, not solely in computing but also across many organisations that wish to develop their own software to meet their particular needs and who need people with this ability. The packages the school use are industry standard and the skills they develop are completely transferable.

For specific careers in computing this subject is not essential but does give a student a big advantage. Areas include software engineering, hardware engineering, web design, systems analysis, technical management, information management. For students pursuing this area to degree standard a BSc Computing Science degree is recommended by those in industry. This area is suffering from a lack of qualified professionals and jobs are available. There is a premium placed on these skills in the current job market.

English Literature

Subject Introduction:

Advanced Subsidiary and Advanced GCE English Literature aim to encourage students to develop their interest in and enjoyment of literary studies through reading widely, independently, and critically. They involve opportunities to:

- explore the traditions within English Literature;
- study a wide range of texts from those written in the 14th Century up to the present day;
- and explore contemporary cultural, moral, spiritual and political issues.

Our students enjoy lively debate and opportunities to explore texts in a way which promotes independent, critical and creative thinking.

Course Structure:

AS Unit 1: The Study of Poetry 1900–Present (Frost and Heaney) and Drama 1900–Present ('A Streetcar Named Desire').
External written examination. 2 hours. Students answer two questions, one from Section A and one from Section B. Section A is open book. Section B is closed book. 60% of AS / 24% of A level.

AS Unit 2: The Study of Prose Pre 1900 ('Frankenstein').
External written examination. 1 hour. Students answer one question. Closed book. 40% of AS / 16% of A level.

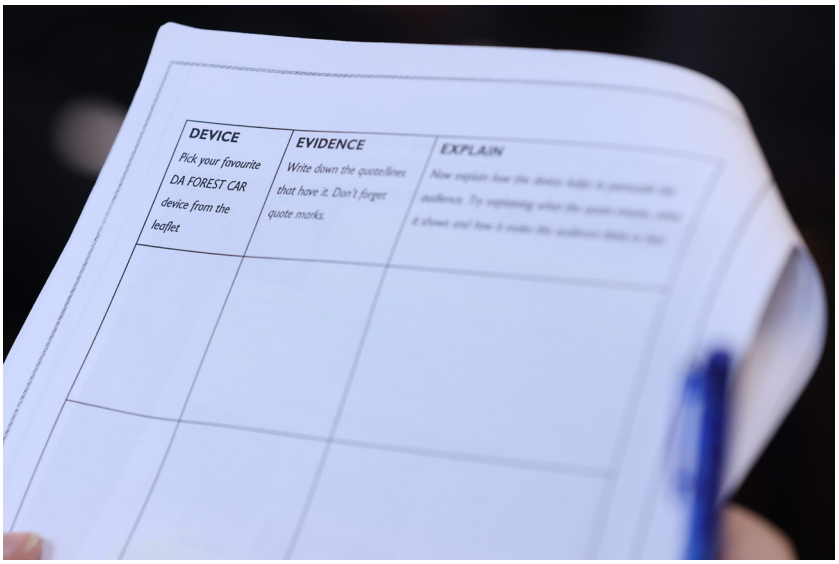
A2 Unit 1: Shakespearean Genres ('Othello').
External written examination. 1 hour 30 mins. Students answer one question. Closed book. 20% of A level.

A2 Unit 2: The Study of Poetry Pre 1900 (Dickinson) and Unseen Poetry.
External written examination. 2 hours Students answer two questions, one from Section A and the question set in Section B. Closed book. 20% of A level.

A2 Unit 3: Internal assessment. Students complete a 2500-word essay based upon two novels; one pre-2000, one post-2000. 20% of A level.

Careers:

Given the demand for confident and articulate communicators in today's professional landscape, English Literature offers the opportunity for students to build both their skills and confidence in analysing and utilising powerful language. This is a transferrable skill and an asset to every career and discipline.



An A Level in English Literature is a necessary requirement for those who wish to study English at degree level. However, as a subject, English Literature also offers valuable knowledge, skills and preparation for careers in law, marketing, teaching, public relations, communications, politics, copywriting, editing, web content creation and management, research and writing.

Additionally, Northern Ireland has developed a thriving economy in the creative arts, film and media; an A level in English Literature naturally lends itself to such disciplines and offers a firm foundation for further study or careers in these fields.

Geography

The CCEA GCE Geography specification gives students a broad knowledge and understanding of the processes and challenges facing our world.
Students investigate physical and human geography themes. They explore the processes that shape weather, the relationships between population and resources or how to protect the countryside. They undertake fieldwork and develop their ability to gather, evaluate and present information.
Students will also explore plate tectonics and tropical ecosystems. They also investigate cultural geography and ethnic diversity. They develop decision-making skills and apply these in a real world scenario.

Assessment

Year 13 AS Geography:

- Unit AS 1: Physical Geography
- Unit AS 2: Human Geography
- Unit AS 3: Fieldwork Skills and Techniques in Geography

These three modules make up 40% of the overall A Level

Year 14 Geography:

- Unit A2 1: Physical Processes, Landforms and Management
- Unit A2 2: Processes and Issues in Human Geography
- Unit A2 3: Decision Making in Geography.

These three modules make up 60% of the overall A Level

Career Opportunities

Incorporating elements of both the Physical and Human Sciences, A Level Geography is a valuable and versatile subject. Widely accepted in Third Level institutions, Geography is compatible with all AS and A Level subjects and thus enhances career opportunities. The subject allows students to proceed to careers as diverse as Accountancy, Architecture, Archaeology, Cartography, Engineering, Environmental related careers, Geographic Information, Law, Leisure, Travel and Tourism, Media, Medicine, Meteorology, Planning, Physiotherapy, surveying and Teaching.

History

GCE History specification develops advanced understanding of how the world became what it is today. It equips students with transferable and written skills, including critical thinking, analysis and debate.

Historians appreciate events and their consequences, helping us understand the past and the present.

Assessment

This specification is available at two levels: AS and A2. Students can take the AS units plus the A2 units for a full GCE A level qualification. They can also choose to take the AS course as a stand-alone qualification.

The specification has four units:

- **Unit AS 1: Historical Investigations and Interpretations**
  Germany 1919–45
- **Unit AS 2: Historical Conflict and Change**
  Russia 1914–41
- **Unit A2 1: Change Over Time**
  Ireland Under the Union 1800–1900
- **Unit A2 2: Historical Investigations and Interpretations**
  Partition of Ireland 1900–25

Content	Assessment	Weightings
AS 1: Historical Investigations and Interpretations	External written examination 1hour 30 mins Students answer a short response question and a two-part source question	50% of AS 20% of A level
AS 2: Historical Conflict and Change	External written examination 1hour 30 mins Students answer two questions from a choice of three. Each has two parts, a short response and an extended essay.	50% of AS 20% of A level
A2 1: Change Over Time	External written examination 1hour 15 mins Students answer a synoptic essay question	20% of A level
A2 2: Historical Investigations and Interpretations	External written examination 2hour 30 mins Students answer three questions; two are source based and one is an extended essay.	40% of A level

Careers

The subject is highly rated by employers because it demands intellectual rigour. History students are trained to deal with large amounts of evidence and information and to develop analytical minds. These are very useful skills in a range of careers, for example, teaching, law, journalism and the social sciences

Life and Health Sciences - A Level (Single & Double Award)

The CCEA GCE Life and Health Sciences specification was developed with industry in response to the needs of the growing Life and Health Sciences sector in Northern Ireland.

Life and Health Science related industries make up over 25% of Northern Ireland's total economic output and include a diverse range of public and private businesses and employment opportunities, including pharmaceutical, chemical, agricultural, dental, nursing, environmental and allied health professions.

This specification is available at two levels: AS and A2 (Single and Double Award). Students can take the AS units plus the A2 units for a full GCE A level qualification. They can also choose to take the AS course as a stand-alone qualification.

For a full GCE Single Award qualification students must complete six units: three at AS level and three at A2. For a full GCE Double Award qualification 12 units are required: six at AS level and six at A2.

The specification has 16 available units. Some units are compulsory (C) while others are optional units (O).

- Unit AS 1: Experimental Techniques
- Unit AS 2: Human Body Systems
- Unit AS 3: Aspects of Physical Chemistry in Industrial Processes
- Unit AS 4: Brain Science
- Unit AS 5: Material Science
- Unit AS 6: Medicine, Drugs and Clinical Trials
- Unit A2 1: Scientific Method, Investigation, Analysis and Evaluation
- Unit A2 2: Organic Chemistry
- Unit A2 3: Medical Physics
- Unit A2 4: Sound and Light
- Unit A2 5: Genetics, Stem Cell Research and Cloning
- Unit A2 6: Microbiology
- Unit A2 7: Oral Health and Dentistry
- Unit A2 8: Histology and Pathology
- Unit A2 9: Analytical Chemistry Techniques
- Unit A2 10: Enabling Technology.

What do you need to study Life and Health Sciences?
You need to have a real interest and ability in the sciences.

Content	Assessment	AS Single Award Weightings	AS Double Award Weightings
Unit AS 1 Experimental Techniques	Core Unit SA & DA Portfolio	33.3% of AS 13.34% of full A-level	16.67 of AS 6.67% of full A-level
Unit AS 2 Human Body Systems	Core Unit SA & DA Examination (11/2 Hours)	33.3% of AS 13.34% of full A-level	16.67 of AS 6.67% of full A-level
Unit AS 3 Aspects of Physical Chemistry in Industrial Processes	Core Unit SA & DA Examination (1 1/2 Hours)	33.3% of AS 13.34% of full A-level	16.67 of AS 6.67% of full A-level
Unit AS 4 Brain Science	DA Core Unit Portfolio		16.67 of AS 6.67% of full A-level
Unit AS 5 Material Science	DA Core Unit Examination (11/2 Hours)		16.67 of AS 6.67% of full A-level
Unit AS 6 Medicine, Drugs and Clinical Trials.	DA Core Unit Portfolio		16.67 of AS 6.67% of full A-level

Content	Assessment	AS Single Award Weightings	AS Double Award Weightings
Unit A2 1 Scientific Method, Investigation, Analysis & Evaluation.	Core Unit SA & DA Portfolio	33.3% of AS 13.34% of full A-level	16.67 of AS 6.67% of full A-level
Unit A2 2 Organic Chemistry	Core Unit SA & DA Examination (1 Hr 45 mins)	33.3% of AS 13.34% of full A-level	16.67 of AS 6.67% of full A-level
Unit A2 3 Medical Physics	Core Unit SA & DA Examination (1 Hr 45 mins)	20% of A-level Single Award Students study any ONE of these units.	10% of A-level for each unit Double Award Students take any TWO of these units
Unit A2 4 Sound & Light	SA & DA Core Unit Examination (1 Hr 45 mins)		
Unit A2 5 Genetics, Stem Cell Research & Cloning	SA & DA Core Unit Examination (1 Hr 45 mins)		
Unit A2 6 Microbiology	Portfolio Optional Units		10% of A-level for each unit Double Award Students take any TWO of these units
Unit A2 7 Microbiology			
Unit A2 8 Histology & Pathology			
Unit A2 9 Analytical Chemistry Techniques			
A2 10 Enabling Technology			

Career Opportunities

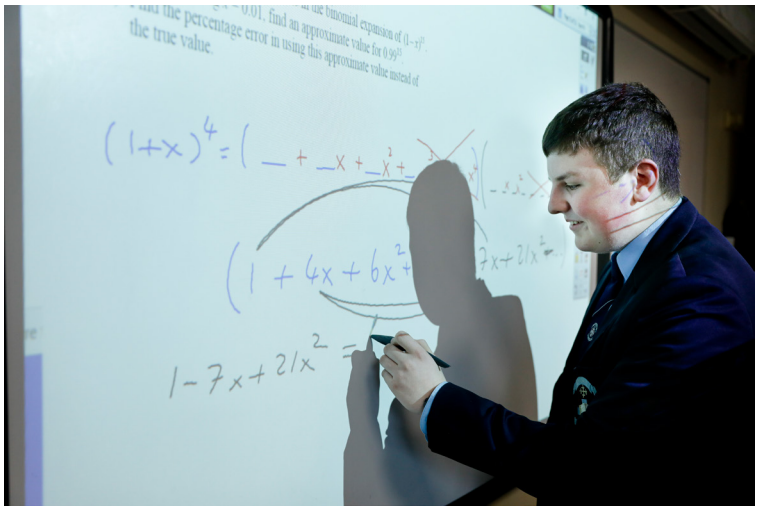
Northern Ireland has a thriving life and health sciences sector that benefits from a strong collaborative approach between industry, academia, and clinicians. The region offers expertise across precision medicine, clinical trials, and digital health. Northern Ireland also has clinical specialisms within the areas of oncology, cardiology, ophthalmology, respiratory and diabetes. 13,000 people study life and health sciences related subjects at university. The Life and Health Sciences aims to develop students' advanced practical skills and knowledge, preparing them for employment or third level study and a career in the life and health sciences.

Mathematics

Mathematics is one of the most fascinating of all the intellectual disciplines. The study of mathematics is not only exciting, but also important. Mathematicians have an opportunity to make a lasting contribution to society by helping to solve problems in such diverse fields as Medicine, Management, Economics, Government, Computer Science, Physics, Psychology, Engineering and Social Science. Mathematical skills are viewed most highly by employers. Employers are always impressed by the clarity of thought and problem-solving skills of mathematicians.

A level Mathematics – CCEA

The CCEA GCE Mathematics specification encourages students to extend their range of mathematical skills and techniques beyond that of GCSE. A level differs considerably from other subjects in that only some of what is studied for GCSE is continued through to A Level, although there is a link between Further Mathematics GCSE and a lot of the topics studied at A Level.
This specification is available at two levels: AS and A2. Students can take the AS units plus the A2 units for a full GCE A level qualification. They can also choose to take the AS course as a stand-alone qualification.



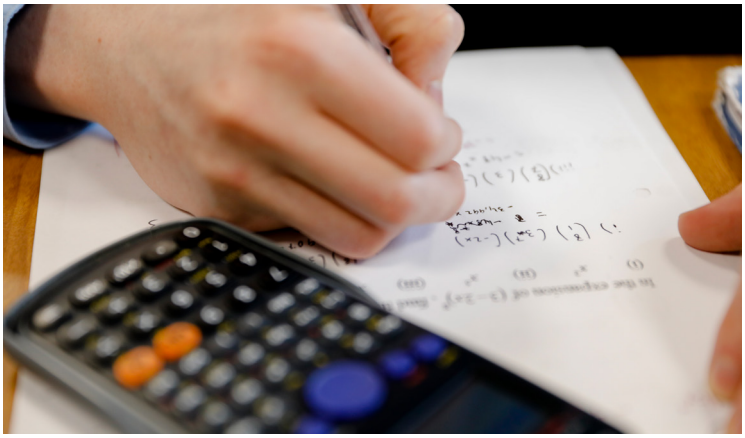
The specification has four units:

- **Unit AS 1: Pure Mathematics**
- **Unit AS 2: Applied Mathematics**
- **Unit A2 1: Pure Mathematics**
- **Unit A2 2: Applied Mathematics.**

Pure Mathematics consists of the study of Algebra, Trigonometry, Calculus and Co-ordinate Geometry.
Applied Mathematics comprises of elements of both Mechanics and Statistics.
Mechanics deals with forces and how they affect the motion of particles and bodies. Statistics deals with the representation, presentation, analysis and manipulation of data.

Structure and Assessment of AS and A2 Mathematics

Content	Assessment	Weightings
AS 1: Pure Mathematics	External written Examination 1 hour 45 mins Students answer all questions.	60% of AS 24% of A level
AS 2: Applied Mathematics	External written Examination 1 hour 15 mins Students answer all questions.	40% of AS 16% of A level
A2 1: Pure Mathematics	External written Examination 2 hour 30 mins Students answer all questions.	36% of A level
A2 2: Applied Mathematics	External written Examination 1 hour 30 mins Students answer all questions.	24% of A level



Career Opportunities

Studying mathematics develops students' analytical, research and problem-solving skills. It provides a firm foundation for scientific, technical, engineering and mathematical careers. It gives students the knowledge and logic they need to solve scientific, mechanical and coding problems. Engineering careers will regard A Level Mathematics as essential, but it also provides an opening to many other fields including Actuarial work and Finance, Medicine, Dentistry, Optometry, Psychology, Science and Electronics-based industries. An AS in Mathematics may also be required for entry to degree study in some of these careers.

Physics

The GCE Physics Specification builds on knowledge, understanding and skills developed in both GCSE Double Award Science and GCSE Physics. Knowledge and understanding from GCSE Mathematics is also very important as there are many computational elements in the course.

Skills Developed

Studying Physics at AS/A2 level develops an interest in and enthusiasm for physics, including developing an interest in further study and careers in the subject. It develops an understanding and appreciation of how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society. At A Level student's develop competence in a range of practical, mathematical and problem-solving skills which prepares them for third level courses. Their studies help to develop a logical, analytical mind and promotes good social and communication skills.

Assessment

Advanced Subsidiary (AS) consists of three modules:

AS Module 1 — Forces and Electricity
Externally assessed Written paper – 1 hour 45 mins
40% of AS, 16% of A Level

AS Module 2 — Waves, Photons and Astronomy
Externally assessed written paper – 1 hour 45 mins
40% of AS, 16% of A Level

AS Module 3 — Practical Techniques and Data Analysis
2 components (1 hour each)
- Externally assessed test of practical skills
- Written paper – analysis of experimental results

20% of AS, 8% of A Level

Advanced GCE (A2) consists of three modules:

A2 Module 1 — Deformation of Solids, Thermal Physics, Circular Motion,
Oscillations and Atomic and Nuclear Physics
Externally assessed Written paper – 2 hours
24% of A Level

A2 Module 2 — Fields, Capacitors and Particle Physics
Externally assessed written paper – 2 hours
24% of A Level

A2 Module 3 — Practical Techniques and Data Analysis
2 components (1 hour each)
- Externally assessed test of practical skills
- Written paper – analysis of experimental results

12% of A Level

Career Opportunities

GCE Physics provides you with a sound basis for the study of physics and related subjects at university, such as:
Applied Mathematics, Astronomy, Astrophysics, Engineering (including Acoustical, Aeronautical, Biomedical, Chemical, Civil, Electrical, Electronic and Mechanical branches), Geophysics and Materials Science.
GCE Physics also provides a basis for work in the fields of Science, Medicine, Communications, Computers and Information Technology. It is also relevant to those areas of Commerce and branches of public service where problem-solving and practical skills are valued such as Accountancy and Actuarial Science.

Religious Studies

Religious Education is at the heart of a Catholic school and plays a vital role in the spiritual and moral development of the student here in St. Michael's College.

A Level Religious Studies

Religious Studies at AS (Year 13) and A2 (Year 14) offers students at the College the opportunity to embark on a detailed exploration of both Church History and Scripture. Students take four modules across the two years in the Sixth Form.

Year 13

Textual Studies
AS 1: An Introduction to the Gospel of Luke
Systematic Study of One Religion
AS 5: The Celtic Church in Ireland in the Fifth, Sixth and Seventh Centuries

Year 14

Textual Studies
A2 1: Themes in the Synoptic Gospels
Systematic Study of One Religion
A2 5: Themes in the Celtic Church, Reformation and Post-Reformation Church

Assessment

Two 1 hour 20 minute external written examinations in Year 13

In Year 14 students sit two 2 hour external written examinations. Students answer two questions in Section A and a compulsory synoptic question.

Careers

Specialist jobs directly related to Religious Studies are Teaching and Ministry, both Ordained and Lay. A number of students who have studied Religious Studies in the Sixth Form have gone on to teach Religion in Primary and Post-Primary Schools and indeed lecture at university.

A qualification in Religious Studies develops a range of skills for students including essay writing skills, research skills and critical argument and debating skills. A Level Religious Studies can be useful for a wide variety of degrees and careers including archaeology, law, journalism, nursing, social work and personnel management. Employers who like applicants to have a good understanding of themselves and their role in society view it favourably. Past pupils of the Department include those currently practicing law, journalism, TV presenting, youth work and a wide variety of other careers.

Religious Education for Sixth Form Students

All students in the College partake in our religious education, 'Social and Spiritual Awareness' programme. Our school promotes not only the study of religion but also religious formation. Each Year 13 & 14 student has two Social and Spiritual Awareness classes per week. Issues such as drugs education, human rights, sexuality and attitudes to religion are discussed and awareness is raised. Pupils are also given the opportunity to explore their spirituality.

Pupils have the opportunity to participate in liturgies - Class Masses, Year 14 Leavers Mass, Assemblies, Prayer Services, and Reconciliation Services. They are encouraged to put Christian values into action. Thus, pupils work on behalf of the poor, fund-raising for Charities and campaigning for Human Rights.

BTEC Sport

The BTEC Level 3 National in Sport has been developed to recognise students' skills, knowledge and understanding of sporting activities, environments and operations. It has been designed to acknowledge students' achievements in a modern and practical way that is linked to further study at a higher level and is also relevant to the workplace.

Sport and exercise scientists continue to be a growing presence in the world of sport, and as we look to the future, all the signs suggest that their influence in sport will increase. BTECs embody a fundamentally learner-centred approach to the curriculum, with a flexible, unit-based structure and knowledge applied in project-based assessments. They focus on the holistic development of the practical, interpersonal and thinking skills required to be able to succeed in employment and higher education.

From the elite performers' reliance on a large support team, to the casual gym user's use of ergogenic aids, sport and exercise sciences' core elements of anatomy, physiology, psychology and biomechanics are seen in almost every aspect of, and activity within, the sport and active leisure sector.

BTEC Sport Level 3 has been structured to allow learners maximum flexibility in selecting optional units so that particular interests and career aspirations within the sport and active leisure sector can be reflected in the choice of unit combinations.

Skills Developed

The qualifications provide opportunities for learners to;

- Focus on the development of personal, learning and thinking skills, functional skills, and wider skills in a sporting context.
- Work independently and effectively in a sporting context.
- Apply a vocational context to all work, readying the learner for the working world.
- Develop an in-depth knowledge on the workings of the human body.
- Become aware of environmental issues and health and safety considerations.

Title	Size & Structure	Summary of Purpose
Pearson BTEC Level 3 National Extended Certificate in Sport	360 GLH (445 TQT) Equivalent in size to one A Level. 4 units of which 3 are mandatory and 2 are external. Mandatory content (83%). External assessment (67%).	A broad basis of study for the sport sector. This qualification is designed to support progression to higher education when taken as part of a programme of study that includes other appropriate BTEC Nationals or A Levels.

Technology & Design – Product Design

At St Michael's, we have a welcoming and up to date Technology suite which caters for a wide range of disciplines within Technology and Design. Our T&D teachers and technician are always here to help you reach your full potential.

What is product design?

Product designers solve problems by creating new products or improving the designs of existing ones. If you are innovative, think critically, can communicate effectively, design fresh products that are more user friendly, attractive, safe and efficient, then this just might be the A level for you.

The two year course comprises of:

- One Independent Design & Make project which is 50% of the qualification
- One written examination which is 50% of the qualification (taken at the end of Year 2)

Exam topics include: Materials, Performance characteristics of materials, Processes and techniques, Digital technologies, Factors influencing the development of products, Effects of technological developments, Potential hazards and risk assessment, Features of manufacturing industries, Designing for maintenance and the cleaner environment, Current legislation, Information handling, Modelling and forward planning, Further processes and techniques

Non Exam Assessment: (Portfolio of approx. 40 pages)
Part 1: Identifying and outlining possibilities for design
Part 2: Designing a prototype
Part 3: Making a final prototype
Part 4: Evaluating own design and prototype

What skills and knowledge should I have or will I discover?

Thinking and reasoning skills, Mathematical expertise, knowledge & understanding of Technology & Design practices, problem solving skills, CAD Software competence and a plethora of creativity, persistence and determination.

Did you know?
Adidas, who have partnered with Parley Ocean Plastic, are upcycling plastic waste that is taken from coastal communities, remote islands and beaches and reworking it to become high performance Polyester yarn for sportswear.
WHERE WILL PRODUCT DESIGN TAKE YOU?

Career opportunities

Product Designer, Furniture Designer, CAD technician, Automotive Engineer, Production Engineer (theatre, TV, film), Exhibition Designer, Graphic Designer, Interior Designer, Aeronautical Engineer, Textile Designer, Product Manager

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