



Prince of Wales Island  
International School  
**BALIK PULAU**

# POWIIS SIXTH FORM

A Pathway to Academic  
Success and Beyond

An Adventure for the Mind  
and A Home for the Heart  
[powiis.edu.my](http://powiis.edu.my)

*Our students go  
to universities all  
over the world*



# Welcome to our Sixth Form

Years 12 and 13 are very important exam years and our academic team works closely with students to prepare them for these exams.

Our Sixth Form offers a wide range of A levels and a small number of other programmes, carefully designed to ensure that students of all interests and abilities can find a pathway to success at university or into the world of work. Supported by our dedicated careers counsellor with comprehensive career counselling for students, each student follows an individually tailored 2-year programme, carefully designed to support their aspirations and goals. This programme normally includes 4 A levels, chosen from a wide range of subjects, and may include additional qualifications in languages or IELTS, or the EPQ project qualification to further enrich their academic journey for A level in Malaysia.

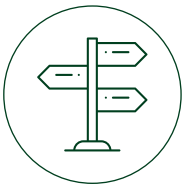
As one of the leading British boarding schools, we prepare students not only for academic success but for a more fulfilling future, where they are well-equipped to excel in a global landscape.

# Why Choose Sixth Form at POWIIS?



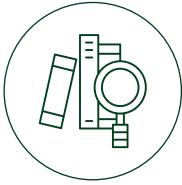
## 1. Student Leadership

POWIS is dedicated to holistic personal growth, we firmly believe in the power of student leadership to shape the future. At POWIIS, our student leadership programme provides a platform for students to develop essential skills, make a positive impact within our school community, and contribute to the world beyond our campus. Within the Sixth Form students become eligible to apply for Executive Student leadership positions (Head Students) Committee chair positions, House Captains and Sixth Form Council. Students undergo a rigorous application and interview process for these positions.



## 2. University Guidance

With the support of our dedicated University and Careers Counsellor, our students experience a full programme of events and activities to support them with University applications including, for example, university visits, practice interviews and mock entry exams. They are supported in developing life skills to profile themselves for a specific career pathway. They are also encouraged to gain hands-on experience through work placements. Masterclasses and university fairs offer further opportunities to refine and direct their focus. One-to-one consultations support personalised statements and ensure university applications are efficiently and effectively prepared to maximise their chances of acceptance at their universities of choice around the world.



### 3. Wide Selection of Subjects

1. Art
2. Biology
3. Business Studies
4. Chemistry
5. Computer Science
6. Design Technology
7. Drama
8. Economics
9. English Literature
10. Geography
11. History
12. Marine Science
13. Mathematics
14. Further Mathematics
15. Media Studies
16. Music
17. Physical Education
18. Physics
19. Psychology
20. Languages  
(French, Spanish,  
Mandarin, Japanese)
21. EPQ



### 4. Pastoral Care & Facilities

The students enjoy certain privileges such as exiting the campus during lunch times, a spacious common room and a dedicated study space. They are supported by their form tutor, who is always the first port of call for parents, as well as their Head of Sixth Form, our dedicated university and careers counsellor, and our school counselling team.





## 5. Soft-Skills and Extra-curricular Activities

Our Sixth Form students enjoy access to a plethora of activities, trips, leadership activities and opportunities for self-discovery beyond the classroom – in sports, the Arts, debating, community service and more, and they are encouraged to immerse themselves in school life, taking part in – and leading – a whole host of activities. This breadth of experiences enables students to build a portfolio of interests and achievements which helps them to stand out in the fiercely competitive worlds of university admissions or employment.



*Wide range of subjects  
(Design Technology, Marine  
Science, Languages, etc.)*



# Where Do Our Students Go After POWIIS?

## USA & Canada

Berklee College of Music  
Boston University  
California Institute of Technology (Caltech)  
Massachusetts Institute of Technology (MIT)  
The University of British Columbia  
University of Alberta  
University of Oregon  
University of Wisconsin-Madison

## United Kingdom

London School of Economics and Political Science (LSE)  
Imperial College London  
University of Oxford  
University of Edinburgh  
Cardiff University  
University of Manchester  
King's College London  
University of Sheffield  
University of Glasgow  
University of Warwick  
University of Bristol

Durham University  
University of Southampton  
University of Leeds  
University of Exeter  
University of York  
University of Bath  
Queen Mary University of London  
University of Dundee  
University of Liverpool  
Loughborough University  
University of Reading  
University of Nottingham  
University of Surrey  
University of Lincoln  
University of Brighton  
Kingston University London  
University of Plymouth  
University of Salford  
De Montfort University  
Aberystwyth University  
Falmouth University  
Norwich University of the Arts  
Anglia Ruskin University

## Europe

Maastricht University, Netherlands  
University of Malta  
École Internationale Tunon, Nice, France

## Asia

Chuo University, Japan  
National Tsing Hua University, Taiwan  
Osaka University, Japan  
Peking University, China  
Taylor's University, Malaysia  
University of Nottingham Malaysia  
UOW Malaysia KDU Penang University College, Malaysia  
Yong Stew Toh Conservatory of Music, Singapore

## Australia

University of Melbourne  
Monash University  
The University of Queensland  
The University of Adelaide

## New Zealand

University of Auckland







A portrait of a young woman with long, dark hair, smiling slightly. She is wearing a grey t-shirt. The background is a dark green wall with large, stylized letters in light green and orange. The letters 'la' and 'a' are visible on the left and right respectively. There are also some orange circles and squares scattered around the letters.

### **Vincy**

POWIIS offers me a lot of opportunities and exposure that leads me to what I'm interested in. I choose Design and Technology is because my love of using those machines and also my interest in those CAD and CAM software which this leads me to pursuing design engineering in my university.



# Alumni

## **JJ** - *University of Edinburgh*

Starting at POWIIS has really allowed me to develop my skills and interests, which has led me to win multiple competitions. All of these experiences have led me to studying architecture at the University of Edinburgh.



## **Bernice** - *King's College London*

University is a time to explore, discover your passions, and grow in ways you never imagined. As the former 2022 head girl and fellow alumni, I know how exciting and overwhelming this moment can be. Trust in your abilities, lean on your support system, and don't forget to enjoy the journey. You've already accomplished so much; now, it's time to show the world what you're made of! Your future is bright, and I'm excited to see where it takes you.

# Admissions Procedure

## Year 12 Admissions (Ages 16 - 17)

### Stage 1

CAT4 Exam & Oxford English Online Placement Test to be completed with invigilation by Registrar

*Duration: approximately 2.5 hours*

### Stage 2

An interview with Principal, Head of Sixth Form and Boarding staff (if applicable).

*Duration: 15 mins each*

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## Document Checklist for Assessment

- ✦ Registration of assessment form
- ✦ Candidate's current school report in English
- ✦ Copy of NRIC/Passport

For enquiries, you may contact [admissions.bp@powiis.edu.my](mailto:admissions.bp@powiis.edu.my).

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*Experienced, specialised  
teaching staff*





*To find out more,  
speak with our  
admission team!*

# Subject Options

Years 12 and 13 are very important exam years and our academic team works closely with students to prepare them for these exams.

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## Arts Curriculum Area

### Art - Fine Art

Course Code and Syllabus: Edexcel, 9FA0

Studying art equips students with a whole set of transferable skills both for life and for a wide range of vocational areas. These include lateral thinking, creative problem solving, analytical and critical thinking, verbal reasoning, communication, risk taking, the ability to use their own initiative, time-management and organisation. This course will help students on their way to becoming creative, imaginative and confident individuals, prepared for the world of work with the ability to formulate opinions, make judgements and meet the challenges of a rapidly changing world. Many careers require artistic skills and a knowledge and appreciation of Art and Design. Every man-made object we see around us has been designed by someone and as fashion, styles and technology continue to change, so do the opportunities for young people in the wide variety of design or art related jobs.

#### Course Aims

Successful candidates gain lifelong skills, including:

- Communication skills, especially the ability to communicate concepts and feelings;
- How to record from direct observation and personal experience;
- The ability and confidence to experiment, be innovative, intuitive and imaginative;

- The language and technical terms used in art and design;
- Research and evaluation skills;
- An appreciation of practical design problems and how to solve these

#### Course Content

A broad approach is taken, with drawing and painting at its centre, but also includes printmaking, textiles, photography, mixed media and 3D work. Above all you will develop the necessary skills needed to produce creative, individual and high quality artwork.

You will be encouraged to be inventive, independent and involved. In the majority of lessons you will be engaged in practical work; however, you will also explore the work of artists and designers, visit exhibitions, undertake independent study and develop your own ideas.

#### Assessment

AS is not available.

#### A Level

- Component 1 Coursework (one practical project and a written Personal Study) (3000 words)
- Component 2 Controlled Assignment (15 hours)

#### Previous Knowledge Required

Art at A Level is an exciting and challenging subject. It is not a subject for the fainthearted nor is it for those who wish to be told what to do every step of the way. The level of commitment necessary is high and the practical nature of this course makes it time consuming. IGCSE Art or an equivalent is not a prerequisite for A Level but would be extremely helpful. The most important qualities needed at A Level are curiosity and commitment. Students should



be able to demonstrate a good level of artistic ability, particularly observational drawing.

### Subject Combinations

Art may be combined with both Arts, Humanities and Science subjects.

### Higher Education and Careers

It is the basic qualification for those hoping to follow degree courses in either Fine or Applied Arts: painting; printmaking; sculpture; graphic design, including advertising; scientific and technical illustration; information graphics and print technology; three dimensional design, including industrial design; furniture design; ceramics; interior design; theatre design; silversmithing and jewellery; fashion and textiles; film, photography and television. Art is also valuable for a number of indirectly related careers such as architecture, museum work, Arts administration, gallery curating and teaching.

## Design and Technology

Course Code and Syllabus: Edexcel 9DT0

The Edexcel GCE in Design and Technology: Product Design seeks to develop students' knowledge, understanding, skills and creativity across all disciplines of product design.

Considering our student's future plans and areas of interest, we can tailor the course towards graphic design, architecture, biomedical design, engineering or classic product design for the major project.

### Course Aims

The aims of the Edexcel Advanced Subsidiary and Advanced GCE in Design and Technology are to encourage students to:

- Learn to work with and understand a range of materials, their properties and their applications in a design setting.
- Develop confidence with a wide range of hand tools, machinery, modelling processes, finishing techniques and product assembly skills.
- To promote sustainable design and manufacture and understand the impact product design and its wider areas can have on our planet.
- Develop creativity, innovative thinking and a passion for design with critical analysis abilities.
- Help students to recognise and overcome challenges and constraints when working towards the production of high quality products.
- Develop a critical understanding of the influences of the processes and products of design and technological activities and from a contemporary and historical perspective
- Draw on a range of skills and knowledge from other subject areas including mathematics
- Draw on and apply knowledge, understanding and skills of production processes to a range of design and technology activities
- Develop an understanding of contemporary design and technology practices
- Use digital technologies and information handling skills to enhance their design and technological capability.

### Course Content

This qualification emphasises two key factors — creativity and sustainability. We all want

students to explore ideas of originality and value, to question and challenge, to envisage what could be, but equally we need them to achieve the results that will progress their careers. All modern designers have to consider sustainable issues when designing new products. A sign of the modern technological age in which we live is that human actions have had a negative impact on our environment. New products provide solutions rather than add to the existing problems of extractions and use of natural resources, pollution from manufacturing and disposal of large amounts of waste products. Good design is vital to our world and economy.

### Assessment

The A Level GCE in Product Design is a linear course and consists of one externally assessed paper and one non-examined assessment component. Students must complete all assessments in May/June in any single year. The breakdown is as follows:

#### Principles of Design and Technology - written exam - 50% of the qualification

This paper includes calculations, short-open and open-response questions, as well as extended writing focused on:

- Analysis and evaluation of design decisions and outcomes, against a technical principle, for prototypes made by others.
- Analysis and evaluation of wider issues in Design and Technology, including social, moral, ethical and environmental impacts.

#### Independent Design and Make Project - Non-examined assessment - 50% of the qualification

*Part one: Identifying and outlining possibilities for design*

Identification and investigation of a design possibility, investigation of a client or end

user's needs, wants and values, research and production of a specification.

#### *Part two: Designing a Prototype*

Design ideas, development of design ideas, final design solution, review of development and final design communication. Using computer aided design and manufacture to convey design concepts.

#### *Part three: Making a final prototype*

Design, manufacture and realisation of a final prototype, including tools and equipment to achieve a quality and accurate final product

#### *Part four: Evaluating own design and prototype*

Testing and evaluation of the final prototype

### Previous Knowledge Required

It is advisable that students would have studied Design and Technology at IGCSE level however some previous experience in related activities and topics to the units within the course, along with evidence of academic qualifications to the equivalent level may be adequate for enrolment. Students should be aware that 12% of the written exam questions will include maths.

### Subject Combinations

As well as supporting other science subjects, students wishing to study architecture need to consider art as a good combination with this subject and for engineering most Universities in the UK would also like to see Physics and mathematics at Advanced Level.

In addition to maths and science, the A Level GCE in Design and Technology embeds knowledge, techniques and practices from a wide range of subjects including art and design, computer science and geography.

## Higher Education and Careers

Successful completion of this course could lead to acceptance on university degree courses in areas such as Graphic Design, Product Design, Engineering, Bio-medical design, Architecture, Interior Design, Landscaping and Advertising.

### Drama

Course Code and Syllabus: CAIE 9482

Throughout the course students will study both text and performance and how the two interact with each other to create meaning; the course is designed to develop students' interest and understanding in theatre through practical exploration with a grounding in academic study. Students will learn the power that theatre hold to reflect the society they live in and build social and cultural context. Students will take on the role of creator, performer, designer and spectator - appreciating all parts of the theatrical world.

### Course Aims

The course is designed to expand your academic understanding whilst stretching your practical application.

Students will develop an interest in, and lasting enjoyment of, drama and theatre as a unique means of human communication and expression. They will appreciate the aesthetic power of drama and theatre, and expand their ability to stage imaginative interpretations of existing repertoire and devise creative practical work of their own.

Students will also develop into a confident and independent interpreter of drama and

theatre. They will recognise the importance of ensemble via practical projects that require a variety of technical skills, such as design and or performance skills, movement, voice, improvisation, acting techniques and characterisation (as appropriate to the textual materials being explored). Theatre is an ever evolving collaborative art form which has been, and continues to be moulded by playwrights and theatrical practitioners who challenge accepted conventions and methodologies.

Students gain lifelong transferable skills which enable young people to face the demands of further and higher education, as well as the demands of the workplace. Energy Policy Professional Christopher Lavallee writes a great article on the benefits of hiring someone with a theatre background and the transferable skills that come from studying Theatre.

### Course Content

#### Component 1 Written Exam

(50% AS, 25% A Level)

This is an open book exam which is an externally assessed written examination, lasting 2 hours. Students will practically explore and study the theoretical aspects of pre-chosen texts in depth. They will show their understanding through the completion of a written exam. (60 marks)

#### Component 2 Practical drama

(50% AS, 25% A Level)

This is internally assessed and externally moderated by Cambridge International (60 marks).

#### *Part 1: Devising (30 marks)*

Students will create an original piece of theatre based on a stimulus; this work will be similar to

that which may have been done at the IGCSE level. They will follow this up with an oral self evaluation of their devising process.

- Group devised performance lasting 10 – 15 minutes to a live audience (20 marks)
- Individual spoken self-evaluation for devising lasting 3 minutes (10 marks)

#### *Part 2: Scripted performance*

As a group students will work to perform an extract from a professionally performed play.

- Group scripted performance of extract from a published play, lasting 10 – 25 minutes, to a live audience (30 marks)

#### Component 3 Theatre-making and performing (25% A Level)

This is an internally assessed and externally moderated by Cambridge International (60 marks).

##### *Part 1: Group devised performance (40 marks)*

Students will create an original piece of theatre based off a set list of theatre practitioners, theatre tradition or style. They will follow this up with a short, written analysis and evaluation of their work.

- Group devised performance lasting 15 – 20 minutes to a live audience (if a designer than a written portfolio) (30 marks)
- Written analysis and evaluation (800 words) (10 marks)

##### *Part 2: Individual performance (20 marks)*

Students will create a solo performance that is connected by a theme. They will use already existing texts and find ways to bring them together into an original piece of theatre.

- Individual created performance of thematically linked materials, lasting 6 – 8 minutes to a live audience (20 marks)

#### Component 4 Theatre in context (25% A Level)

This is externally assessed by Cambridge International (60 marks)

##### *Research essay (3000 words)*

Students will complete a research essay on an element of theatre that interests them. This may be based on a practitioner, theatre styles or genres, cultural development or textual exploration. This could be a continuation of their learning for Component 2 or 3 or be research into a new area of theatre.

- Knowledge and understanding of the chosen area of drama and theatre (25 marks)
- Knowledge and understanding of practical aspects of theatre-making and performance (15 marks)
- Analysis and evaluation (20 marks)

#### **Previous Knowledge Required**

Candidates should have a strong command of English; It is important to note that this is an academic discipline and requires a great deal of commitment. Due to the practical component of the course, it is strongly advised that students have had some sort of previous performance experience. Where previous completion of IGCSE Drama (or equivalent) would be an asset to those taking this course it is not required.

#### **Subject Combinations**

Drama combines well with all Arts subjects, but would also work well as a contrast to Science, Math and Humanity subjects.

#### **Higher Education and Careers**

The majority of pupils go on to university courses in a wide range of subjects including Law, History, English, Theatre, Film, Psychology, Music, Politics, Philosophy, and Languages. In addition, pupils who have taken this course

have pursued many different theatrical paths, including university courses in Drama, of which there are now many good ones, Drama School, technical courses and straight into the theatre world.

Furthermore, A Level Drama enables those to progress to employment where people skills are essential, for example: management, retail, nursing, industry and business environments. The skills gained in Drama A Level are relevant to such employment where higher order thinking skills, analysis, critical thinking, problem solving, presenting ordered and coherent arguments, time management, confidence, the ability to work collaboratively and meeting essential deadlines are held in high esteem.

## Music

Course Code and Syllabus: CAIE 9483

Whether you are a committed musician and already considering a career in Music, a performer or an artist and enjoy playing and singing, or an academic with a keen interest in Music then the Music course at A Level has something for you.

### Course Aims

The aims are:

- To foster a discriminating aural appreciation of, and an informed critical response to, music of the Western tradition from at least two representative genres and periods.
- To encourage the development of creative and interpretative skills through the disciplines of composing and performing in Western and/or non-Western traditions.

- To deepen understanding of music in its wider cultural context.
- To communicate understanding, supporting judgments by argument based on evidence.

### Course Content

At POWIIS, we are only offering A Level music. Students are required to complete all components according to the syllabus.

The course covers listening and practical musicianship. For the listening component students will study the score of a variety of works. Examples of previous works studies include: Haydn Symphony no. 55 (The Schoolmaster); Mozart Piano Concerto in G major; Beethoven Symphony no. 5 in C minor and Schubert Piano Quintet in A major (The Trout).

Another part of the syllabus contains options in performing and composition as well as the opportunity to undertake an investigation and write a report about the music that has been performed or composed.

### Assessment and Coursework

- Component 1 Listening (2 hours)
- Component 2 Practical music which includes performing and composition.

Students will choose two from the following three components below:

- Component 3 Extended Performance with a short research report
- Component 4 Extended Composition with a short research report
- Component 5 Investigating Music

*\*Component 1 - 2 are compulsory*

*\*Components 2 - 5 are all coursework based.*

### Previous Knowledge Required

Important Note: A-Level music is not relevant to the syllabus of ABRSM or Trinity Music programme. It requires a higher level understanding in Western Music. A strong fundamental music background is required. Students will be studying performance, composition and musical understanding along the course. Students are required to have ongoing music activities outside school such as participating in orchestra or choir, chamber, and individual instrumental lesson and theory lesson. During the A-Level course, instrumental lessons will not be provided during class time. It is beneficial for students to have at least a grade C in Music at IGCSE or equivalent, and Grade 6 in instrument. A full session of audition and interview will be arranged upon the application if necessary.

### Subject Combinations

Music compliments all other A level subject choices.

### Higher Education and Careers

An A level in this subject is essential for music degree courses. It is also possible to study this subject as part of a joint degree, e.g. Music and French, Music and Drama, etc. The top 10 careers for after music education include Music Producer, Recording Engineer, Session/Full time musician, Artist Manager, Tour Manager, Music Teacher, Booking Agent, Music Publicist, Music Composer, Music Arranger. Other career possibilities include Arts Management, Orchestra Management, Music Therapist, etc.

## Humanities Curriculum Area

### Geography

Course Code and Syllabus: CAIE 9696

From causes of natural disasters such as landslides and hurricanes to the effects of international trade and globalisation, Geography is a challenging subject that explores areas of knowledge that covers the socio-political, economic and environmental dimensions of our planet. Geography occupies a central position in understanding and interpreting social, economic, political and environmental conditions and change, in both space and time. This course encourages students to think about the specific contribution that they can make to understanding contemporary issues and also the complexity of natural systems, their linkages and their impact upon the human race. Students are also shown that it is equally important to understand the impacts of the human race upon the environment and how these impacts can be managed in achieving sustainable development. The study of environments is rooted in an understanding of physical processes, so this course emphasises studying real examples to show the variety and complexity of human and physical environments.

## Course Aims

The aims are to:

- Increase your knowledge of, and ability to use and apply, appropriate skills and techniques relevant to greater understanding and interpretation of facts and relationships in Physical and Human Geography;
- Encourage a concern for accuracy and objectivity in collecting, recording, processing, analysing, interpreting and reporting data in a spatial context;
- Develop your ability to handle and evaluate different types and sources of information;
- Develop your ability to think logically, and to present an ordered and coherent argument in a variety of ways;
- Promote your awareness of the need for understanding, respect and co-operation in conserving the environment and improving the quality of life both at a global scale and within the context of different cultural settings.

## Course Content

### AS level

The AS level covers both Physical and Human Geography. The physical content includes: hydrology and fluvial geomorphology; atmosphere and weather and rocks and weathering. The human core includes: population; migration and settlement dynamics.

### A Level

The A level covers options in Physical and Human Geography including tropical environments, coastal environments, hazardous environments and arid, semi-arid environments, production, location and change, environmental management, global interdependence and economic transition.

### AS Level

- Paper 1 Physical Core Topics (1 hour 30 minutes)
- Paper 2 Human Core Topics (1 hour 30 minutes)

### A Level

- Paper 2 Physical Geography Option Topic (1 hour 30 minutes)
- Paper 3 Human Geography Option Topic (1 hour 30 minutes)

## Previous Knowledge Required

We recommend that students who are beginning this course should have previously achieved a minimum of Grade C/5 in an IGCSE course or Cambridge O Level in Geography, or the equivalent. However, students without such a background who also have a strong science background, will find the course an interesting and rigorous one which will help them build key geographical skills and knowledge, and these in turn will help them better understand the living world. Students should have strong analytical skills and be able to write argumentatively.

## Subject Combinations

Geography combines well with Chemistry, Economics and Business A Level courses. It is a favourable subject for students looking to study Politics, Economics, Environmental Sciences and Law at university.

## Higher Education and Careers

Geography studied with Sciences supports applications for almost any science-based university course like Engineering, Psychology and Environmental Sciences; studied with Humanities it supports university courses such as Business Management, Law, Media and Politics. Geography students have also gone on to courses and employment such

as: Architecture, Graphic Design, Surveying, Medicine, Agriculture, Land Management, Journalism, Accountancy, Retail Management, Recreation and Tourism, Planning, Civil Service, Armed Forces, Teaching, Banking, Law, Accountancy, Hazard Management, Development and Charity work.

## History

Course Code and Syllabus: CAIE 9489

History is not a subject stuck in the past. Far from it, historical events have shaped our world into what it is today. Knowledge and understanding of how people lived in the past help us to understand why people act like they do today. Through studying A Level History you will develop a deeper understanding of social, cultural, religious and ethnic diversity. Further, its depth, variety and challenging nature means that the skills you develop will be of great assistance to you regardless of what you study at university or the career path you choose to follow in life. At POWIS we study a wide range of international history and with option units chosen based on teacher expertise.

### Course Aims

The syllabus aims to develop:

- An interest in the past and an appreciation of human endeavour
- A greater knowledge and understanding of historical periods or themes
- A greater awareness of historical concepts such as cause and effect, similarity and difference, and change and continuity
- An appreciation of the nature and diversity of historical sources available, and the methods used by historians

- An exploration of a variety of approaches to different aspects of history and different interpretations of particular historical issues
- The ability to think independently and make informed judgements on issues
- An empathy with people living in different places and at different times
- A firm foundation for further study of History

### Course Content and Assessment

#### AS Level

- Component 1 Document question
- Component 2 Outline study

#### A Level

- Component 3 Interpretations question (source-based)
- Component 4 Depth study

### Previous Knowledge Required

It is recommended that candidates who are beginning this course should have previously completed a GCSE, IGCSE or O level course in History or the equivalent, although this is not essential. A Level History is particularly suited to students with enquiring minds who enjoy reading extensively and relish the challenge of producing long, clear and logical arguments in the form of essays.

### Subject Combinations

History is taken with a wide variety of other subjects. It combines well with other Arts subjects, Mathematics and Languages. In recent years sixth formers have mixed History with Sciences in order to study a broad range of subjects. It is a favoured subject for those wishing to study Law.

### Higher Education and Careers

History forms a valuable element for Law, Politics, Economics and related subjects at



university. A History degree itself is a marketable commodity; almost all careers outside specialist areas such as Medicine are open to the History graduate. The most popular in recent years include Merchant Banking, Accountancy, Law, Industrial Management, Advertising and Public Relations.

## Psychology

Course Code and Syllabus:  
Edexcel YPSO1

Psychology tries to answer the question, "Why do people behave the way they do?" Students are taught to appreciate that behaviour can have many causes and that no one theory fits all. In appreciating the need to understand differences between individuals, psychology is also concerned with developing rules or generalisations about human behaviour in a scientific way. This course is concerned with how psychological investigations are carried out and how we need to critically evaluate their findings. Along the way, students will become acquainted with some of the most famous psychological studies ever carried out, including Moscovici's study into minority influence and research carried out by Raine into the brain abnormalities of serial killers. There is also the opportunity to plan, carry out, analyse and evaluate their own investigations throughout the course.

### Course Aims

The aims are:

- To provide an introduction to psychological concepts, theories, research findings and applications
- To create an understanding of the range and limitations of psychological theory and practice
- To encourage candidates to explore and understand the relationship between psychological findings and everyday life
- To develop skills of analysis, interpretation, application and evaluation
- To promote an appreciation and understanding of individual, social and cultural diversity
- To develop an understanding of ethical issues in psychology, including the moral and ethical implications of psychological research
- To explore and understand the relationship between psychological findings and social, cultural and contemporary issues

### Course Content

#### AS Level

Students describe, compare and evaluate theories and research from four approaches: Social, Cognitive, Biological, and Behaviourism. Students will also learn the different research methodology used in psychology to investigate human behaviour, whilst also learning to analyse data.

#### A Level

Students study how psychology is applied to everyday life. They learn about the way we develop, criminal psychology and mental illness as well as further developing their research skills.

### Assessment

#### AS Level

- Paper 1 64 marks - 1 hour and 30 minutes
  - Short answer questions, two eight mark questions and one twelve mark essay question

- Paper 2 96 marks - 2 hours - Short answer questions, two eight mark questions and two essay questions worth twelve and sixteen marks

### A Level

- Paper 3 64 marks - 1 hour and 30 minutes - Short answer and essay based questions worth eight marks
- Paper 4 96 marks - 2 hours - Short answer and essay based questions worth sixteen and twenty marks

### **Previous Knowledge Required**

Students need a good level of both English and maths to be successful in Psychology. The A Level is open to both students who have and have not studied GCSE Psychology, although those with the GCSE will find the first year relatively straightforward in terms of content.

### **Subject Combinations**

There are no suggested combinations, nor any subjects that would exclude anyone from choosing Psychology. There is an overlap with Biology, but, for example, History and Geography have relevance to the cultural and social issues discussed.

### **Higher Education and Careers**

Psychology is one of the most popular options at university. Whilst this course is not a prerequisite for applications to read Psychology, it will provide an educated insight into the subject and a thorough grounding in all that a first year undergraduate will face. Psychology degrees lead to careers in a multitude of disciplines, not least those in the health-related or caring professions, as well as Management, Education, Criminology, Media Studies and Advertising. Psychology supports university applications to

sciences (including medicine) and humanities, and psychology graduates are valued by employers as they are scientifically trained, numerate but clearly have an interest in humanity and the forces that shape our behaviour.

## **Economics**

Course Code and Syllabus: CAIE 9708

What factors influence the price of gold? Why does the exchange rate change so frequently? What is inflation? Why does the Government want the economy to grow faster? Why does the Malaysian Government impose high taxes on imported cars? Why do some governments subsidise fuel whilst others tax it very heavily? Why are some economies developing extremely rapidly whilst others linger in poverty? These are the types of questions you will consider in the study of Economics. Economics is the study of how scarce resources are allocated to satisfy human needs and wants and the choices that have to be made by individuals, firms and governments and the consequences of these choices. As far as is possible, the Economics A Level Course is taught using real life examples and where appropriate is related to current economic events.

### **Course Aims**

The aims are:

- To provide a basis of factual knowledge of economics.
- To encourage the student to develop:
  - A facility for self-expression, not only in writing but also in using additional aids such as statistics and diagrammatical analysis where appropriate.

- The habit of using works of reference as sources of data specific to economics.
- The habit of reading critically to gain information about the increasingly dynamic and interdependent economy we live in.
- An appreciation of the methods of study used by economists, and the most effective ways economic data may be analysed, correlated, discussed, presented and evaluated.

### Course Content

Both the AS and A level examination require a knowledge of the following topic areas:

Basic Economic Ideas and Resource Allocation; The Price System and the Microeconomy; Government Microeconomic Intervention; The Macroeconomy; Government Macroeconomic Intervention; International Economic Issues.

### Assessment

#### AS Level

- Paper 1 Multiple Choice (1 hour) - 33% of the AS Level, 17% of the A Level
- Paper 2 Data Response and Essays (2 hours) - 67% of the AS Level, 33% of the A Level

#### A Level

- Paper 3 Multiple Choice ( 1 hour 15 minutes) - 17% of the A Level
- Paper 4 Data response and Essays (2 hours) - 33% of the A Level

### Previous Knowledge Required

No prior knowledge of the subject is required although it is helpful if students have good numeracy skills and an interest in current affairs. Also, a good command of the English language is required in order to cope with the large amount of new vocabulary and the complexity of the language associated with the study of the subject.

### Subject Combinations

Economics has been combined with every other A level. As a Social Science it fits into almost any combination of subjects.

### Higher Education and Careers

Economics A-level is not a requirement for entry to read Economics at university, but about 70% of Economics undergraduates do have A level. Most universities require an A level in Mathematics. Graduates in Economics are employed in almost all walks of life, with Management, Administration and Accountancy the most common professions.

## Business Studies

Course Code and Syllabus: CAIE 9609

Why is a Starbucks latte more expensive in China than New York? Why did Tesco form a joint venture with a Chinese food retailer? How can financial information be used to analyse the performance of a business? What motivates workers? These are the types of questions that would be answered in the study of Business at A Level. A case study approach is used as far as is possible and students will be able to develop problem solving skills by recommending solutions to the various issues affecting businesses and their owners in the rapidly changing world we face today.

### Course Aims

The course aims to enable students to:

- Understand and appreciate the nature and scope of business, and the role of business in society.

- Develop critical understanding of organisations, the markets they serve and the process of adding value. This should involve consideration of the internal workings and management of organisations and, in particular, the process of decision-making in a dynamic external environment. Be aware that business behaviour can be studied from the perspective of a range of stakeholders including customers, managers, creditors, owners/shareholders and employees.
- Be aware of the economic, environmental, ethical, governmental, legal, social and technological issues associated with business activity.
- Develop skills in:
  1. decision-making and problem solving in the light of evaluation;
  2. the quantification and management of information, where appropriate;
  3. effective communication.
- Unit 3 Marketing planning, globalisation and international marketing
- Unit 4 Operations planning, capacity utilisation, lean production & quality management and project management
- Unit 5 Costs, budgets, contents & analysis of published accounts and investment appraisal
- Unit 6 Strategic management, analysis, choice and implementation

### Assessment

#### AS Level

- Paper 1 (1 hour 15 minutes) Short answer and essay - 40% Paper 2 (1 hour 30 minutes) Data response - 60%

#### A Level

- Paper 1 (1 hour 15 minutes) Short answer and essay - 20% Paper 2 (1 hour 30 minutes) Data response - 30%
- Paper 3 (3 hours) Case study - 50%

### Course Content

#### AS Level

- Unit 1 Business Enterprise, structures, size, objectives and stakeholders
- Unit 2 Management and leadership, motivation and human resource management
- Unit 3 Marketing research and marketing mix
- Unit 4 The nature of operations, operations planning and inventory management
- Unit 5 Business finance, sources of finance, costs, accounting fundamentals, forecasting cash flows and managing working capital.

#### A Level

- Unit 1 Business structure, size of business and external influence on business activity
- Unit 2 Human resource management, organisational structure and business communication

### Previous Knowledge Required

No prior knowledge of the subject is required although it is essential that a student has a good command of the English language. There is an amount of new vocabulary and complexity of the language associated with the course.

### Subject Combinations

Business can be combined with any subject, but it is usually advisable not to take both Economics and Business together because some admissions tutors are concerned about subject overlap and loss of breadth.

### Higher Education and Careers

Studying business at A level is not a requirement for Business Studies or Management Science at university, whilst IGCSE mathematics at Grade 6 or even 7 often are required and mathematics A level is often a natural choice.

# Languages and Culture Curriculum Area

## English Literature

Course Code and Syllabus:  
Edexcel X/YET01

An A Level in English Literature is an ideal choice for anyone who loves reading, wants to learn about human nature and enjoys engaging their critical thinking skills and arguing for their point of view or interpretation of something. The course includes a wide variety of literature from the seventeenth to the twenty-first centuries and is split into the study of drama, poetry and prose. Students will find themselves reading a wide variety of texts from Shakespeare to Margaret Atwood and discussing the themes and issues that the texts raise. Students will also gain transferable academic skills in terms of research, citation, structuring an academic argument and writing academic essays. Students are taught to think analytically, to consider different interpretations and to listen and respond to one another sensitively in preparation for the seminar style environment they are likely to find at university. One of the most important skills they learn is how to write coherently and critically. This is an essential skill that will aid them in their other subjects and is invaluable in higher education and the world of employment. Aside from the academic benefits, students will develop their appreciation and enjoyment of literary forms and carry this into their lives beyond the classroom, developing a lifelong love of literature.

### Course Aims

Successful English Literature students develop understanding and enjoyment of literary texts that are a pleasure for life and in addition gain skills for life, including:

- The ability to write clearly and effectively;
- Skills in developing arguments;
- Skills in researching and managing information;
- The ability to analyse complex texts in different forms and styles.

### Course Content

During the two year course students will be developing the ability to:

- Develop an informed personal response to literature in English in a range of texts from different periods and cultures.
- Create an appreciation of a range of forms of literature: poetry, prose and drama.
- Cultivate interdependent skills of reading, analysis and communication.
- Introduce a range of critical perspectives to inform the reading of a text.
- Explore wider reading and an understanding of how it may contribute to personal development.

### Assessment Summary

#### AS Level (XET01)

- Paper 1 (2 hours) Post-2000 Poetry and Prose  
Open book examination  
Section A: Post-2000 Poetry  
Section B: Post-2000 Prose
- Paper 2 (2 Hours) Drama  
Open book examination  
Section A: Pre-1900 Drama  
Section B: Post-1900 Drama

### A Level (YET01)

- Paper 1: (2 Hours) Poetry and Prose  
Open book examination  
Section A: Poetry  
Section B: Prose
- Paper 2: (2 Hours) Shakespeare and Pre-1900 Poetry  
Open book examination  
Section A: Shakespeare  
Section B: Pre-1900 Poetry

### **Previous Knowledge Required**

Students should have had some previous experience of studying literature, preferably at IGCSE or equivalent, although it is acknowledged that this opportunity may not have been available to all students and therefore interested students will be considered on an individual basis. A secure understanding of the English language is required.

### **Subject Combinations**

English combines well with all other subjects offered at POWIIS.

### **Higher Education and Careers**

A wide variety of university courses enables students to take their study of literature further, either on its own or in combination with other subjects such as Art History, American Studies, Film, Theatre Studies and Philosophy. Beyond that, the possibilities are numerous, especially as English is a non-vocational subject, e.g. Journalism, Broadcasting, Business, Advertising, the Arts, Publishing, the Civil Service and Teaching.

## **Languages**

- French or Spanish Common European Reference Framework Languages (CEFR)
- Japanese The Japanese-Language Proficiency Test (JLPT) or Japanese GCSE
- Mandarin Chinese: Chinese Proficiency Test (HSK)

### **Course Aims**

1. To learn or practice a (new) foreign language through 6th form, where language learning is sometimes neglected.
2. To acquire (or maintain) the necessary skills to communicate in the chosen target language.
3. To explore the culture of the country (or countries) where the chosen language is spoken and to create multi-cultural awareness.
4. To achieve an additional qualification (CEFR, JLPT GCSE or HSK certificate) which will be recognised by a university or any future employer.

### **Course Content**

French and Mandarin can be studied either at beginner level or as a continuation from IGCSE. Other languages that are on offer, currently Spanish (A1) and Japanese (N5) are studied mainly at beginner level. All language lessons will be oriented towards foreign language learners. There is now an option to study both Spanish and Japanese to GCSE level. There is a level of flexibility.

Students will acquire the 4 main skills: reading, writing, listening and speaking. At beginner level the main focus will be the ability to communicate in the target language in everyday life situations.

For advanced courses, the topics and language structures will be more complex (e.g. world of work, global issues, youth and culture).

Apart from the language, the students will be introduced into the culture of the country (or countries) where the target language is spoken.

The Japanese-Language Proficiency Test (JLPT) has been offered by the Japan Foundation and Japan Educational Exchanges and Services (formerly Association of International Education, Japan) since 1984 as a reliable means of evaluating and certifying the Japanese proficiency of non-native speakers. At the beginning, there were approximately 7,000 examinees worldwide. In 2011, there were as many as 610,000 examinees around the globe, making JLPT the largest-scale Japanese-language test in the world.

Over time, test applicants have become more diverse, and use of JLPT results has expanded from skill measurement to include employment screening and evaluation for promotions and pay raises as well as use as a form of qualification.

To ensure the continuing relevance and accuracy of the JLPT, the Japan Foundation and Japan Educational Exchanges and Services introduced a revised version of the test in 2010. This new test takes full advantage of the most advanced research in Japanese pedagogy and testing theory, and reflects the vast wealth of data accumulated since the original JLPT was launched over 25 years ago.

### Assessment

The students will enter an examination of one of the respective language institutions at a level that will be agreed upon by the individual

student and the teacher upon exam registration. Students from the same level of course may choose different levels of assessment, according to their individual progress.

Available levels are:

#### For European languages

CEFR: A1 (beginner), A2 (waystage/elementary), B1 (threshold/intermediate), B2 (vantage/upper intermediate)

#### For Mandarin Chinese

HSK Level I, Level II, Level III, Level IV, Level V and Level VI

#### Assessment for Japanese Level N5

- Reading: One is able to read and understand typical expressions and sentences written in hiragana, katakana, and basic kanji.
- Listening: One is able to listen and comprehend conversations about topics regularly encountered in daily life and classroom situations, and is able to pick up necessary information from short conversations spoken slowly.

Respective language institutions are Alliance Française (French), Instituto Cervantes (Spanish) Penang Japanese Language Society and HSK Test center (Mandarin Chinese)

### Previous Knowledge

Any of the offered languages can be studied at beginner level, so no previous knowledge is required. If a continuation at IGCSE level is desired, IGCSE grades A-C would be recommended to enter the advanced courses.

### Subject Combinations

The offered languages are not A Levels and do not take up one of the option choices. They

will complement any of the A Levels. There is no specific combination necessary nor recommended. The choice of more than one language is not advised.

### Japanese GCSE

Why choose Edexcel GCSE Japanese? We believe languages should be accessible for all students. The Pearson Edexcel Level 1/ Level 2 GCSE (9–1) in Japanese has been developed to help students of all abilities progress and develop a passion for the Japanese language, through culturally engaging content.

### Content and assessment in Japanese

The course has content and assessments that provide an engaging real-world focus. The authentic situations and stimuli enable students to see language in context and learn about the culture of Japan. The assessments allow for spontaneity and test grammar as well as providing plenty of opportunities for students to apply their knowledge independently, creatively and in authentic situations. Straightforward assessments that are accessible to all students. Special care has been taken to ensure that all papers are designed to be clear and concise and, where appropriate, questions feature scaffolding to help all students' progress through the assessments confidently. Both papers are also structured so that they are progressive in their level of demand with the most demanding question being the final question in the paper. Translation tasks are progressive in their level of difficulty and are of appropriate demand at each tier.

## Media Studies

Course Code and Syllabus: CAIE 9607

Media surrounds us and it is the main way information is communicated to a mass audience in the modern world. An A Level in Media Studies is an ideal choice for anyone who is interested in the modern media environment and curious about the industry and how it works. We will study the way media texts are constructed, the industry behind these texts and the impact they have on their audiences.

Cambridge International AS and A Level Media Studies offers learners the chance to develop an understanding and appreciation of the place of media in our everyday lives. The syllabus enables learners to take a hands-on approach to the subject. Through the coursework components - the Foundation Portfolio for AS Level and the Advanced Portfolio for A Level - they create their own media products from planning through to execution. Learners also consider and analyse examples from existing media, examining production processes and technologies and the effects they achieve.

### Course Aims

Successful media students develop critical understanding of media texts and an appreciation for the process of creation that allows them to become active participants rather than passive consumers.

Students will gain the following skills:

- The ability to write a clear and effective analysis;



- Skills in developing arguments;
- Skills in planning and creating media texts;
- The ability to analyse and understand the impact of the media texts we consume on a daily basis.

### **Course Content**

Skills and understanding common to all areas of study:

- Media forms and media platforms.
- Case studies.
- The ability to apply practical skills creatively, the ability to analyse their own and published media products critically, research and evaluation skills and information management and project management skills.
- Knowledge and understanding relating to the key concepts of Language, Representation, Industry and Audience.

#### AS Level subject content

Candidates must study:

- Media texts
- Media Language
- Media contexts

Candidates must study at least one media area from:

- Film
- Music
- Print
- Radio and podcasts
- Video games

#### A Level subject content

In addition to the AS content, candidates must study at least two of the following topics:

- Media regulation
- Postmodern media
- Power and the media

Candidates must also study:

- Media ecology (the evolving media environment)

### **Assessment**

#### AS Level

##### *Component 1: Foundation Portfolio:*

Candidates produce a media product that includes digital evidence of the process of their work and a creative critical reflection. Candidates work either individually or as part of a group to complete this coursework.

50% of the AS Level

25% of the A Level A Level

#### AS Level

##### *Component 2: Media texts and contexts*

Examination - 2 hours 50 marks

Section A: Media texts (25 marks)

Candidates answer one question based on an unseen moving image extract.

Section B: Media contexts (25 marks)

Candidates answer one question from a choice of two questions.

50% of the AS Level

25% of the A Level

#### A Level

##### *Component 3: Advanced Portfolio*

Candidates produce a campaign of media products, digital evidence of the process of their work and reflect upon their finished products, in the form of an evaluative essay of around 1000 words. Candidates work either individually or as part of a group to complete this coursework.

Internally assessed and externally moderated, this is worth 25% of the A Level

### *Component 3: Critical Perspectives*

Examination 2 hours 60 marks

Section A: Media debates (30 marks)

Candidates answer two from a choice of three questions.

Section B: Media ecology (30 marks)

Candidates answer one question.

Externally assessed, this is worth 25% of the A Level

### **Previous Knowledge Required**

No previous formal study of the topic is required, but candidates need a genuine interest in the world of the media and media production as well as a strong set of results in subjects that require analytical skills, essay writing and critical thinking, such as English Literature and History at IGCSE. A secure understanding of the English language is required to deal with the academic rigour of the course.

### **Subject Combinations**

Media Studies combines well with all other subjects offered at POWIIS, but combines particularly well with creative subjects such as Art, Design Technology and Drama, but also other analytical essay based subjects such as English Literature, History, Geography, Psychology and Economics.

### **Higher Education and Careers**

A wide variety of university courses enables students to take their study of media further, either on its own or in combination with other subjects such as Art, History, American Studies, Film, Theatre Studies, Literature and Philosophy. Beyond that, the possibilities are numerous, e.g. Journalism, Broadcasting, Business, Advertising, the Arts, Publishing, Marketing, Digital Content Creation and

Management. Creative Media is one of the world's biggest growth industries and "the creative economy contributes just over 6.1% to global gross domestic product (GDP), averaging between 2% and 7% of national GDPs around the world.

(Source: <https://www.thepolicycircle.org/minibrief/the-creative-economy/>)

## Math & IT Curriculum Area

### **Mathematics**

Course Code and Syllabus:  
Edexcel YMA01

Mathematics is a stimulating subject for those who enjoy a structured process of problem solving and a logical way of thinking. It is a common part of degree courses such as Business, Architecture, Chemistry, Biology, Psychology, Management Science and Computing and is essential for courses such as Engineering and Physics. The problem solving skills and statistical techniques are a useful tool to the study of a variety of scientific courses, such as Medicine, Nursing and Geology, but are also useful for Accounting and Finance, Sports Studies, Geography, Design to name but a few. Mathematics A level keeps many doors open and is valuable for almost every future career plan. The study of Mathematics is held in great esteem by employers, as it shows an ability to think logically, and can help to gain that chosen career or elusive university place.

## Course Aims

The aims are to enable candidates to:

- Develop their mathematical knowledge and skills in a way which encourages confidence and provides satisfaction and enjoyment;
- Develop an understanding of mathematical principles and an appreciation of mathematics as a logical and coherent subject;
- Acquire a range of mathematical skills, particularly those which will enable them to use applications of mathematics in the context of everyday situations and of other subjects they may be studying;
- Develop the ability to analyse problems logically, recognise when and how a situation may be represented mathematically, identify and interpret relevant factors and, where necessary, select an appropriate mathematical method to solve the problem
- Use mathematics as a means of communication with emphasis on the use of clear expression;
- Acquire the mathematical background necessary for further study in this or related subjects.

## Course Content

### Pure Mathematics

This includes equations, graphs and transformations, coordinate geometry, logarithms and exponentials, sequences and series, trigonometry, differentiation and integration, and vectors.

### Statistics

Students work with real data sets extending the work they have covered in GCSE maths, such as the calculation of the numerical measures mean, median and mode, and practical applications of correlation and regression. Elementary probability theory is also studied, and the Normal distribution is introduced.

### Mechanics

This introduces mathematical modelling in physical situations, and studies motion in one or two dimensions (including the constant acceleration equations), forces on static objects, Newton's Law of Motion, momentum and projectiles.

### Assessment

- AS Level Pure 1 and Pure 2 (1 hour and 30 minutes each)
- A Level Pure 3 and Pure 4 (1 hour and 30 minutes each)
- Applied modules: Statistics 1 and Mechanics 1 (1 hour 30 minutes each)

### Previous Knowledge Required

It is normally expected that students have achieved Mathematics IGCSE at a minimum of Grade A/7 or equivalent. There is considerable overlap between IGCSE Further Mathematics.

## Further Mathematics

Course Code and Syllabus:  
Edexcel YFM01

Further Mathematics is offered as an A Level for our strongest Mathematicians. Students taking Further Mathematics will complete their A Level in Mathematics by the end of Year 12. They will then study for Further Mathematics in year 13, completing an extra 6 modules that build upon their existing knowledge.

This subject is strongly advised for those wishing to study Mathematics or Physics at university or Engineering at the competitive universities.

### Course Aims

The course aims are the same as those for Mathematics, but at a more rigorous level.

### Course Content

Students will cover the topics in A Level Mathematics to a much more advanced level in all three strands Pure Mathematics, Statistics and Mechanics. They will also study Decision Mathematics.

### Assessment

- Further Pure Mathematics 1, 2, 3
- Decision 1
- Mechanics 2, 3
- Statistics 2, 3

All exams are 1 hour and 30 minutes each and 6 modules are required to gain a Further Maths A level qualification.

### Previous Knowledge Required

It is expected that students have Mathematics IGCSE or equivalent at a minimum of Grade A\*/8. IGCSE Further Mathematics IGCSE, or equivalent, is recommended but not essential.

### Subject Combinations

Mathematics is popular with all combinations of subjects. It combines well with Sciences, where some skill with mathematical methods is important, but equally it can be a good contrasting subject to the Humanities.

### Higher Education and Careers

A Level Mathematics is a useful qualification for anyone intending to study Economics, Engineering, Geography, Science, Architecture, Electronics, Computing, Accounting and all the Sciences, including Medicine and related subjects. For some of these subjects, e.g. Economics, certain Universities insist on

Mathematics A level; even if this is not the case, it is often extremely useful where courses tend to assume a knowledge of A Level Mathematics. For anyone considering reading a Science, Engineering, Economics or Mathematics at Oxbridge, Further Mathematics A level would be a distinct advantage, both as a qualification and as good preparation for the course at university. Mathematics itself, which is offered by the vast majority of universities, is a very highly regarded degree course with an extremely good record of subsequent employment. Mathematics graduates enter a wide variety of careers from investment banking and company management to publishing and diplomacy. Further Mathematics A level is highly desirable for anyone wishing to do a Mathematics degree. Often Mathematics can be combined with another subject, such as Philosophy, Computing, Physics, Music, etc.

## Computer Science

Course Code and Syllabus: CAIE 9618

Computer Science is the study of the foundational principles and practices of computation and computational thinking, and their application in the design and development of computer systems. This syllabus aims to encourage the development of computational thinking skills, by learning how to program. Students will develop an understanding of the main principles of solving problems using computers, and that every computer system is made up of subsystems. Students will also develop a detailed understanding of the component parts of computer systems and how they interrelate, including software,

data, hardware, communications and people. Students will gain an understanding of the different methods of communication and the functionality of networks and the internet, and learn the skills necessary to apply this understanding to develop computer based solutions to problems.

### Course Aims

The course aims to enable students to:

- Develop computational thinking, which is a set of fundamental skills that help produce a solution to a problem. Skills such as abstraction, decomposition and algorithmic thinking are used to study a problem and design a solution that can be implemented.
- Understand programming paradigms, which are a way of thinking about or approaching problems. There are many different programming styles that can be used, which are suited to unique functions, tools and specific situations. An understanding of programming paradigms is essential to ensure they are used appropriately, when designing and building programs.
- Understand the rules and methods of communication, and how devices transfer data.
- Develop a detailed awareness of computer architecture and hardware, including the rules that dictate how components and data are organised, and how data are communicated between components, to allow hardware to function.
- Be able to interpret different representations of data, and understand a range of data structures for data storage.

### Course Content

#### AS Level

1. Information representation
2. Communication

3. Hardware
4. Processor fundamentals
5. System software
6. Security, privacy and data integrity
7. Ethics and ownership
8. Databases
9. Algorithm design and problem-solving
10. Data types and structures
11. Programming
12. Software development

#### A Level

13. Data representation
14. Communication and Internet technologies
15. Hardware and virtual machines
16. System software
17. Security
18. Artificial Intelligence (AI)
19. Computational thinking and problem-solving
20. Further programming

### Assessment

Component Weighting

- Paper 1 Theory Fundamentals (1 hour 30 mins - 50% of AS Level, 25% of A Level)
- Paper 2 Fundamental Problem Solving and Programming Skills (2 hours - 50% of AS Level, 25% of A Level)
- Paper 3 Advanced Theory (1 hour 30 mins - 25% of A Level)
- Paper 4 Practical (2 hours 30 mins - 25% of A Level)

### Previous Knowledge Required

Prior completion of IGCSE Computer Science would be advantageous with a minimum grade of a B or higher. Whilst not essential, a good grasp of IGCSE Maths and Physics would help the aspiring student engage with many of the concepts in this course.

### Subject Combinations

Computer Science combines particularly well with Mathematics and/or Physics, but is a suitable complement to all other subjects offered at POWIIS.

### Higher Education

A Level Computer Science provides a suitable foundation for the study of Computer Science or related courses in higher education. Equally, it is suitable for candidates intending to pursue careers or further study in Computer Science, or as part of a course of general education.

## PE & Sport Curriculum Area

### Physical Education

Course Code and Syllabus: Edexcel 9PE0

### Course Aims

To equip students with both a depth and breadth of knowledge, understanding and skills relating to scientific, socio-cultural and practical aspects of physical education.

### Course Content

- Component 1 Scientific Principles of Physical Education
- Component 2 Physiological and Social Principles of Physical Education
- Component 3 Practical Performance
- Component 4 Performance Analysis and Performance Development Programme

### Assessment

- Component 1 Written Exam 2h 30m 40% of qualification
- Component 2 Written Exam 2h 30% of qualification
- Component 3 15% of qualification performed as a player/performer or as a coach
- Component 4 15 % of qualification In the role of player/performer or coach analyse two components of a physical activity (one physiological component and either a tactical or technical component). In the role of player/performer or coach analyse, implement and evaluate a Performance development programme

### Previous Knowledge Required

It would be helpful to have completed IGCSE PE and are involved in sport on a regular basis

### Subject Combinations

Works well with Biology for a more depth knowledge of the mechanics of the body

### Higher Education and Careers

- Physiotherapy
- Sport Science
- Sport Medicine
- Physical Education Teaching
- Sport Psychology

# Science Curriculum Area

## Biology

Course Code and Syllabus:  
Edexcel X/YBI11

The study of Biology is essentially the study of life and how it is scientifically explained. This means that all courses concentrate on the chemical and biological processes, which explain the formation of every aspect of life from individual cells to complex mammals. Courses also place emphasis on an understanding of how human actions affect other forms of life and the means by which these can be controlled. Students opting for Biology, therefore, need to recognise that they will not study just human biology but that much of their course will be concerned with plants and simple organisms as an understanding of these is essential if one is to understand more complicated life forms.

### Course Aims

This course aims to:

- Enable students to become confident citizens in a technological world, with an informed interest in scientific matters;
- Enable students to be suitably prepared for further studies in biological sciences.
- Develop abilities and skills that are relevant to the study and practice of biological science
- Develop attitudes relevant to biological science.
- Stimulate interest in, and care for, the local and global environment, and help students to understand the need for conservation.

- Make students aware:

1. that scientific theories and methods have developed, and continue to develop, as a result of groups and individuals working together, and that biological science overcomes national boundaries;
2. that the study and practice of biology are affected and limited by social, economic, technological, ethical and cultural factors;
3. that the application of biological science may be both helpful and harmful to the individual, the community and the environment;
4. of the importance of using IT for communication, as an aid to experiments and as a tool for interpreting experimental and theoretical results.
5. stimulate students and give them a lasting interest in biology, so that they find studying biology to be enjoyable and satisfying.

### Course Content

#### AS Level

Molecules, diet, transport, health, cells, development, biodiversity, conservation and practical skills.

#### A Level

Energy, environment, microbiology, immunity, respiration, internal environment, coordination, gene technology and practical skills.

### Assessment

#### AS Level

- Unit 1 (1 hour 30 mins) Molecules, Diet, Transport and Health
- Unit 2 (1 hour 30 mins) Cells, Development, Biodiversity and Conservation
- Unit 3 (1 hour 20 mins) Practical Skills in Biology I

### A Level

- Unit 4 (1 hour 45 mins) Energy, Environment, Microbiology and Immunity
- Unit 5 (1 hour 45 mins) Respiration, Internal Environment, Coordination and Gene Technology Unit 6 (1 hour 20 mins) Practical Skills in Biology II

### **Previous Knowledge Required**

IGCSE Biology, IGCSE Double Award Science Grade B/6 or an equivalent experience of Biology is essential as many aspects of the course build on prior knowledge. Previous study of Chemistry at IGCSE Double Award or equivalent is also recommended.

### **Subject Combinations**

Taking Chemistry with Biology can be a help, particularly in the small unit of biochemistry that is studied, but it is by no means essential; many cope very well at both AS and A2 studying Biology on its own. Biology is often taken as a stand-alone science amongst a selection of Arts subjects as well as in a combination of Sciences. Taking Biology A level without Chemistry usually limits progress beyond school level.

### **Higher Education and Careers**

Biology is an important and sometimes essential A-level for further studies including Medicine, Veterinary Science, Dentistry and all degrees related to Biology. Chemistry is usually prerequisite for Biology degrees.

## **Chemistry**

Course Code and Syllabus:  
Edexcel X/YCH11

Chemistry is the study of materials: how they are made, their properties, their uses and their interaction. Studying Chemistry at A Level provides students with a solid grounding in chemical concepts and numerous opportunities to experience how chemistry is used in modern society. Chemistry is a practical subject which involves higher order thinking skills and problem solving. It involves cooperation and collaboration as well as practical skills and research skills.

### **Course Aims**

This aims of the International Advanced Level in Chemistry enable students to develop:

- An interest in, and enthusiasm, for chemistry including developing an interest in further study and careers in chemistry.
- An appreciation of how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society
- A deeper understanding of the skills, knowledge and understanding of How Science Works
- Essential knowledge and understanding of different areas of the subject and how they relate to each other.

### **Course Content**

- Unit 1 Structure, Bonding and Introduction to Organic Chemistry
- Unit 2 Energetics, Group Chemistry, Halogenoalkanes and Alcohols
- Unit 3 Practical Skills in Chemistry I



- Unit 4 Rates, Equilibria and Further Organic Chemistry
- Unit 5 Transition Metals and Organic Nitrogen Chemistry
- Unit 6 Practical Skills in Chemistry II

### Assessment

- The Pearson Edexcel International Advanced Level in Chemistry comprises six units and contains an International Advanced Subsidiary subset of three IAS units.
- The International Advanced Subsidiary is the first half of the International Advanced Level course and consists of Units 1,2 and 3. It may be awarded as a discrete qualification or contribute 50 per cent of the total International Advanced Level marks.

### AS Level

- Unit 1 Structured Questions (1 hour 30 mins, 20% of A Level)
- Unit 2 Structured Questions (1 hour 30 mins, 20% of A Level)
- Unit 3 Questions on Experimental Skills (1 hour 20 mins, 10% of A Level)

### A Level

- Unit 4 Structured Questions (1 hour 45 mins, 20% of A Level)
- Unit 5 Structured Questions (1 hour 45 mins, 20% of A Level)
- Unit 6 Questions on Experimental Skills (1 hour 20 mins, 10% of A Level)

### Previous Knowledge Required

IGCSE Chemistry (or Science Double award) grade B/6 or above is essential as many aspects of the course build on prior knowledge.

### Subject Combinations

As well as supporting other science subjects, Chemistry can be a useful asset for someone taking essentially Arts-based subjects. Students wishing to study architecture need to study science, mathematics and art for most Universities in the UK.

### Higher Education and Careers

Chemistry is a very useful A level for any proposed science degree and also for most Arts-based degrees. A Chemistry degree can lead to a career in Science as well as many other fields such as Law, Finance or Management. Chemistry is a subject which is required for entry into many professions such as medicine, dentistry, pharmacy and chemical engineering. It also is required to support many fields such as biochemistry and environmental science.

## Physics

Course Code and Syllabus:  
Edexcel X/YPH1

From the very smallest to the very largest, from atoms and quarks to the Universe and black holes, Physics strives to come up with the answers to explain it all. Physicists study materials and try to predict and control their properties. They use this to help design, engineer and build a better world.

### Course Aims

The aims of the International advanced level A-level physics course is to enable students to develop:

- Essential knowledge and understanding of different areas of the subject and how they relate to each other

- A deep appreciation of the skills, knowledge and understanding of scientific methods
- Competence and confidence in a variety of practical, mathematical and problem-solving skills
- Their interest in and enthusiasm for the subject, including developing an interest in further study and careers associated with the subject.

### **Course Content**

#### AS Level

- Unit 1: Mechanics and Materials
- Unit 2: Waves and Electricity
- Unit 3: Practical Skills in Physics I

#### A Level

- Unit 4: Further Mechanics, Fields and Particles
- Unit 5: Thermodynamics, Radiation, Oscillations and Cosmology
- Unit 6: Practical skills in physics II

### **Assessment**

#### AS Level

- Unit 1: A written assessment of 1 hour and 30 minutes with a total of 80 marks available. The paper may include multiple-choice, short-open, open-response, calculations and extended-writing questions. This unit is worth 20% of the total IAL or 40% of the total IAS.
- Unit 2: A written assessment of 1 hour and 30 minutes with a total of 80 marks available. The paper may include multiple-choice, short-open, open-response, calculations and extended-writing questions. This unit is worth 20% of the total IAL or 40% of the total IAS.
- Unit 3: A written assessment of 1 hour and 20 minutes with a total of 50 marks available. This

unit will assess candidates' knowledge and understanding of experimental procedures and techniques that were developed in Units 1 and 2. The paper may include short-open, open-response, calculations and extended-writing questions. It is worth 10% of the total IAL or 20% of the total IAS.

#### A Level

- Unit 4: A written assessment of 1 hour and 45 minutes with a total of 90 marks. The paper may include multiple-choice, short-open, open-response, calculations and extended-writing questions. It is worth 20% of the total IAL.
- Unit 5: A written assessment of 1 hour and 45 minutes with a total of 90 marks. The paper may include multiple-choice, short-open, open-response, calculations and extended-writing questions. It is worth 20% of the total IAL.
- Unit 6: A written assessment of 1 hour and 20 minutes with a total of 90 marks. This unit will assess candidates' knowledge and understanding of the experimental procedures and techniques that were developed in Units 4 and 5. The paper may include short-open, open-response, calculations and extended-writing questions. It is worth 10% of the total IAL.

### **Previous Knowledge Required**

It is recommended that students have achieved a grade 6 or higher in IGCSE physics or IGCSE double award science as many aspects of the course build on prior knowledge. An aptitude for Maths is also important. There is a large jump in difficulty level from IGCSE to International A-level.

## Subject Combinations

These can be as varied as you like. Students often take A Level Mathematics and Chemistry with Physics, but it is certainly no longer a disadvantage if they do not.

## Higher Education and Careers

A Level Physics is a very well respected course and most Degree courses will accept students with this qualification. A Level Physics is essential for Engineering and is also very useful for Medicine or Veterinary Science. Mathematics is a requirement to study Physics at university.

## Marine Science

Course code and syllabus: CAIE 9693

### Aims

The aims of this course are to enable students to develop:

- Acquire knowledge and understanding and develop practical skills, including efficient, accurate and safe scientific practices.
- Learn to apply the scientific method, while developing an awareness of the limitations of scientific theories and models.
- Develop skills in data analysis, evaluation and drawing conclusions, cultivating attitudes relevant to science such as objectivity, honesty, enquiry and inventiveness.
- Develop effective scientific communication skills, using appropriate terminology and scientific conventions.
- Understand their responsibility to others / society and to care for the environment.
- Enjoy science and develop an informed interest in the subject that may lead to further study.

## Content Overview

The following topics are studied in International AS level:

1. Water
2. Earth processes
3. Interactions in marine ecosystems
4. Classification and biodiversity
5. Examples of marine ecosystems

The following topics are studied in International A level:

6. Physiology of marine organisms
7. Energy
8. Fisheries for the future
9. Human impacts on marine ecosystems

AS Level candidates and A level candidates also study practical skills.

## Assessment Overview

### Paper 1

AS Level Theory 1 hour 45 minutes (75 marks)

- Structured and free-response questions  
Section A: Structured questions (45 marks)  
Section B: Free-response questions (30 marks).
- Questions are based on the AS Level syllabus content.
- Externally assessed 50% of the AS Level 25% of the A Level.

### Paper 2

AS Level Data-handling and investigative skills  
1 hour 45 minutes (75 marks)

- Structured questions
- Questions are based on the AS Level syllabus content.
- Externally assessed 50% of the AS Level 25% of the A Level.

### Paper 3

A Level Theory 1 hour 45 minutes (75 marks)

- Structured and free-response questions  
Section A: Structured questions (45 marks)  
Section B: Free-response questions (30 marks)
- Questions are based on the A Level syllabus content but knowledge of the AS Level syllabus content may be required.
- Externally assessed 25% of the A Level.

### Paper 4

A Level Data-handling and investigative skills

1 hour 45 minutes 75 marks

- Structured and extended response questions
- Questions are based on the A Level syllabus content but knowledge of the AS Level syllabus content may be required.
- Externally assessed 25% of the A Level.

### **Previous study**

It is recommended that learners starting this course should have completed IGCSE in Biology or Marine Science or the equivalent.

### **Future studies**

Cambridge International AS and A Level Marine Science can form part of an ideal subject combination for learners who want to study Marine Biology or Environmental Science at university or to follow a career in shipping, fisheries, tourism or aquaculture.

## Extend Project Qualification (EPQ)

Course Code and Syllabus:  
Edexcel S00/2372/X

### **Edexcel Level 3 Project Qualification**

The independent project will develop and extend from one or more of a student's study areas and/or from an area of personal interest or activity outside their main programme of study. It will be based on a topic chosen by the student and agreed as appropriate by the school.

### **Course Aims**

The Level 3 Extended Project will enable learners to:

- Have significant input to the choice and design of their project.
- Take responsibility for an individual task or a defined task within a group project.
- Develop and improve their own learning and performance as critical, reflective and independent learners.
- Develop and apply decision making and, where appropriate, problem-solving skills
- Extend their planning, research, critical thinking, analysis, synthesis, evaluation and presentation skills.
- Where appropriate, develop as e-confident learners and apply relevant technologies in their studies.
- Develop and apply skills, creatively demonstrating initiative and enterprise.
- Transfer skills developed as part of their project to other areas of study.
- Use their learning experiences to support their personal aspirations for further education and/or career development.

## Course Content

The Extended Project must:

- Be of sufficient breadth and depth to enable learners to address the broad aims listed above.
- Develop and extend from one or more of the learner's study areas and/or an area of personal interest or activity outside their main programme of study.
- Be based on a topic chosen by the learner and agreed as appropriate by the centre.
- Be based on a topic that has the potential to provide the learner with opportunities to meet all of the assessment objectives.
- Require 120 guided learning hours.

During the course of completing their Extended Project, learners must demonstrate their knowledge and understanding of:

- The key concepts and principles underlying their studies or areas of interest.
- Connections, links and complexities, where appropriate, between different areas of study and/or different areas of interest.

During the course of completing their project, learners must also be provided with opportunities to apply and develop Personal, Learning and Thinking Skills (PLTS), functional skills, key skills and any further specialist technical skills that are relevant to the chosen topic.

## Structure of the Qualification

At POWIS we offer one of two units within the qualification:

- Unit 1: Dissertation – A theoretical written project on any topic presenting an argument, approximately 5,000-6000 words in length. For example, research into

a biological, historical or environmental issue. The emphasis will be on analysing secondary data.

- Unit 2: Investigation/Field Study – A practical investigatory project involving the collection of data, approximately 4,000-5,000 words in length. For example a scientific investigation, a geographical study of erosion, a biological study of pollution, a statistical survey. The emphasis will be on analysing primary data (either quantitative or qualitative).

## Assessment

There are four assessment objectives for the Pearson Edexcel Level 3 Extended Project. These detail the knowledge, skills and understanding that the learner is required to demonstrate in each unit. They are as detailed below, along with the approximate weighting that they are given in each unit.

### A01 (17%) - Manage

Identify, design, plan and carry out a project applying a range of skills, strategies and methods to achieve objectives.

### A02 (22%) - Use resources

Research, critically select, organise and use information, and select and use a range of resources. Analyse data, apply relevantly and demonstrate understanding of any links, connections and complexities of the topic.

### A03 (44%) - Develop and Realise

Select and use a range of skills, including where appropriate, new technologies and problem solving, to take decisions critically and achieve planned outcomes.

#### A04 (17%) - Review

Evaluate all aspects of the extended project, including outcomes in relation to stated objectives and own learning and performance. Select and use a range of communications skills and media to present evidenced project outcomes and conclusions in an appropriate format.

#### **Evidence for Assessment (Portfolio)**

Learners may produce any type of evidence appropriate to the topic and in any appropriate format, such as written text, notes, journals, slides, audio or video files of performances and activities, photographs or artefacts. The evidence requirements are included within the relevant unit content. This is what must be submitted for assessment:

- The project proposal form (learning outcome 1).
- The activity log (learning outcome 1).
- Records of the research carried out (learning outcome 2).
- The project outcome for Unit 1: Dissertation or Unit 2: Investigation/Field Study (learning outcome 3).
- The evaluation (learning outcome 4).
- Evidence of the presentation (learning outcome 4).

It may be convenient to include much or all of this within a single portfolio divided into sections. Depending on the type of project, a single piece of work may include evidence for more than one learning outcome. For example, a written report may integrate the records of research carried out and the project review within the completed project outcome.

#### **Previous Knowledge**

No previous knowledge is required but students should have an excellent command of both written and spoken English and be well motivated in order to undertake an independent project.

#### **Subject Combinations**

The Level 3 Extended Project will enhance any subject combination emphasising humanities. This includes Business Studies, Economics, Geography, History, Psychology, or any humanity/social science related discipline.

#### **Higher Education & Careers**

The Level 3 Extended Project offers a great deal to learners' academic and career skills. The qualification offers a kinaesthetic "hands-on" learning experience to students as an alternative to typical exam assessments. Those who learn best by doing will learn important skills that careers in researching information, gathering data, analysing and interpreting data, and making conclusions will value.

Regarding higher education, the Level 3 Extended Project is an opportunity to get a head start on the writing, research and style skills that will be necessary at university. This early experience at conducting research will give students an advantage on research and writing projects at higher learning levels in the future.





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We strive to provide a safe environment for all; our commitment to safeguarding is paramount.