



CHENGELO SCHOOL

# SIXTH FORM COURSE GUIDE

---



2023 - 2024

# INTRODUCTION

## Welcome to Chengelo School Sixth Form!

Thank you for your interest in Chengelo Sixth Form. Our students get into Sixth Form full of excitement at having a curriculum which is entirely full of the subjects they are passionate about, the subjects which will very likely decide their path post-18. This undertaking is fully supported by skilled and excellent staff who are well experienced to nurture and prepare the students adequately in-class, in extracurricular activities and other enrichment undertakings.

In Psalm 139: 14, the psalmist declares: "I praise You because I am fearfully and wonderfully made." During their time in the Sixth Form, our aim for all our students is that they come to an increasing knowledge and understanding of who they are, and who God has made them to be. Sixth Form is a time for students to develop in maturity, in responsibility and independence, ensuring that they are fully prepared to face the years ahead at university and beyond with determination, confidence and faith.

Academically, Chengelo Sixth Form students achieve strong examination results, giving them access to reputable and distinguished universities around the world. Popular destinations include Canada, Australia, South Africa, the UK and the USA. Some of our Upper Sixth graduates have gone on to join Russell Group universities in the UK, not only gaining places, but also scholarships to study the subject of their choice at degree level. The fast growing community of old *Chengelians* (past Chengelo students) is also an important part of the motivation and drive that our current students get as they pursue their studies and weigh-in on their future successes.

Such successes are not only due to academic results and motivation from old Chengelians, although these are also very important, but also due to the character development that time in the Sixth Form facilitates. From cooking for friends in the Sixth Form Centre to leading school assemblies; from completing the gruelling Duke of Edinburgh Gold Award to taking a star role in the school play; from scoring the winning goal in football to presenting a professional face in mock interviews, our Sixth Form students are given a chance to identify, explore and develop their passions over the course of their time here, and thrive as a result.

For those students who are transferring from Form 5 at Chengelo, there is a definite shift at this level to a more adult learning experience. Students have their own laptop, and access to mobile phones; they take responsibility for their own learning and behaviour, as well as being given greater whole-school leadership opportunities. This time, therefore, acts as a successful bridge between the Chengelo life they have known so far and the absolute freedom of university life, preparing students for a safe transition, equipped with the skills they need to face the pressures of the adult world.

I hope you enjoy reading more about the Chengelo Sixth Form experience and look forward to welcoming your child in the near future.

**Mr. Chriss Banda**  
Head, Secondary

# CONTENTS

## WHO ARE WE?

- Christian Ethos & Core Values
- Personal Growth through Outdoor Education
- Leadership Development
- Careers

## ACADEMICS

## SUBJECT CHOICES

- Biology A Level
- Business A Level
- Chemistry A Level
- Computer Science A Level
- Design & Technology A Level
- English Literature A Level
- Geography A Level
- History A Level
- Mathematics A Level
- Music A Level
- Physical Education A Level
- Physics A Level
- Psychology A Level
- Independent Project Qualification



CHENGELLO SCHOOL

# WHO ARE WE?

## Christian Ethos and Core Values

Chengelo has a clear commitment to educate and train young people to be witnesses to the light of Jesus Christ in Zambia and beyond. The school ethos is reflected in everything we do and promoted through our core values: integrity, faith, responsibility, servant-heartedness, creativity and perseverance. We expect all Sixth Formers be role-models, demonstrating these core values to the rest of the secondary school.

Our PSME programme provides ample opportunity for students to engage with a wide range of challenging global issues in the light of these core values, helping them to reflect upon the ideas raised and refine their understanding of themselves as they relate to the world around them. Every week, Sixth Form students attend assemblies which complement PSME, where they hear encouraging and engaging messages from staff members on a variety of relevant themes and topics.

## Personal Growth through Outdoor Education

Part of our broad curriculum involves providing opportunities for students to experience being out of their comfort zone. Our very own outdoor adventure and education centre, Ndubaluba, runs two expeditions specifically designed for Sixth Form students to stretch their teamwork skills and perseverance. Many of our students enrol in the prestigious Duke of Edinburgh award, with the possibility of achieving the gold award, taking part in a number of exciting activities from expeditions - where they plan, train for and complete an adventurous journey - to volunteering, undertaking service to an individual or community.



## CHENGELO SCHOOL

### Leadership Development

At the core of Chengelo's vision is the call to identify and raise up leaders, equipping them with skills and experiences so they can transform the communities that are around them. There is no shortage of leadership opportunities.

One of the most high-profile opportunities available to students in the Sixth Form, is to be selected as a Prefect, or even Head Boy/Girl. The prefect team play a critical role in the smooth running of the school, setting an outstanding example for the younger students to follow. In addition to their weekly duties, each year, the prefect team devise their own project to serve the local community. Recent projects have involved raising money and designing signage for a local hospital and decorating a nearby school.

Other leadership opportunities and responsibilities available to Sixth Form students include being involved in the planning of extra-curricular activities for the wider school, mentoring younger students or becoming a Sixth Form Centre monitor.

### Careers

We know that students feel overwhelmed when considering their future. Whether they want to continue into higher education, explore career opportunities, or even take a gap-year to volunteer, travel or carry out charitable work, our Sixth Form and Careers team work alongside each student to ensure they are informed, advised and guided.

When circumstances allow, the Sixth Form undertake an annual trip to South Africa to visit a variety of companies from Coca-Cola to BMW as well as different universities, such as UCT and Stellenbosch. We also continue to build important links with external organisations and company representatives who visit our students to share their experience in industries such as medicine, engineering, agriculture and architecture, to name a few.

Every Sixth Form student has a BridgeU account, and this, alongside seminars and workshops organised by the school with different partners, ensure that each student is able to explore the courses and careers of their choice, with expert guidance every step of the way.





CHENGELLO SCHOOL

# ACADEMICS

At Chengelo, we follow the Cambridge Assessment International Education (CAIE) examination board for all our AS and A-Level qualifications. CAIE have achieved an outstanding global reputation for rigour, application and preparation for further study and are increasingly fostering sound links with universities across the world, more information on which can be found at this link: [Recognition in specific countries \(cambridgeinternational.org\)](https://www.cambridgeinternational.org)

## Entrance Requirements

A Levels are globally known as the 'gold standard' of secondary education, so to enter Sixth Form, students must have achieved or expect to achieve at least 5 IGCSEs at grade C or above, including English and mathematics. Individual subject entry is usually dependent on at least a B grade in that subject at IGCSE, while entry to A Level mathematics in most cases requires at least an A grade at IGCSE.

Upon application to the Sixth Form, all students will sit a CAT test, which will generate indicator grades for them, based on international benchmarks. Students make excellent progress while in Sixth Form and consistently achieve examination results which are above their expected CAT indicator grade.

Students wishing to join the Sixth Form after their ECZ exams will need to have equivalent results, e.g. a minimum of 5 subjects at grade 3 or above (including mathematics and English), with at least a grade 2 in their chosen A Level subjects.

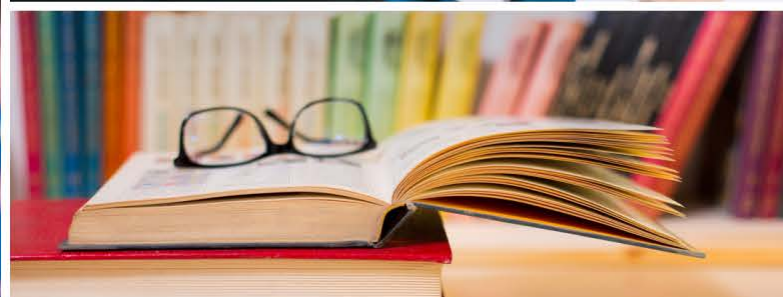


# CHOOSING A COURSE

## Six Tips for Choosing Subjects:

- Choose subjects that you are genuinely interested in, not just what your friends are doing
- Know where your skills lie - consider your academic performance in that subject to date.
- Seek guidance from the relevant subject teachers.
- If you have a career in mind, choose your subjects accordingly, but make sure that you have taken into account what you enjoy and are good at. For example, if you want to be an engineer, then mathematics and physics will be important choices. If you don't enjoy these subjects, or you find them very challenging, then you may find that your interest in engineering will soon wear thin...
- If you have not studied a subject before, make sure you do plenty of research. Ask other students who are studying the course what it entails.
- Check university entrance requirements to ensure your subject choices will allow you access to your preferred university course options. *This is particularly true of entrance to South African universities.*

For those students considering higher education at a university in the UK, the following website is very useful to consider where A Level subject choices can take you: <https://www.informedchoices.ac.uk>





# BIOLOGY

## (9700)

### Why study biology?

Biology is the natural science concerned with the study of life and living organisms, including their structure, function, growth, origin, evolution, distribution, and taxonomy.

Biology is a fascinating subject in its own right, but it also deals with topics of pressing human concern such as disease and health, biodiversity and conservation, food production and processing, and cloning and genetic engineering. It is essential to an intelligent understanding of many of the current problems facing humans in the 21st Century. Studying biology will help build important skills such as problem solving, numeracy, attention to detail and analytical skills.

### What to expect

Many of the topics covered at A Level will be familiar from IGCSE, for example, cells, biological molecules, and disease. However, study at A Level will broaden and deepen the knowledge and application of these fascinating concepts.

New topics will also stretch students' problem-solving and conceptualisation skills to provide an exciting challenge. The course contains both theoretical and practical elements, both of which are examined and form a core part of the course.

### Assessment

In Lower Sixth, students follow the Advanced Subsidiary (AS) certification, taking Paper 1 (multiple choice), 2 (structured questions) and 3 (either Advanced Practical Skills 1 or Advanced Practical Skills 2) in a single examination series.

In Upper Sixth, having received their AS certification, students who wish to continue their studies to the full Advanced Level qualification may carry their AS marks forward and take Paper 4 (structured questions) and 5 (planning, analysis and evaluation) in the examination series in which they require certification.

### Where could it lead?

Studying Biology at A Level provides an excellent foundation for further study at degree level and opens up access to a vast number of different career options including medicine, physiotherapy, dietetics, marine biology, veterinary science, sports science, dentistry and biomedicine...

### Possible subject combinations

Students taking biology often combine it with other science subjects, especially chemistry, although it is not uncommon to pair biology with geography or BTEC in agriculture. Biology would also pair well with physical education.





# BUSINESS (9609)

## Why study business?

The first benefit of studying business studies is the practical and technical skills developed, both professionally and personally.

During the study of business, learners will develop a broad knowledge of business operations as well as gaining targeted skills in specific fields, such as customers, markets, finance, operations, strategy, business policy and communication.

## What to expect

Business at A level builds on the skills developed at IGCSE level, developing abilities and confidence with more detailed text and content enabling learners to further develop analytical and evaluative skills which are essential for decision making.

## Assessment

In Lower Sixth, students follow the Advanced Subsidiary (AS) course, taking Papers 1 (short answer and essay) and 2 (data response) in a single examination series.

In Upper Sixth, those students who choose to advance further to studying the full Advanced Level may carry their AS marks forward and take Paper 3 (Business Decision Making) and 4 (Business Strategy) in a single examination series.

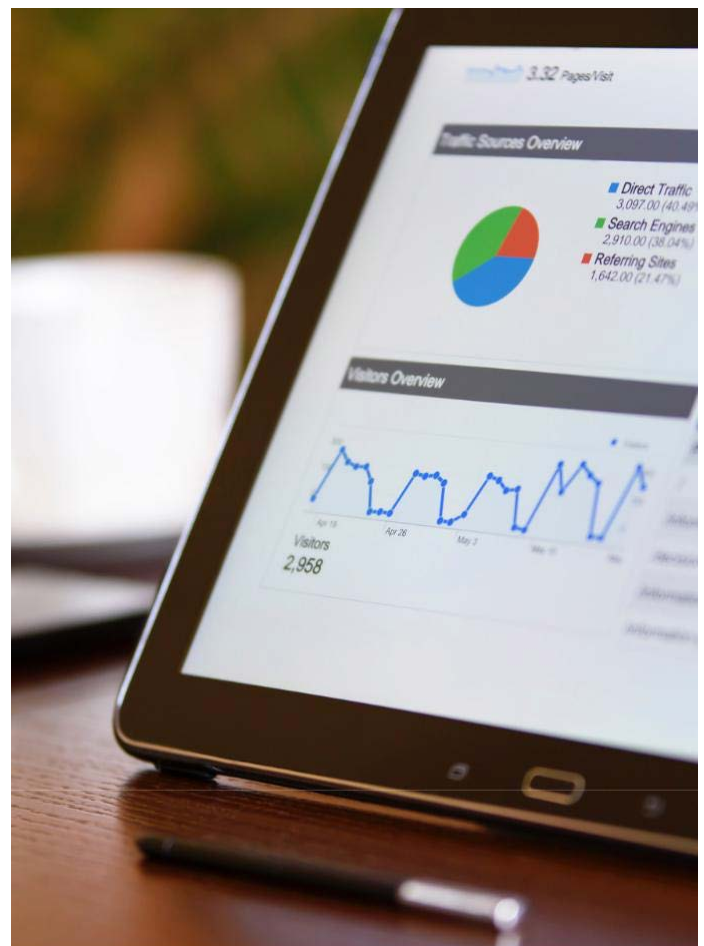
## Where could it lead?

Business studies is a wide field that incorporates many types of management positions. From major corporations to independent businesses, every operation needs skilled business administrators in order to succeed. Motivated, organised personalities will thrive in business.

Careers in business include accountancy, human resource, public relation management, advertising, banking, investment and financial services.

## Possible subject combinations

Business can combine well with subjects such as ICT, mathematics, English and psychology.



# CHEMISTRY

## (9701)

### Possible subject combinations

Students taking chemistry often combine with other science subjects, especially biology, but it is not uncommon to pair chemistry with geography or BTEC in agriculture.

### Why study chemistry?

Chemistry helps us to understand the world in which we live and underpins a wide range of science-based degree courses and careers.

Success with A level chemistry will prepare you for a future in chemistry, pharmacy, pharmacology, chemical engineering, biochemistry, biomedical sciences, medicine and dentistry.

This course is designed to be stimulating, enjoyable and challenging. We want students to develop a passion for the subject and understand its practical relevance.

### What to expect

In the first year we'll develop students' IGCSE understanding and provide a clear foundational introduction to this higher-level study. Students will learn about physical, inorganic and organic chemistry.

Learners will also undertake a series of practicals to develop their skills in this field. Exam papers will include questions on the theory of practical work and interpretation of both quantitative and qualitative results.

In the second year of the A level course students will take the foundational topics and study them in further depth. These will include chemical energetics, electrochemistry, reaction kinetics and organic chemistry. Students will also have the opportunity to further develop practical skills and learn how to problem-solve and interpret data.

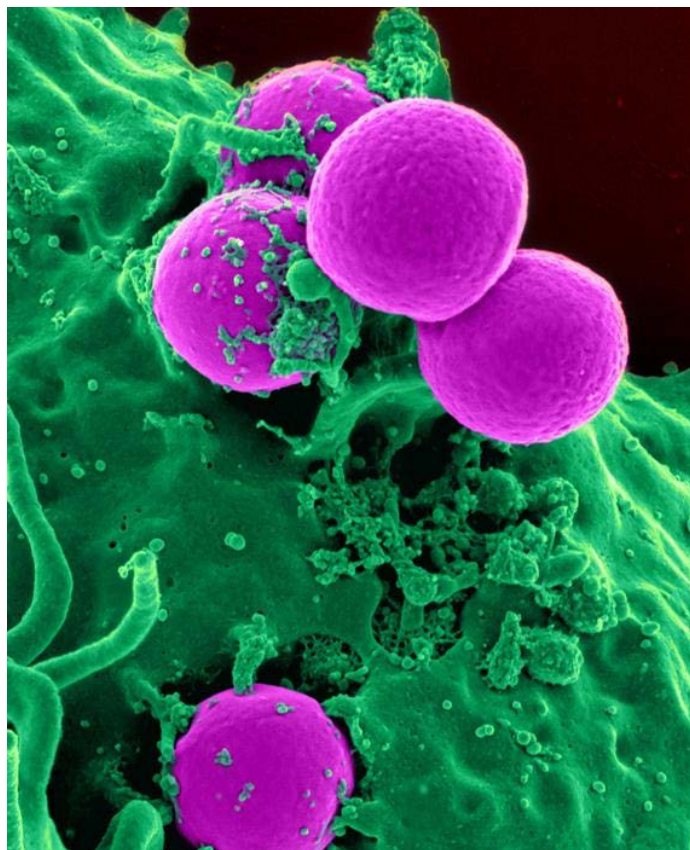
### Assessment

In Lower Sixth, students follow the Advanced Subsidiary (AS) certification, taking Paper 1 (multiple choice), 2 (structured questions) and 3 (either Advanced Practical Skills 1 or Advanced Practical Skills 2) in a single examination series.

In Upper Sixth, those students who have received AS certification and wish to continue their studies to the full Advanced Level qualification may carry their AS marks forward and take Papers 4 (structured questions) and 5 (planning, analysis and evaluation) in the examination series in which they require certification.

### Where could it lead?

Studying chemistry at AS and A Level provides an excellent foundation for further study at degree level and opens up access to a vast number of different career options including medicine, pharmacy, chemical engineering and veterinary science...





# COMPUTER SCIENCE (9618)

## Why study computer science?

The most important aspect of computer science is problem solving, an essential skill for life. Students study the design, development and analysis of software and hardware used to solve problems in a variety of business, scientific and social contexts. Because computers solve problems to serve people, there is a significant human side to computer science as well.

Computing and computer technology are part of just about everything that touches our lives from the cars we drive, to the movies we watch, to the ways businesses and governments deal with us. Understanding different dimensions of computing is part of the necessary skill set for an educated person in the 21st century. Whether you want to be a scientist, develop the latest killer application, or just know what it really means when someone says 'the computer made a mistake', studying computing will provide you with valuable knowledge.

## What to expect

Cambridge International AS Level and A Level Computer Science syllabus is designed to give greater flexibility to learners. It is envisaged that learners will use the skills and knowledge of computer science acquired through this course in one of three ways:

- to provide a general understanding and perspective of the development of computer technology and systems, which will inform their decisions and support their participation in an increasingly technologically dependent society.
- to provide the necessary skills and knowledge to seek employment in areas that use computer science.
- to develop their knowledge and understanding of computer science through entry to higher education, where this qualification will provide a useful foundation for further study of computer science or more specialist aspects of computer science.

## Assessment

For Cambridge International AS and A Level computer science, students may choose:

- to take Papers 1, 2, 3 and 4 in the same examination series, leading to the full Cambridge International A Level.
- to follow a staged assessment route by taking Papers 1 and 2 (for the AS Level qualification) in one series, then Papers 3 (Advanced Theory) and 4 (Practical) (for the full Cambridge International A Level) in a later series.
- to take Papers 1 and 2 only (for the AS Level qualification).

## Where could it lead?

Cambridge International AS Level computer science constitutes the first half of the Cambridge International A Level course in computer science and provides a suitable foundation for the study of computer science at Cambridge International A Level and then for related courses in higher education. It is also suitable for candidates intending to pursue careers or further study in computer science or ICT, or as part of a course in general education.

## Possible subject combinations

Entry requirements for computer science degrees usually emphasize A Level mathematics, with some institutions asking for a background in physics.

A background in psychology or sociology can provide an added dimension to your studies, as you would have gained an understanding of how humans process information, while other natural sciences may also be helpful.





# DESIGN & TECHNOLOGY (9705)

## Why study design and technology?

Design skills and the ability to visualise new ideas can be useful in many careers such as marketing, sales and advertising, construction, as well as engineering and manufacturing.

This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers, especially those in the creative industries. They will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning in to practice by producing products of their choice.

Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education institutions and employers.

## What to expect

The course will encourage students to:

- develop and sustain their own innovation, creativity and design and technology capability, to recognise constraints and to produce high quality products. develop a critical
- understanding of the influences of the processes and products of design and technological activity from a historical perspective and in current practice.
- apply essential knowledge, understanding and skills of design production processes to a range of technological activities and develop an understanding of industrial practices.
- use ICT to enhance their design and technological capability.
- develop an understanding of health and safety, to develop moral, spiritual, ethical, social and cultural awareness inherent in design and technological activity and to develop critical evaluation skills in technical, aesthetic, economic, environmental, social, and cultural contexts.
- develop as discerning consumers able to make informed choices.
- develop positive attitudes of co-operation and citizenship and work collaboratively.

## Assessment

- AS Level candidates take only Components 1 and 2. Candidates
- who want to take the Cambridge International A Level qualification in two stages take the Cambridge International AS Level first. If they pass Cambridge International AS Level, they then only need to take Components 3 and 4 in order to complete the Cambridge International A Level.
- Examinations are only available in the November series.

## Where could it lead?

The A2 level product design course enables pupils who wish to go in to the design profession to develop a portfolio of work that is essential when applying for design based university courses or apprenticeships.

Pupils studying AS and A Level design and technology go on to study industrial design, graphic design, engineering, civil engineering, architecture and interior design.

## Possible subject combinations

Students taking AS and A Level design and technology often choose to combine it with mathematics and physics.



# ENGLISH LITERATURE 9695

## Why study English literature?

"That is part of the beauty of all literature. You discover that your longings are universal longings, that you're not lonely and isolated from anyone. You belong." **F. Scott Fitzgerald**

Of all the subjects that you could study at A Level, English literature is the most universal. It is a window to a wider world; in which other subject can you travel from seventeenth century England via 20th century Ireland to modern-day Nigeria? If you enjoy discussing controversial topics, and exploring the world view of writers from 1600 to the present, then English literature is for you.

Through the medium of drama, poetry and prose, we explore the writers' ideas and discuss their messages, developing our own personal response. However, the study of literature is more than just discussion: you will also learn how to present your ideas through a confident, succinct and persuasive essay style, a skill which is useful for any future career, from research scientist to lawyer, from teacher to doctor.

## What to expect

English Literature at A Level builds on the skills developed at IGCSE Level, developing your confidence with a wide range of texts, and enabling you to develop your analysis of language, structure and tone. You can expect to increase your understanding of how language works, as well as develop your personal response to the texts read, through a variety of creative responses.

## Assessment

Students may choose...

- to take Paper 1 (Drama and Poetry) and 2 (Prose and Unseen) only (for the AS Level qualification).
- to take Papers 1, 2, 3 and 4 in the same examination series, leading to the full Cambridge International A Level.
- to follow a staged assessment route by taking Papers 1 and 2 (for the AS Level qualification) in one series, then Paper 3 (Shakespeare and Drama) and 4 (Pre- and Post-1900 Poetry and Prose) (for the full A Level) in a later series.

## Where could it lead?

Students of A Level English literature have a world of opportunity ahead. Typical destinations include the legal profession, journalism, marketing, advertising, teaching or writing.

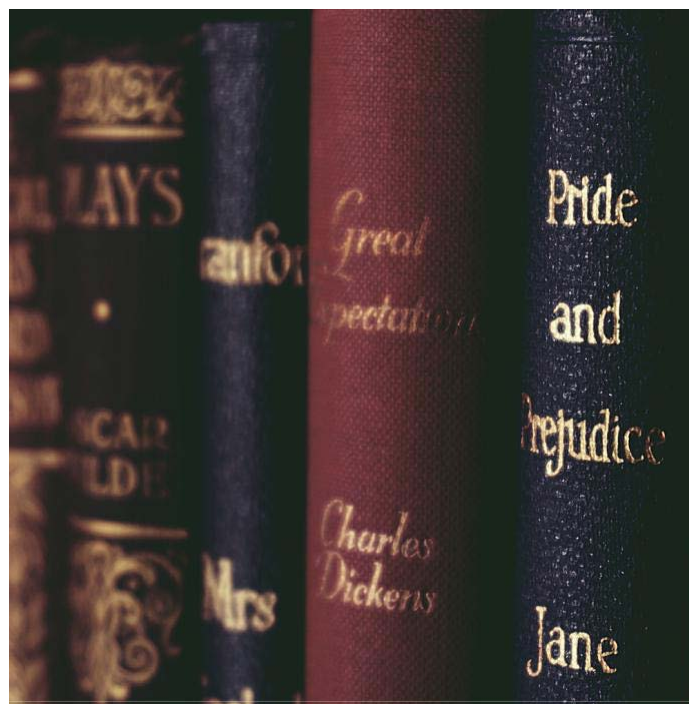
Some will go into the film industry as writers, editors, reviewers or directors. Others will go into finance, administration or management.

For a future employer, a qualification in English literature demonstrates that you are able to think critically and express yourself clearly, logically and succinctly, skills which are valued in a wide range of professions.

## Possible subject combinations

English literature combines well with most subjects. Many students studying English literature also study psychology and history.

However, it can also provide an effective balance with sciences and mathematics, enabling students to present themselves as effective all-rounders when it comes to university applications.





# GEOGRAPHY

## (9696)

### Why study geography?

"Geography is the subject which holds the key to our future." **Michael Palin**

There has never been a better or more important time to study A Level geography, dealing with vital issues such as climate change, migration, environmental degradation, social issues and natural hazards.

A Level geography is one of the most relevant subjects students can choose to study. Learners will enjoy the scope of the material they cover, the insights it can provide into the world around us and the highly contemporary nature of the issues it tackles.

The A Level geography course is often split into human and physical geography, even though geography is a very fluid subject with some of the issues overlapping.

Human topics such as urbanisation and globalisation are great for generating debate and allowing students to apply their knowledge to a worldwide context.

Physical geography looks at topics such as natural hazards and look at how these occur, what can be done to predict them and the management that is in place if one occurs.

### What to expect

To study A Level geography, students need to have an enquiring and open mind. Geography is a study of the world around us and students need to be aware of issues worldwide. Learners will have the opportunity to debate issues such as migration and to think about them from political and social perspectives.

A basic grasp of mathematics is required and the ability to interpret graphs and analyse them is fundamental, along with basic map skills. Students will engage with case studies on specific topics and will develop the skill of writing answers clearly and succinctly.

### Assessment

For Cambridge International AS Level geography, candidates take:

- Paper 1 - Core Physical Geography
- Paper 2 - Core Human Geography

In addition, Cambridge International A Level geography candidates take:

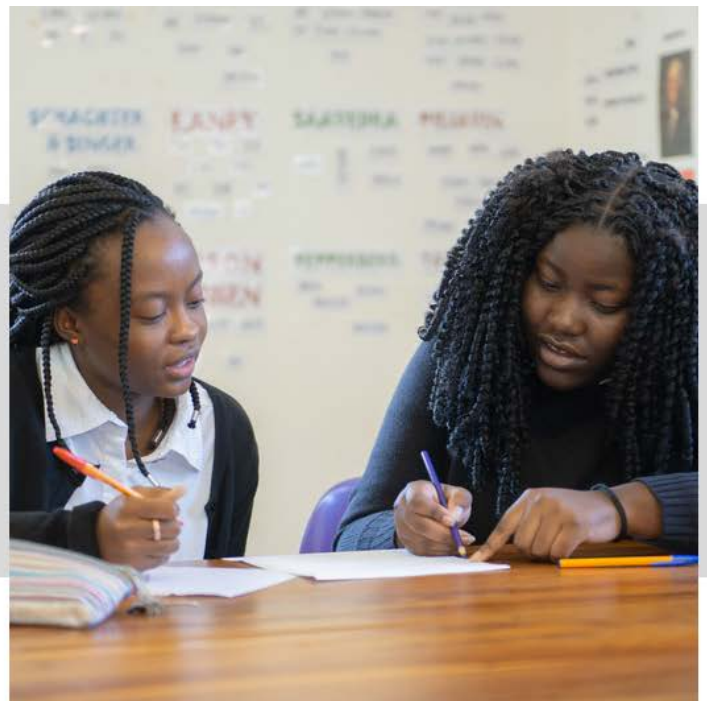
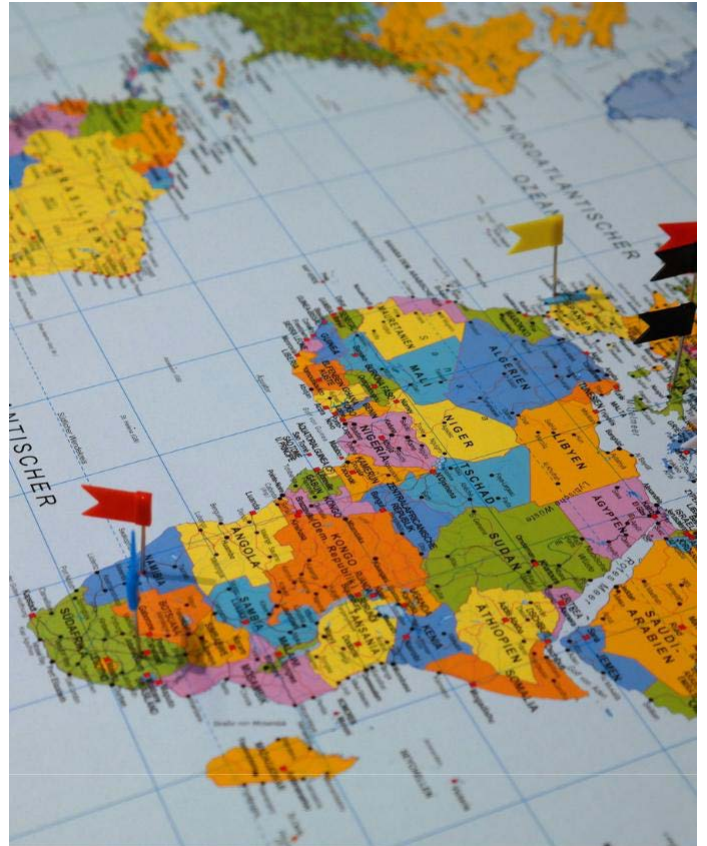
- Paper 3 - Advanced Physical Geography
- Paper 4 - Advanced Human Geography

### Where could it lead?

Geography is classed as a facilitating subject that supports progression into a broad range of subject areas in tertiary education that include biology, business studies and economics.

### Possible subject combinations

Possible subject combinations for geography are mathematics, English, business studies, agriculture and the sciences.





# HISTORY

## (9489)

### Why study history?

A Level history is a critical subject. It not only opens a window to the past, but helps students to appreciate the human endeavour over time which leads to a much better understanding of the world we live in.

The subject allows students to have insights on historical concepts such as cause and consequence, change and continuity, similarity and difference, significance as well as interpretations.

History includes a diverse range of research methods which ultimately results in higher order thinking skills such as critical thinking, independent thought, problem solving and empathy for people living in different places and at different times.

### What to expect

Candidates will not be expected to have studied history prior to joining A Level history.

In Lower Sixth, students for the AS level will study two components:

- **Component 1:** A document question 'Origins of the Civil War' (America), 1846-1861.
- **Component 2:** Outline Study on the History of the USA from the period of 1840-1941.

In Upper Sixth, at A Level, students will explore the different interpretations of who was to blame for the start of the Cold War in a topic called 'The origins and development of the Cold War'.

They will then study international history, focusing on the relationship between the USA and the USSR during the Cold War from 1950 – 1991 and conflict in the Middle East from 1948 – 1991.

### Assessment

A Cambridge International A Level qualification in history can be achieved either as a staged assessment over different examination series or in one examination series.

### AS candidates:

- Component 1: This is a 1hr 15m long document question weighing 40% of the lower sixth mark.
- Component 2: This is an outline study which is 1hr 45m long and weighs 60% of the mark.

### A Level candidates take 4 components in total:

Components 1 and 2 will weigh 20% and 30% respectively and in addition, components 3 and 4 will weigh 20% and 30%.

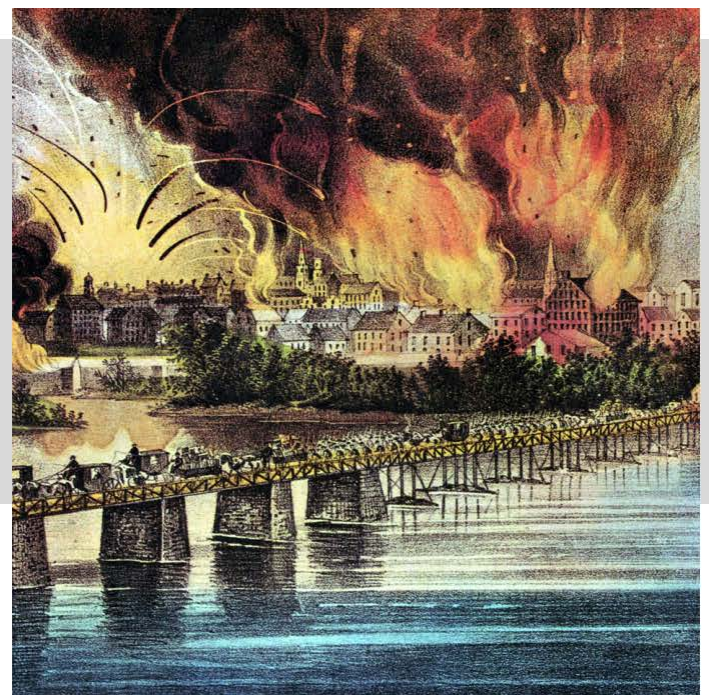
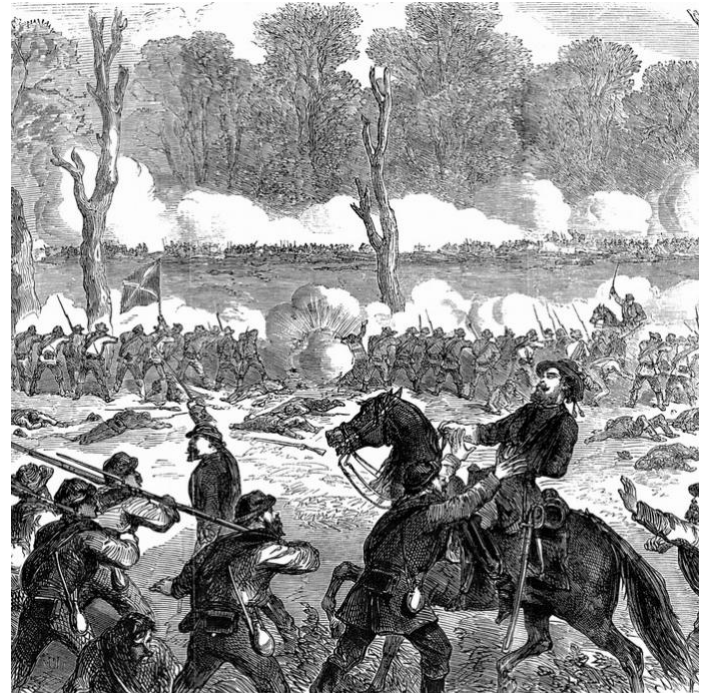
### Where could it lead?

This qualification enables students to compete at an International level and grants them the opportunity to directly apply and be considered as candidates for the best universities in the world.

Career opportunities for history are vast. Students who have an A-Level background in this subject are better prepared for careers in law, politics, International relations and various fields of academia such as teaching and lecturing.

### Possible subject combinations

History is often combined with humanities subjects and English.



# MATHEMATICS

## (9709)

### Why study mathematics?

Do you enjoy solving problems? Can you think analytically and creatively to find solutions? If you can answer yes to these questions, mathematics could be a good option for your AS/A levels.

Through the study of mathematics, students will appreciate the beauty of God's creation in patterns, shapes and colour, while gaining an insight into real-world application.

Mathematics is an intellectually demanding subject, but is extremely rewarding. Universities and employers alike highly regard AS/A level mathematics, irrespective of your chosen career path.

### What to expect

In lower sixth, students taking AS mathematics will study Pure Mathematics and Probability and Statistics. In upper sixth, students will study Pure Mathematics and Mechanics. Please be aware, the combinations do sometimes change.

### Assessment

Students in Lower Sixth will be registered for written examinations in Pure Mathematics (P1) and Probability and Statistics (P6). In Upper Sixth, students are entered for written examinations in Mechanics (P4) and Pure Mathematics (P3).

#### AS Mathematics

For paper 1, students will study topics such as quadratics, functions, trigonometry. For paper 6, students will study the Poisson distribution, linear combinations of random variables, sampling and estimation among others.

#### A2 Mathematics

For paper 3, students study topics such as algebra, differentiation and integration. For paper 4, students study topics such as forces and equilibrium, momentum and Newton's Law of Motion.

For a full list of all topics taught, please refer to the Cambridge website.

### Where could it lead?

Career opportunities are unlimited for mathematics. Some of the occupations that mathematics offers include accounting, computer programming, medicine, engineering and law.

### Possible Subject Combinations

Historically, students taking mathematics at Chengelo have frequently chosen to combine it with science subjects such as physics and chemistry, with some choosing to combine with design and technology, however there are no hard and fast rules.





# MUSIC

## (9483)

### **Why study music?**

Whether we realise it or not, music is a large part of our everyday lives. It is integral to every world culture and tradition.

Studying music not only prepares students for careers in a diverse range of musical fields, but it also helps students to understand cultural traditions and practices more fully.

### **What to expect**

Many of the topics covered at A Level will be familiar from IGCSE. Students continue studying performance and composition in greater depth, preparing longer programmes and portfolios than required at IGCSE.

For the demanding listening paper, students study a range of set works from Western Classical traditions in great detail. They also build upon their knowledge of popular, world, folk and jazz music.

Students will conduct intensive research into background issues pertaining to music history, performance, criticism and development.

### **Assessment**

In Lower Sixth, students follow the Advanced Subsidiary (AS) certification, taking Paper 1 (Listening) and 2 (Practical Musicianship) in a single examination series.

In Upper Sixth, those students who wish to take their studies to the full Advanced Level qualification may carry their AS marks forward and take Papers 3 (Performance) and 4 (Composition) in the examination series in which they require certification. All assessment in Upper Sixth is done during the course of the term.

### **Where could it lead?**

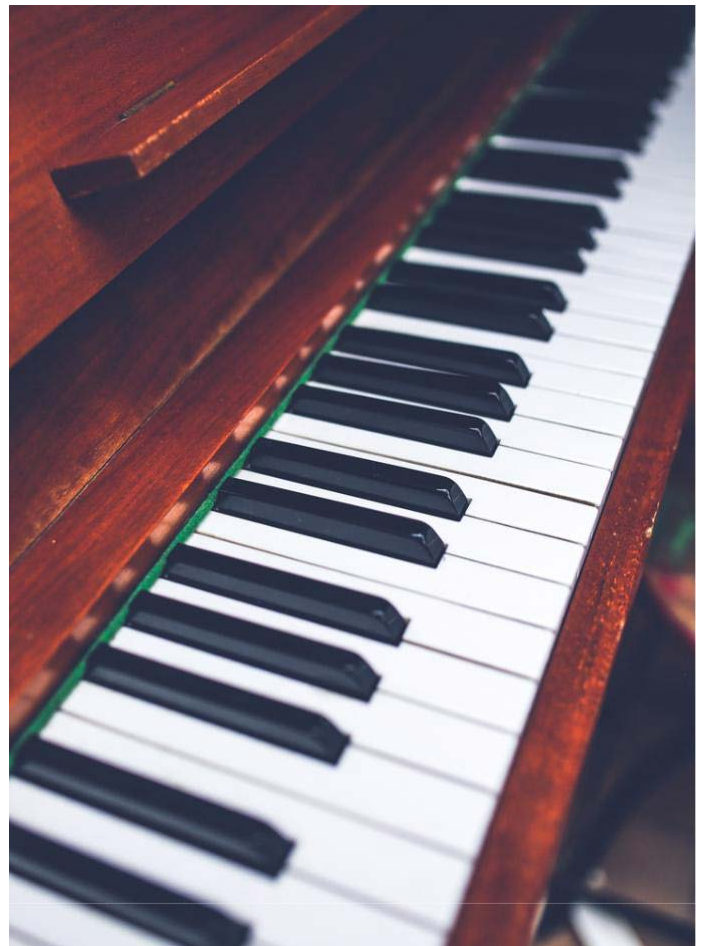
Studying music at A Level can be a stepping stone to many diverse careers in music, including performance, composition, orchestration, conducting, musicology, music technology, recording engineering and music education.

Universities looking for students with diverse abilities and interests will look upon students with experience studying music favourably.

### **Possible subject combinations?**

For students with a creative disposition, music combines well with other similarly creative subjects, such as art or design and technology.

The critical analysis skills required in music also have much in common with humanities subjects such as English literature or history.





# PHYSICAL EDUCATION (9396)

## Why study physical education?

The Cambridge International AS & A Level Physical Education syllabus is both practical and theoretical. As well as fostering enjoyment in physical activity, it will encourage students to develop an understanding of the interaction between theory and practice by focusing on the performer and performance.

Students learn about anatomy and physiology, movement skills and contemporary studies at Cambridge International AS Level. This provides a firm foundation for the further advanced study of exercise, physiology, psychology of sport performance and the study of the Olympic Games from a global perspective.

## What to expect

Many of the topics covered at A Level will be familiar from IGCSE Physical Education. Students continue studying a range of topics from in-depth anatomy and physiology to the politics and policies of the Olympic Games.

Alongside their theoretical studies, students will undertake regular practical sessions to develop their skills and performance in a range of sports, evidence of which will be captured on video to submit as part of their coursework.

## Assessment

In Lower Sixth, students follow the Advanced Subsidiary (AS) certification, taking a combination of a written exam (70%) and coursework (30%) in a single examination series.

In Upper Sixth, students who, having received AS certification, wish to continue their studies to the full Advanced Level qualification may carry their AS marks forward and take Paper 3 (Written) and 4 (Coursework) in the examination series in which they require certification.

## Where could it lead?

The syllabus provides an excellent grounding for students intending to pursue careers in teaching and coaching, sports development, sports science, physiotherapy, the leisure industry, recreational management and professional sport

## Possible subject combinations?

For students with an interest in sport, physical education combines well with other science subjects, such as biology, chemistry or physics, although it can also provide an interesting foil to other subjects such as English, should a student wish to pursue sports journalism in the future.



# PHYSICS

## (9702)

### Why study physics?

Physics is the science that attempts to describe how nature works using the language of mathematics. It is often considered the most fundamental of all the natural sciences and its theories attempt to describe the behaviour of the smallest building blocks of matter, light, the universe and everything in between.

Without physics, the gadgets, Internet and electricity supply that we take for granted wouldn't be here. Physics also deals with the big questions: Is the universe infinite or finite? Why do we always find the smallest bits of cereal at the bottom of the packet? Can we use technology to increase life expectancy?

Whether your motivation is to think beyond boundaries or to open the door to well-paid careers, the knowledge and skills you gain by studying physics will be useful.

The lab skills, applications of mathematics, insights into modeling and knowledge of instrumentation developed through a study of physics are applicable to a wide range of university courses and careers.

### What to expect

Many of the topics covered at A Level will be familiar from IGCSE, for example, forces, work and energy, motion, waves etc. However, study at A Level will broaden and deepen the knowledge and application of these fascinating concepts.

New topics will also stretch students' problem-solving and conceptualisation skills to provide an exciting challenge. The course contains both theoretical and practical elements, both of which are examined and form a core part of the course.

### Assessment

In Lower Sixth, students follow the Advanced Subsidiary (AS) certification, taking Papers 1, 2 and 3 (either Advanced Practical Skills 1 or Advanced Practical Skills 2) in a single examination series.

In Upper Sixth, students who, having received AS certification, wish to continue their studies to the full Advanced Level qualification may carry their AS marks forward and take Papers 4 and 5 in the examination series in which they require certification.

It is possible to take the full Advanced Level qualification at the end of the course, in which case, students would take all five papers in a single examination series.

### Where could it lead?

A Level physics can be used as a stepping stone to a vast number of careers and qualifications, such as astrophysics, theoretical physics, nanotechnology, optics and photonics, engineering, climatology, medicine, acoustics and computing.

An A Level in physics is also very highly regarded in professions such as finance, insurance and law due to A Level physicists showing excellent mathematics and problem-solving skills.

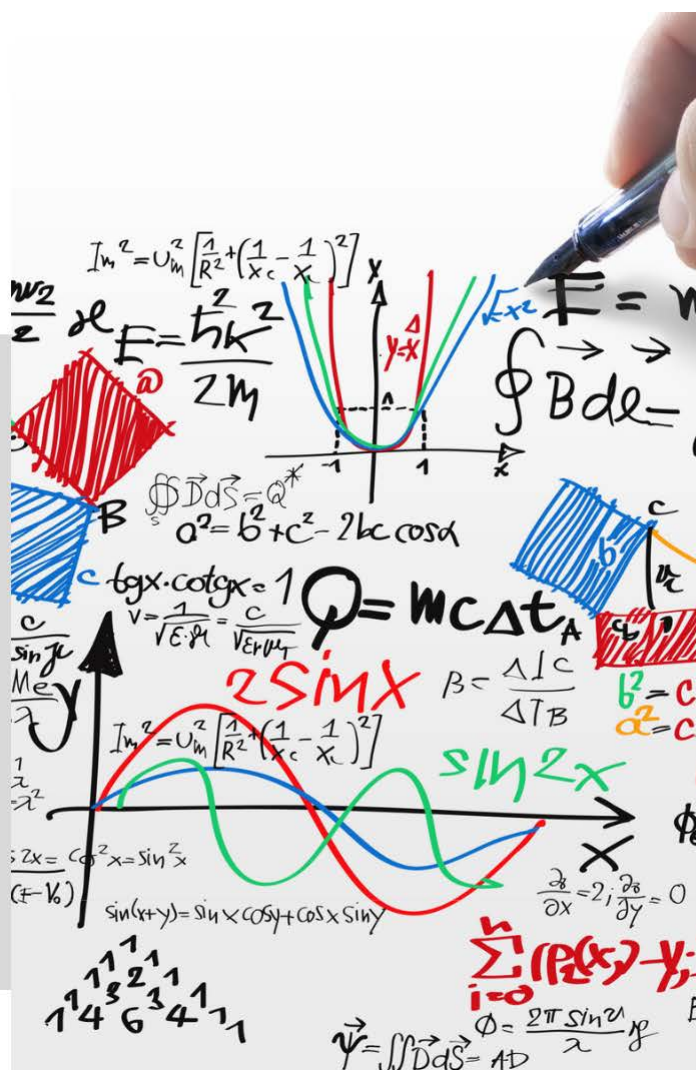
Many students taking physics continue to study the experimental and theoretical physical sciences or apply their understanding in engineering. Physicists are also highly sought after in meteorology, astronomy, media production and architecture. Energy resources, medical physics and computing are growing fields and will present opportunities for innovation in the future.

More information can be found on the Institute of Physics' website: <http://www.iop.org/careers/>

### Possible subject combinations

A large percentage of the physics course will require the use of mathematical skills. A Level physicists are strongly advised to study AS mathematics.

Students wishing to study medicine frequently choose to combine physics with the other science subjects, while others who wish to pursue architecture and related careers, choose to study design and technology as a companion subject.





# PSYCHOLOGY

## (9990)

### Why study psychology?

"If the only tool you have is a hammer, you tend to see every problem as a nail."

Maslow

Whatever career you seek to pursue, a background in psychology will enhance your employability and give you valuable tools in dealing with people. Degree courses in psychology are among the most popular choices in universities all around the world. This fascinating subject looks at how people think, act, react and interact. In learning about the inner workings of the human mind, you will understand more about why people behave the way they do and are sure to discover more about yourself in doing so.

If you have ever thought, "Why would someone do something like that", then psychology might just provide you with an answer.

### What to expect

In Lower Sixth, students follow the AS Level course, focusing on 12 core studies. The core studies illustrate a wide range of research methods used in psychology, such as experiments, observations, self-reports and case studies. By exploring the relationship between the content of the study and the research methods, students gain a broad understanding of how psychologists study experiences and behaviours and why the research took place.

In Upper Sixth, A Level psychology students go on to consider the following two options:

1. Abnormality - This specialist option considers the definitions, symptoms, causes

and treatments of a variety of mental disorders.

2. Organisations - This specialist option considers the world of work, and how individuals and groups within an organisation function and influence each other and have an impact on the organisation itself.

### Assessment

In Lower Sixth, students follow the Advanced Subsidiary (AS) certification, taking Papers 1, 2 in a single examination series.

In Upper Sixth, students who, having received AS certification, wish to continue their studies to the full Advanced Level qualification may carry their AS marks forward and take Papers 3 and 4 in the examination series in which they require certification.

### Where could it lead?

Studying psychology at A Level lays a solid foundation for further study which open up opportunities within the following fields:

- Clinical psychologist
- Counseling psychologist
- Educational psychologist
- Forensic psychologist
- Further education teacher
- Health psychologist
- High intensity therapist
- Occupational psychologist
- Primary care graduate mental health worker
- Psychological wellbeing practitioner
- Sport and exercise psychologist
- Careers adviser
- Detective
- Human resources officer
- Market researcher
- Play therapist
- Psychotherapist
- Social Science (Education, Teaching, Counseling)

It is also suitable for learners intending to pursue any career in which an understanding of human nature is needed.





# INTERNATIONAL PROJECT QUALIFICATION (IPQ) (9980)

## What is the IPQ?

The IPQ is a level 3 stand-alone qualification that students complete alongside their A Level qualifications.

The International Project Qualification gives students the opportunity to carry out an academic research project on a subject of their choice. It is increasingly considered a highly valued qualification, which can enhance university applications and support students with their transition to higher education.

## Why complete a Cambridge IPQ?

The IPQ provides opportunities for the development of critical, reflective problem-solving and independent learning skills through the planning, research and evaluation of a self-selected project.

Completing the IPQ enables students to develop successful independent learning and prepares them for further education and work. In the process, they have the opportunity to build on the higher-order thinking skills of analysis, evaluation and synthesis,

## What to expect

Students completing the IPQ will receive some seminars on relevant study skills: from conducting a literature review to research methods and critical thinking skills.

Students will be supported by a mentor who will work with the IPQ coordinator to ensure students are guided appropriately throughout the duration of the course.

## Assessment

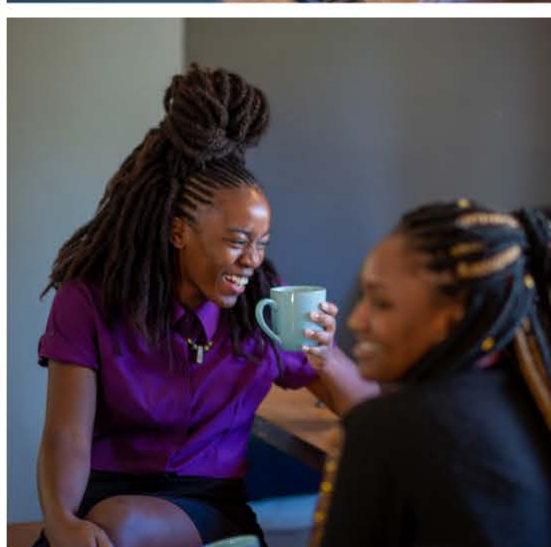
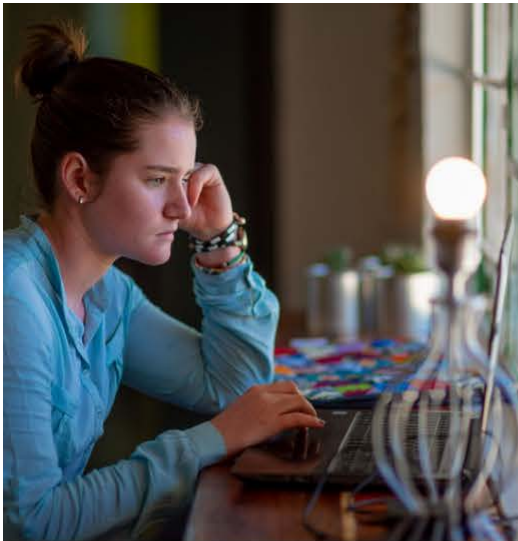
The IPQ can be submitted in the June or November series. Students are assessed based on the process of the research, not just the final written document. For this reason, students complete a research log, detailing initial ideas, plans, research methods etc.

On completion of the IPQ, students are expected to carry out an oral presentation of their research in the form of a short lecture or PowerPoint presentation.

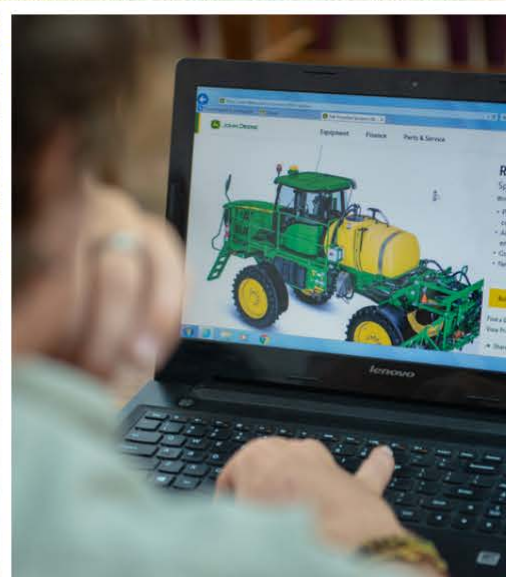
The IPQ is graded A\* - E and is broadly equivalent to half an A Level (max 70 UCAS points – slightly more than an AS level).















CHENGLO SCHOOL  
AS A WITNESS TO THE LIGHT