



SHIRELAND  
BIOMEDICAL  
UNIVERSITY TECHNICAL COLLEGE

# SIXTH FORM COURSE HANDBOOK



SHIRELAND  
BIOMEDICAL  
UNIVERSITY TECHNICAL COLLEGE



BIRMINGHAM CITY  
University



# PARAMEDIC PATHWAY

# WHY CHOOSE US?

- **Expert-Led Learning:** Taught by university professionals alongside our Shireland Biomedical staff.
- **Real-World Experience:** Gain practical skills with job placements.
- **Immersive Workshops:** Held on campus at Birmingham City University.

## What is included in the Paramedic Pathway?

### **AAQ - Medical Science (Extended Certificate) | 1 A Level Equivalent**

The qualification has three mandatory units covering the following topics: Human Physiology, Anatomy and Pathology, Health Issues and Scientific Reporting, Practical Microbiology and Infectious Diseases

+

### **AAQ - Applied Science (Extended Certificate) | 1 A Level Equivalent**

The qualification has four mandatory units covering the following topics: Principles and Applications of Biology, Principles and Applications of Chemistry, Principles and Applications of Physics, Practical Scientific Procedures and Techniques

+

In addition, students will choose one A level subject from our list which is on our website.

## What is AAQ?

AAQ is a Level 3 Alternative Academic Qualification and provides a BTEC National in the course choice. It is accredited by Pearson's Education; it is the equivalent of one A level. Assessment is via exam and coursework.

**Discover your passion, gain hands-on experience, and prepare for a bright future.**

**Apply now or contact us to learn more.**



**SHIRELAND  
BIOMEDICAL**  
UNIVERSITY TECHNICAL COLLEGE



**BIRMINGHAM CITY**  
University



# EARLY YEARS AND PRIMARY PATHWAY

# WHY CHOOSE US?

- **Expert-Led Learning:** Taught by university professionals alongside our Shireland Biomedical staff.
- **Real-World Experience:** Gain practical skills with job placements.
- **Immersive Workshops:** Held on campus at Birmingham City University.

## What is included in the Early Years and Primary Pathway?

### **AAQ - Early Childhood Development (Extended Certificate) | 1 A Level Equivalent**

The qualification has four mandatory units covering the following topics: Children's Development, Keeping Children Safe, Play and Learning, Research and Reflective Practice.

+

### **Health and Social Care (Extended Certificate) | 1 A Level Equivalent**

The qualification has three mandatory units covering the following topics: Human Lifespan and Development, Human Biology and Health, Health and Social Care Practice.

+

In addition, students will choose a combination of a further two A level or AAQ subjects from our list which is on our website.

## What is AAQ?

AAQ is a Level 3 Alternative Academic Qualification and provides a BTEC National in the course choice. It is accredited by Pearson's Education; it is the equivalent of one A level. Assessment is via exam and coursework.

**Discover your passion, gain hands-on experience, and prepare for a bright future.**

**Apply now or contact us to learn more.**





SHIRELAND  
BIOMEDICAL  
UNIVERSITY TECHNICAL COLLEGE



BIRMINGHAM CITY  
University



# NURSING AND MIDWIFERY PATHWAY

# WHY CHOOSE US?

- **Expert-Led Learning:** Taught by university professionals alongside our Shireland Biomedical staff.
- **Real-World Experience:** Gain practical skills with job placements.
- **Immersive Workshops:** Held on campus at Birmingham City University.

## What is included in the Nursing and Midwifery Pathway?

### **AAQ - Medical Science (Extended Certificate) | 1 A Level Equivalent**

The qualification has three mandatory units covering the following topics: Human Physiology, Anatomy and Pathology, Health Issues and Scientific Reporting, Practical Microbiology and Infectious Diseases

+

### **AAQ - Health and Social Care (Extended Certificate) | 1 A Level Equivalent**

The qualification has three mandatory units covering the following topics: Human Lifespan and Development, Human Biology and Health, Health and Social Care Practice.

+

In addition, students will choose one A level subject from our list which is on our website.

## What is AAQ?

AAQ is a Level 3 Alternative Academic Qualification and provides a BTEC National in the course choice. It is accredited by Pearson's Education; it is the equivalent of one A level. Assessment is via exam and coursework.

**Discover your passion, gain hands-on experience, and prepare for a bright future.**

**Apply now or contact us to learn more.**

# COURSE ENTRY REQUIREMENTS

## Students are required to have:

- x5 GCSEs or equivalent, including English and Maths, at grade 5 or above.
- Met any additional entry requirements for specific subjects as detailed below.

Subject	Additional Entry Requirements
A Level Music	GCSE Music – Grade 6 or above <b>OR</b>  BTEC Music or equivalent – merit or above  Students wanting to study A Level music must also be working at Instrumental or Vocal Grade 4 or above
Vocational Extended Certificate in Sound Engineering	GCSE Music – Grade 6 or above <b>OR</b>  BTEC Music or Music Technology or equivalent – merit or above <b>OR</b>  Instrumental or Vocal Grade 4 or above
A Level Art	GCSE Art Grade 6 or above
A Level Computer Science	
A Level Biology	GCSE Science Grade 6 <b>OR</b> GCSE Biology Grade 6  GCSE Maths Grade 6 preferable
A Level Chemistry	GCSE Science Grade 6 <b>OR</b> GCSE Chemistry Grade 6  GCSE Maths Grade 6 preferable
A Level Drama and Theatre	GCSE Drama Grade 6 <b>OR</b>  A relevant Level 2 BTEC qualification – Merit <b>OR</b> Ability to demonstrate competence in required skills through external examination and/or performance
A Level English Literature	GCSE English Language Grade 6 <b>AND</b> GCSE English Literature Grade 6
A Level Mathematics	GCSE Maths Grade 6
A Level History	GCSE History Grade 6
A Level Geography	GCSE Geography Grade 6
A Level Philosophy, Ethics and Religion	GCSE RE Grade 6
A Level Physics	GCSE Science Grade 6 <b>OR</b> GCSE Physics Grade 6  GCSE Maths Grade 6 preferable
A Level Psychology	GCSE English Grade 6
A Level Sociology	GCSE English Grade 6
AAQ Applied Science	GCSE Science Grade 4
Vocational Health and Social Care	GCSE Science Grade 4
AAQ Medical Science	GCSE Science Grade 4
AAQ Early Childhood Development	GCSE Science Grade 4



# A LEVEL MUSIC

## Studying the Course

A-level music is a rigorous academic subject which equips students with the written, analytical, practical and personal skills which are essential to success. For this reason, it is a highly valued qualification not only for those looking to pursue a career in the creative arts, but also for those interested in fields such as accountancy, law, media or medicine.

The course focusses on the development of three key skills: performing; composing and listening; and appraising. Students build on their own knowledge of musical theory, gain a solid understanding of the basic principles of performance, refine their practical skills, study and practice composition, and expand their knowledge of music history through listening and appraisal.

Within these areas of study, A level Music offers students the opportunity to develop their ability to use musical devices and conventions through composition, engage with and increase awareness and appreciation of the diverse heritage of music, and develop critical evaluation skills through appraising their own and other's music.

Students who study A-level Music have unique access to industry experts and professional musicians who provide opportunities to further develop your skills in performance and composition through expert masterclasses, tutorials, and performance opportunities.

<b>What will I study?</b> You will study a variety of pieces from Western, non-Western, Classical, and popular genres and analyse what makes these pieces of music so successful.  You will also study advance composition techniques and produce a portfolio of original work, and advance performance technique to produce a recital programme.	<b>How will I be assessed?</b> 40% written exam testing your knowledge of the set works, and your ability to analyse pieces of music you've never heard before.  30% will come from your portfolio of compositions, and 30% will come from your performance recital.	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Sound Technician</li><li>• Community Musician</li><li>• Music Therapy</li><li>• Teaching</li><li>• Music Production</li><li>• Music Management, inc. HR, Finance, Marketing, Administration</li><li>• Events management and marketing</li></ul>
--	---	---

# VOCATIONAL EXTENDED CERTIFICATE IN SOUND ENGINEERING

## Studying the Course

A qualification in Music Technology is designed to prepare students for a career in the field of music production, sound engineering and the wider arts industry.

The course covers a range of core subjects, including music recording and production, live sound engineering, and using digital audio workstations. Students learn how to record, edit and mix music using industry-leading software and tools.

Students have the opportunity to specialise in areas such as live sound engineering, post-production for film and TV, and music business. This allows them to tailor their education to their specific interests and career goals.

Coursework is hands-on, with students completing practical assessments that involves recording and producing music, creating soundtracks and operating recording equipment in real-world scenarios.

<b>What will I study?</b> Five units will be studied: <ul style="list-style-type: none"><li>• Live sound</li><li>• Studio recording</li><li>• Mixing and mastering</li><li>• Studio design and acoustics</li><li>• DAW use</li></ul>	<b>How will I be assessed?</b> Four out of the five units you study will be assessed through a portfolio of projects designed to reflect the kinds of things professional sound engineers do. The fifth unit is assessed through a 15-hour exam, where you will demonstrate the technical skill you have developed over the two years.	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Music Production</li><li>• Sound Engineering</li><li>• Composition</li><li>• Arts Management and Marketing</li><li>• Music Therapy</li><li>• Post-production Specialist</li><li>• Freelance Musician and Creative</li></ul>
---	---	---

# A LEVEL ART

## Studying the Course

"The arts are integral to our understanding of the world, as important as reading, writing, geography and arithmetic." (Nicholas Serota director of the Tate 2012).

Art, craft and design encourages creative thinking skills and develops visual literacy. Industry's demands for an increasingly innovative and globally competitive workforce, makes learning in this subject ever more relevant to young people.

The discipline of drawing is at the foundation of other skills in art. It is used as a tool, by which students can analyse, record and translate the world around them. Critical studies enhance and underpin practical teaching, where students engage with artists, designers and architects of contemporary and historically significant, as well as culturally diverse contexts. Analysing wider issues and concepts, developing critical-thinking and imitating the processes, methods and media used by artists, inspires students to embrace their own creativity and individual self-expression.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Observational drawings etc</li><li>• Artist Research.</li><li>• Material exploration.</li><li>• Development of ideas.</li><li>• Realisation of a personal outcome.</li></ul>	<b>How will I be assessed?</b> <ul style="list-style-type: none"><li>• Portfolio Submission – 60%</li><li>• Coursework based Feb Year 12 – February Year 13</li><li>• Externally Set Assignment – 40%</li><li>• Completed both within and outside of lessons. Submission Date Year 13 Early May</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Art Therapy</li><li>• Art Conservation</li><li>• Valuation</li><li>• Sales</li><li>• Architect</li><li>• Fashion Design</li><li>• Graphic Design</li><li>• Marketing</li></ul>
--	---	--

# A LEVEL COMPUTER SCIENCE

## Studying the Course

In today's world, society's reliance on computers and technology has never been greater. Computers have improved our lives in countless ways and continue to evolve, playing a vital role in everyday living. The demand for skilled professionals in the field of computer science is higher than ever.

Studying A-level Computer Science will equip you with the essential knowledge, understanding, and practical skills needed to thrive in this fast-growing field. It serves as a foundation for further study at university and prepares you for a successful career in a wide range of computing-related fields.

Our dedicated staff will guide you through both the theoretical and practical aspects of computer science. You'll develop computational thinking and problem-solving skills—crucial for success in the workplace and beyond. The first year of the course focuses on in-depth computer science theory, which you'll apply to create robust software solutions to real-world problems, using industry-standard programming languages.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Fundamentals of computer science theory</li><li>• Software development and programming</li><li>• Problem-solving using computational thinking</li><li>• Real-world application of computer science concepts</li><li>• Advanced algorithms and data structures</li><li>• Computer systems, architecture, and networking</li><li>• Database design and management</li></ul>	<b>How will I be assessed?</b> <ul style="list-style-type: none"><li>• Written Examinations: These will test your theoretical understanding of computer science.</li><li>• Practical Projects: You will design and build a software solution to solve a real-world problem, applying the concepts learned throughout the course.</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Systems Developer</li><li>• Web Developer</li><li>• Multimedia Programmer</li><li>• Software Tester</li><li>• Network Engineer</li><li>• IT Trainer</li><li>• Social Media Manager</li><li>• Database Engineer</li></ul>
---	--	--

# A LEVEL BIOLOGY

## Studying the Course

Biology A-level provides you with the opportunity to become involved in the study of living things. As a biology student, you will study topics such as cell biology, neuroscience, evolutionary biology and ecology.

Biologists now find themselves as one of the top ten most employable graduates and we have the experience to support your success in this subject.

An integral part of our teaching is practical work, and all students will be expected to use biological equipment including colorimeters, microscopes, ecological sampling and microbial growth apparatus. As research and communication are an integral part of Biology, all students are provided with subsidised textbooks and outstanding teacher-created resources to support their knowledge and understanding of the course content.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Biological molecules.</li><li>• Cells.</li><li>• Organisms exchange substances with their environment.</li><li>• Genetic information, variation and relationships between organisms.</li><li>• Energy transfers in and between organisms.</li><li>• Organisms respond to changes in their environments.</li><li>• Genetics, populations, evolution and ecosystems.</li><li>• The control of gene expression.</li></ul>	<b>How will I be assessed?</b> <p>External assessments:</p> <ul style="list-style-type: none"><li>• Paper 1: 35% of A Level. Topics 1-4.</li><li>• Paper 2: 35% of A Level. Topics 5-8.</li><li>• Paper 3: 30% of A Level. Topics 1-8.</li><li>• 12 required practical skills</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Environmental Science</li><li>• Conservation</li><li>• Veterinary Science</li><li>• Sport Psychology</li><li>• Occupational Therapy</li><li>• Nutritionist</li><li>• Biomechanics Specialist</li><li>• Physical Therapist</li></ul>
--	---	---

# A LEVEL CHEMISTRY

## Studying the Course

Chemistry is the study of the composition, structure, properties and reactions of substances. Chemistry seeks to explain everything that we see around us daily on a molecular, atomic or even sub-atomic level. From how the food we eat provides our cells with energy for us to function and access this website, to how the materials which make up the chair you are sitting on interact with each other to prevent you from falling to the floor.

Chemistry explores the building blocks of all living and non-living substances and tries to explain why certain substances interact with each other, how they interact and what happens when they interact.

Chemistry is a popular science and we have excellent laboratory facilities. The facilities allow the students a wide variety of learning activities including formal lectures, practical sessions and group work.

<b>What will I study?</b> A range of topics of: <ul style="list-style-type: none"><li>• Physical chemistry</li><li>• Inorganic chemistry</li><li>• Organic chemistry</li></ul> * 12 x Required Practical skills	<b>How will I be assessed?</b> 3 Written Exam Papers: <ul style="list-style-type: none"><li>• Paper 1 Physical &amp; Inorganic chemistry &amp; Practical skills (35%)</li><li>• Paper 2 Physical &amp; Organic chemistry &amp; Practical skills (35%)</li><li>• Paper 3 Mixed Content chemistry &amp; Practical skills (30%)</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Pharmacy</li><li>• Dentistry</li><li>• Biological Science</li><li>• Analytical Chemistry</li><li>• Veterinary Medicine</li><li>• Law</li><li>• Philosophy</li></ul>
---	---	---



# A LEVEL DRAMA AND THEATRE

## Studying the Course

Studying Drama and Theatre gives you access to industry standard facilities, including a studio space, fully equipped theatre with lighting and sound equipment, and recording studios. The teaching staff are outstanding, enthusiastic and experienced, making the course relevant, exciting and enjoyable for all.

We work in conjunction with Birmingham Hippodrome Creative, as well as several practitioners currently working within the industry including actors, directors, agents and film crews, meaning you receive relevant and up to date advice on working within the industry. The course is practically focused and has flexible units that can be tailored to the needs and interests of each individual student. It is fast paced, exciting and full of opportunities.

This course is designed to equip you with the skills and expertise needed to progress into diverse roles within the creative and performing arts industry. A qualification in Drama and Theatre is not just about being an actor: the skills and experience you gain through this course will support you in all aspects of your future.

<b>What will I study?</b> <ul style="list-style-type: none"><li>Studying 2 full texts.</li><li>Evaluating Live Theatre performances.</li><li>Devise performance from chosen stimulus.</li><li>Create 2 performances from centre chosen texts.</li></ul>	<b>How will I be assessed?</b> Year 1 and 2 <ul style="list-style-type: none"><li>Practical performances (including portfolio) 60%</li><li>Written exams 40%</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>Performance and Creative Arts</li><li>Arts Marketing and Management</li><li>Speech and Language Therapy</li><li>Communications</li><li>Education</li><li>Community Theatre</li><li>Logistics Management</li></ul>
---	---	---

# A LEVEL ENGLISH LITERATURE

## Studying the Course

“The reading of all good books is like a conversation with the finest minds of past centuries.”

The study of English Literature is, ultimately, the study of humanity, in the broadest sense. Great literature reflects the great moments of historical, political and social change, throughout history, told by those who lived through them. And yet, it is more than that. It is a deeply compassionate, personal insight into what it means to be human, at a world level, but also at an intimate and personal level.

Lovers of literature broaden their understanding of themselves and those around them. As an academic and core subject, English Literature A-level is valued by higher education providers. Any degree course requires an advanced level of literacy, communication and thinking skills, all of which are fostered by the rigorous, analytical approach taught at A-level.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Paper 1: Love Through the Ages:<ul style="list-style-type: none"><li>• 'Othello'</li><li>• 'The Great Gatsby'</li><li>• Pre-1900 Poetry</li></ul></li><li>• Paper 2: Text in Shared Contexts:<ul style="list-style-type: none"><li>• 'The Handmaid's Tale'</li><li>• 'A Streetcar Named Desire'</li><li>• 'Feminine Gospels'</li></ul></li><li>• Comparative critical study of two texts (one which will be of your own choosing)</li></ul>	<b>How will I be assessed?</b> <ul style="list-style-type: none"><li>• 80% examination at the end of the course.</li><li>• 20% non-exam assessment consisting of an independent critical study of two texts.</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Law</li><li>• Journalism</li><li>• Publishing</li><li>• Web Editor</li><li>• Archivist</li><li>• Marketing Management</li><li>• Public Relations</li></ul>
---	--	--

# A LEVEL MATHEMATICS

## Studying the Course

The course allows you to build on your previous understanding of Mathematics from GCSE. You will expand your knowledge of Mathematics on algebra and functions and will learn to use Mathematics in the real world by studying mechanics and statistics. All these elements of the course make it applicable to almost any future career you might be considering. The modules covered in this course will also help you with other A-level courses such as biology, chemistry and physics.

You will have access to online interactive resources that have thorough worked solutions so that you can really understand how problems are solved. The resources will provide you with many tips and hints on how to best prepare yourself for each unit so that you have a good understanding of all the basics before you begin the unit. You can access this from home, so you can work at your own pace and ensure you have grasped an understanding of everything.

This course also allows you to explore the use of technology, through the use of graphical calculators. You will be given one at the start of the course which you can use in lessons and in the exams. The calculator is very expensive, but we will provide this for you, so you do not have to purchase one. It's an excellent tool to help you visualize graphs and solve lots of exciting equations.

<b>What will I study?</b> Pure Mathematics Proof, Algebra and functions, Coordinate geometry in the $(x, y)$ plane, Sequences and series, Trigonometry, Exponentials and logarithms, Differentiation, Integration, Numerical methods, Vectors  <b>Applied Mathematics</b> Statistical sampling, Data presentation and interpretation, Probability, Statistical distributions, Statistical hypothesis, Quantities and units in mechanics, Kinematics, Forces and Newton's laws, Moments	<b>How will I be assessed?</b> Three 2-hour exams Paper 1: Pure Mathematics 33% Paper 2: Pure Mathematics 33% Paper 3: Applied Mathematics (Statistics and Mechanics) 33%	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Finance and Accounting</li><li>• Acoustic Engineering</li><li>• Aeronautical Science</li><li>• Analytics</li><li>• Economics</li><li>• Civil Engineering</li><li>• Quantity Surveyor</li></ul>
---	--	--

# A LEVEL GEOGRAPHY

## Studying the Course

Geography is one of the most dynamic and relevant subjects available to students today. It provides a deep understanding of the relationships between people, places, and environments, and equips learners with the tools to interpret and respond to global challenges such as climate change, migration, urbanisation, and resource management. Studying A Level Geography helps students develop analytical, research, and communication skills while encouraging global awareness and cultural sensitivity. It builds critical thinking and data interpretation abilities, making it an ideal choice for students with interests across both the sciences and humanities. Geography opens doors to a wide range of careers, including sustainability, planning, environmental science, and international development.

Universities value Geography highly because it is a rigorous and versatile A Level that demonstrates a student's ability to handle complex information, think critically, and evaluate evidence. It also shows that students can work independently and collaboratively while engaging with real-world issues. Geography complements a broad spectrum of degree courses such as Environmental Science, Economics, Politics, Sociology, Urban Planning, and International Relations. It is recognised by Russell Group universities as a facilitating subject, meaning it supports access to a wide range of university courses.

As part of the A Level Geography course, students are required to take part in a compulsory residential field trip. This trip is essential for developing fieldwork skills and collecting data for the Non-Examination Assessment (NEA). Typically lasting between three and five days, the trip is part-funded by the school, with a contribution required from parents. It offers students the opportunity to experience geography in action, whether through coastal erosion studies or urban regeneration projects. The hands-on experience gained during this trip is invaluable for both academic development and future career pathways.

<b>What will I study?</b> <ul style="list-style-type: none"><li>Physical Geography which includes: Coasts, Water and Carbon Cycles and Natural Hazards.</li><li>Human Geography which includes: Population, Global Systems and Changing Places.</li><li>NEA (None Examined Assessment) is an independent piece of work relating which requires you to collect and analyse field data.</li></ul>	<b>How will I be assessed?</b> <p>Two examination papers.</p> <ul style="list-style-type: none"><li>Paper 1 is Physical Geography.</li><li>Paper 2 is Human Geography.</li><li>These are 2 hours 30 minutes each.</li><li>Each examination makes up 40% of the overall mark.</li><li>NEA is assessed by class teacher and moderated by the exam board. This makes up 20% of the overall grade.</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>Conservation</li><li>Environmental Science</li><li>Town and Country Planning</li><li>Teaching</li><li>Law</li><li>Healthcare</li><li>Cartography (map making)</li></ul>
---	--	---

# A LEVEL HISTORY

## Studying the Course

History is a very popular A-level choice, with over 70,000 students choosing it this year across Britain. As well as being highly respected by all universities, for a variety of courses the qualification itself can prove extremely useful, hence explaining its popularity.

History is a great A-level for progression into social science and humanities courses at university, such as History, English, law and economics. However, it is by no means restricted to being relevant for these courses alone. Many leading universities also respect science students taking History as the analytical and writing skills gained from it are invaluable in any field. Its depth, variety and challenging nature means that the skills students learn from History A Level will remain with them no matter what they choose to study at a higher level.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Democracy and Nazism Germany 1918-1945.</li><li>• Stuart Britain and the Crisis of Monarchy: 1603-1702.</li><li>• Age of the Crusades – Non Examination Assessment.</li></ul>	<b>How will I be assessed?</b> <ul style="list-style-type: none"><li>• X2 2h 30m exams worth 40% each.</li><li>• 4000 word NEA (Coursework) worth 20%</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Cultural Learning and Development</li><li>• Cultural Heritage Conservation</li><li>• Archaeology</li><li>• Museum and Gallery Management</li><li>• Politics</li><li>• Law</li><li>• Armed Forces</li></ul>
---	---	--

# A LEVEL PHILOSOPHY, ETHICS AND RELIGION

## Studying the Course

Philosophy, Ethics and Religion is an extremely well-respected discipline in both the academic and employment world. A good qualification in this subject will show that you can think around important issues and develop problem-solving skills. All careers are governed by ethical principles and an ability to understand these would certainly be deemed an advantage by employers.

Reasons to choose this subject:

- Improve ethical and philosophical thinking skills and the ability to think outside of the box.
- Study topics that explain the diversity of life and religion in the modern world.
- Develop communication skills and learn to clearly express your views and increase your self-confidence.
- Understand contemporary ethical and religious issues such as immigration and religious fundamentalism.
- Investigate ultimate questions such as “why does evil exist?” and “what is the purpose of life?”
- Allows you to explore how religious and non-religious beliefs and practices shape and influence the world we live in.

<b>What will I study?</b> <ul style="list-style-type: none"><li>▪ Philosophical issues and questions raised by religion and belief.</li><li>▪ The nature and influence of religious experience, challenges.</li><li>▪ Exploring how religious philosophy has been influenced by practices and beliefs.</li><li>▪ Ethical language, theories and concepts.</li><li>▪ Change in religious ideas, through science and secularisation</li></ul>	<b>How will I be assessed?</b> <p>There are three units with three separate two hour exams at the end of the A Level.</p> <ul style="list-style-type: none"><li>▪ Philosophy of Religion</li><li>▪ Ethics and Religion</li><li>▪ A Study of Religion.</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>▪ Law</li><li>▪ Journalism</li><li>▪ Politics</li><li>▪ Public Relations</li><li>▪ Social Work</li><li>▪ Media and Publishing</li><li>▪ Education</li><li>▪ Anthropology</li><li>▪ Sociology</li><li>▪ Medicine</li><li>▪ Psychology</li><li>▪ Philosophy</li></ul>
---	---	---



# A LEVEL PHYSICS

## Studying the Course

Modern physicists have been responsible for some of the greatest achievements of our era. Just think – without our understanding of atomic theory there would be no computers, no internet, no smartphones. The digital age as we know it would not exist. Without quantum mechanics there would be no lasers or satellite navigation. Who knows where future scientific discoveries and inventions will take us?

If you're up for shaping tomorrow's world, an A-level in Physics could take you to the frontline of the latest emerging technology. Whether you are working in a field directly related to physics like nuclear physics or astronomy, or one that simply uses the skills you've gained, your Physics A-level can really help you to make a difference.

The aim of the course is to provide a stepping-stone from GCSE to A Level Physics including quantum physics, medical physics, nuclear physics, mechanics and magnetism. It prepares students not only for studying physics further but any course and career which requires logical thinking and a structured approach to problem solving.

<b>What will I study?</b> Yr 12 <ul style="list-style-type: none"><li>• Measurements and their errors</li><li>• Particles and radiation</li><li>• Waves</li><li>• Mechanics &amp; materials</li><li>• Electricity</li><li>• Further mechanics SHM</li></ul> Yr 13 <ul style="list-style-type: none"><li>• Thermal physics</li><li>• Fields and their consequences</li><li>• Nuclear physics</li><li>• Chosen Option</li><li>• Medical physics</li></ul>	<b>How will I be assessed?</b> 3 Written Exam Papers: <ul style="list-style-type: none"><li>• Paper 1: Yr 12 material (34%)</li><li>• Paper 2 :Yr 13 material (34%)</li><li>• Paper 3 : Mixed Content &amp; Practical skills &amp; Medical Physics (32%)</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Defence</li><li>• Astronomy</li><li>• Education</li><li>• Meteorology</li><li>• Telecommunications</li><li>• Finance</li><li>• Computing</li></ul>
---	---	--

# A LEVEL PSYCHOLOGY

## Studying the Course

Psychology is a science and is the study of brain and behaviour. We all have ideas about people and about ourselves, and psychology relates to those ideas but draws on scientific methods to build a body of knowledge about such issues. Psychology can be theoretical, looking at how the brain works and what drives our behaviour, including issues such as early childhood experiences and what happens to us as we develop. Psychology can be practical, such as in therapy and treatments as well as in the workplace, such as when devising advertisements or advising the police.

You might think of psychology as listening to people on a couch and to an extent you would be right. There is much more to it than that, however. The most important quality for anyone wanting to study psychology is to find people fascinating.

Are you intrigued by why people act in the way they do? If so, then psychology will capture your imagination. You will need to:

- be willing to have your opinions and values challenged
- be willing to listen to and take on board new ideas and novel argument
- be able to see both sides of an issue not reject one side simply because you believe initially that it is wrong. Psychology provides many opportunities to develop skills in assessing debates and arguments.

Psychology is a very useful subject for any career where you interact with people.

Occupations such as journalism, nursing and marketing all welcome trainees who have studied psychology.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Psychology is the 'scientific study of the mind and behaviour', and the A Level offers an introduction to six 'core' areas of the discipline.</li><li>• The course teaches conformity, social norms, how the mind remembers and forgets and how children form attachments</li></ul>	<b>How will I be assessed?</b> <ul style="list-style-type: none"><li>• The three exams last 2 hours and are worth 96 marks each. The exams consist of multiple choice, short answer and extended writing questions.</li><li>• Paper 1 – Memory, attachment social influence and Psychopathology</li><li>• Paper 2 – Research methods, approaches and Biopsychology</li><li>• Paper 3 – Issues and debates, Schizophrenia, Forensic Psychology and Gender/Relationships</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Clinical Psychology</li><li>• Forensic Psychology</li><li>• Counselling</li><li>• Probation and Prison Service</li><li>• Police</li></ul>
---	--	---

# A LEVEL SOCIOLOGY

## Studying the Course

Sociology is the study of society. It is about all kinds of social relationships that people share with each other in their families, schools and work. The methods developed by sociologists are used in other academic areas such as market research and management studies.

You will study all varieties of human experience. Social theory is also important in Sociology. It teaches us that there are no right or wrong answers when it comes to studying the way people live together. What is important for a sociologist is the ability to evaluate evidence and choose between possible explanations. You will enjoy Sociology if you are the type of person who is not afraid to have new ideas and who is not afraid to work at a demanding pace.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Families and Households</li><li>• Research Methods</li><li>• Education</li><li>• Crime and deviance</li><li>• Beliefs in society</li><li>• Theory and methods/Methods in context</li></ul>	<b>How will I be assessed?</b> 3 written exam papers. <ul style="list-style-type: none"><li>• Paper 1 Education with Theory and Methods 2 hours.</li><li>• Paper 2 Topics in Sociology (Families and households and Beliefs in society sections) 2 hours.</li><li>• Paper 3 Crime and deviance with Theory and Methods 2 hours.</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Social Work</li><li>• Nursing</li><li>• Civil Service</li><li>• Social Policy</li><li>• Criminology</li><li>• Teaching</li><li>• Policing</li></ul>
--	--	---

# AAQ HEALTH AND SOCIAL CARE

## Studying the Course

The health and social care sector comprises two sub sectors; health care and social care. Health care encompasses all hospital activities, medical, nursing homes and GP services for example. The social care sector includes residential nursing care, residential nursing facilities, domiciliary care and social work.

By studying the Health and Social Care you will be able to progress in the sector through degree programs in nursing, midwifery, social work, physiotherapy, occupational therapy and pharmacy for example. There are more than 300 distinct career paths in this sector. The sector is a major employer; almost four million people across the UK. You can gain an enormous sense of personal achievement by making a positive difference to people's lives. A career in social care offers long-term employment prospects, with great opportunities for promotion and progression.

The Health and Social Care department have highly motivated staff who will provide you with all the support you need. You will be expected to work hard as we have high expectations, but a fun and supportive environment will be created to help you succeed.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Human lifespan development</li><li>• Anatomy and Physiology</li><li>• Safeguarding</li><li>• Mental Health</li><li>• Children's Development</li><li>• Sociological Perspectives</li><li>• Psychological Perspectives</li><li>• Public Health</li></ul>	<b>How will I be assessed?</b> <ul style="list-style-type: none"><li>• Extended Certificate 50% coursework, 50% external assessment</li><li>• Diploma 60% coursework, 40% external assessment</li><li>• Extended Diploma 70% coursework, 30% external assessment</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Nursing</li><li>• Midwifery</li><li>• Social Work</li><li>• Speech Therapy</li><li>• Education</li><li>• Health Promotion</li><li>• Physiotherapy</li><li>• Occupational Health</li></ul>
--	--	---

# AAQ APPLIED SCIENCE

## Studying the Course

Choosing to study the Applied Science is a great decision to make for lots of reasons. More and more employers are looking for well qualified people to work within the fields of science, technology, engineering, and mathematics. You will sharpen your skills for employment or further study and help you to achieve your ambitions and career goals.

The course has been developed in the science sector. It focuses on giving students the opportunity to acquire technical and employability skills, knowledge and understanding which are transferable. The course enables individuals to meet changing circumstances, whether these arise from a shift in their own status or employment, or general changes in applied science practice, provision, or environment.

An integral part of our teaching in Applied Science is practical work and all students will be expected to carry out scientific procedures including colorimeters, microscopes, titration, making standard solutions, thin and paper chromatography.

As research and communication are an integral part of Applied Science all students are provided with textbooks and outstanding teacher-created resources to support their knowledge and understanding of the course content.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Principles and applications of science I and II</li><li>• Practical scientific procedures and techniques</li><li>• Physiology of human body systems</li><li>• Biological molecules and metabolic pathways</li><li>• Science investigation skills</li><li>• Laboratory techniques and their application</li><li>• Investigative project</li></ul>	<b>How will I be assessed?</b> <p>Single award: 4 units</p> <ul style="list-style-type: none"><li>• 2 x coursework units</li><li>• 2 x exam units</li></ul> <p>Double award: 8 units</p> <ul style="list-style-type: none"><li>• 5 x coursework units</li><li>• 3 x exam units</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Forensic Science</li><li>• Science Technician</li><li>• Medicine</li><li>• Biochemical Science</li><li>• Environmental Science</li><li>• Healthcare</li><li>• Education</li><li>• Engineering</li></ul>
--	--	---

# AAQ MEDICAL SCIENCE

## Studying the Course

This exciting new qualification is being offered in response to an increasing interest in progression into medical sciences in place of traditional academic routes into medicine. At Shireland Biomedical UTC we want to be the first to act on local and national employment sector demands and provide you with the skills and qualifications you need for a successful career and future post-sixth form.

The curriculum has been developed with input from the medical industry and higher education institutions. This qualification reflects the demands of medical science and provides the foundation of knowledge and skills required for progression into further study at degree level or employment in the industry. Students will study core principles such as human anatomy, physiology, and microbiology and apply this to medical science through the study of health issues, pathology, and treatments and therapies. Students will also learn practical and investigative skills that build on this fundamental knowledge.

Medical Science is designed to be taken alongside A levels such as Sociology, Chemistry and Psychology or applied courses such as Applied Science, or Health and Social care. The course is modular which means assessment will be a mixture of externally marked exams and internally marked coursework, some of which will be completed and assessed in the first year of study. Because of the holistic nature of the course content, teaching and assessments will be synoptically linked. For example when learning about how a disease causes certain symptoms (taught in one module) you will need to understand the function of the immune system (taught in another module). Your lessons will be delivered in modern and well-equipped teaching laboratories and the clinical ward.

To study the Medical Science qualification, you will need a Grade 5 in Biology or combined science and grade 4 for English or Maths.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Principles of Human Physiology anatomy and pathology</li><li>• Human Biology and Health issues</li><li>• Practical, microbiology and infectious diseases</li><li>• Optional units</li><li>• Diseases disorders, treatments and therapies</li><li>• Biomedical Science</li><li>• Human reproduction and fertility</li></ul>	<b>How will I be assessed?</b> <ul style="list-style-type: none"><li>• 50% externally assessed units.</li><li>• 50% internally assessed units.</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Child nursing</li><li>• Midwifery</li><li>• Social Work</li><li>• Primary teaching</li><li>• Nursery nurse</li><li>• Child psychologist</li><li>• Child minder</li><li>• Family support worker</li></ul>
--	--	--



# AAQ EARLY CHILDHOOD DEVELOPMENT

## Studying the Course

The childcare sector consists of being able to work with children in a range of different fields, such as in education, in health and social care settings or directly supporting children in getting additional help to improve their life experiences. The childcare course offers a background into key theories and aspects that will govern your everyday practice as an early year's educator.

By studying Early Childhood Development, you will be able to progress in the sector through degree programs in nursing, midwifery, social work and primary school teaching for example. It works alongside health and social care to provide you with a wide breadth of knowledge about how to support children in all aspects of their life. With a growing population of younger children, there are a whole host of opportunities available for individuals to work within the early years framework providing care for children between the ages of 0-8 in either the private, voluntary or public sector. A career in childcare offers long-term employment prospects, with great opportunities for promotion and progression.

The Childcare department have highly motivated staff who will provide you with all the support you need. You will be expected to work hard as we have high expectations, but a fun and supportive environment will be created to help you succeed.

<b>What will I study?</b> <ul style="list-style-type: none"><li>• Children's Development</li><li>• Development of Children's Communication, Literacy and Numeracy Skills</li><li>• Play and Learning</li><li>• Working with Parents and Others in Early Year</li><li>• 50 hours of work experience in at least one setting with children aged 0-8</li></ul>	<b>How will I be assessed?</b> <ul style="list-style-type: none"><li>• 50% externally assessed units.</li><li>• 50% internally assessed units.</li></ul>	<b>Career Pathways:</b> <ul style="list-style-type: none"><li>• Child nursing</li><li>• Midwifery</li><li>• Social Work</li><li>• Primary teaching</li><li>• Nursery nurse</li><li>• Child psychologist</li><li>• Child minder</li><li>• Family support worker</li></ul>
---	--	--



**SHIRELAND  
CBSO ACADEMY**



**SHIRELAND  
BIOMEDICAL**  
UNIVERSITY TECHNICAL COLLEGE