

Only a short
walk from
Cambridge South
Railway station

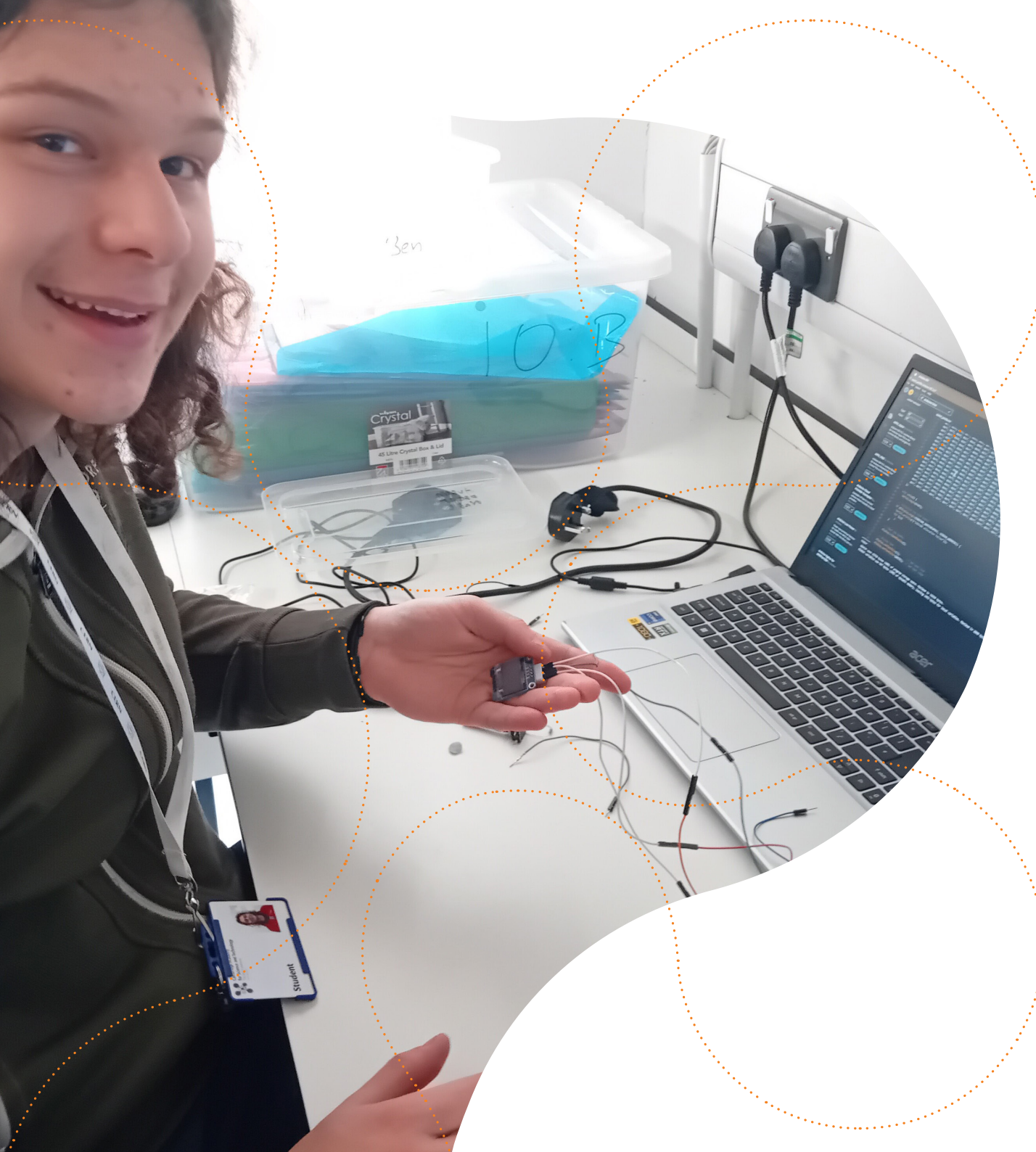


**Cambridge Academy
for Science and Technology**
The best in everyone™
Part of United Learning

Prospectus 2027



Sixth Form



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What do we offer?

CAST Sixth Form is an inspiring, specialist STEM college that can offer you A level or T level courses in a range of sciences, maths, computing and health. Our small size means you will receive a personalised education and support to ensure that you really flourish, both academically and personally. In addition to your academic studies, you will work with industry professionals on extended STEM projects, applying your academic learning to address real-world challenges, gaining the professional skills that will make you very successful in the future.

CAST Sixth Form has a strong track record of both academic excellence and student progress. This is achieved through a combination of high-quality teaching, state-of-the-art laboratories and facilities, independent study areas, and academic support. Throughout your time in CAST Sixth Form you will receive outstanding personalised careers support, ensuring that you are able to achieve your university and apprenticeship goals upon graduation, and achieve your dream career in the future. We welcome students from many backgrounds, creating a vibrant atmosphere with a wealth of opportunities supported by a very active Sixth Form Council.

Our location on the Cambridge Biomedical Campus means you will have access to some of the world's leading research and health organisations. The Biomedical Campus also provides excellent transport links with its own railway station, bus station and is on the guided busway. CAST Sixth Form is a United Learning school and is also supported by the Baker Dearing Trust as a University Technical College (UTC).

“

Because all the teachers are subject experts, the quality of education is excellent. Teachers really know their subjects and are always happy to help.

”

Aidan (Year 13)



“

I recently moved to Cambridge. CAST Sixth Form is small, so it was really easy to get to know everyone and make friends. All the activities organised by the Sixth Form Council really help with this.

”

Ella (Year 12)





“

I love Challenge, it has allowed me to get real hands-on experience of many employment sectors. I now want to go into automotive engineering because of what I have learnt.

”

Claudio (Year 13)



Real experience from the start

Being a good scientist is more than just knowing about the subject, it is being able to do it. That doesn't mean just repeating the experiments of the past but being able to design and perform your own investigations using modern techniques and technology. Throughout your time in CAST Sixth Form you will engage in Challenge Projects, these are extended STEM based projects developed and delivered in close collaboration with partners in industry, healthcare and academia.

You will always have a choice of at least 4 projects from across a range of disciplines including computing, chemistry, physics, biochemistry, engineering, technology and ecology. This allows you to personalise your education beyond your academic studies, gain important employability skills and try out subjects you may be considering for university or apprenticeships. As part of our Challenge Programme, you will complete the Extended Project Qualification (EPQ).

Universities are increasingly asking for supra-curricular education, learning about academic subjects beyond the school curriculum. Similarly, apprenticeship providers and employers are looking for students with developed practical skills. Our Challenge programme makes you stand out from the crowd.

Examples of Challenge Projects

- Students used a range of organic chemistry techniques to synthesise gingerol, an anti-oxidant found in ginger. They then compared the purity of their compound to the same chemical they had purified from ground ginger.
- Working with engineers from Cambridge University, Department of Engineering students designed, built and tested the streamlining on model dragster cars.
- Students worked with computer scientists from the University of Oxford to design, build and train machine learning to analyse data from ATLAS experiment at CERN to identify collisions in which the Higgs boson was created.
- Working with scientists from the Hobson's Conduit Trust, students characterised a local, critically endangered chalk stream. Using their data they developed a management plan to protect the river.

“

When I moved to CAST Sixth Form I wasn't sure what to expect from Challenge. It has been incredible; I have had the chance to work with a range of equipment most people wouldn't even get to use until after university!

”

Marilyn (Year 12)

Supporting you to succeed

The transition from school to sixth form and beyond is an exciting time and one which brings many challenges. We will support you on every step of your journey throughout your time at CAST Sixth Form, ensuring your time here is successful and you are well prepared for university, apprenticeships or employment.

Academic support

Weekly study surgeries give you the opportunity to meet with subject teachers on an individual basis to get support with topics you may find tricky. We will also provide free access to resources like UpLearn, providing comprehensive A*/A level subject materials designed to enhance your study.

Life skills

Our Sixth Form tutor programme covers a range of topics, including study skills, health, politics, personal safety and finance. Furthermore, there is a weekly debate allowing you to engage with a wide range of contemporary topics in a fun and engaging way whilst developing skills for top level university interviews.

Supra-curricular support

Subjects provide opportunities to engage in Olympiads, Senior Maths Challenge, and other competitions, activities, visits and lectures. CAST is an active partner of the Cambridge Festival, hosting a day of activities. You will not only have the opportunity to visit the event, but also to deliver it! We have specialist groups to support those planning to apply for Oxbridge, Medicine, and other competitive courses, ensuring many of our students make successful applications.

Extra-curricular support

CAST Sixth Form is a friendly, supportive environment, you will have no problem meeting others and making new friends. Our Sixth Form Council provides opportunities to gain leadership experience, organising and running a range of charity and social activities, including BBQs, proms, bake sales, dress up days and quizzes. You can participate in a range of extracurricular clubs or are welcome to start your own if one does not already exist. CAST Sixth Form students have access to the college gym. There is the opportunity to engage in a range of trips, both at home and abroad, including ski trips, a visit to CERN, and cultural trips.

“

I want to be a vet. CAST Sixth Form has given me loads of opportunities to enhance my UCAS application, for example I have completed the Chemistry Olympiad, Senior Maths Challenge and had some great work experience. Challenge has also been fantastic.

”

Anna (Year 12)



“

Tutor time provides lots of support, the sessions are really relevant to things that we need to understand. The debates are fantastic fun and really help understanding what is happening in the world.

”

Dara (Year 12)



Supporting you to succeed

Pastoral support

You will be assigned an academic tutor who will work with you through your time in CAST Sixth Form, meeting with you to provide mentoring support and delivering tutor time activities. Our tutors are supported by the Head of Sixth Form and pastoral team who can provide additional support if required.

Special Educational Needs and Disability (SEND)

If you have additional needs our SEND team will work with you and your family to develop an individual support plan to support you and ensure you reach your potential.

Disadvantaged support

Our 16 to 19 Bursary Fund provides financial support to help you overcome specific financial barriers that may prevent you remaining in education. We would strongly encourage you to apply if you are eligible. The bursary fund is intended to help you with the costs of participating in education.

“

I have a SEND mentor who is very helpful, she has given me lots of good advice and support and is very easy to talk to. SEND have also arranged special exam considerations for me.

”

Zina (Year 13)

“

The support at CAST Sixth Form is great. There is always somebody to talk to if you need help.

”

Blanca (Year 13)

As a result of a very successful T Level work placement, Aggie was offered a degree level apprentice position at the Medical Research Council's Laboratory of Molecular Biology (MRC LMB). Aggie joined CAST for her Sixth Form education to study for a T Level in Laboratory Science, for which she achieved a Merit grade.

Michael is studying Applied Physics at Eindhoven Technical University. Whilst in CAST Sixth Form he studied Maths, Physics, Computer Science and Further Maths. For his EPQ he created a real time suspension telemetry system for a mountain bike. Michael worked with Cambridge University on a Challenge Project designing, building and training an AI to identify musical genres from patterns in the music. CAST Sixth Form supported Michael in gaining work experience at Mott MacDonald.

Marta is studying Veterinary Medicine at the University of Cambridge. She joined CAST Sixth Form to study A Levels in Biology, Chemistry and Maths, achieving A grades in all her subjects. She also gained an A grade for her EPQ. In addition to her academic studies Marta completed extended projects in molecular biology, ecology and organic chemistry. CAST Sixth Form supported her university application, providing support with her application; practice interviews; and an admissions workshop at a Cambridge College. CAST Sixth Form further supported her to gain appropriate work experience.

Make your future extraordinary

Careers support

Progression is at the centre of all that we do at CAST Sixth Form. We want you to have the best possible chance of succeeding in your chosen career path. To support you in this you will receive personalised guidance, help in developing CV writing skills, interview technique, and applications for university or apprenticeships. A Level students will complete a week of work experience, whilst T Level students complete a 3-month work placement. We have bespoke support for those applying to Oxbridge, Medicine, Dentistry and Veterinary Science. This compliments the skills and knowledge you are gaining through our Challenge Programme.

Destinations

Our goal is that when you leave us you will get the university course, apprenticeship or job of your dreams. The majority of Year 13 students progress onto university (about 80%, compared to around 36% nationally). Each year we have students who achieve places at the UK's top universities, including Cambridge, Oxford and Russell Group Universities. The vast majority of our students go on to study STEM courses. We routinely have students achieving places to study Medicine.

Jonas is studying Medicine at King's College London. He studied Biology, Psychology and Chemistry, and also completed an EPQ. CAST Sixth Form supported his application to study Medicine at university by providing work experience, support with his personal statement and a mock interview. Jonas was a member of the college's MedSoc, gaining insight into careers in the health service.



“

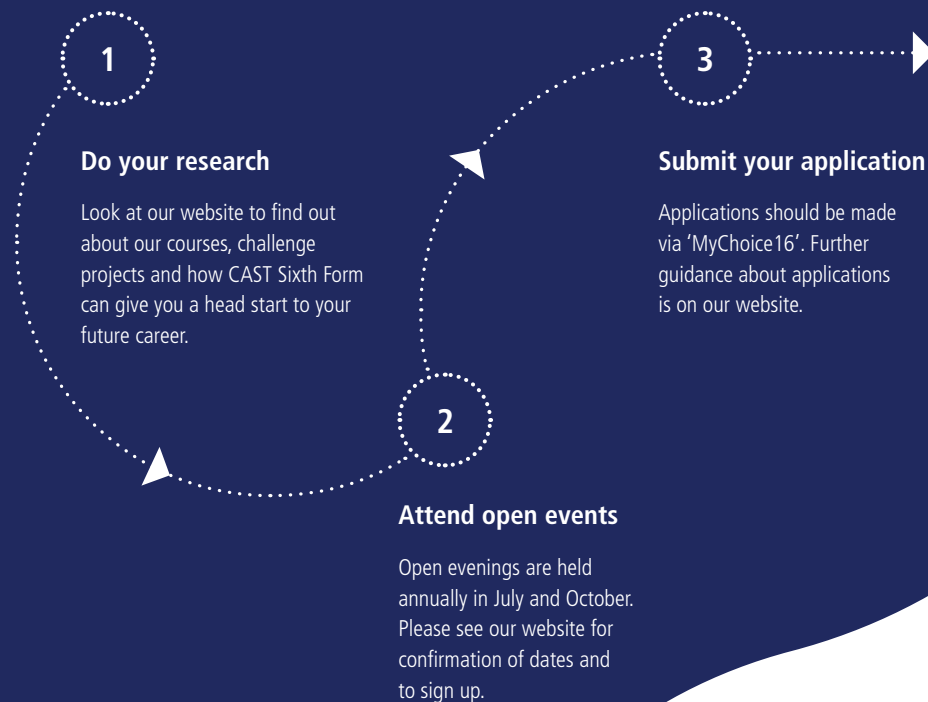
The Sixth Form offers a brilliant work experience programme. There is lots of support to reach specialist technical providers. I went to the Physics Department, University of Cambridge, it has really helped me in deciding what I want to study at university.

”

Leon (Year 12)

Your application journey

Before you apply



After you apply





The sixth form study programme

A Level study programme

T Level study programme

Who is the study programme aimed at?	Primarily intended for academic students who are planning to go to university, but does allow you to start an apprenticeship, or go directly into work.	Primarily intended for academic students who are planning to complete an apprenticeship or go directly into work but does allow you to go to university.
Course structure	A Levels are a 2-year course. Your grade is determined by exams at the end of the course. The Geography and Computer Science courses also have a coursework component.	T Levels are a 2-year course. They are assessed by a mixture of exams and practical assessments. To pass the course you must complete a relevant 3-month work placement.
Entry requirements	7 GCSEs (grade 4-9), including Maths (6) and English (4) with at least a grade 6 in the subjects chosen at A Level. For Maths A Level a grade 7 in GCSE Maths is required and for Further Maths A Level a grade 8.	The minimum entry requirement is 5 GCSEs (at grade 4-9) including Sciences (5), Maths (5) and English (4). You must also have a right to work in the UK.
Courses	Choose 3 or 4 from: • Biology • Chemistry • Computer Science • Environmental Science • Geography • Maths • Further Maths • Physics • Psychology	Choose from: • Science (Laboratory Science) or • Health (Adult Nursing) Courses are equivalent to three A Levels.
Additional Courses	Level 3 Mathematical Studies (Core Maths) - if not studying A Level Maths. Extended Project Qualification (EPQ)	Level 3 Mathematical Studies (Core Maths)



A Level Biology

Biology is an exciting and dynamic subject at the heart of modern healthcare, conservation and sustainability. Not only does this course provide a good introduction to understanding how our own body works, but it also explores the wider aspects of life on Earth and how we understand it. Biology provides an essential background for anyone considering a career in life sciences. Studying this subject promotes an understanding of topical issues such as stem cell technology, drug development, and global warming.

Qualifications in Biology lead onto a very wide range of university courses and apprenticeships. These can lead onto traditional careers such as medicine, veterinary science, and bioscience research, or to more diverse fields such as media, forensics, diagnostics, law and many more.

Content

In Years 12 and 13 the students follow the OCR Biology A specification H420. This develops many of the ideas and theories studied at GCSE such as genetics, homeostasis, bioenergetics and ecology.

A Level Chemistry

Chemistry is sometimes known as the 'central science' because it helps to connect physical sciences, like maths and physics, with applied sciences, like biology, medicine and engineering. It helps you to develop research, problem solving and analytical skills. It helps you to challenge ideas and show how you worked things out through logic and step-by-step reasoning. Chemistry often requires teamwork and communication skills, which are important for project management.

A Level Chemistry is essential for a degree in Medicine. Qualifications in chemistry will help you get ahead in most STEM careers and more besides. It is an important subject for careers in environmental science, engineering, toxicology, metallurgy (studying how metals behave), space exploration, developing perfumes and cosmetics, pharmaceuticals, science writing, research and many more.

Content

In Years 12 and 13 you will follow the OCR Chemistry A specification H432. This develops many of the ideas and theories studied at GCSE such as quantitative chemistry, energy, organic chemistry, rates of reaction and analysis of compounds.





A Level Computer Science

Computer Science develops the knowledge and skills required to play an active role in the digital world. You will develop a firm grasp of computing concepts, be able to optimise systems, solve problems and create new systems. There can sometimes be confusion about the differences between ICT and Computing. Computing in industry is essentially a practical subject that applies theory to design and develop products for clients. With this in mind, your curriculum will reflect modern business practice. Most learning is delivered through projects, which involve project management, teamwork, report writing and the use of industry-standard tools.

Computer Science can lead into a range of fields, including computing, programming, machine learning and cryptography.

Content

In Years 12 and 13 you will follow the WJEC/Eduqas Computer Science specification. The course develops, then applies theoretical knowledge to practical tasks. We teach the design and production of high-quality programs, and raise awareness of their contribution to society, allowing an understanding of how course material relates to industry practices.

A Level Environmental Science

Environmental Science is an interdisciplinary science that includes many areas including biology, chemistry, physics, maths and geography. You will explore how the world works at both a biological and physical level, look at the effect that humans are having on it and explore ways to mitigate these effects. Environmental Science is rapidly developing field and studying it will put you at the forefront of some the biggest challenges facing humanity.

Environmental Science is a rapidly growing field that encompasses careers from politics to conservation, nuclear physics to sustainable building. The number of jobs in the environmental science sector is growing by around 5% annually as we recognise the importance of effectively managing our interactions with the environment whilst continuing to maintain and improve our quality of life.

Content

A Level students follow the AQA Environmental Science specification 7447. The A Level Environmental Science course helps you to understand the Earth's processes, both physical and biological. It allows you to discuss the impact of human activity on the environment and evaluate strategies used to reduce climate change, energy requirements, conservation and agriculture and thinks about how these often-competing needs can be balanced. You develop accurate research methods. As part of your studies, you will undertake practical field activities using specialist equipment to collect data for study.



A Level Further Maths

An A Level in Further Maths provides you with the extended skills to reason and problem solve in a variety of contexts and provides a framework with which you can access sciences, engineering and all careers requiring a high degree of maths knowledge and application. To study Further Maths, you must also study A Level Mathematics.

Further Maths is required by some of the more competitive universities and apprenticeships to study engineering, physics or computer science, as well as maths.

Content

In Years 12 and 13 you will follow the OCR Further Maths specification H645. A Level Further Maths is offered for the most able mathematicians and those who wish to develop a deeper mathematical understanding. When studying this course, you are introduced to interesting new areas of pure mathematics such as complex numbers, matrices and develop further your knowledge in both statistics and mechanics.



A Level Geography

With the threat of climate change and its impact on all aspects of life there has never been a more important time for you to study a subject that explains the dynamic interplay of humankind and the natural world. Geography at CAST Sixth Form is based on a balanced framework of physical and human geography allowing you to investigate the link between these themes. We encourage you to develop a problem-solving approach to contemporary geographical challenges. Both the physical and human dimensions of the course come together with a common focus on mitigating causes and adapting to the effects of climate change.

Geography opens doors to many careers and courses. These can include areas such as town planning, land management, aid work and development, research, and journalism amongst others.

Content

In Years 12 and 13 the students follow the AQA Geography specification 7037. This builds on many of the topics studied at GCSE such as coastal systems and landscapes, contemporary urban environments, ecosystems under stress, and the positive and negative impacts of globalisation. You will also undertake an independent investigation, developing both fieldwork and academic skills.



A Level Mathematics

Mathematics at A Level continues the study and use of algebra from GCSE but includes greater depth in statistics and introduces mechanics – a way of looking at forces and moving particles using techniques from Maths. Through these 3 approaches, you will learn about skills such as modelling, analysis and reasoning. You will continue to develop ideas about proof, especially using trigonometric identities and proof by contradiction.

An A Level in Mathematics provides the essential skills to reason and problem solve in a variety of contexts and provides a framework with which you can access the sciences, engineering and all careers requiring a high degree of numeracy and logical thinking, including economics, data science, and statistics. A Level Mathematics is essential for anyone wanting to study engineering, physics or computing at university.

Content

In Years 12 and 13 the students follow the OCR Mathematics A specification H240. This develops many of the ideas studied at GCSE including statistics but also further develops your skills in calculus, trigonometry, algebra and mechanics.

A Level Physics

A Level Physics will provide you with the tools to understand the structure of the whole Universe, from the smallest subatomic particles to the largest galaxies. You will expand your knowledge of the fundamentals of physics and discover new ideas in quantum mechanics and particle physics. We also look at applications of physics in the real world, with an emphasis on medical physics.

In addition to being a standalone subject, Physics provides the basis to many of the other sciences, including biology, chemistry, the medical sciences, Earth sciences, and astronomy as well as all areas of engineering and many aspects of computer science.

Content

In Years 12 and 13 the students follow the OCR Physics A specification H556. This develops many of the ideas and theories studied at GCSE such as forces, energy and motion as well as adding quantum physics, medical physics, cosmology and astrophysics.



A Level Psychology

Psychology is the scientific study of the mind and human behaviour. As such psychology centres around gaining understanding of the many facets of the human form. By studying psychology, you will be able to hone analytical and organisational skills and learn about scientific research methods, including collecting and working with data. Learning about human behaviour can also help to build your communication skills and improve your teamwork and leadership skills. You will use a scientific approach to learn about behaviour and mental life.

Whatever career you pursue, a background in psychology will enhance your employability. Studying psychology can help you understand yourself and other people by learning about aspects of human behaviour that will help you in daily life.

Content

Students follow the AQA Psychology specification 7182. You will learn about brain function and behaviour, interactions with others, memory performance, your ability to cope with pressure and your understanding of the causes of psychological disorders. You will also cover human behaviour, including social interaction, language and communication, human motivation and emotion, and the process of decision-making.



“

My two years in the Sixth Form at CAST have been the best two years of my life so far. I cannot thank the teachers enough and I have enjoyed being in a small and supportive community of peers. CAST has given me wonderful opportunities in order for me to achieve these results and to go onto university and a future career in STEM. I have had an incredible time.

”

Sammy



T Level Health (Adult Nursing)

T Level Health is the only sixth form course directly designed to support you to work in the health sector. The location of CAST Sixth Form on the Cambridge Biomedical Campus means we have easy access to 3 major hospitals, including two of an international standing. As health is one of the fastest growing industry sectors, you will have a chance to make a huge difference to other people's lives and society as a whole.

Following a T Level, you can progress straight into a skilled profession or continue your studies with a degree or higher apprenticeship. The course is ideal for those planning a career in a hospital or other healthcare setting, such as nursing, midwifery, paramedic, physiotherapy, etc.

Content

The Core element of a T Level in Health will boost your knowledge in a range of topics such as the principles of good scientific and clinical practice, as well as fundamental scientific concepts; not to mention your understanding of standard operating procedures, management of equipment and work areas, stock control and storage, and the importance of quality standards and health and safety.

You will gain the skills you need for your future job, such as patient-centred care, carrying out simple clinical procedures and taking clinical measurements, safeguarding, ethics, infection control and responding to incidents and emergencies.

Finally, you will be able to put everything you learn into practice, with a substantial industry placement of around 45 days. This will give you an amazing opportunity to work with an employer while you study, in a hospital or other healthcare setting, gaining invaluable experience as well as the key skills that employers are looking for.

T Level Science (Laboratory Science)

T Level Science is aimed at students who are interested in pursuing a career in Laboratory Science. As a Laboratory Scientist you will never be out of work in the Cambridge area. The course will prepare you for working in all areas of Laboratory Science, especially in biological or chemical fields.

Following T Level Science, you could progress straight into skilled laboratory work or continue your studies with a higher apprenticeship or degree.

Content

The Core element of this T Level will boost your knowledge in a range of topics including the principles of good scientific and clinical practice and fundamental scientific concepts. You will also learn to use standard operating procedures, manage equipment and work areas, stock control and storage, the importance of quality standards, and health and safety.

You will specialise in laboratory sciences understanding how to design and perform experiments, keeping good records and problem solving.

Finally, you will be able to put everything you learn into practice, with a substantial industry placement of around 45 days. This will give you an amazing opportunity to work with an employer, such as a chemical, pharmaceutical or biotechnology company where you will gain invaluable experience and key skills.





Other qualifications Level 3 Mathematical Studies (Core Maths)

If you are not studying A Level Mathematics you will be expected to study Core Maths as part of your CAST Sixth Form study programme.

This Level 3 Certificate in Mathematical Studies will consolidate your mathematical understanding, build your confidence and competence in applying mathematical techniques and introduce you to new techniques and concepts. The course will prepare you for further study and future employment within a broad range of academic, professional, and technical fields.

Content

In Years 12 and 13 you will follow the AQA Level 3 Mathematical Studies specification 1350. The main topics are analysis of data, personal finance and estimation.

Other qualifications Extended Project Qualification

As part of our Challenge programme all A Level students complete the OCR Extended Project Qualification (EPQ) H857. Your EPQ will allow you to complete a free choice of project that develops or extends a variety of skills. This project allows you to pursue a theme or topic based on a particular personal interest.

You will be provided with dedicated lesson time and support to complete your project. CAST Sixth Form will assign you a mentor to provide individualised guidance and advice.

The EPQ allows you to develop transferable skills, including independent working, problem-solving, researching, critical thinking, communication and time management.



CAST Sixth Form is part of United Learning

United Learning is a group of schools which aims to provide excellent education to children and young people across the country.

We seek to improve the life chances of all the children and young people we serve and make it our mission to bring out the best in everyone - students, staff, parents and the wider community. Through being a group, we can offer more to both staff and young people than any single school could offer alone. As part of United Learning, we are able to offer group-wide activities and experiences that we would not be able to offer alone.

United Learning's approach is underpinned by a sense of moral purpose and commitment to doing what is right for children and young people, supporting colleagues to achieve excellence and acting with integrity in all our dealings within and beyond the organisation, in the interests of young people everywhere.

We summarise this ethos as the best in everyone.



CAST Sixth Form is a University Technical College

University Technical Colleges (UTCs) are government-funded schools with a STEM (Science, Technology, Engineering and Maths) focus. They provide a unique and relevant approach to education which addresses the changing needs of students and employers in the 21st Century.

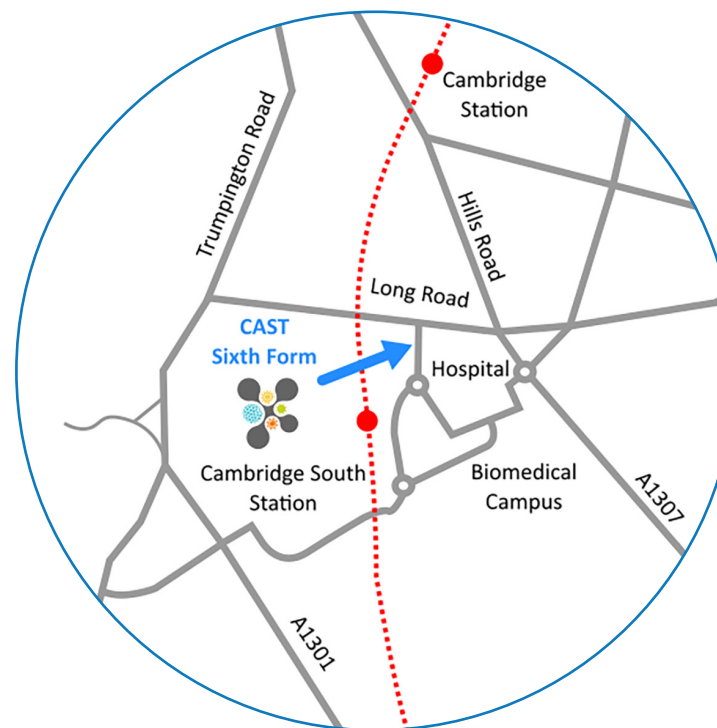
Established by companies and universities in areas of high demand for talent, UTCs provide sought-after technical qualifications and experience and benefit from industry standard equipment and specialist staff to provide students with the skills valued by employers. UTCs are a national family of almost 50 state-funded schools that offer a distinctively different educational choice from other schools. The Baker Dearing Educational Trust is a small, flexible charity that sits at the centre of the UTC network and focuses on promoting and supporting new and existing UTCs.

The UTC mission is to provide young people with a relevant education in a fast-changing world and provide employers with the skilled workforce needed for UK industry to thrive. We offer young people the education they need today to equip them for tomorrow's careers.



Travel

CAST Sixth Form is situated on the Cambridge Biomedical Campus close to Addenbrookes Hospital, therefore, has excellent transport links. The college has ample bike parking, is served by a large number of buses calling at the Cambridge Biomedical Campus, is on the Cambridgeshire Guided Busway, and only a few minutes' walk from Cambridge South Station.





If you are interested in joining Cambridge Academy for Science and Technology Sixth Form you should apply as detailed on our website.

If you have any questions, please contact
admissions@CambridgeAST.org.uk or call us on 01223 724300.
For more information, please visit our website or use the QR code.



Robinson Way, Cambridge CB2 0SZ

www.CambridgeAST.org.uk

 [Cast_sixth_form](https://www.instagram.com/cast_sixth_form)

Open days:

Wednesday

1 July 2026

Wednesday

21 October 2026

Sixth Form