



utc university
technical college
cambridge

sponsored by

Cambridge 
Regional College
first for training & skills

 **CAMBRIDGE UNIVERSITY**
Health Partners
Knowledge-based healthcare

**a new science college
for 14-19 year olds**

**biomedical &
environmental science**

prospectus 2014/2015

WELCOME

This UTC is an exciting new concept in education. Supported by world-class partners, it will provide a dynamic and inspirational curriculum closely aligned to the needs of the local and national labour market in Biomedical and Environmental Science and Technology. Our new building will contain sector-leading facilities, and the innovative,

project-based approach to learning will ensure that every student is fully prepared with the necessary qualifications and skills to excel as they progress to higher education, apprenticeships, further training or directly into employment.

OPEN DAYS

22 November 2013 4pm–7pm

23 November 2013 10am–1pm

8 March 2014 10am–1pm

24 May 2014 10am–1pm

SATURDAY SCIENCE

Keep an eye out for our Saturday Science sessions in November, with exciting hands-on activities. See utccambridge.co.uk for details.



“ The UTC is much welcomed to help ensure a local workforce with relevant skills. As a major employer within Cambridge it is in our interest to be involved in this exciting development. We take our corporate social responsibility seriously and wish to offer input into the future training and employability of young people in our community. ”

Cambridge University Hospitals NHS Foundation Trust

thinking the **Wonderful** realising the **Impossible**



a new college for Cambridge
a new way to learn science

UTC Cambridge is one of the most exciting innovations to take place in education, offering specialist science to a generation ready to become part of the global network of biomedical and environmental science and technology professionals.

Based in Cambridge, home to the Cambridge Phenomenon and one of the world's leading Biomedical Campuses, the

UTC will deliver an education supported at every stage by leading employers and research centres.

Cambridge's reputation in science and technology is world-renowned: affiliates of the University of Cambridge have won more Nobel Prizes than any other institution – 89 in total, including 29 in Physics, 26 in Medicine and 21 in Chemistry.

In a city where Crick and Watson discovered the molecular structure of DNA – one of the greatest breakthroughs in scientific history – and where scientists are working at the cutting edge of life-saving research, students will be inspired to achieve above and beyond their expectations.



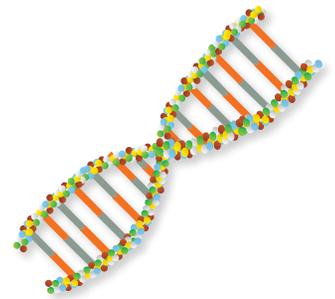
OUR VISION

Learning science in the real world – for the real world

Our vision for the University Technical College Cambridge is a centre of excellence for learning at the heart of the biomedical and environmental industries in Cambridgeshire. Young people will experience a broad and balanced curriculum with deep specialisms in Biomedical and Environmental Science and a learning and working day that will give them a head start with their careers. They will be inspired by real-life projects

designed by employers and learn in outstanding facilities adjacent to Cambridge's Biomedical Campus.

Some of the leading bioscience and ecotech companies in and around Cambridge are partners in the UTC Cambridge



“ Cambridge Regional College has a long tradition as a sponsor of the UTC and the learning relates to the needs of their employer and university general education but UTC Cambridge's specialism is proud to be part of the

Cambridge Regional



being **Curious** about **Science**

onal College is passionate about learning that connects to the real world, on of high quality technical and professional education. We are the lead because 14-19 is the best time to develop an understanding of how your e world of work and your future career. University Technical Colleges, with iversity partners, are exceptional institutions where you can continue your t also gain in-depth knowledge and skills for careers in particular sectors. cialisms are in Science, for which the city has a global reputation. We are is exciting innovation in educational opportunity for young people. ”

College

WHAT IS...

Did you know....?

James Watson and Francis Crick discovered the Molecular Structure of DNA - the Double Helix – in Cambridge, one of the greatest breakthroughs in scientific history.



The UTC Cambridge?

University Technical Colleges offer a unique opportunity for education and business to come together to develop the skills needed by industry. UTCs are sponsored by employers, university bodies and colleges and offer young people aged 14 to 19 an innovative, specialist education to the highest standard.

The UTC Cambridge will be a new centre of excellence for Biomedical and Environmental Science and Technology. It will offer young people a unique opportunity to get a head start in the biomedical and environmental industries, through an innovative learning programme developed in partnership with leading employers.

Biomedical Science?

Cambridge Biomedical Campus is at the very heart of world-leading research and development into new treatments and drugs for life-threatening conditions.

Biomedical scientists carry out the vital laboratory and scientific tests needed to diagnose and treat disease, performing a key role in screening for diseases and monitoring the effects of medication and other treatments.

Environmental Science?

Environmental science involves investigating pollution, depletion of resources and other environmental problems and coming up with solutions. Environmental scientists analyse the air, water, and soil and give advice on how to manage the environment, working in the lab or out in the field. Technologists create solutions and products to reduce environmental impact.



“ Cambridge University Health Partners (CUHP) is proud to be sponsoring the UTC Cambridge because the University and its NHS partners have a major role as employers supporting the local health and biomedical-based economy. ”

Cambridge University Health Partners

UTC PARTNERS

The UTC Cambridge is backed by major organisations at the heart of Cambridge's success as a centre in biomedical and environmental science and technology.

MEDICAL RESEARCH COUNCIL

The Medical Research Council is dedicated to improving human health through research. Its scientists have won 27 Nobel prizes in 100 years of life-changing discoveries.

The pioneering MRC Laboratory of Molecular Biology, a £212 million centre, is next door to the UTC Cambridge.

CAMBRIDGE UNIVERSITY HEALTH PARTNERS

Cambridge University Health Partners is one of only five Academic Health Science Centres in England, recognised as internationally competitive centres of excellence, driving the partnership between the National Health Service and the University of Cambridge to improve patient care.

WELLCOME TRUST SANGER INSTITUTE

The Wellcome Trust Sanger Institute is a world-leading centre of genome sequencing and analysis, spearheading the UK contribution to the Human Genome Project.

NAPP PHARMACEUTICALS

Napp Pharmaceuticals is a world-leader in pain control and one of the most successful pharmaceutical companies in the UK.

BABRAHAM INSTITUTE

The Babraham Institute is a world leader in pioneering research into the principles of epigenetic gene regulation. By determining how the body reacts to dietary and environmental stimuli, scientists hope to improve lifelong wellbeing and healthier ageing.

CAMBRIDGE REGIONAL COLLEGE

Cambridge Regional College is a leading centre of vocational excellence for 16 to 19 year-olds, with one of the most successful apprenticeship programmes in the country. It has 4,000 full-time and 6,000 part-time students and more than 3,500 apprentices currently in training, based at a multi-million pound purpose-built campus with outstanding facilities on the Science Park.

CAMBRIDGE CLEANTECH

Cambridge Cleantech is working to develop the UK as a centre of excellence for the cleantech sector, promoting collaboration between higher education, the scientific and research community and the cleantech sector.

THE CUBE

The Cube operates, manages and designs biology facilities and in-vitro laboratories, delivering design and support services for refurbishing or building new research facilities incorporating in vivo or in vitro functions.

ANGLIAN WATER

The Anglian Water Group is a large employer in the region, employing people with a spectrum of skills and backgrounds, and is the largest water and water recycling company in England and Wales by geographic area.

AMEYCESPA

AmeyCespa has over 40 years of international experience in waste management, with an emphasis on pioneering new technologies. It is at the forefront of waste management developments.

LONG ROAD SIXTH FORM COLLEGE

Long Road Sixth Form College is a high quality 16+ education institution dedicated to the pursuit of excellence. It specialises in the provision of A level, GCSE and vocational programmes for 16-19 year old full-time students.

PARKSIDE FEDERATION ACADEMIES

Parkside Federation Academies runs Coleridge Community College, Parkside Community College and an international sixth form, Parkside Sixth. Its goal is to establish its partnership schools as lifelong centres of excellence.

CAMBRIDGESHIRE COUNTY COUNCIL

Cambridgeshire County Council is committed to partnership-working and participates in many partnerships in the area.

“The new technical college will fill a significant gap in educational provision in the Cambridge area for 14 to 19 year-olds.”

Parkside Federation Academies

29 scientists backed by the Medical Research Council have won Nobel Prizes



MRC Laboratory of Molecular Biology

“ The MRC supports seven research units in Cambridge, on or near the Cambridge Biomedical Campus, employing or training nearly 1,000 scientists, support staff and research students. We would be able to support the UTC in a number of ways, including providing input to the curriculum and providing specialists to speak to learners. ”

Medical Research Council



INNOVATIVE LEARNING

Cambridge is leading
the way on research
and innovation

Learning real science through real-world Challenge Projects, and working with real scientists from our world-leading biomedical industry partners will be at the heart of learning at UTC Cambridge.

Masterclasses
Science Superlabs
Challenge Projects
Industry Mentors

The UTC's innovative mix of academic studies, technical and vocational learning, employer-designed projects and work placements with leading businesses will give students a head start when they move on to employment or university.

Industry-backed Challenge Projects are a central part of the curriculum, led by UTC sponsors who oversee the six-week programme, arrange hands-on visits to their labs and provide mentors – including scientists involved in leading research.

Students will have access to a wide range of enrichment activities, including tutorials, citizenship, communication skills and sport – all designed to improve their learning experience and enhance their employability skills.

Did you know....?

The UTC Cambridge will be next door to the £212 million state-of-the art MRC Laboratory of Molecular Biology, home to some of the world's leading scientists.

The curriculum has been designed with our sponsors, which means students will have the skills, qualifications and experience that employers want. Some of the country's leading experts in their field will deliver masterclasses to students.

Work experience is also an important part of each course, providing the opportunity to work in some of the region's top biomedical and cleantech organisations.

CURRICULUM*

14-16 (Key Stage 4)

CHALLENGE PROJECTS

CORE SUBJECTS FOR ALL STUDENTS

**BTEC Diploma
Science**

Informatics

GCSE
English

GCSE
Maths

GCSE
Double Science

or Individually Ta

Challenge Projects include Health & Safety, Infection Co

Did you know....?

The world's first test-tube baby, Louise Brown, was born as a result of pioneering work in Cambridge.



FOR ALL STUDENTS

PLUS CHOICE FROM:

Technical & Professional

EBacc top-up

Additional GCSEs

**Additional
BTEC Diploma
or
Units**

GCSE
Geography

GCSE
Spanish

GCSE
3rd Science top-up

GCSE
Computer Science

GCSE
Further Maths

Filtered Programme

Control, Hygiene, Energy Awareness and Environmental Support

*Subject to exam body revisions

CURRICULUM*

16-19 (Key Stage 5)

CHALLENGE PROJECTS

ALL STUDENTS

**Development of
English**

**Development of
Maths**

Informatics

plus

**LEVEL 3
Technical & Professional**

**BTEC
Extended
Diploma
Science**

or Individually Taught

Challenge Projects include Health & Safety, Infection Control

Did you know....?

The University of Cambridge has won more Nobel Prizes than any other institution.



FOR ALL STUDENTS

LEVEL 3 A Levels

or Biology
Chemistry
Further Maths
Physics
Maths
Computer Science
Geography
Use of Maths

LEVEL 3 Combined

or **BTEC
Diploma
plus
A Levels**

LEVEL 2

or **BTEC
Diploma
(1 Year)**

Filtered Programme

Control, Hygiene, Energy Awareness and Environmental Support

*Subject to exam body revisions



“ We are a major employer in the area, employing people with a range of skill sets – we would benefit from motivated, enthusiastic, passionate young people in the workplace. ”

Napp Pharmaceuticals

PROGRESSION

Students graduating from the UTC Cambridge will be exceptionally well prepared to progress into higher education, work or an apprenticeship, ready to build careers that contribute to the Cambridge success story.

University

Graduating from the UTC Cambridge will give you a head start when it comes to choosing a university. Employers are seeking specialist science staff in all areas, and a degree will help take your career to the next level.

Apprenticeships

Our sponsors are highly supportive of apprenticeships, and expect to offer opportunities to our students. Apprentices are paid while they train, attending college one day a week and learning hands-on in the workplace as they gain valuable qualifications. They also offer an alternative route to higher education.

Jobs

The Cambridge area is full of highly successful employers ready to take on new staff who leave the UTC with an impressive range of specialist qualifications – ready to go straight into the workplace and develop their careers.

Example Careers

- Medical Professional
- Science Professional
- Environmental Technologist

Example Job Roles

- Laboratory Technician
- Theatre Nurse
- Paramedic
- Research Scientist
- Scientific Facilities Manager
- Utilities Technician or Manager (Water, Electricity, Waste)
- Environmental Technician
- Environmental Auditor

““ Developing this area for young students who aspire to work in a research environment can only be seen as an excellent opportunity.””

Wellcome Trust Sanger Institute

SCIENCE AT WORK

“ I discovered I preferred the hands-on approach to learning when I started my apprenticeship. It helped me decide what I wanted to do in life and set me on the pathway to a career in science.

I would definitely recommend an apprenticeship. Instead of going to university, I will have three years experience of working in the lab, gaining experience as well as qualifications.

I now have a permanent job working as a trainee cytoscreener - looking at cells through a microscope to detect cancer and other abnormalities – in the Addenbrooke’s Hospital screening labs. ”

Lee Carmen, 20

Trainee Cytoscreener at Addenbrooke’s Hospital





“ Every day is different and I really enjoy it. I would like to go a lot higher, and I will probably go for more qualifications in the future. ”

Lee Carmen, 20
Trainee Cytoscreener
at Addenbrooke's Hospital

FAQs

What is the UTC Cambridge?

The UTC Cambridge will be a new centre of excellence for Biomedical and Environmental Science and Technology.

It will offer young people a unique opportunity to get a head start in developing the skills required for exciting and rewarding careers in the fast moving biomedical and environmental industries.

Why Cambridge?

Many of the world's largest and most successful research facilities, biotech and pharmaceutical companies are located in Cambridge, allowing our students to learn from leading scientists in research and development.



Who are we looking for?

Students who are curious about the world and how and why things work.
Students who want a new experience of learning the skills that are highly valued in future employment.
Students who want to be excited and challenged by their learning and will give their all.

Why choose UTC Cambridge? Is it right for me?

Yes... if you want to be part of a unique approach to learning driven by world-class employer projects.

Yes... if you want to fully engage your passion for science and technology with real experts.

Yes... if you want to secure your progression to employment and HE in an innovative learning facility on the Cambridge Biomedical Campus.

HOW TO APPLY

At 14

Download the application form from the website, www.utccambridge.co.uk

At 16

If you currently attend one of the Cambridge Area Partnership schools, you should apply for a place using the Cambridge Area Partnership application form, which is held by your careers teacher, or via the online application process.

If you do not attend one of the Cambridge Area Partnership schools, you can download a form from our website, www.utccambridge.co.uk

Admissions

The UTC Cambridge is a fully comprehensive, mixed-ability institution and as such operates an open admission policy. For information on our admissions policy, go to www.utccambridge.co.uk

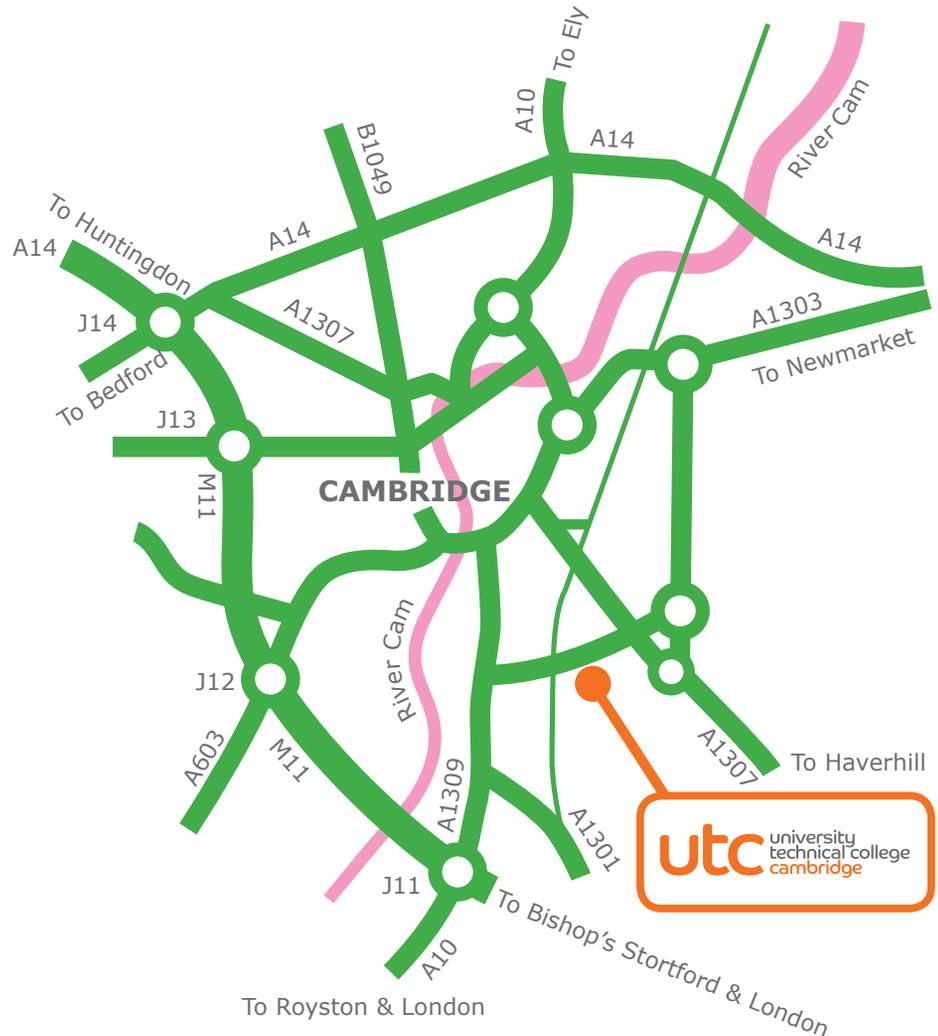


TRAVEL

Our policy is to encourage students to use public transport or other methods of environmentally-friendly transport where possible, and therefore there is no student parking on site other than for students with a disability. There are plenty of cycle racks available for students who wish to cycle to college.

Our free shuttle bus runs regular pick-up and drop-off journeys to and from Cambridge railway station and Drummer Street bus station, and the Guided Busway stops very close to the college.

There are Park and Ride services from Babraham Road to Addenbrooke's Hospital, and the Trumpington Park and Ride provides a bus to the college approximately every 15 minutes.



UTC Cambridge,
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UTC Cambridge

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find us on...

