

Opening September 2027



TURNER SCHOOLS
CARBON 6
STEM PATHWAY AT DISCOVERY PARK

**A new and specialist science and maths
sixth form in Sandwich, Kent**

CONTENTS

Welcome to Turner Schools Carbon 6 STEM Pathway..... 4

About Discovery Park 6

Student Life7

Why Carbon 6?..... 8

Academic Excellence10

Leadership Team.....12

Next Steps and Contacts14



WELCOME TO CARBON 6 STEM PATHWAY

After more than 30 years in education, I've had the privilege of working with thousands of young people, each with unique potential and ambition. Yet, time and again, I've seen that some of our brightest minds—especially those passionate about science and innovation—need more than just a good education. They need a launchpad.

That is why Carbon 6 Science Sixth Form was created.

In the heart of East Kent, at the world-renowned Discovery Park campus, we are building something exceptional: a science sixth form with excellence at its core. Our vision is simple but bold — to give young scientists the environment, resources, and inspiration they need to thrive.

We are not replicating what already exists. We are redefining it. Carbon 6 combines academic rigour with real-world research, industry partnerships, and a culture of curiosity. Here, students don't just learn about science — they do science. They will investigate, question, test, and innovate alongside professionals, academics, and mentors.

This is more than a sixth form. It's a centre of excellence for the next generation of doctors, engineers, researchers, and change-makers. Science has the power to change the world. And I believe that young people in our region should be at the forefront of that change.

Welcome to Carbon 6 Science Sixth Form, where the future of science begins.



Specialist STEM sixth form
for years 12 & 13



Expert teaching from industry-
experienced educators



Supportive community that
nurtures curiosity and ambition



Cutting-edge labs within world-
class Discovery Park campus



Hands-on research with
industry & university partners



Pathways to top universities
and STEM careers

The first cohort of students will be year 12s starting in September 2027, with the school expanding to encompass Years 12 & 13s from 2028.

Carbon 6 is a joint venture between Discovery Park and The Amelix Entrepreneurship Academy, a Canterbury-based academy that teaches real entrepreneurial skills, creating genuine businesses and setting pupils up for life.

Carbon 6 is state-funded and facilitated by The Turner Schools Trust, a multi-academy trust with eight schools in Canterbury, Dover and Folkestone.

Russ Sauntry - Education Lead,
Carbon 6 Academy of Science



ABOUT DISCOVERY PARK

Discovery Park is a leading science and innovation campus, home to global pharmaceutical leaders, billion-dollar multinationals, and high-growth start-ups, creating a dynamic ecosystem where innovation happens every day. Students benefit from direct exposure to this environment through guest lectures, mentoring, work placements, and collaborations with industry professionals.

220-acre secure innovation campus.

180+ companies onsite.

£324 million estimated year value to the UK economy.

“

The South East is a thriving hub for science, with the highest levels of life sciences employment of any region in the UK. Discovery Park is a key employer in East Kent, so we're excited to be supporting Carbon 6 with our world-class facilities and industry connections, enabling ambitious young people to develop the expertise needed for fulfilling careers in STEM.

Chris Broom - Head of Business Development,
Discovery Park

”

ONSITE
COMPANIES
INCLUDE



STUDENT LIFE AT CARBON 6

Carbon 6 students gain independence in a sixth form without younger year groups, mixing instead with academics, entrepreneurs, and scientists at the forefront of discovery.

Students have access to a variety of canteens and cafes at Discovery Park, offering a varied menu for breakfast, lunch and snacks to fuel learning.

The social zone is a great place for relaxing between classes, including pool, darts, table tennis and a putting green.

Wednesday afternoons will be kept free for enrichment activities, with students given access to Sports Academies at Turner Sixth Form.

Carbon 6 students are able to access Discovery Park's onsite gym, Your Leisure, with studio space & outdoor classes.

The academy benefits from excellent transport via high-speed rail and bus, as well as free onsite parking for all students.



WHY CARBON 6? THE UK'S ONLY SIXTH FORM EMBEDDED IN A SCIENCE AND INNOVATION HUB

Carbon 6 Academy of Science is a free-to-attend sixth form designed for ambitious students entering year 12, who are passionate about STEM (science, technology, engineering, and mathematics).

Excellent teaching

Specialist and inspirational science and maths teachers with real world experience and deep subject matter knowledge.

World-class lab facilities, where students study in professional laboratories and have access to advanced equipment such as PCR machines, robotics kits, and 3D printers.

Industry connections

Organised onsite work experience and guest lectures allowing students insight into careers in STEM and providing an advantage in a competitive job landscape.

Additional enrichment activities including industry lead experiments, real-world challenges and interdisciplinary projects to bring together science and technology.

Carbon 6 Community

Dedicated support to help all students settle in and feel at home at Carbon 6, as part of an engaged and motivated peer group.

Future planning guidance and careers mentoring for all students, helping navigate applications to further education, such as degree apprenticeships or university, or next steps into the world of work.



“

Kent's Discovery Park is home to some of our most innovative businesses, all of which play their own role in driving the breakthroughs and investment that make life sciences such a valuable part of our economy, and our Industrial Strategy.

Immersing students into this thriving scientific and business community will inspire the next generation of innovators, essential for the future of these industries, and give young people the vital skills for the careers our economy needs.

Lord Vallance - UK Science Minister

”

ACADEMIC EXCELLENCE

Carbon 6 is a specialist sixth form for science and maths, offering A-levels in Biology, Chemistry, Physics and Maths, with additional opportunities in Further Maths and Extended Project Qualifications. Students can pick three or four subjects.

This focused specialism means students can be taught in world-class science labs and classrooms, with all lessons delivered by teachers with specialist sector expertise, ensuring that every student is challenged to reach their full potential.

Our ambition is clear: we expect the highest outcomes. With personalised support, a focus on mastery, and hands-on experience in professional laboratories, students are prepared not just for top grades but for real-world STEM careers.

While Carbon 6 is a specialist sixth form, students are able to study alternative or supplementary A-level subjects via Turner Sixth Form.



STEM PATHWAY: CORE A-LEVELS OFFERED AT CARBON 6

2 year course: Students can pick three or four or study all four subjects. Additional A-levels offered:

Biology

Explore living organisms from cells to ecosystems, developing practical skills essential for medicine, research, and environmental careers.

Chemistry

Investigate the behaviour and transformation of matter through organic, inorganic, and physical chemistry with laboratory work.

Further Maths

Extend your mathematical expertise with complex numbers, matrices, and differential equations for top university courses.

Physics

Uncover the fundamental laws of the universe through mechanics, electricity, waves, and nuclear physics

Maths

Develop advanced problem-solving and analytical skills across pure mathematics, statistics, and mechanics.

Extended Project Qualifications

Undertake independent research on a topic of your choice, demonstrating university-level skills in critical thinking and academic writing.



Carbon 6 entry criteria:

Open to all students achieving **Grade 6+ in science GCSE subjects**, with no geographic or catchment requirements.

CARBON 6 LEADERSHIP TEAM



Russ Sauntry - Founding Director, Amelix Education

Education Lead, Carbon 6 Academy of Science

Russ joined the world of education after more than two decades in senior school leadership. Now at the helm of Amelix Education, his purpose is clear: to empower young people not just to accumulate qualifications, but to build meaningful futures. His professional credentials include a National Professional Qualification for Headship (NPQH), marking his status as a qualified headteacher.

Russell’s leadership is grounded in lived experience. Growing up on a working-class estate outside Manchester, he witnessed first-hand the difference access to opportunity can make. Thirty-eight years later he is delivering a bold vision for Kent through Carbon 6 — a specialist sixth form for science and mathematics, embedded within the world-class facilities of Discovery Park.

Education, Entrepreneurship & Impact

Across his career, Russ has held the full range of leadership positions in schools, he’s developed strategic programmes for ambitious learners, and founded Amelix Education, which offers a suite of real-world learning pathways in entrepreneurship and STEM.



Dr Kevin Whitby PhD – Scientific Lead, Carbon 6 Academy of Science

Dr Whitby delivers education that bridges classroom theory with real-world science, having over 40 years experience in both academic and industrial science.

Before qualifying as a teacher in 2012, Dr Whitby helped pioneer combination therapy for hepatitis C, contributed to the science that led to modern HIV antivirals, and has guided international medical teams behind some of the most successful product launches in UK pharma history.

Dr Whitby has experience of teaching in a variety of schools from Grammars to special needs schools.

At the intersection of science, strategy, education and impact, Kevin will drive everything we do towards smarter research, stronger evidence and better educational outcomes.

Brilliant mind. Proven results. Inspiring leadership.



Turner Schools Trust

Carbon 6 Academy of Science sits under the umbrella of the Turner Schools Trust, a multi-academy family of eight schools in Folkestone, Dover and Canterbury.

Turner provides education through pre-school, primary, secondary and sixth form. Each academy is individual and responds to the needs of its local community to provide the best possible opportunity for its young people. Turner promotes high academic standards, while ensuring crucial opportunities for personal and emotional development.

Turner has a record of delivery quality sixth form education. At Turner T6 Sixth Form, 75% of pupils progressed onto higher/further education and 99% secured employment at the end of Year 13.

Turner Schools Trust mission: Transforming children’s futures. Empowering families. Strengthening communities.

Learn more: www.turnerschools.com



CARBON 6: CONTACTS



01304 49 00 11



www.carbon6academy.org.uk



info@carbon6academy.org.uk



Discovery Park, Ramsgate Rd,
Sandwich, CT13 9FF