

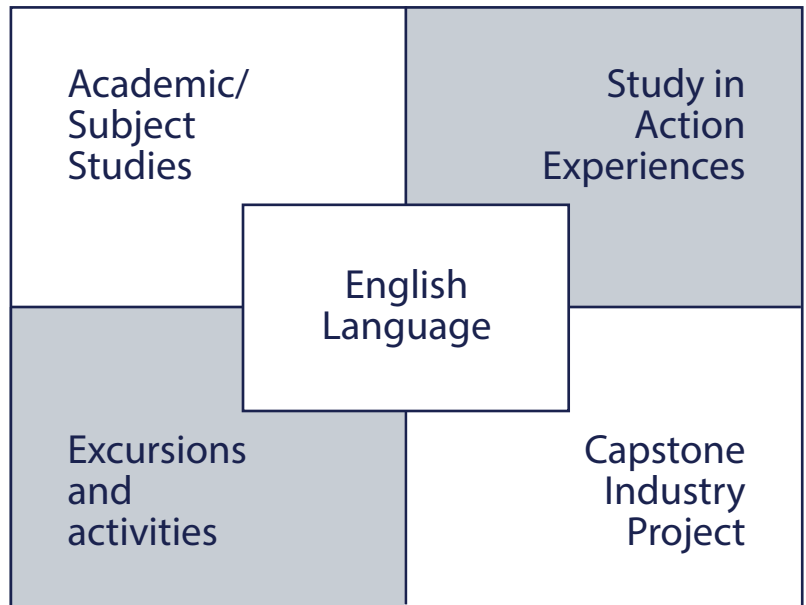
Young Professionals

Courses for those aspiring to become future professionals • *Ages 13-17*

Our "Aspiring" courses combine academic rigour, practical workshops and real world industry projects to provide an immersive career experience.

Who is this course for?

- Students with at least an intermediate level of English looking to improve their ability via a challenging context
- Students looking for an insight into future career paths in an English-speaking environment
- Students looking to gain a deeper understanding into the theory and practice in a specific career field



Academic Studies

Students will learn from highly experienced tutor practitioners who will share their personal insights into the industry, as well as deliver the theoretical and practical components of the course through a tutorial approach.



Study in Action workshops

The study in action workshops are off-site activities that provide a unique opportunity for students to extend and broaden their academic experience through linked subject specific career-related workshops delivered by industry leading providers.



Capstone Industry Project

Students from related fields of study will come together to complete an interdisciplinary project based on a real-life problem-solving situation. This project is externally assessed and certified and provides an opportunity to work with industry professionals and can support a student's university application.



Activities & Excursions

The Activity and Excursion component provides students with the opportunity to socialise with other international students, and visit places of interest within the UK that can help develop their cultural appreciation.

Sample Timetable

| | TUE | WED | THU | FRI | SAT | SUN | MON |
|-----|---------------|--|---|------------------------------------|---|-----------------------|----------------------|
| AM | Arrivals | Subject Theory | Excursion: Study In Action Day L'Oréal Young Scientist Centre Crash Testing | Subject Theory | Excursion: London River Cruise and Greenwich tour | Subject Theory | Careers Morning |
| PM | Arrivals | Activity: Walking Tour of Oxford and punting | | Subject Practical | | Project Preparation | Subject Practical |
| EVE | Welcome Games | Project Preparation | Activity: Quiz Night | Activity: Murder Mystery | Activity: Movie Night | Project Presentations | Graduation and Party |

*based on 2023 timetable

Aspiring Engineer



Key Facts:



Age range:
13-17



Location:
d'Overbroeck's



Class size:
11



Certificate:
Personalised report card & certificate



Minimum language level:
B1 (intermediate)



Tuition content
Theory and practical tuition across engineering field.



Weekly excursions:
2 full-day



Hours per week:
25



Dates:
9 July - 6 August

This course will guide aspiring engineers to gain a better understanding of the engineering industry from commercial and technical perspectives. Students will understand the different areas of engineering and learn to evaluate the social, economic, and environmental impact of projects in different global contexts. Possible topics areas for each week may include: the principles of design, planning and prototyping, sustainable engineering and the varying roles of the Aspiring Engineer.

Learning outcomes

- Targeted career and pre-university development including an Individualised Career Action Plan
- Hands-on experience into careers in engineering and design
- Improvement in English fluency, especially in practical and career-oriented language
- Development of transferable skills including leadership, teamwork, and problem-solving

Example Study In Action Workshops

Reduce Energy - Students will take a tour of the wind turbine and a workshop about sustainable energy, its future and where/what we need to do in order to help save our planet. Additional tour of solar panels and lunch at the turbines is included.

National Space Centre - Working to a budget, students must work together to design, construct and launch their rocket to 'land' on the Moon. Their craft must be designed based on strict criteria and materials purchased on a budget. Which team will win the race?

Capstone Industry Project

Through the Capstone Industry Project students will develop a compelling portfolio which can support their application to university and gain a 'DEC Award'- an industry recognised certificate delivered by the award-winning 'Class Of Your Own' team behind the 'Design Engineer Construct!' Learning Programme and backed by a leading UK awarding organisation.

Aspiring Engineer

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Course Overview

Our course will guide future engineers to gain a better understanding of the engineering industry from commercial and technical perspectives. Students will understand the different areas of engineering and learn to evaluate the social, economic, and environmental impact of engineering projects in different global contexts. Lessons will encourage the development of knowledge and understanding of a range of engineering technologies and industries and offer unique opportunities for students to apply their knowledge through project-based learning.

Lessons & Learning Objectives

Engineering Materials, Processes & Techniques

- Explore engineering materials: metals, alloys, polymers, elastomers, adhesives, composites and ceramics. Learn about the properties of materials: mechanical, physical, thermal, electrical, magnetic and modification of properties and discover how materials are processed, including forming, casting and moulding techniques.

The Role of the Engineer

- Explore what it means to be an engineer and how engineers differ from scientists or mathematicians. Explore the ethical discussions that engineers might have on certain projects and how innovation is at the heart of engineering. Understand how engineers can take a complex project and systematically break it down into several interconnected sub-systems.

Principles of Design, Planning and Prototyping

- Develop an understanding of engineering products, drawings, project planning, and manufacturing. Students will be guided on how to read, interpret and understand engineering drawings and how to generate their own.

Sustainable Engineering

- Explore renewable energy its prospects in the future, while focusing on solar, tidal and wind energy. Highlight current developments in the energy sector, both gas and oil. Discuss internal combustion engines along with the development and future of biofuels, fuel cells, and electric cars.
- Explore how products and technologies can be created using sustainable or recycled materials and the challenges to engineering long-lasting life cycle products.

Transferrable Skills

- The ability to use specialist knowledge creatively
- Pragmatism and practicality to turn a concept into reality
- Effective communication
- Good teamworking
- Project and time management
- A professional approach

Career Pathways

Students that study engineering will gain skills and knowledge applicable in a range of professional sectors, including engineering, IT consultancy, design engineering and technicians, systems analysis, sustainable development, architecture, urban design, and more.

Assessment Criteria

Academic achievement is based on the learning objectives which identify key knowledge and skills that students should be able to demonstrate upon successful completion of the course.

Capstone DEC Project Overview

Design a Rehabilitation Unit for Paralympians

Calling students with a passion to build an extraordinary career in Healthcare!

Join our Aspiring Architects, Engineers and Medics project to design life-changing Rehabilitation Centres.

Are you a student who aspires to make a significant impact on the lives of elite sporting individuals in need of advanced healthcare solutions? Immerse yourself in our educational programme where you will collaboratively design state-of-the-art rehabilitation centres that empower athletes to achieve new milestones. Gain insights from accomplished architects, engineers and medical professionals and contribute to the creation of inclusive and empowering healthcare solutions for Paralympians!

Project Overview

The primary objective of this integrated project is to challenge young people and ignite their passion for careers in healthcare, architecture and engineering by tasking them with the design of a state-of-the-art rehabilitation centre for Paralympians.

By the end of this project, learners will have gained a deep understanding of the collaborative nature of the design, engineering, construction and healthcare industries. They will have developed problem-solving skills, team-working and presentation abilities and discovered some of the exciting opportunities that await them in these fields. Additionally, they will have a newfound appreciation for the importance of creating accessible and inclusive spaces for Paralympic athletes – and all people with disabilities.

Supported by real professionals, learners will discover how their skills and passions can converge to make a meaningful impact on the world of sports and healthcare.

Learning Objectives

Day 1 - Introduction to the Paralympics and Rehabilitation

We start the project with an introduction to the Paralympics, the athletes and their unique rehabilitation needs. We'll highlight the significance of providing world-class facilities to support Paralympians on their journey to excellence. Learners will form interdisciplinary teams comprising aspiring architects, engineers and medics. Each team member will bring their unique skills and perspectives to the project. Tasked with conducting a needs assessment, learners will research the specific requirements of Paralympic athletes, considering mobility, accessibility, medical facilities and psychological support.

Day 2 - Design Development

Teams will work collaboratively to brainstorm and develop their design concepts for the rehabilitation centre with an emphasis on sustainability, accessibility, and patient-centred design principles. We'll highlight the importance of sustainable construction and healthcare practices, addressing net-zero energy, waste reduction and eco-friendly materials and discuss how the facility can contribute to a healthier environment.

Day 3 - Visit to a Healthcare Facility

Teams will focus on healthcare integration, including designing medical treatment rooms, physical therapy spaces and psychological support areas and explore the role of technology in healthcare. Through an introduction to healthcare technology and its role in modern healthcare, learners will discover how digital engineering skills can be applied in healthcare settings, such as in the design and maintenance of medical equipment and smart healthcare facilities.

Day 4 - Presentation and Pitch

The project will culminate with team presentations and pitches. Each team will present their design to a panel of professional judges.

Assessment and Certification

The course is developed and delivered by Class Of Your Own, a UK social enterprise that for 14 years has inspired children to experience the Built Environment through the 'Design Engineer Construct!' ("DEC") Learning Programme. From Primary School to Secondary School and beyond, 'COYO' provide children and young learners with a unique opportunity to develop the knowledge, competencies, behaviours, and skills fundamental to successful engagement in the professional aspects of this exciting sector of industry.

Class Of Your Own works with some of the biggest and best from the UK construction and medical sectors, and students will get to work with a range of professionals over the course of the programme.

Upon completion of the programme, students will receive a DEC Award, which is a Training Qualifications UK and industry-endorsed certificate.

Excursions

Activity trips to help students to relax, learn about a different country and have lots of fun.

Students have a full activity programme plus two full-days per week. The destinations for each particular week of the course are outlined below.

To enable us to respond to student feedback and requests, activities and excursion itineraries are planned and organised by a dedicated Activity Manager. For this reason, it is impossible to provide exact weekly timetables until a few days before the start of the following week.

This enables the Activity Manager to minimise any repetition and give students a unique experience every week. With this in mind, the below excursion destinations are **subject to change** and are meant to give examples of the destinations students will visit.



London

Students visit key British landmarks such as Trafalgar Square, Downing Street, Horse Guards Parade, Buckingham Palace, Houses of Parliament & Westminster Abbey.



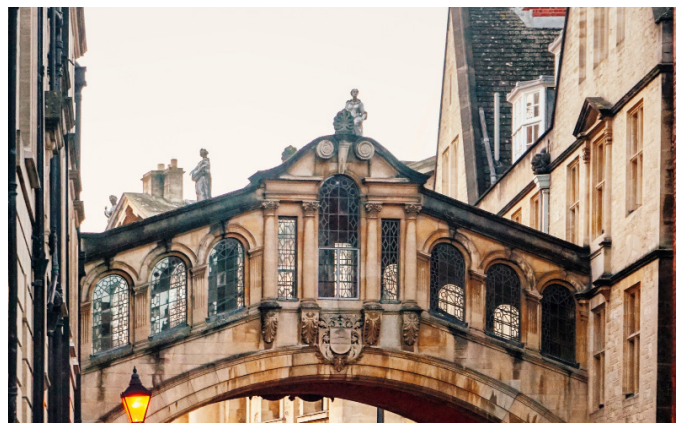
Windsor

Students are given the opportunity to visit the home of the British Royal Family at their residence Windsor Castle and explore the historic market town.



Cambridge

Founded in 1209, the University of Cambridge is the heart of the city of Cambridge. The city's skyline is dominated by the university's college buildings including King's College Chapel, Cavendish Laboratory, and the Cambridge University Library.



Oxford

For one afternoon a week, students will go to the centre of Oxford to explore its rich history. They will visit landmarks such as Carfax Tower, Bodleian Library, Christ Church Cathedral, the 'Bridge of Sighs' & many Oxford University Colleges.



d'Overbroeck's

Oxford • Ages 13-17










Founded in 1977, d'Overbroeck's is a highly successful and well respected British day and boarding school in Oxford. Located to the north of the city centre, d'Overbroeck's state-of-the-art sixth form centre opened in September 2017 and provides first-rate teaching facilities.



Find out more about d'Overbroeck's



Key Facts:

-  **Age range:** 13-17
-  **Location:** North Oxford, 10 minute bus ride to City centre
-  **Bedrooms:** Mix of single, twin and triple
-  **Bathrooms:** Mix of shared & en-suite
-  **Social Space:** Student lounges in each of the three boarding houses with table tennis and televisions
-  **Facilities:** Modern laboratories, art studio, auditorium
-  **Internet:** Wi-Fi available throughout
-  **Security:** Electronic fob access only
-  **Airports:** Heathrow 1 hours
Gatwick 2 hours