



### Key Facts:



**Age range :**  
13-17



**Location:**  
d'Overbroeck's



**Class size:**  
12



**Certificate:**  
External industry  
certificate from  
trusted UK provider



**Minimum language level:**  
B1 (intermediate)



**Tuition content**  
Academic subject studies,  
Industry workshops and  
Capstone Industry Project.



**Weekly excursions:**  
2 full-day, 1 half-day



**Hours per week:**  
25



**Dates:**  
8 July - 5 August



**Duration:**  
2 weeks

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 an Engineer.

### Learning outcomes

- Understand the properties and processing techniques of various engineering materials
- Explore the role of engineers, how they differ from scientists and mathematicians, the ethical considerations in engineering projects, and the importance of innovation.
- Develop the ability to read, interpret, and create engineering drawings, understand project planning, and grasp the principles of engineering product development and manufacturing.
- Examine renewable energy sources, the future of the energy sector, the development of biofuels, fuel cells and electric cars, and the challenges of creating sustainable and long-lasting products using recycled materials.

### Example Industry Workshops

**RI Crash Testing, L'Oreal Young Scientist Centre** - Students will become engineers for the day, testing their own ideas by designing creative experiments. In the Crash Testing workshop, students will learn how vehicles are designed to keep us safe in a collision and use their knowledge in a real-life crash test. The workshops aim to ignite a passion for scientific discovering and encourages curiosity-driven learning.

**Silverstone Museum** - Students will enjoy a tour of Silverstone itself to learn about the history of motorsport. The various exhibits allow students to explore the wider aspects of racing, including medical support, the mechanics, safety, and via the Tech Lab, the technology and engineering. Students will also take part in an interactive session where they can get hands-on with genuine motorsport items.

### Capstone Industry Project

The Engineering industry project is developed and delivered by Class of Your Own, a UK social enterprise that has inspired young learners to experience the Engineering and the Built Environment through Design Engineer and Construct! (DEC) learning programme.

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

Capstone Industry Project in collaboration with:

**classofyourown®**  
EDUCATING THE FUTURE OF CONSTRUCTION



*Discover our  
Engineering  
course*

