ENGINEERING

Course Overview ***2023***

SBC

Course Overview

AT A GLANCE

Oxford
Price: £5, 995
Ages: 16-17
Duration: 2 weeks
Starting Dates: 2nd July, 16th July, 30th July 2023
Location: Oxford College

Cambridge
Price: £4,500
Ages: 15-17
Duration: 2 weeks
Starting Dates: 9th July, 23rd July, 6th August 2023
Location: Sancton Wood School, Cambridge

At Oxford and Cambridge College this summer you can gain valuable academic experience by taking the first steps in the study of Engineering.

Summer Boarding Courses' Engineering programmes are the ideal courses for students who wish to pursue an Engineering discipline as a career or at university. They provide in-depth introductions to the theory of engineering which is applied in fields of innovation, design and construction.

Our Engineering students analyse technical aspects of engineering, such as in the construction of bridges, buildings, electronic circuits and mechanical design, as well as the social impact of engineering, such as in how engineering is used to tackle environmental, urban and logistical issues.

SAMPLE TIMETABLE

WEEK ONE

8.45-9.00	**Morning Assembly**				
9.00-10.30	**Engineering Seminar** *Introduction to Engineering*	**Engineering Lecture** *Engineering and Mathematics*	**Keynote Lecture**	**Engineering Lecture** *Engineering for Construction*	**Engineering Seminar** *Environmental Engineering*
11.00-12.30	**Engineering Time to Shine: A Engineering Case Study** *A design and construction group project in a field of Engineering, such as Robotics, Construction and Civil Engineering.*				
13.30-14.45	**Engineering Practical Workshop:** *Physics and the Science of Engineering.*	**Engineering Seminar** *Engineering and Design*	**Industry Experience**	**Engineering Seminar** *Engineering Bridges and Towers*	**Keynote Lecture** *Leadership* By Visiting Academic
15.00-16.15		**Academic Coaching**: *Interview Preparation*		**Academic Coaching**: *Writing a personal statement*	**Academic Coaching**: *Public Speaking Skills*
16.15-18.15	**Free Time** ***Tutorials*** *once per week, 16.30-17.30* ***Career Counselling Clinic****, 16.30-17.30*				

WEEK TWO

8.45-9.00	**Morning Assembly**				
9.00-10.30	**Engineering Seminar** *Robotics and Electronic Engineering*	**Engineering Lecture** *The Basics of Coding for Engineering*	**Keynote Lecture**	**Engineering Lecture** *Civil Engineering: Roads and Railroads*	**Engineering Seminar** *Aeuronautic Engineering*
11.00-12.30	**Engineering Time to Shine: A Engineering Case Study** *A design and construction group project in a field of Engineering, such as Robotics, Construction and Civil Engineering.*				
13.30-14.45	**Engineering Practical Workshop:** *Engineering and Nanotechnology*	**Engineering Seminar** *Engineering for Product Design*	**Industry Experience**	**Engineering Seminar** *City Planning*	**Keynote Lecture** *Success in Academia* By Visiting Academic
15.00-16.15		**Academic Coaching**: *Interview Preparation*		**Academic Coaching**: *Writing a personal statement*	**Academic Coaching**: *Public Speaking Skills*
16.15-18.15	**Free Time** ***Tutorials*** *once per week, 16.30-17.30* ***Career Counselling Clinic****, 16.30-17.30*				

ENGINEERING
TIME TO SHINE

Time to Shine title: *The Engineering Award 2023: The Engineering Solutions of the Future*

Time to Shine description: Oxford and Cambridge College's Engineering students will take part in SBC's *Engineering Awards 2023* Time to Shine competition. This team-building competition will guide students to design engineering solutions for future challenges, such as how green technology can power cities; how digital technology can reduce carbon footprints, and how mechanical engineering can utilise space in crowded megalopolises.

What you'll learn

- An overview of the major themes of engineering, such as robotic, mechanical, construction and aeronautic engineering.
- An insight into future trends in engineering, and the challenges future engineers will face.
- Guest speeches from leading academics in the field of Engineering
- Take part in our exciting *Engineering Awards 2023* Time to Shine project, in which you and your team will compete to solve engineering challenges of the future.
- Through fun and engaging lesson activities, develop and apply your 21st century skills, such as critical thinking, communication skills, collaborative skills, and original thinking.

ENGINEERING
INDUSTRY EXPERIENCE

A highlight of our academic programme is our **Industry Experience** afternoons, where students take part in a series of workshops and lectures led by top industry professionals and academics in their respective fields. The Industrial Experience element of our courses provides a profound level of insight so that students can further make informed decisions as to whether their future career choices are right for them. Our College students will be introduced to a real-world professional environment in their chose field of study, where they will absorb knowledge through workshops, lectures and Q&As.

Visit the Engineering laboratories at a leading Oxford Academic Engineering department, and learn from leading academics on what engineering projects these departments take part in on a daily basis. The tour involves a hands-on workshop in which students use leading Engineering technologies and software.