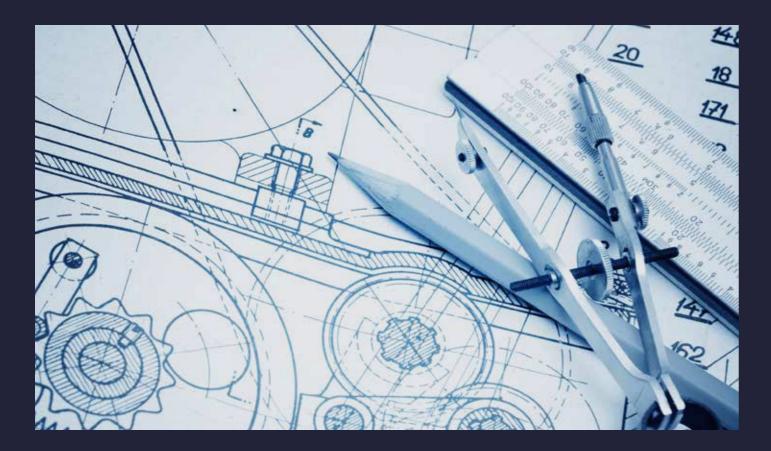


COURSE OVERVIEW

Engineering

Cambridge College



# At a Glance

### **Cambridge College**

Ages: 15-17

Duration: 2 weeks

Discover the world of engineering in our immersive twoweek programme at our prestigious College Summer Schools. Designed for those with a keen interest in engineerings, this course promise an exhilarating journey into the heart of the subject. Throughout the course, you will focus on a variety of topics, ranging from robotics to aeronautics. We will explore the future of engineering together and investigate the challenges that the engineers of tomorrow await. But it doesn't stop there! Engage in lively discussions with guest speakers, showcase your newfound expertise in our Time To Shine Ceremony, present innovative solutions to engineering challenges to your peers, and hone essential interpersonal skills in a lively and enjoyable learning environment. Prepare to embark on a transformative journey that will leave you inspired, informed and ready to shape the future of engineering!

### Engineering

### Sample Timetable

#### **WEEK ONE TIMETABLE**

| 8:45-9:00   |   |  | Morning Assembly    | sembly  |   |  |  |
|-------------|---|--|---------------------|---|---|--|--|
| 9:00-10:30  | Engineering Seminar<br>Introduction to<br>Engineering   | Engineering<br>Lecture<br>Engineering and<br>Mathematics | Keynote Lecture     | Engineering<br>Lecture<br>Engineering for<br>Construction | Engineering Seminar<br>Environmental<br>Engineering     |  |  |
| 11:00-12:30 | Engineering Time to Shine: A Engineering Case Study  A design and construc\$on group project in a field of Engineering, such as Robotics, Construction and Civil Engineering. |  |                     |   |   |  |  |
| 13:30-14:45 | Engineering Practical<br>Workshop<br>Physics and the Science<br>of Engineering  | Engineering<br>Seminar<br>Engineering and<br>Design      |                     | Engineering Seminar<br>Engineering Bridges<br>and Towers  | Keynote Lecture<br>Leadership<br>By Visi1ng<br>Academic |  |  |
| 15:00-16:15 |   | University Coaching Interview Preparation                | Industry Experience | University Coaching Writing a personal statement          | University 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 TIMETABLE**

| 5-9:00    | Morning Assembly  |  |                     |  |   |  |  |
|-----------|---|--|---------------------|--|---|--|--|
| 00-10:30  | Engineering Seminar<br>Robotics and Electronic<br>Engineering   | Engineering Lecture The Basics of Coding for Engineering | Keynote Lecture     | Engineering Lecture Civil Engineering: Roads and Railroads | Engineering<br>Seminar<br>Aeuronautic<br>Engineering                |  |  |
| 0-12:30   | 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. |  |                     |  |   |  |  |
| :30-14:45 | Engineering Practical<br>Workshop<br>Engineering and<br>Nanotechnology  | Engineering Seminar Engineering for Product Design       | Industry Experience | Engineering Seminar<br>City Planning                       | Keynote Lecture<br>Success in<br>Academia<br>By Visting<br>Academic |  |  |
| 00-16:15  |   | University Coaching Interview Preparation                |                     | University Coaching Writing a personal statement           | University<br>Coaching<br>Public Speaking<br>Skills                 |  |  |
| :15-18:15 | Free Time Tutorials once per week, 16:30-17:30 Career Counselling Clinic, 16:30-17:30   |  |                     |  |   |  |  |

### Time to Shine

### Engineering the Future

Today, giving great presentations are a vital skill for achieving academic and professional success. Our programmes reflect this by having the 'art of presenting' at the heart of their content, and allow you to discover new confidence when using English in public situations. It's more than just a chance to enhance your public speaking skills, though; it's an opportunity for you to share your passion and subject knowledge with your fellow classmates. Through your presentations, you will become sources of inspiration, and encourage others to delve deeper into your subject.



#### What You'll Learn

- Receive an overview of the major themes of engineering, such as robotic, mechanical, construction and aeronautic engineering.
- Gain an insight into future trends in engineering, and the challenges that future engineers will face..
- Participate in Q&As with guest speakers from leading academics in the field of Engineering.
- Play an active role in our Time To Shine ceremony, presenting solutions of engineering challenges to your peers.
- Develop and apply core 21st century skills through fun and engaging lessons, including critical thinking, communication, creativity and collaboration.















## Industry Experience

Enhance your academic foundation with our comprehensive Industry Experience sessions. These sessions are both on-site, in which you will participate in workshops on-campus that are led by an industry professional and blend practical engagement with immersive learning, and off-site, in which students engage in excursions that complement your course content and will broaden your horizons.

Learning at SBC is about more than just theory; it's about hands-on, tangible exploration. Dive into real-world engineering challenges, from crafting intricate designs to understanding the mechanics of flight. Our curated industry visits offer students an inside look at venues that have shaped the engineering narrative, ensuring that every trip complements the academic curriculum and offers real-world context.

### Book your place

A booking can be made online on our website summerboardingcourses.com

Course places are limited so we recommend booking early. If you are booking on behalf of a family, please let us know at the time of booking.



