

# Week 1

## Sample Summer Experience Timetable

☐ Residential Package
 ☐ Programme Content
 ☐ Premium Content

## ENGINEERING

### Weekend (Premium)

### Weekend (Residential)

Saturday	Sunday	Saturday	Sunday
Breakfast		Breakfast	
Immersive strategy game & workshop	Professional development coaching sessions	Week 1 Residential Students Check-Out	Break - Free time
			Break - Free time
Lunch Break			Lunch Break
Psychometric testing & personality profiling	Expert university admissions & recruitment coaching		London walking tour
			Sports day at central London park
Dinner & Break			Dinner & Break
Scavenger hunt	Crafts night		Scavenger hunt
			Crafts night
Lights Out			Lights Out

WEEKEND - NON-RESIDENTIAL

Break - No Programmes

# Week 2

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
07:30 - 09:30	Breakfast					
10:00 - 10:30	Travel to venue					2-Week Residential students check-out & depart
10:30 - 13:00	<b>The Sustainable Engineer</b> Understand the role engineering plays in preserving our planet	<b>The Mechanical Engineer: SuperCar Experience</b> Tour a classic car collection, tear down an engine, car design challenge	<b>The Biomedical Engineer</b> Examine the intersection between medicine and engineering by conducting your own client innovation challenge	<b>The Electrical Engineer</b> Build and code your own buggy robot	<b>Assessed Activity</b> Take part in an assessed activity and receive feedback from top engineers.	
13:00 - 14:00	Lunch Break					
14:00 - 17:00	Continued	Continued	<b>Continued</b> Explore the different technologies utilised by biomedical engineers to revolutionalise the medical industry	Continued	<b>Graduation Ceremony</b> Closing speeches & certificates	
17:00 - 17:30	Travel to accommodation					
17:30 - 19:30	Dinner & Break					
19:30 - 22:00	Film night	Sports & games night	Wellness evening	Karaoke night	Prom	
23:00	Lights Out					
			17:30 - 21:00	Gala dinner with professionals		



## Immersive Career Experiences : Week 1

### Civil and Structural Engineering

- Use core concepts and real-world constraints to design a civil engineering masterpiece
- Build a structure to carry weight across two points in a graduate recruitment-style group task
- Compete against other attendees to impress the judges and become the most successful engineer

### Materials and Aerospace Engineering

- Understand the physics of flight when manufacturing a high-performing aerofoil
- Work with a Rolls Royce engineer to improve and test 3D-printed aerofoil designs
- Find the optimum conditions for flight using a wind tunnel
- Discuss your results with top material and aerospace engineers and propose solutions to achieve the most aerodynamic design

### The Boeing Experience

- Visit an airfield and explore a range of commercial aircraft with pilots and aerospace engineers
- Learn how the design of different aircraft and gliders varies depending on function
- Rig and derig a glass fibre glider with traditional controls, working as a team to lift the wings and secure the main rigging pins
- Work alongside electrical engineers and pilots to programme a fly-by-wire control panel

### Engineering in the 21st Century: Robotics and Machine Learning

- Discover how modern engineering has become more efficient with the invention of ground-breaking technology
- Investigate how innovative biomedical engineering solutions will improve medical diagnostics and enhance treatments
- Explore how automation and data are taking over the manufacturing industry
- Design your own AI creation with top robotics engineers
- Decipher what the future of engineering looks like and how you can help solve global challenges

### How to Become a Successful Engineer

- Your path to success: understanding the key decisions ahead and how to maximise your chances of success
- Making the right subject choices: A-level/IB/university and beyond
- Securing work experience and designing an impactful CV/resume
- Powerful interview techniques
- Coaching from engineers on what you can do now to stand out in the future



## Immersive Career Experiences : Week 2

### Enter the Supercar Studio

- Gain access to the largest collection of classic cars in the UK and discover the evolution of the motor vehicle
- Meet engineers who have helped create the world's most prestigious cars
- Learn the unique engineering features of one of the most sought-after cars in the world
- Take apart a petrol engine under the supervision of a top mechanical engineer
- Assess the transformation of vehicles as we move away from petrol towards electric energy
- Design your own electric vehicle under the guidance of experts

### Engineering and the Environment: The Thames Barrier

- Visit an engineering megastructure, The Thames Barrier: a world-leading sustainable engineering feat in London
- Explore the intricacies of the environmentally friendly design and uncover its dual purpose
- Use what you've learnt in a simulated climate emergency: work together to protect the inhabitants of the Thames Estuary from imminent tidal flood risk
- Present your group proposal to a panel of leading environmental advisors
- Receive live feedback on your solutions

### The Rise of the Smart City

- Discover the cities of the future: smart, sustainable urban spaces
- Investigate how we can engineer innovative solutions to tackle the challenges of climate change and population growth
- Layout the plans and designs for your own smart city and receive feedback from experts
- Network with engineers and senior project leaders: find out what it takes to work for an award-winning engineering firm

### Electrical Engineering

- Explore the key principles behind electrical engineering
- Take apart a household appliance and break it into its constituent parts
- Put your creativity to the test and use existing components to invent something from scratch
- Automate your new invention with a microchip and compete to win a prize from our panel of expert judges

### Networking Event With Top Engineers

- Take part in a private networking session with top engineers
- Put your newfound knowledge to the test
- Have your burning questions answered by those in the know
- Receive valuable advice from experts in the field





## Immersive Career Experiences : 2 Week Premium

### Premium

The Two-Week Premium option includes all the benefits of the first and second weeks plus exclusive evening and weekend excursions and extra career development opportunities. Continue your professional immersion beyond the core programme hours and embark on a London adventure where business meets pleasure.

### Highlights

- Attend a private Gala dinner with top professionals on the river Thames
- Build a stand-out CV and LinkedIn profile, inclusive of professional headshots
- Understand your core strengths and development areas through psychometric testing and personality profiling
- Develop key strategy, teamwork and leadership skills at an escape room
- Be coached by professional athletes and politicians on what it means to be at the top of your game
- PLUS many more unique experiences

