Timetable

Future Engineer Summer Programme (13-18)

Day 1: Your Start in Engineering

Scoping – the start of any engineering solution

Introduction to Engineering Materials

Technical Engineering Sketching workshop with leading industry professional

Understanding structures

Day 2: Aerospace Engineering

Experimental and computational fluid dynamics

Thermodynamics – the flow of heat in systems

Unmanned air vehicles (UAV's) – the future of Aerospace?

Control and systems engineering

Day 3: Robotics and AI

The importance of robotics and AI in engineering

Introduction to robotics

Introduction to AI for engineers

Day 4: A Day in Industry

Industrial site visit to local airfield – experience life as a working aerospace engineer, working and maintaining a classic aircraft collection.

Day 5: Sustainable Energy

Introduction to sustainable power technology

Engage in an applied workshop simulation to understand the relationship between consumer power needs and power production

Day 6: Manufacturing

Create your own composite part in a real workshop environment

The interplay of theory and reality from design to manufacturing

Introduction to additive manufacturing – test the properties of printed systems in an interactive workshop environment

Day 7: Space Engineering

Understand the principles that govern rocketry and spacecraft design

Witness theory in action with our interactive rocketry demonstration delivered by aeronautical engineers

The future of space technology

Day 8: Crafting a Reflective University Application

Reflective Learning Session: Engage in personal reflection to identify key experiences that have shaped your academic and career goals.

Learn how to weave your personal reflections and experiences into a compelling story for your university application, regardless of the global destination.

LinkedIn: Master the use of LinkedIn as a tool for building your professional network and enhancing your online presence, beneficial for job applications!

Day 9: Mastering Your Personal Statement and Professional Applications

Personal Statement Masterclass: Gain insights into writing a persuasive and memorable personal statement, focusing on your unique journey and aspirations, applicable to all universities across the globe.

Professional Toolkit - drafting a standout CV, crafting effective cover letters, and presenting your skills and experiences compellingly, with a global perspective.

Interactive Application Workshop: Participate in a hands-on session where you can develop and refine your application materials with expert feedback, making them relevant for universities worldwide.

Day 10: Global Space Design Challenge

Intensive and professional programme of training by expert engineers and academics followed by an industry design simulation which exposes students to the joys and challenges of working in an industrial team

Contribute to the overall success of your company

Compete against other teams in a fast-paced single day competition

Work alongside leading academics and professionals from industry

The timetable displayed is a guide only and may be subject to last minute changes