

# Build the Future: Design, Engineer, Construct!

Academic Enhancement • Ages 16-18 • Corpus Christi College



## Course Key Facts:

- 2 week duration
- 11 July / 25 July
- £2,950 per week
- Corpus Christi College, University of Cambridge
- 25 hours per week
- Ages 16-18
- B2 (upper-intermediate) minimum language level
- Industry certification

## Course Overview

Think of a memorable gig, concert or music festival you've been to... One fan in the midst of dozens, hundreds or even thousands of others.

What was the atmosphere like? Was there enough space to dance if you wanted to, or could you only move when the crowd moved you? How did the sound affect you? Too loud? Not loud enough? Even if you've never been to a live performance, what do you imagine it would be like? How would you want to feel?

There are some places where sound can sound truly great, yet we probably don't think about the science and engineering behind it.

One thing is certain - there's a great architecture, engineering and construction team involved. In this course, students will imagine they are part of that team and commissioned by their favourite artist to design an independent recording studio and intimate live music venue for the Cambridge Philharmonic.

Their client (the artist!) wants to offer a vibrant space of excellent acoustic quality to musicians who are just starting out, giving them a place to rehearse, record and perform. The live venue should accommodate a maximum audience of 300 people standing and the entire building must be highly sustainable and inclusive.

Students must consider:

- How the building will offer a memorable performer and audience experience
- What the artists' requirements are in terms of sound and comfort
- How they will create spaces with excellent acoustic quality
- How they will create spaces that evoke an intimate experience for/with the artist
- How the space will be flexible, for different music genres
- How the building will fit into the local environment, both physically and culturally
- What social, environmental and economic issues they will consider
- How their building will support and influence future artists.

Students on this course will learn the most relevant skills and techniques needed by anybody considering a professional career in architecture, engineering and construction including problem solving, team-working and critical thinking. With access to state-of-the-art computer facilities throughout the two-week experience, students can also expect to develop excellent digital skills using industry standard building design software.

## Learning Objectives

- Understand digital design, engineering and construction techniques and practices
- Develop professional skills and competencies
- Communicate design concepts clearly, concisely and confidently
- Gain knowledge of industry best-practices, standards and needs

## Course Outcomes

Students will develop a compelling portfolio which can support their application to university and gain a 'DEC Award'-an industry recognised certificate delivered by the award-winning 'Class Of Your Own' team behind the 'Design Engineer Construct!' Learning Programme and backed by a leading UK awarding organisation.

- Fully accredited DEC Award certificate
- Bucksmore Certificate of Completion

## Course Partners

This course partners with leading professionals to ensure the latest industry best-practices are understood and delivered. Class Of Your Own is world-leading in creating STEM focussed learning programmes such as 'Design, Engineer, Construct' that introduce students to the architectural and construction industries and broaden their academic portfolio for entrance into university.



## Additional Information

Our Academic Enhancement courses differ from other options across our wide portfolio. There are only 20 places available per 2 week session open to students of all nationalities, which means places are given on a first come, first serve basis. The structure of the course sees students working in groups to complete the course project, and the strict language level ensures that every student will still have a fulfilling experience without Bucksmore's usual nationality cap. The course is industry aligned, from the content to the tutors and to the overall experience.