Architecture

University Preparation • Advanced Studies Programme • Brasenose College

Course Key Facts:

- 2-6 week duration
- 27 June / 11 July / 25 July start date
- £2,655 per week
- 23 hours per week
- Ages 16-18
- C1 (Advanced) language level
- 2 subjects per 2 weeks

Introduction

Architecture is an interdisciplinary subject for creative students with a keen eye for design and innovation. A degree in architecture is more than just designing buildings; rather, it is at the forefront of sustainable development, urbanism, construction and engineering, and environmental design. This field of study also draws significantly from history, literature, art and art history, and other humanities-based subjects. Learning architecture provides a global tour to explore different environments and cultures whilst designing sustainable future buildings, cities, and societies.

Course Overview

Our course introduces both theoretical and applied concepts and methods for the study of architecture and design. This project-led course will encourage students to explore their creativity through architectural design, critique, and innovation. Lessons will explore all aspects of architecture, from materials to community planning, and consider historical, environmental, and cultural factors for each project. Students will explore the purpose of architecture on small and large scales, from designing a chair to planning an extragalactic community. Students will consider interdisciplinary influences on architecture, drawing from history, art, geography, engineering, ecology, mathematics, and other disciplines to influence their designs. Students will compile their work into a portfolio, which will be independently assessed at the end of the course.

Example Lessons Titles

- Building Sustainable Communities: Earth, Mars, and Beyond!
- Building Materials: Can Everything Be Recycled?
- Looking...Down? Exploring Subterranean Communities
- The Influence of Urban Design on Community Health

Suggested Pre-Reading

- Glancey, J. (2006). Architecture. Dorling Kindersley Ltd.
- DK. (2019). Manmade Wonders of the World. Dorling Kindersley Ltd.

Learning Objectives

1. Historical and Cultural Influences of Architecture

a. Students will explore architecture and design throughout history and on a global scale, including reviewing case studies of urban planning and design, the development of construction materials, and how art is reflected in and by architecture. Students will understand the use of symbolism within architecture through various case studies.

2. Principles of Design

a. Design will be explored throughout the lenses of construction, structural integrity, and environmental sustainability. Students will understand the fundamental principles of architecture and identify the basics of good design. Students will analyse case studies that draw on different principles of design and understand their success (or failure) in terms sustainability, structure, aesthetics, and more.

b. Students will interpret the design of buildings and their cultural uses whilst drawing on a variety of historical and environmental data. Students will learn how to 'deconstruct' a building to lead to a deeper understanding of design.

3. Construction, Materials, and Sustainable Development

a. Students will identify the strengths and weaknesses of construction materials within case studies of design. The basics of construction and engineering will be presented, and students will understand which methods are most suitable in certain contexts. Emphasis will be placed on sustainability and how architecture can support or inhibit the development of sustainable cities.

4. Experimental Architecture

a. Students will begin to design their own works based on their knowledge of certain environments. All aspects of design will be considered, including sustainability, culture, history, materials sourcing, construction techniques, and current environmental degradation. Ideas for design on a small scale, such as a new developed community, and large-scale, such as an intergalactic residence, will be considered.

5. Shape in Architecture

a. Critically examine different engineering qualities and design choices using squares, rectangles, circles, ovals, hexagons, and other shapes. Draw upon key international examples of buildings that have used unique shapes in their design, including acknowledging reference to socio-cultural influences.