



# Foundation studies in Design

The principal aim of the programme is to enable students to linguistically and academically negotiate the transition from school to university and be prepared for the demands of an undergraduate degree programme in an appropriate Design related discipline. The programme syllabus is designed around the acquisition of core academic skills and literacy development that underpins successful higher education outcomes: academic research, ICT, critical thinking, design thinking and the promotion of self-awareness.

## Semester 1 Core Modules :

- 2D Design
- 3D Design
- Interactive Learning Skills & Communication

## Semester 2 Core Modules

- Specialist Design Project Problem Solving
- Practical Research Skills

## Module overview

### 2D Design

To promote in students an appreciation for the relevance of visual literacy in the context of design and a practical enthusiasm for visual expression.

- To enable students to develop knowledge and understanding of the 2D design process
- To help students develop foundation skills in visual communication, graphic design, digital illustration, and image manipulation through a variety of media. 4. To help students develop ability to plan and carry out a 2D design project independently

### 3D Design

To help students develop:

1. Core 3D design skills (e.g. sketching, marker rendering storyboarding and technical drawing)
2. Knowledge and understanding of the design process and the broader context of design practice
3. Ability to design user/context focussed products in a planned and structured manner
4. An awareness of model making techniques for design
5. Knowledge and understanding of 3D CAD and 3D printing as tools for product design

### Interactive Learning Skills & Communication

This module has been designed to help students develop their academic literacy and communication skills in preparation for undergraduate study and to understand the institutional culture, practices, norms and expectations of UK higher education in an international academic context and community; to enable students to develop basic academic research and communication skills and; to raise students' English language levels to the required entry point for undergraduate entry.

### Practical Research Skills

This module has been designed to prepare students with an underpinning knowledge and skills in research methods to students seeking to progress to one of the prescribed undergraduate degree pathways at Brunel University. The students are taken step-by-step through research methods, approaches to the development of ideas and ways to conclude a project.

## Design Pathway

- Semester 1 Technical Design
- Semester 2 Mathematics for Engineers & Designers (BSc entry only) + Problem Solving, Critical Thinking & Analytical Skills (BA entry only)

## Digital Media Pathway

- Semester 1 Introduction to Art and Design
- Semester 2 - Problem Solving, Critical Thinking & Analytical Skills

### Problem Solving, Creative Thinking and Analytical Skills

The principle aim of this module is to develop understanding and application in a range of methods of investigation relevant to the design profession. The module is designed to develop in students the ability to problem solve, think critically, creatively and innovatively about design, think laterally in regards to problem solving using case studies as well as using analytical techniques developed throughout the Level 0 in design.

### Specialist Design Project

To develop the ability to work independently, within a self-generated design project (as agreed with programme staff) 2. To develop an exploratory approach to research, the investigation of relevant issues, conceptual design and the design development/resolution process whilst managing project work and timelines 3. To develop students' ability to identify a problem, create a feasible design and appropriate design solution, and enhance specialist skills in 2D and 3D design and design thinking.

### Technical Design

Develop knowledge and understanding of the basic laws of applied physics. 2. Make connections between physical concepts and apply the functional elements of physics in real life process. 3. Develop knowledge and understanding in applied physics to study Further Design and Engineering.

### Mathematics for Engineers & Designers

Exploring numbers and working with Numbers Area, Volume and Perimeter of shapes (2D and 3D) Basic algebra and simplifying algebraic expressions Solving linear equations and inequalities Introduction to Quadratic Equations. Solving equations graphically (including quadratic equations) Introduction to Calculus (basic Differentiation and Integration) Angles and circle theorem and basic trigonometric.

### Introduction to Art and Design

You will learn about the Principles of art and design, History of art and design, Important movements in art and design, Critical and creative thinking, Thought leaders in design and influences of art and design in other related fields.

Please note modules may be subject to change

Course and Module Information Sheet - V1.0

Want to know more?  
Visit our website:  
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