

Year One

Technology and Design Studio 1 (40 credits)

- This module will introduce the concept of a studio-based working environment. You'll work on a number of projects throughout the year, exploring the technical aspects associated with building environments.
- You'll look at the range of factors that influence building design development and learn how to make a critical and reflective appraisal of solutions to construction problems.

Construction Technology 1 (20 credits)

- This module will introduce you to a range of technical, practical and environmental principles involved in the making of structures.
- It will provide you with a framework for understanding the environmental impact of buildings, in terms of both human wellbeing and the creation of a sustainable built environment.

Architecture in Context (20 credits)

- This module looks at how wider social issues – such as politics, the economy and technology – influence architecture, both throughout history and in current times.
- You'll learn to recognise and engage with architectural responses to these influences by studying a variety of historical and cultural themes within an architectural framework.

Architectural Science and Building Services (20 credits)

- The aim of this module is to introduce you to the principles underlying the operation and functioning of building engineering services, associated with domestic buildings.
- You will explore sustainability and green buildings; how buildings are appropriately heated, cooled and illuminated; and how they are provided with water supplies, energy, and systems to remove waste and refuse.
- This module will also include a study trip to the Centre for Alternative Technology (CAT) in Wales.

Integrated Design Communication 1 (20 credits)

- This module will introduce you to a range of design communication skills and give you a basic understanding of building information modelling (BIM),

through the application of hand drawing, model making, and computer-aided design (CAD) software.

- You'll be encouraged to communicate your ideas through a range of professionally recognised conventions, preparing you for the expectations of graduate employers.

Year Two

Technology and Design Studio 2 (40 credits)

- Through studio-based working, you'll explore the technical aspects associated with building environments and performance requirements.
- This will be approached through the identification of quality control mechanisms, and distinguishing between options when selecting building materials, construction methods and environmental services.

Construction Technology 2 (20 credits)

- This module will further your understanding of the technical, practical and environmental principles of architectural design.
- It will familiarise you with a number of alternative solutions to enable you to meet the technical and human demands of architectural projects. You'll also further develop your critical understanding of the environmental impacts of design decisions.

Planning, Development and Surveying (20 credits)

- This module explores ways in which the built environment is planned, surveyed and developed, exploring the constraints on the creation and management of buildings, spaces and places.
- You will gain an understanding of the sense of place within different cultures and communities, and how town planning policies and processes supports this.

Integrated Design Communication 2 (20 credits)

- This module will develop your design communication skills and understanding of building information modelling (BIM), through the application of CAD software, environmental modelling, and – subsequently – visualisation techniques and challenges using digital media.

Professionalism and Employability (20 credits)

- This module provides the opportunity to develop skills in the design, planning and implementation of development projects. You will gain a further understanding and appreciation of design character, the way in which historic and contemporary buildings and spaces are used, and the implications of constraints that apply to today's construction industry.

- You will examine the public policy realm, market mechanisms and community interest, as well as looking at key graduate skills such as self-management, programming, and job planning.

Technology Design Studio 3 (40 credits)

- This module enables you to design and technically develop a scheme within the built environment. The module is student led, offering you the opportunity to focus on a major study project. Your project will be based on a realistic development scenario; you'll assess the development potential, create and present a feasibility study, and produce detailed design proposals.
- You'll produce a report of your development ideas, illustrated with drawings, models and other electronic techniques. The culmination of the project will be formal public exhibition of your work at the NTU Degree Shows*.

Construction Technology 3 (40 credits)

- This module will support your major research project from the Technology Design Studio module. It will enable you to integrate research and technological issues such as acoustics, lighting, structure and material studies into your studio work. This will give you the opportunity to fully explore issues relating to the realisation of a design project.
- You'll develop your knowledge of site strategies and structure, construction systems and materials, and the consideration and implementation of building services, legislation and environmental strategies.

Integrated Design Communication 3 (20 credits)

- This module will provide you with an understanding of the theory and practice of building information modelling and integrated project delivery, and of their application within the construction industry
- You'll develop hands-on skills and experience in generating collaborative design models, and merging models for design coordination and clash detection.

Contract Administration (20 credits)

- In this module you'll learn about contract administration – the study of construction contracts and practice. Widely used in the industry, you'll find knowledge of construction-related contracts invaluable in your graduate career.
- You'll study key topics relating to the administration of construction-related contracts, and apply the practices and procedures to industry-related scenarios.

Research Project (20 credits)

- This module provides you with the skills and experience to underpin the Technology Design Studio module. The module will cover the elements of

research investigation, analysis, argument, construction, critical debate, and presentation of findings.

- Through a series of documents and drawings, you'll be able to clearly demonstrate how your research has informed your major study project. At the end of the module, you'll have completed all the necessary research, including site research; analysed the material; and clearly identified all issues relevant to your design.

***Exhibiting as part of the Degree Shows**

In your final year, you'll be invited to display your work as part of NTU's Degree Shows. The events are an opportunity for all final year students studying across NTU's Art and Design-based courses to showcase their work to our network of industry professionals and prospective employers, invited specifically for this purpose.