

Module Specification

Module Summary Information

1	Module Title	Built Environment Technology 1
2	Module Credits	20
3	Module Level	4
4	Module Code	BNV4103

5	Module Overview
<p>This module introduces, for all of the built environment professions, a range of concepts relating to the technology of construction. It provides you with an understanding of modern and sustainable methods of construction. We use the example of low rise residential construction as it is relatively straightforward and allows us to introduce and explore these issues appropriately.</p> <p>In particular, you will be introduced to everyday materials, construction methods, building services Building Regulation and Health, Safety and Welfare legislation. You will gain an insight into the properties of materials and the basic scientific principles that apply to them. The module will focus on construction materials in general and how they can be used in creating a construction element and/or component (e.g. a floor, an external wall, a roof). You will develop the ability to identify, describe and visualise these materials in terms of types, dimension, size and weight.</p> <p>Individually you will use or develop a virtual building model in a way appropriate to your particular specialism (AT, BS, CM, PDP, QS and RE).</p>	

6	Indicative Content
<p>Preparing to build: site appraisal and investigation.</p> <p>Building Regulations, Health, Safety and Welfare.</p> <p>Substructure: foundations and ground floors.</p> <p>Superstructure: external walls, upper floors and roofs.</p> <p>Windows and external doors.</p> <p>Stairways, partitions and internal doors.</p> <p>Building services and equipment: water, drainage and sanitation.</p> <p>Energy systems: gas, electricity, data and controls</p> <p>Materials, components and specification.</p> <p>Building Information Modelling (BIM).</p> <p>Sustainable solutions: low and zero carbon homes, modern methods of construction and renewable energy sources.</p>	

7		Module Learning Outcomes
		On successful completion of the module, students will be able to:
	1	Explain the terminology used in the construction of low-rise residential buildings.
	2	Recognise the key characteristics of different construction materials and how they are combined in buildings; structure, fabric, components and finishes.
	3	Describe how performance requirements of building elements and emerging technologies inform technical innovation and development of new materials.
	4	Discuss the principal legislation and regulations that affect construction technology and their influence on new environmental technologies.

8		Module Assessment		
Learning Outcome				
		Coursework	Exam	In-Person
1-4		X		

9		Breakdown Learning and Teaching Activities	
Learning Activities		Hours	
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable		48	
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE		36	
Private Study (PS) includes preparation for exams		116	
Total Study Hours:		200	