BUIL H2503: Technical Design & Detailing II

Module Title:	Technical Design & Detailing II
Language of Instruction:	English

Credits:	20

NFQ Level:	6

Module Delivered In	No Programmes

Teaching & Learning Strategies:	Studio based project and problem based learning, to develop the students' problem solving skills, in an architectural context. Individual and group/team work utilised as appropriate Freehand drawing process and other media are utilised as a means of problem-solving and communicating information. One to one detail reviews/tutorials and group 'crits', all to provide student feedback. International and local Technical study trips are organised to selected sites/buildings; pre-visit tutorial to brief the buildings, and work to be carried out 'on site'.

Module Aim:	TD & D II is the principal architectural technology module and establishes an approach to technical design. The aim of this module is to establish an approach to technical design under the following headings: • Investigation • Integration • Contextual development The learner will be introduced to different building types, structures and materials and will investigate and choose an appropriate structure and external envelope combination and incorporate the principles of weathering, structure, insulation and more e.g. sound or fire resistance in the technical design solution. The aim is to ensure the student can apply and integrate the technical knowledge and understanding developed within the other supporting architectural technology modules; this is applied to the development of TD&D II projects by exploring primarily the materials and construction techniques utilised in the chosen building types and as outlined in the Project briefs. The Contextual Development aim will focus on a holistic design approach that responds to environmental design and relevant building code concerns at both site and building level. Sustainable design is inherent in all modules and projects

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	Investigate appropriate construction methods and materials by undertaking structured research.
LO2	Resolve technical design issues using a combination of freehand drawing and other media including model making.
LO3	Apply the requirements of the relevant Regulations, Codes and Standards to technical design solutions for chosen building types
LO4	Explore, resolve and integrate structural, environmental and services factors to a technical design solution for chosen building types
LO5	Prepare integrated working drawings, specification and scheduling for chosen building types
LO6	Be able to respond to the architectural design approaches relative to the chosen building types, and recognise the design intent

Pre-requisite learning		
Module Recommendations *This is prior learning (or a practical skill) that is recommended before enrolment in this module.*		
6669	PROJ H1502	Technical Design & Detailing I
Incompatible Modules *These are modules which have learning outcomes that are too similar to the learning outcomes of this module.*		
No incompatible modules listed		
Co-requisite Modules		
5295	GRAP H2504	Graphics, CAD & BIM I
6673	SERV H2503	Building Services II
6684	TECH H2518	Building Technology, Materials and Structures II
Requirements *This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.*		
No requirements listed		

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Module Content & Assessment

Indicative Content
TD&D II Studio based projects, integrated to other modules Studio based projects each involve Investigation (research stage) application & integration (sketch design stage), and appropriate Contextual Development (final proposed solutions) with reference to site layout, structures and appropriate external envelope solutions; using drawing (esquisse and final Revit), suitable product information, specification, schedule and building performance report: All TD&D II projects are integrated with AP&L 1; BTM&S 2; Building Services 2 and Graphics CAD & BIM. Typical projects are all follows: Environmental site planning layout Project: a vehicle for developing students skills in working with sustainable site development and a larger scale residential development Community Centre Building Project: a vehicle for developing students skills in working with Framed structures; Timber Technology and simple non domestic buildings Apartment Building Project: a vehicle for developing students skills in working with Cross Wall structures; Concrete Technology and more complex residential buildings (including e.g. a DAC application set)

Assessment Breakdown	%
Project	100.00%

No Continuous Assessment

Project

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Project	• Assessment will be detailed in each Studio Project brief relative to its specific learning outcomes and the associated marking scheme. Where other subjects form part of the Studio submission this will be clearly identified in the brief. A feedback matrix is used to inform student performance; this is provided at relevant stages (Sample project briefs included in Appendices). • Formative assessment will be made on each Studio Project; • Summative assessment will be made of the submitted final portfolio at year end	1,2,3,4,5,6	100.00	n/a

No Practical

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

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Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Studio Based Learning	30 Weeks per Stage	9.00
Independent Learning	30 Weeks per Stage	20.00
	Total Hours	870.00