

Module Title:	Studio 4b
Language of Instruction:	English
Credits:	15
NFQ Level:	8
Module Delivered In	1 programme(s)
Teaching & Learning Strategies:	<p>The studio environment supports project-based learning to assist students to develop skills as innovators & problem solvers to an advanced level. Students learn by doing while completing desktop surveys of the proposed site. Teaching varies from lectures, demonstrations, presentations, one-to-one detail reviews/tutorials and project crits and presentations. Students present their work to their peer group at various stages in the project. The presentation / crits provide students with direct feedback from teaching staff and fellow classmates. The technical study trip is used to provide the students with best practice examples of real-life scenarios. In early part of the second semester the students visit an international city, where they will look at a range of buildings, typically engage in a short project with similar students from the chosen city, students will also aim to visit construction manufacturing plants for the manufacture of construction products. Whilst visiting the city students will study, a range of buildings that have innovative facades / external envelopes and a strong environmental strategy. The trips allow the students to experience and witness specialist building interventions and the latest and advanced technical/technological innovations within the building industry. In this module the focus is on four key concepts. BREEAM, innovative facades, sustainable environmental strategy & the research of building types.</p>
Module Aim:	<p>The Aim of this module is to:</p> <ul style="list-style-type: none"> • To develop the student's ability to measure, record and appraise the proposed site. • To develop students' ability to produce sketch design, planning drawings & construction stage detailed drawings together with supporting documentation, specifications, technical reports, case studies to an advanced level, including conceptual technical design development. • To support students to evolve an individual approach to their own work based on research, analysis, case studies and reflection. • To develop technical design processes and research skills required to create technical design proposals within the profession. Appreciate, observe, document/ record and analyse important buildings, technical architectural details and technical manufacturing processes as visited on international and local technical study visits.
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	An ability to structure a clear methodology to undertake an evaluation and analysis of a complex project brief and create appropriate supporting documentation, (surveys, reports, drawings with a focus on four key concepts, BREEAM, innovative facades, sustainable environmental strategy & the research of building types.
LO2	An ability to undertake and present research, systematic analysis of theory and case studies, using available information / evidence to construct reasoned responses for material and technological choices made in a studio project focusing on four key concepts, BREEAM, innovative facades, sustainable environmental strategy & the research of building types, with reference to case study buildings visited on the international study trip and buildings researched in studio.
LO3	To have the knowledge of core principles of construction legislation, building regulations, safety and health and other related codes and standards and to apply and present analysis for a studio project focusing on four key concepts, BREEAM, innovative facades, sustainable environmental strategy & the research of building types.
LO4	An understanding of how to evaluate and problem solve technical construction solutions / details and the ability to produce and present technical drawings, written technical reports for a studio project focusing on four key concepts, BREEAM, innovative facades, sustainable environmental strategy & the research of building types.
LO5	An ability to complete and present/ communicate studio work for a new build project focusing on BREEAM, innovative facades & sustainable environmental strategies, with reference to case study buildings visited on the international study trip and buildings researched in studio. To prepare to high level of graphical presentation of studio projects using REVIT and other leading edge software tools.
Pre-requisite learning	
Module Recommendations	
<i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
Incompatible Modules	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements	
<i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>	
Students should have completed year 3 of BSc Architectural technology level 7. Students are required to have Revit and other software skills to produce, measured drawings, survey drawings, sketch technical details, technical drawings and specification for tender/ construction, planning drawings, working drawings and 3d rendered presentation drawings.	

Module Content & Assessment

Indicative Content

Project 2

The project uses a newbuild Medium complexity building type as a vehicle to develop specific skills in design and detailing for low-energy, environment friendly buildings and 'green' / sustainable construction technologies. This project will prepare a design for a new building that will be defined by 4 key concepts. BREEAM, innovative facades, sustainable environmental strategy & research of a specific building type.

Assessment Breakdown	%
Project	100.00%

No Continuous Assessment

Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Project 1. This project will prepare a design for a new building that will be defined by 4 key concepts. BREEAM, INNOVATIVE FACADES, SUSTAINABLE ENVIRONMENTAL STRATEGY & RESEARCH OF A BUILDING TYPE. The project is divided into the four sections, Stage 1. Research: Case Studies - BREEAM, Innovative Facades and Sustainable Environmental Strategy. (15 %) Stage 2. Sketch design research & Planning: Sketch design layouts, Technical design, Materials, Building regulation analysis and Planning application (30 %) Stage 3. Tender/ Construction: Construction Information, technical detailing & compliance for DAC & FSC (50 %) Stage 4. Project Portfolio Presentation. (5 %)	1,2,3,4,5	90.00	Sem 2 End
Project	Case Studies & Research : An International study trip with a focus on existing historic and modern building types investigated through BREEAM, the use of innovative facades/ envelope design & analysis of sustainable environmental strategies. There will also be Local technical study trips to support the studio projects.	1,2,3,4,5	10.00	n/a

No Practical

No End of Module Formal Examination

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

Module Workload

Workload: Full Time		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Studio Based Learning	12 Weeks per Stage	9.00
Independent Learning	12 Weeks per Stage	22.25
Total Hours		375.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_CMARC_B	Bachelor of Science (Honours) in Architectural Technology	8	Mandatory