

ARCH6085: Studio: Multi-storey Elements

Module Details	
Module Code:	ARCH6085
Title:	Studio: Multi-storey Elements APPROVED
Long Title:	Studio: Multi-storey Elements
NFQ Level:	Fundamental
Valid From:	Semester 1 - 2021/22 (September 2021)
Duration:	1 Semester
Credits:	10
Field of Study:	5810 - Architecture & Urban Environment
Module Delivered in:	2 programme(s)
Module Description:	This module aims to give students an insight into the planning process and construction process of a multi-storey residential development, and the components which make up the building envelope. The module focuses on site analysis and development, and the process of submitting a planning application. The module also focuses on detailing of the key junctions of the building to integrate secondary structure, cladding systems, flat roof systems, and roof terrace systems into multi-storey framed construction, while producing a set of general arrangement (GA) drawings and other detailed drawings to inform the construction process.

Learning Outcomes	
On successful completion of this module the learner will be able to:	
#	Learning Outcome Description
LO1	Conduct a site analysis and produce site plan drawings which locate the proposed building on site while addressing all site services, access and circulation requirements.
LO2	Produce a set of planning application documents which are suitable for submission to a local authority for planning permission.
LO3	Apply building regulations in the technical design process and produce construction drawings which are compliant with building regulations.
LO4	Identify critical junctions and develop construction details which provide a unified approach to detailing the junctions where various wall, floor, roof and roof terrace systems connect.
LO5	Develop a full set of general arrangement drawings which integrate the required construction information.
Dependencies	
Module Recommendations	
Incompatible Modules	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements	
No requirements listed	

Indicative Content	
Site Design Site design to include site access, public & private amenity spaces, site services, and building orientation. Integration of safe pedestrian and vehicular zones, access by fire services, surface treatments, falls and site drainage requirements. Provision of accessible parking and access to main entrances of building from accessible parking and main site entrance.	
Planning process Knowledge of the planning process as it relates to the provision of architectural services, and the planning application process, timelines and process of appeal. Documents required to submit a valid planning application, and the content required in each individual document for a planning application to be lodged with a local authority. The validation process, notification of decision to grant, final decision, and communication with client, and relevant design team members. Requirements to communicate with planning departments prior to lodgment of a planning application, the process of further information requests, observations, and third party appeals.	
Detailing Principles Detailing for water tightness with rain screen cladding systems and flat roof membranes. Maintaining air tightness, reducing thermal bridging, vapour control, wind tight membranes, ventilated and unventilated structures, and integration/facilitation of services. Ground moisture ingress and radon control. Technical specification of the various components of the building, and integration between various construction components.	
General arrangement drawings Integration of detailed information on larger scale plans, elevations and sections. Minimum requirements for room areas, apartment areas, and aggregate living area. Compartmentation, separating walls, determining the fire resistance and integrity of walls & floors, dB ratings for sound proofing of walls and floors, fire doors, general access & circulation, and escape from building. Sizing and location openings to facilitate cladding design on elevations, coordinating panel sizes based on manufacturers information to avoid modification on site. Completion of GA drawings to required construction drawing standard; dimensioning, annotation, call outs, room tags, identifying wall types, floor types, roof types, and relevant specification notes by type.	

Module Content & Assessment	
Assessment Breakdown	%
Coursework	100.00%

Assessments

Coursework			
Assessment Type	Project	% of Total Mark	15
Timing	Week 2	Learning Outcomes	1,3
Assessment Description Site analysis and site plan development			
Assessment Type	Project	% of Total Mark	10
Timing	Week 4	Learning Outcomes	2
Assessment Description Planning application			
Assessment Type	Project	% of Total Mark	30
Timing	Week 8	Learning Outcomes	3,4
Assessment Description Construction details for a multi-storey building			
Assessment Type	Project	% of Total Mark	45
Timing	Sem End	Learning Outcomes	3,5
Assessment Description			

Construction drawings set: develop GA drawings to include floor plans, sections & elevations for a multi-storey building, and integrate revised construction details and site plan into the drawing set.
No End of Module Formal Examination
Reassessment Requirement
Coursework Only <i>This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.</i>

The University reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time					
Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours
Lecture	Contact	Studio based delivery of module	Every Week	1.00	1
Tutorial	Contact	Group Tutorial	Every Week	0.50	0.5
Lecturer Supervised Learning (Non-contact)	Non Contact	Completion of studio assignments	Every Week	12.50	12.5
Total Hours					14.00
Total Weekly Learner Workload					14.00
Total Weekly Contact Hours					1.50
Workload: Part Time					
Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours
Lecture	Contact	Studio based delivery of module	Every Week	1.00	1
Tutorial	Contact	Group Tutorial	Every Week	0.50	0.5
Lecturer Supervised Learning (Non-contact)	Non Contact	Completion of studio assignments	Every Week	12.50	12.5
Total Hours					14.00
Total Weekly Learner Workload					14.00
Total Weekly Contact Hours					1.50

Module Resources

Recommended Book Resources
<p>Watts, Andrew. (2018), Modern Construction Handbook : Augmented Reality, 6th Edition. Walter de Gruyter GmbH, [ISBN: 9783035616903].</p> <p>Edited by Pamela Buxton. (2018), Metric handbook, Taylor & Francis Group, [ISBN: 9780415304405].</p> <p>Gerald Staib. (2008), Components and Systems: Modular Construction. Design. Structure. New Technologies, 1st Ed. Redaktion DETAIL, Germany, [ISBN: 9783764386566].</p> <p>Ann Ross, Jonathan Hetreed. (2011), Architect's Pocket Book, 4th Ed. Architectural Press, UK, [ISBN: 9780080969596].</p>
<i>This module does not have any article/paper resources</i>
Other Resources
<p>Web Collection, Department of Housing, Local Government and Heritage (Ireland). (2021), Irish Building Regulations, Technical Guidance Documents (Web Editions), Dublin, Ireland, https://www.gov.ie/en/collection/d9729-technical-guidance-documents/</p> <p>Web Document, Department of Environment and Local Government (Ireland). (2001), Planning and Development Regulations, 2001, Dublin, Ireland, http://www.irishstatutebook.ie/eli/2001/si/600/made/en/print?q=Planning+and+development+regulations</p>

Module Delivered in

Programme Code	Programme	Semester	Delivery
CR_CARCT_8	Bachelor of Science (Honours) in Architectural Technology	-1	Mandatory
CR_TARCH_7	Bachelor of Science in Architectural Technology	-1	Mandatory