

ARCH6084: Studio: Multi-storey Frames

Module Details	
Module Code:	ARCH6084
Title:	Studio: Multi-storey Frames APPROVED
Long Title:	Studio: Multi-storey Frames
NFQ Level:	Fundamental
Valid From:	Semester 1 - 2020/21 (September 2020)
Duration:	1 Semester
Credits:	10
Field of Study:	5810 - Architecture & Urban Environment
Module Delivered in:	2 programme(s)
Module Description:	This module explores the structures, simple spans and materials used in the construction of multi-storey mixed/hybrid buildings. Introduction to conservation principles. Universal design provides individual and team opportunities to investigate building envelope systems; analyse various cladding materials, components and details, explore tectonics and aesthetics; and comply with relevant legislation parts A, B, C, D, E, F and L.

Learning Outcomes	
On successful completion of this module the learner will be able to:	
#	Learning Outcome Description
LO1	Apply building surveying skills and conservation principles through a collaborative team role.
LO2	Apply innovative building materials, systems and technology to building forms.
LO3	Apply the theory and principles of environmental and Universal design and sustainable practice to mixed use structures, simple spans and hybrid composite systems.
LO4	Identify, evaluate, synthesize information, apply critical judgement and develop strategies for building envelopes.
LO5	Apply fundamental regulations and legislation to building forms.
Dependencies	
Module Recommendations	
Incompatible Modules	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements	
No requirements listed	

Indicative Content
Methodology, Pedagogy Analysis of context and function. Production of 2D and 3D drawings, plans, sections, elevations & details. Axonometric drawings of building sections and critical junctions.
Technical Design mixed structures in timber, steel and concrete, material characteristics, support mechanisms, jointing, thermal expansion, relationship with components within the structure, relationship between aesthetics and craft, sustainable practices, details & code/ legislation compliance. Legislation compliance relating to stairs detail design and construction.
Principles Rain screen principles, air cavities, water movement, Universal design, conservation principles.
Universal Design Apartment layout, circulation, introduction to fire regulations, stairs design and regulations. Apply minimum regulations for bedroom floor areas, aggregate living areas, implementation of part M standards for accessibility.

Module Content & Assessment	
Assessment Breakdown	%
Coursework	100.00%

Assessments

Coursework			
Assessment Type	Project	% of Total Mark	10
Timing	Week 2	Learning Outcomes	1
Assessment Description Building survey in a conservation building.			
Assessment Type	Project	% of Total Mark	30
Timing	Week 5	Learning Outcomes	2,3,5
Assessment Description Propose structural solution for mixed system			
Assessment Type	Project	% of Total Mark	30
Timing	Week 9	Learning Outcomes	2,3,5
Assessment Description Universal design and fire safe design			
Assessment Type	Project	% of Total Mark	30
Timing	Week 13	Learning Outcomes	2,4,5
Assessment Description Wood, Stone & Metal cladding systems.			
No End of Module Formal Examination			
Reassessment Requirement			
Coursework Only			
This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.			

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>Alan J. Brookes, Maarten Meijs. (2008), Cladding of buildings,, 4th Ed. Taylor & Francis Abingdon, [ISBN: 978-058240520].</p> <p>Ann Ross, Jonathan Hetreed, Charlotte Baden Powell. (2011), Architect's Pocket Book, 3rd Ed. Architectural Press, [ISBN: 978-008096959].</p> <p>Jack Stroud Foster, Raymond Harington. (2000), Structure & Fabric: Part 2 (Mitchells Building Series),, 6th Ed. Longman Harlow, [ISBN: 978-058240520].</p>
Supplementary Book Resources
<p>Edited by David Adler. (2001), Metric Handbook, Architectural Press, Oxford, [ISBN: 978-075065281].</p>
<i>This module does not have any article/paper resources</i>
<i>This module does not have any other resources</i>

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