

<b>Full Title:</b>	Construction Technology 2
<b>Language of Instruction:</b>	English
<b>Module Code:</b>	CNST E7005
<b>Credits:</b>	10
<b>Valid From:</b>	Semester 1 - 2017/18 ( September 2017 )
<b>Module Delivered in</b>	<a href="#">4 programme(s)</a>
<b>Module Description:</b>	This module aims to complete the students familiarisation with standard building technologies associated with non-domestic buildings in skeletal construction and to familiarise the student with non-standard, advanced and innovative building technologies.
<b>Learning Outcomes:</b>	
<i>On successful completion of this module the learner should be able to</i>	
<ol style="list-style-type: none"> <li>1. Identify and contrast the alternative frame types in low rise and multi-storey skeletal construction.</li> <li>2. Recognise and evaluate the options for the provision of a building wall envelope in skeletal construction</li> <li>3. Recognise and explain the components of space and shell roof structures.</li> <li>4. Interpret and prepare construction/production details associated with skeletal, space and shell.</li> </ol>	

## Module Content & Assessment

Indicative Content
<b>Low rise skeleton frame construction</b> n/a
<b>Multi-storey construction</b> Types; material choices; grids; wind & other factors
<b>Cladding including rain screens - Principles and Detailing</b> Panels, joints fixings; concrete external; infill panels
<b>Curtain walling</b> Stick, unitised & panellised systems; face sealed, drained & back ventilated and pressure equalised system designs
<b>Structural glass cladding</b> Structural sealant glazing; framed and frameless, mechanically fixed systems - patch, planar and RFR ; multiple-skin and twin wall facades
<b>Pre-stressed concrete</b> Principles and Detailing
<b>Space structures</b> Tension structures; air supported; shell roof; folded plate
<b>Long span roofs and flat roofs</b> n/a

Assessment Breakdown	%
Course Work	50.00%
End of Module Formal Examination	50.00%

## Full Time

Course Work							
Assessment Type	Assessment Description	Outcome addressed	% of total	Marks Out Of	Pass Marks	Assessment Date	Duration
Portfolio	A portfolio of approximately six to eight sketches and/or finished drawings (carrying approximately equal marks) of construction details relating to skeletal, space, and shell.	2,3,4	50.00	100	40	n/a	0

No Project

No Practical

End of Module Formal Examination							
Assessment Type	Assessment Description	Outcome addressed	% of total	Marks Out Of	Pass Marks	Assessment Date	Duration
Formal Exam	Final Examination	1,2,3,4	50.00	100	40	End-of-Semester	0

Reassessment Requirement
<b>A repeat examination</b> Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element.
<b>Reassessment Description</b> Students will be given an opportunity to remediate part or all of their CA performance by the autumn/repeat examination boards by repeating part or all of the same or similar CA.

DKIT reserves the right to alter the nature and timings of assessment

**Module Workload & Resources**

**Workload: Full Time**

Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	Theory based lectures	2.00	Every Week	2.00
Practical	Guided preparation of sketches and/or finished drawings contributing towards a portfolio of relevant construction details	2.00	Every Week	2.00
Directed Reading	Preparation for CA	1.00	Every Week	1.00
Independent Study	Preparation for final examination	2.00	Every Week	2.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				4.00

**Workload: Part Time**

Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	Theory based lectures	1.00	Every Week	1.00
Practical	Guided preparation of sketches and/or finished drawings contributing towards a portfolio of relevant construction details	1.00	Every Week	1.00
Independent Study	Completion of sketches and/or finished drawings of relevant construction details and preparation for the final examination.	5.00	Every Week	5.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				2.00

Resources
<i>Recommended Book Resources</i>
<p>Chudley, R. &amp; Greeno, R. 2012, <i>Advanced Construction Technology</i>, 5th Ed., Longman [ISBN: 9780435046835]</p> <p>Riley, M. &amp; Cotgrove, A. 2009, <i>Construction Technology 2: Industrial and Commercial Building</i>, Palgrave MacMillan [ISBN: 9780230575714]</p> <p>Watts, A 2013, <i>Modern Construction Handbook</i>, 3rd Ed., Walter de Gruyter &amp; Co [ISBN: 9783990434543]</p> <p>Greeno, R. &amp; Chudley, R. 2012, <i>Building Construction Handbook</i>, 9th Ed., Routledge [ISBN: 97800809706]</p> <p>Allen, E 2013, <i>Fundamentals of Building Construction: Materials and Methods</i>, John Wiley &amp; Sons [ISBN: 9781118138915]</p> <p>Allen, E. 2013, <i>Exercises in Building Construction</i>, John Wiley &amp; Sons [ISBN: 978111865328]</p> <p>Emmitt, S. &amp; Gorse, C. 2010, <i>Barrys Advanced Construction of Buildings</i>, Wiley-Blackwell [ISBN: 9781405188531]</p>
<i>This module does not have any article/paper resources</i>
<i>Other Resources</i>
<p>On-line database: <i>Databases including IHS</i>, Available to registered students via DKIT Library website</p> <p>Website: <a href="http://www.bre.co.uk">www.bre.co.uk</a></p> <p>Website: <a href="http://www.environ.ie">www.environ.ie</a></p>

### Module Delivered in

Programme Code	Programme	Semester	Delivery
DK_EARCT_8	<a href="#">Bachelor of Science (Honours) in Architectural Technology</a>	3	Mandatory
DK_ECMGT_8	<a href="#">Bachelor of Science (Honours) in Construction Management</a>	3	Mandatory
DK_EARCT_7	<a href="#">Bachelor of Science in Architectural Technology</a>	3	Mandatory
DK_ECMGT_7	<a href="#">Bachelor of Science in Construction Management</a>	3	Mandatory