



<b>Title:</b>	Technical Design Strategy <b>APPROVED</b>
<b>Long Title:</b>	Technical Design Strategy
<b>Module Code:</b>	ARCH9001
<b>Credits:</b>	15
<b>NFQ Level:</b>	Expert
<b>Field of Study:</b>	Architecture & Urban Environment
<b>Valid From:</b>	Semester 1 - 2013/14 ( September 2013 )
<b>Module Delivered in</b>	<a href="#">1 programme(s)</a>
<b>Module Coordinator:</b>	KATHERINE KEANE
<b>Module Author:</b>	KATHERINE KEANE
<b>Module Description:</b>	Technical Design Studio to facilitate the development of expertise in research and conceptual exploration of technical strategies appraisal and feasibility investigations for individually directed focus in technical design project or component.
<b>Learning Outcomes</b>	
<i>On successful completion of this module the learner will be able to:</i>	
LO1	Appraise contemporary critical challenges in architectural technical design
LO2	Prepare a brief for a complex technical design project or critical component.
LO3	Design a conceptual and critical strategy for a complex technical design project or critical component.
LO4	Propose a conceptual and critical strategy for structural design, construction and engineering for a complex technical design project or critical component.
LO5	Formulate a conceptual and critical strategy for responding to environmental conditions and issues of human comfort in a complex technical design project or critical component
<b>Pre-requisite learning</b>	
<b>Module Recommendations</b>	
<i>This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named CIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).</i>	
No recommendations listed	
<b>Incompatible Modules</b>	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module. You may not earn additional credit for the same learning and therefore you may not enrol in this module if you have successfully completed any modules in the incompatible list.</i>	
No incompatible modules listed	
<b>Co-requisite Modules</b>	
No Co-requisite modules listed	
<b>Requirements</b>	
<i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed. You may not enrol on this module if you have not acquired the learning specified in this section.</i>	
No requirements listed	
<b>Co-requisites</b>	
No Co Requisites listed	

**Module Content & Assessment**

**Indicative Content**

**Research and Investigation of Contemporary Issues**

Appraisal of contemporary challenges in technical design and identification of technical project scope.

**Technical Design Brief**

Provide the necessary information to describe the rationale, purpose, goals, costs, risks, constraints and time and performance requirements of the project, the direction and scope of the project, including client identification, project objective, project background, environmental performance, location attributes.

**Feasibility Studies**

A rigorous technical analysis and documentation of all aspects of the anticipated project, to define: The goals of the project; Opportunities and constraints; Key issues influencing the technical design; The technical design criteria; The limits and scope of the technical design project.

**Precedent studies**

Precedent study to identify principles from past practices in technical design, technology, environment, context, structure, construction, planning, and regulations

**Schematic Technical Design and Conceptual Technical Strategies**

First phase in the technical design of a project, preparation of schematic diagrams giving a general view of the technical components and the scale of the project after detailed technical investigations.

**Assessment Breakdown**

**%**

Course Work

100.00%

**Course Work**

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Technical Design Conceptual Strategies	1,2,3,4,5	100.0	Every Second Week

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.*

**The institute reserves the right to alter the nature and timings of assessment**

**Module Workload**

**Workload: Full Time**

<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Tutorial	Studio Critique	1.0	Every Week	1.00
Directed Learning	Studio learning	6.0	Every Week	6.00
Independent & Directed Learning (Non-contact)	Studio investigations and development	14.0	Every Week	14.00
Total Hours				21.00
Total Weekly Learner Workload				21.00
Total Weekly Contact Hours				1.00

**Workload: Part Time**

<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Directed Learning	Studio learning	6.0	Every Week	6.00
Tutorial	Studio Critique	1.0	Every Week	1.00
Independent & Directed Learning (Non-contact)	Studio investigations and development	14.0	Every Week	14.00
Total Hours				21.00
Total Weekly Learner Workload				21.00
Total Weekly Contact Hours				1.00

Module Resources
<i>Recommended Book Resources</i>
<ul style="list-style-type: none"> <li>• Franca Trubiana Ed. 2012, <i>Design and Construction of High-Performance Homes: Building Envelopes, Renewable Energies and Integrated Practice</i>, Routledge [ISBN: ISBN: 9780415615280]</li> <li>• Jonathan Tarbatt 2012, <i>The Plot: Designing Diversity in the Built Environment</i>, RIBA [ISBN: 9781859464434]</li> <li>• Shauna Mallory- Hill 2012, <i>Enhancing Building Performance</i>, Wiley [ISBN: 9780470657591]</li> <li>• Michael Jaggs and Chris Scivyer 2011, <i>Airtightness in Commercial and Public Buildings</i>, BRE Press [ISBN: 9781848061743]</li> <li>• G. Z. Brown, Mark DeKay 2000, <i>Sun, Wind, and Light</i>, John Wiley and Sons Inc [ISBN: 9780470945780]</li> <li>• David L. Smith, 2011, <i>Environmental Issues for Architecture</i>, John Wiley and Sons Inc [ISBN: 9780470497098]</li> <li>• Peter F. Smith 2007, <i>Sustainability at the cutting edge</i>, Architectural Press Oxford [ISBN: 9780750683005]</li> </ul>
<i>Supplementary Book Resources</i>
<ul style="list-style-type: none"> <li>• Thomas Stark , Bernhard Lenz and Jurgen Schreiber 2011, <i>Sustainable Building Services</i>, Detail [ISBN: 9783920034492]</li> <li>• Ed. Asko Sarja 2006, <i>Predictive and optimised life cycle management</i>, Taylor &amp; Francis London [ISBN: 9780415353939]</li> <li>• Sean Doran 2011, <i>U-Value Conventions in Practice: Worked Examples Using BR 443</i>, BRE Press [ISBN: 9781848061972]</li> <li>• Sofie Pelsmakers 2011, <i>The Environmental Design Pocketbook</i>, RIBA [ISBN: 9781859463741]</li> <li>• Ljubomir Jankovic 2012, <i>Designing Zero Carbon Buildings</i>, Routledge [ISBN: 9781849712941]</li> </ul>
<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_9	<a href="#">Master of Science in Architectural Technical Design</a>	1	Mandatory