

<b>Full Title:</b>	Civil Engineering Management (prog rev 2013)
<b>Language of Instruction:</b>	English
<b>Module Code:</b>	MGMT E7007
<b>Credits:</b>	5
<b>Valid From:</b>	Semester 1 - 2014/15 ( September 2014 )
<b>Module Delivered in</b>	<a href="#">1 programme(s)</a>
<b>Module Description:</b>	The purpose of this module is to provide the student with knowledge of project management skills used in the construction industry with a focus on planning techniques, financial appraisal, measurement and contractual issues.
<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. Recognise and appreciate different techniques used in the management of construction projects.</li> <li>2. Identify and summarise the objectives and functions of Construction Project Management.</li> <li>3. Define, assimilate and analyse various different planning and review techniques used in project planning.</li> <li>4. Recognise, summarise and use different project economic appraisal techniques.</li> <li>5. Identify, interpret and use standard measurement systems in the measurement and procurement of construction works.</li> <li>6. Recognise and summarise the relevance of various contract types and issues on infrastructural construction projects.</li> </ol>	

## Module Content & Assessment

Indicative Content
<p><b>Management Principles</b> Objectives and functions of construction project management, career paths, organisation structures.</p>
<p><b>Project Planning</b> Ghantt charts, Linked Ghantt charts, Network analysis planning. Activity on the arrow programming, Precedence diagrams, critical paths, floats. Project planning review techniques, resource leveling / smoothing.</p>
<p><b>Project Economic Appraisal</b> Interest rate effects, depreciation, sinking funds, present worth. Economic comparison techniques - Present worth assessment, Equivalent Annual Costs.</p>
<p><b>Measurement and Standard Methods of Measurement</b> Measurement of Civils works and Bill of Quantity preparation using the National Roads Authority Method of Measurement of Roads and Bridges, including - Site Clearance, Fencing, Earthworks, Pavements, Kerbs, Footways and Paved areas, Traffic Signs and Road Markings.</p>
<p><b>Contract Documentation and General Conditions of Contract</b> Bonds, Collateral Warranties, Parent Company Guarantees. Use of General Conditions of Contract including an overview of the following national and international forms of contracts - IEI, ICC (prev ICE), JCT, FIDIC, NEC, Dept of Finance Public Works Contracts.</p>
<p><b>Capital Works Management Framework</b> Irish construction procurement reform basic principles, Risk transfer, Delay and Compensation Events, Implications for both Contractors and Consultants.</p>
<p><b>Variations / Change Orders</b> Assessment and valuation of varied works during the contract period.</p>

Assessment Breakdown	%
Course Work	20.00%
End of Module Formal Examination	80.00%

## Full Time

Course Work							
Assessment Type	Assessment Description	Outcome addressed	% of total	Marks Out Of	Pass Marks	Assessment Date	Duration
Continuous Assessment	Network programme exercise.	1,3	7.50	0	0	n/a	0
Continuous Assessment	NRA MMRB exercise	1,5	7.50	0	0	n/a	0
Class Test	Short tutorial style class tests throughout the year to supplement the delivery of the indicative content.	3,5	5.00	0	0	n/a	0

No Project
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No Practical
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End of Module Formal Examination							
Assessment Type	Assessment Description	Outcome addressed	% of total	Marks Out Of	Pass Marks	Assessment Date	Duration
Formal Exam	Formal examination examining all of the indicative content.	1,2,3,4,5,6	80.00	0	0	End-of-Semester	0

**Reassessment Requirement****A repeat examination**

*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.*

**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	Formal Lecture	3.00	Every Week	3.00
Tutorial	Supervised tutorial	1.00	Every Week	1.00
Directed Reading	Assimilation of presented course materials	2.00	Every Week	2.00
Independent Study	Completion of course work exercises	2.00	Every Week	2.00
Total Weekly Learner Workload				8.00
Total Weekly Contact Hours				4.00

**This course has no Part Time workload.**

### Resources

*Recommended Book Resources*

Frank Harris & Ronald McCaffer 2006, *Modern Construction Management*, 6th Ed., Blackwell Science London [ISBN: 1405133252]

Keith F. Potts 1995, *Major Construction Works Contractual and Financial Management*, Longman Scientific & Technical [ISBN: 0582102987]

National Roads Authority 2001, *Method of Measurement for Roadworks*, Series 200, 300, 600, 700, 1200, National Roads Authority

Department of Finance 2007, *Capital Works Management Framework Guidance Notes for Public Works Contracts*, The National Public Procurement Policy Unit of the Department of Finance Dublin

*This module does not have any article/paper resources*

*Other Resources*

website: Construction Procurement Reform website *Department of Public Expenditure and Reform*, Dublin  
<http://www.constructionprocurement.gov.ie>

website: *National Roads Authority*, NRA, Dublin  
<http://www.nra.ie>

### Module Delivered in

Programme Code	Programme	Semester	Delivery
DK_ECIVL_7	<a href="#">Bachelor of Engineering in Civil Engineering</a>	6	Mandatory