

## Liverpool John Moores University

Title: CONSTRUCTION PRACTICE  
Status: Definitive  
Code: **4105BEUG** (117836)  
Version Start Date: 01-08-2011

Owning School/Faculty: Built Environment  
Teaching School/Faculty: Built Environment

Team	Leader
Raj Shah	Y
John Sinclair	

**Academic Level:** FHEQ4      **Credit Value:** 24.00      **Total Delivered Hours:** 98.00  
**Total Learning Hours:** 240      **Private Study:** 142

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	48.000
Practical	12.000
Tutorial	24.000
Workshop	12.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1		50.0	2.00
Report	AS2		25.0	
Report	AS3		25.0	

### Aims

*To introduce students to the legal, planning and operational aspects of Civil Engineering & Construction, and to introduce them to the variety of subject areas within Civil Engineering*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Discuss the culture and methodologies of the construction industry particularly in the context of the contractual relationships and the civil and statutory duties and obligations of the parties to a project.
- 2 Describe & contrast the potential procurement solutions, tendering arrangements and associated documentation suitable for particular projects.
- 3 Demonstrate knowledge and understanding of the methods and resources used in construction activities.
- 4 Select appropriate methods and resources for construction activities having due regard for safety, environmental, quality, technical and economic considerations.
- 5 Demonstrate an understanding of relevant health and safety legislation, the hazards arising from construction activities and of the means of managing them through preventative design and protective measures, including preparation of work method statements and risk assessments.
- 6 Describe and examine the principal features of project planning including the methods available for programming construction works, cash flow analysis, and monitoring of progress, and sequencing using industry standard software.
- 7 Explain the essentials of Civil Engineering Site activities

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Examination	1	2	3	7
Project report	4	5		
Project report	6			

## Outline Syllabus

*Project definition, Client types; clients' requirements; briefing: time, cost, quality and functional objectives; external influences: environmental issues.*

*Procurement arrangement options and documentation: Contractual arrangements. Approaches to obtaining tenders. Procurement route selection: Simple selection procedures.*

*Construction methods sequences and resources used in civil engineering, building and building services activities; site layouts, traffic and waste management planning. Construction methods used earthworks, piling, drainage works, ground stabilisation, falsework and formwork*

*Health & Safety legislation, particularly CDM regulations, principal provisions; Safe systems of work; Work method statements, risk assessments and safety method statements;*

*Project planning procedures; Introduction to project management software; Pre-tender, pre-contract, contract and short term planning; Precedence diagrams; Project tracking and control of progress; Contract budgets, cost, value, and cash flow;*

*Communications and documentation; Quality control and waste management.  
Introduction to Geotechnics: Site investigation, desk studies, Ground investigation  
Introduction to Surveying: Levelling, appreciation of Site drawings*

## Learning Activities

Lectures Tutorials and IT workshops.

## References

<b>Course Material</b>	Book
<b>Author</b>	
<b>Publishing Year</b>	2009
<b>Title</b>	Civil Engineering Procedure
<b>Subtitle</b>	
<b>Edition</b>	6th edition
<b>Publisher</b>	ICE
<b>ISBN</b>	9780727735249

<b>Course Material</b>	Book
<b>Author</b>	Cooke, B. & Williams, P.,
<b>Publishing Year</b>	2009
<b>Title</b>	Construction Planning, Programming and Control
<b>Subtitle</b>	
<b>Edition</b>	3rd Edition
<b>Publisher</b>	Blackwell, 3rd Edition
<b>ISBN</b>	9781405183802

<b>Course Material</b>	Book
<b>Author</b>	Ashworth, A
<b>Publishing Year</b>	1998
<b>Title</b>	Civil Engineering Contractual Procedures
<b>Subtitle</b>	
<b>Edition</b>	5th Edition
<b>Publisher</b>	Pearson
<b>ISBN</b>	9780131298279

<b>Course Material</b>	Book
<b>Author</b>	Warren, D.R.
<b>Publishing Year</b>	1996
<b>Title</b>	Civil Engineering Construction
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Macmillan
<b>ISBN</b>	0727727893

<b>Course Material</b>	Book
<b>Author</b>	HSE
<b>Publishing Year</b>	2007
<b>Title</b>	Managing Health and Safety in Construction
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	HSE BOOKS
<b>ISBN</b>	9780717662234

<b>Course Material</b>	Book
<b>Author</b>	Construction Skills
<b>Publishing Year</b>	2010
<b>Title</b>	Construction Site Safety - Health Safety & Environmental information
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	CS
<b>ISBN</b>	9781857513165

<b>Course Material</b>	Book
<b>Author</b>	Joyce R
<b>Publishing Year</b>	2007
<b>Title</b>	The CDM Regulations Explained
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	RICS
<b>ISBN</b>	9780727734969

<b>Course Material</b>	Book
<b>Author</b>	Hughes,P
<b>Publishing Year</b>	2005
<b>Title</b>	Introduction to Health and Safety in Construction
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Ferrett, E
<b>ISBN</b>	9780750681117

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## Notes

This module introduces students to the practical aspects of construction, considering legal, health and Safety and managerial aspects of the profession, and introduces students to the subjects of Geotechnics and Surveying