

Liverpool John Moores University

Title: CONSTRUCTION TECHNOLOGY & PRACTICE
Status: Definitive
Code: **5508UGIM** (118718)
Version Start Date: 01-08-2011

Owning School/Faculty: Built Environment
Teaching School/Faculty: Isle of Man College

Team	Leader
Mohd Nazali Mohd Noor	

Academic Level: FHEQ5
Credit Value: 24.00
Total Delivered Hours: 74.00
Total Learning Hours: 240
Private Study: 166

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	72.000

Grading Basis: 40 %

Assessment Details

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

Aims

To develop understanding of construction techniques associated with the production of high and low rise framed buildings, both new build and refurbishment.

To develop an understanding of the variety of design solutions available for the construction of Multi Storey Buildings

To enable students to evaluate the relative merits of the various construction forms in any given situation

To introduce the technology of building services installations for commercial and industrial buildings.

Learning Outcomes

After completing the module the student should be able to:

- 1 Analyse and illustrate the various construction and civil engineering solutions available for low and high rise building structural frames.
- 2 Evaluate the restrictions that are imposed on building design by the need to comply with legislation concerning health and safety, built form and sustainability.
- 3 Compare and contrast different design solutions and methods of construction used for high-rise and low-rise framed buildings.
- 4 Analyse the importance of sustainability in the context of the design and construction of buildings.
- 5 Evaluate the impact of new technologies on current construction and civil engineering processes for industrial and commercial buildings.
- 6 Compare and contrast alternative solutions for mechanical and electrical services and utilities services in industrial and commercial buildings.

Learning Outcomes of Assessments

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

TEST 1	1	4	
EXAMINATION	2	3	5
TEST 2	6		

Outline Syllabus

High and low rise framed building solutions with particular emphasis on:-

Demolition: Site Set Up and Options

Site Problems: Contamination and Remediation

Substructure: Foundations

Basements: Types and Grades

Structural Frames: Types and Advantages

Floors: Upper Floors

External Walls: Claddings

Roofs: Structures and Coverings

Internal Access: Stairs and Mechanical Access Provision

Title	'The Construction of Buildings'
Subtitle	
Edition	4th
Publisher	Blackwell Scientific
ISBN	063205543X

Course Material	Book
Author	Illingworth, J.R
Publishing Year	2000
Title	'Construction Methods and Planning'
Subtitle	
Edition	2nd
Publisher	E&FN Spon
ISBN	041924980X

Course Material	Book
Author	Emmitt and Gorse
Publishing Year	2009
Title	Advanced Construction of Buildings
Subtitle	
Edition	
Publisher	Blackwell
ISBN	978 14051 1055 6

Course Material	Book
Author	Adams, S
Publishing Year	1989
Title	'Practical Buildability
Subtitle	
Edition	
Publisher	Butterworths
ISBN	0408035250

Course Material	Book
Author	Holyroyd, M
Publishing Year	2003
Title	'Buildability'
Subtitle	
Edition	
Publisher	Thomas Telford
ISBN	0727732072

Course Material	Book
Author	Health and Safety Executive
Publishing Year	1996
Title	'Health and Safety in Construction'
Subtitle	

Edition	
Publisher	HSE
ISBN	0717611434

Course Material	Book
Author	Chudley R., Greeno R
Publishing Year	2004
Title	'Building Construction Handbook'
Subtitle	
Edition	
Publisher	Butterworth Heinemann
ISBN	0-750-661-968

Course Material	Book
Author	Hall F., Greeno R.
Publishing Year	2005
Title	'Building Services Handbook'
Subtitle	
Edition	
Publisher	Butterworth-Heinemann
ISBN	0750664606

Notes

This module concerns the construction principles and processes associated with commercial buildings.

Students will discover that by achieving the learning outcomes as identified above their knowledge is re-in forced through other associated modules.

This construction knowledge will assist students in other modules to provide a suitable platform from which to launch their career into property/construction industry.