

Liverpool John Moores University

Title: CONSTRUCTION TECHNOLOGY AND SERVICES 2
Status: Definitive
Code: **5509UGIM** (118685)
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:** 80.00
Total Learning Hours: 240 **Private Study:** 160

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	72.000
Online	8.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1		30.0	
Test	AS2		50.0	
Test	AS3		20.0	

Aims

*To explain and analyse the construction techniques of framed 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 forms of superstructure construction for low and high rise building structural frames.
- 2 Describe and evaluate the various forms of foundations and substructure work for multi-storey buildings.
- 3 Explain the typical remedial works to multi-storey buildings during refurbishment and adaptation work.
- 4 Analyse the importance of sustainability in the context of the design and construction of multi storey buildings.
- 5 Evaluate modern methods of construction and new renewable energy technologies in relation to industrial and commercial buildings.
- 6 Describe the range of Heating, Ventilating and Air Conditioning systems for in industrial and commercial buildings.
- 7 Describe the installation and integration of utility services to multi-storey buildings.

Learning Outcomes of Assessments

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

REPORT	1	2		
TEST	3	4	5	6
ICA	7			

Outline Syllabus

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

Demolition:

Site Problems:

Substructure:

Basements:

Structural Frames:

Floors:

External Walls:

Roofs:

Internal Access:

Buildings and Fire:

Service Integration:

Sustainable, Intelligent Buildings:

Refurbishment Technologies:

Building Services:

Health and Safety

Learning Activities

Lectures and tutorial workshops, supported where possible with site visits, guest lectures and videos.

Students should supplement their lecture notes with background reading; journals, digests, trade literature and also use the material that is available through electronic databases and manufacturers literature.

References

Course Material	Book
Author	Riley, M. and Cotgrave,A
Publishing Year	2009
Title	'Construction Technology 2'
Subtitle	
Edition	2nd
Publisher	Palgrave
ISBN	978-0-230-57571-

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

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 at both levels 5 and 6 and provide a suitable platform from which to launch their career into property/construction industry.