Liverpool John Moores University

Title:	STRUCTURAL DESIGN
Status:	Definitive
Code:	**4023BEHN** (102295)
Version Start Date:	01-08-2016
Owning School/Faculty:	Civil Engineering
Teaching School/Faculty:	Civil Engineering

Team	Leader
Hassan Al Nageim	Y

Academic Level:	FHEQ4	**Credit Value:**	12	**Total Delivered Hours:**	39
Total Learning Hours:	120	**Private Study:**	81		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	24
Tutorial	12

Grading Basis: BTEC

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Open book exam	70	3
Report	AS2	Assignment	30	

Aims

To introduce students to the use of codes of practice in the design of structures.
To design structural elements in reinforced concrete, structural steelwork, timber and masonry

Learning Outcomes

After completing the module the student should be able to:

1 Design and detail single span, simply supported, beams in reinforced concrete.
2 Design single span, simply supported, beams in structural steelwork.
3 Design single span, simply supported, joists in timber.
4 Design walls in masonry.

Learning Outcomes of Assessments

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

EXAM	1	2	3	4
CW	1			

Outline Syllabus

Reinforced concrete design to BS8110 of single span beams.
Design of steel beams to BS5950.
Design of structural timber to BS5286.
Design of loadbearing masonry to BS5628.

Learning Activities

Lectures, tutorials, problem solving sessions and use of computer software.

Notes

The module is intended to develop the students' competance in the design of structural componants of varied materials in accordance with British Standards