Liverpool John Moores University

Title:	WORK BASED LEARNING STRUCTURES
Status:	Definitive
Code:	**6204CIV** (122939)
Version Start Date:	01-08-2021
Owning School/Faculty:	Civil Engineering and Built Environment
Teaching School/Faculty:	Civil Engineering and Built Environment

Team	Leader
Felicite Ruddock	Y
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Academic Level:	FHEQ6	**Credit Value:**	20	**Total Delivered Hours:**	11
Total Learning Hours:	200	**Private Study:**	189		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	5
Seminar	6

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	REPORT (APPROX. 4500 WORDS)	100	

Aims

This module develops student knowledge and understanding of the Civil Engineering Profession by making use of the opportunities available within the workplace. Structures and Risk Management are the major themes of this module.

Learning Outcomes

After completing the module the student should be able to:

1	Critically analyse the design process and apply it to complex structural elements using a variety of building materials and under different environmental and loading conditions.
2	Produce and critically review safe and economical design in accordance with the current codes of practice.
3	Design more advanced structural elements
4	Apply knowledge and understanding of risk issues to engineering design, and critically evaluate current practices of risk management
5	Exercise initiative, personal responsibility and leadership skills as a member of a design team, and critically evaluate the success of team working.

Learning Outcomes of Assessments

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

REPORT (APPROX. 4500 WORDS)	1	2	3	4	5

Outline Syllabus

Reflection and report on learning through work in the Civil Engineering Profession. The work (supplemented by CPD) must include the following:

• Design in a collaborative context

• Reinforced concrete work to EC2: Frame analysis-design and detailing, design of; ribbed floor slabs. Pre-stressed concrete; Pre-tensioned and post-tensioned flexural members, losses of pre-stress force.

•Use of Structural Design software

•Health and safety management

•Programming, resource implications, time cost applications and project acceleration, financial risks

•Risk management strategy: hazard and risk, definitions and interpretation, strategic risks, political and business implications of risks, understanding the management strategy;

•Current practices of risk management: what it is; why it is used; how it is applied; when it should be undertaken; and who should be responsible for it, including the deployment of appropriate practices and procedures for the effective management of risk in construction

•Risk perception and identification, risk analysis and assessment, qualitative assessment, quantitative assessment, risk outcomes

Learning Activities

Most learning takes place in the workplace, supplemented by lectures and seminar sessions.

Notes

This module is links to direct work experience, gained on projects in the work place. In order to choose this option, a student will need the support of a Civil Engineer who will act as their work place mentor and sufficient time at their place of work to achieve the learning outcomes. Assuming that no more than half the time at work will support the learning outcomes, this would approximate to 10 weeks' work at level 6.

All work based learning needs to be assessed and approved prior to commencement in line with the LJMU Placement Learning Code of Practice.