# **Liverpool** John Moores University

Title: CIVIL ENGINEERING PROJECT

Status: Definitive

Code: **4102BEUG** (118050)

Version Start Date: 01-08-2018

Owning School/Faculty: Civil Engineering Teaching School/Faculty: Civil Engineering

Team	Leader
Yue Huang	Υ
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Academic Credit Total

Level: FHEQ4 Value: 24 Delivered 75

**Hours:** 

Total Private

Learning 240 Study: 165

**Hours:** 

**Delivery Options** 

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	36
Practical	36

**Grading Basis:** 40 %

#### **Assessment Details**

Category	Short	Description	Weighting	Exam
	Description		(%)	Duration
Report	AS1	Group report and presentation	40	
Exam	AS2	Exam	40	3
Portfolio	AS3	E-Portfolio	10	
Self	AS4	Self awareness statement	10	
Awareness				
Statement				

### **Aims**

To encourage the student to apply the knowledge gained from the modules within

the first level of study to a suitable work derived project, and to understand the impacts of their project on sustainability.

To learn engineering drawing through the use of a suitable computer aided drawing package.

To develop self-learning through personal development planning and e-portfolio programmes.

To introduce students to a wide range of graduate skills.

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Practically apply design principles and techniques to a suitable work derived project, and express ideas effectively using appropriate written and drawn forms
- To identify and reflect upon the following aspects of personal development: strengths and weaknesses, motivations and values, ability to work with others.
- 3 Analyse and solve problems, making effective use of ICT
- Work effectively in a group and communicate orally effectively making use of Powerpoint or other visual aids.
- Gain knowledge of work projects, and develop initiative in problem solving in real situations.
- 6 Assess the impact of a project on sustainability.
- 7 Produce engineering drawings using Autocad.
- 8 Produce engineering drawings and sketches by hand.

## **Learning Outcomes of Assessments**

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

Group Report &	1	4	6	8
Presentation Exam	5			
E-portfolio for PDP exercise	3	7		
WoW Skills Bronze	2			

### **Outline Syllabus**

This module will facilitate the learning process by enabling students to put the theory gained in first year modules into practice. A suitable work derived project will be simulated to provide the vehicle for this purpose. Within the module itself the following areas will be considered and applied to the project:

Communication skills, written, drawing (by hand) and verbal.

Team working and interpersonal skills.

Personal development planning.

Initiative.

Information literacy and IT skills.

Sustainability and environmental impact

Computer Aided Drawing will be taught and applied to the project. This will include:-

Access CAD Software, creating & loading drawings, saving drawings to an appropriate folder/directory. Setting up system preferences, drawing scales, drawing sheet size, borders, title block. Use of view, zoom and pan commands, plotting and help system.

Production of site plans, floor plans, elevations and detail drawings. Use of format, draw, tools and modify commands. Use of layers, linetype and weight, lock, freeze and thaw. Creating and editing text and dimensions. Printing drawings. Introduction to 3D design including views, UCS, extrude and draw solids commands.

## **Learning Activities**

The module is based around campus based work-related learning (CBWRL). The central theme of the module is the production of a suitable work derived project and it is supported by the other modules within the first year programme. Group work is a key theme of the module; the intention being to simulate the experience of the work place and work place activity, endorsed and approved by the involvement of employers and stakeholders as relevant to the workplace generally. Key skills are developed through lectures, seminars, individual and group presentations and the use of e-portfolio to facilitate personal development planning.

#### **Notes**

This module develops the learning process at level 1 by developing CAD skills and integrating the knowledge gained from modules and applying them to a work related learning project. It is intended to simulate the experience and discipline of the world of work and to provide opportunities for students to develop and practice work-related skills.