## **Liverpool** John Moores University

Title: ENGINEERING SOLUTIONS

Status: Definitive

Code: **3008ENG** (105566)

Version Start Date: 01-08-2016

Owning School/Faculty: Electronics and Electrical Engineering Teaching School/Faculty: Electronics and Electrical Engineering

Team	Leader
Rebecca Bartlett	Υ
Martin Jones	

Academic Credit Total

Level: FHEQ3 Value: 12 Delivered 34

Hours:

Total Private

Learning 120 Study: 86

**Hours:** 

**Delivery Options** 

Course typically offered: Semester 2

Component	Contact Hours	
Lecture	4	
Practical	30	

**Grading Basis:** 40 %

### **Assessment Details**

Category	Short	Description	Weighting	Exam
	Description		(%)	Duration
Artefacts	AS1	Coursework 1: solid works	20	
		drawing		
Report	AS2	Coursework 2: design project	20	
Presentation	AS3	Coursework 3: group presentation using VA software	60	

### Aims

To enable students to develop the concepts and skills necessary to be effective learners and to gain an appreciation of what being an engineer means in contemporary society

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Use specialised design software.
- Work effectively in a group
- 3 Design and build a model from a design brief
- 4 Make a short presentation using visual aids software.

## **Learning Outcomes of Assessments**

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

solid works drawing 1

project proposal 2 3

group presentation 4

# **Outline Syllabus**

Basic use of Solid Works.

Design principles.

Design project management

Design and build model incorporating Mechanical and Electrical principles.

# **Learning Activities**

Mainly group practical work, with lectures to introduce specialised software and the concepts of design principles and design project management.

### **Notes**

This module is designed to enable students to develop the concepts and skills necessary to be effective learners and to gain an appreciation of what being an engineer means in contemporary society. This is done through a group design and build project.