

Liverpool John Moores University

Title: VISUALISING SOLUTIONS
Status: Definitive
Code: **4008TECH** (105274)
Version Start Date: 01-08-2016

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

Team	Leader
Adam Papworth	Y

Academic Level: FHEQ4 **Credit Value:** 12 **Total Delivered Hours:** 36
Total Learning Hours: 120 **Private Study:** 84

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Practical	36

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Freehand sketching and isometric representation	50	
Essay	AS2	Freehand sketching using multiviews, textures and colour.	50	

Aims

This module provides the underpinning skills required by a designer during the ideation phase of design, where he must be able to imagine, represent and see design solutions.

The emphasis on this module is freehand sketching to aid this visualisation process to allow students to investigate, explore and communicate their ideas graphically.

Learning Outcomes

After completing the module the student should be able to:

- 1 Produce freehand sketches of a range of three dimensional objects indicating their design intent
- 2 Produce multi view sketches of simple three dimensional objects
- 3 Read and interpret a range of engineering sketches

Learning Outcomes of Assessments

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

CW	1	3
CW	2	3

Outline Syllabus

Freehand sketching:

Sketching tools, preparation. line types, arches, circles and ellipses, lettering and annotation, proportion and scale, classification of projections, Axonometric pictorials including trimetric, one and two point projection, parallel projection, shading and colour. Orthographic projection, views, first and third angle projection, multi view sketches, construction lines, auxiliary and section views, annotations. Line weight, material, colour, texture, lighting, shadows, reflections, composition and backgrounds.

Learning Activities

This module will be delivered through a series of practical sketching sessions in the Creativity Centre. It will commence with the construction of basic sketched elements and proceed to the development of complete freehand sketches.

Notes

The objective of this module is to enhance the students ability to read, interpret and communicate using a range of traditional graphical forms.