

## Design Visualisation

### Module Information

2022.01, Approved

#### Summary Information

Module Code	4162PDE
Formal Module Title	Design Visualisation
Owning School	Engineering
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

#### Teaching Responsibility

LJMU Schools involved in Delivery
Engineering

#### Learning Methods

Learning Method Type	Hours
Lecture	22
Practical	22

#### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

#### Aims and Outcomes

Aims	Develop fundamental sketching, rendering and modelling skills
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**After completing the module the student should be able to:**

## Learning Outcomes

Code	Number	Description
MLO1	1	Develop a concept visual using hand sketching techniques
MLO2	2	Create persuasive conceptual imagery using 2D sketching software
MLO3	3	Demonstrate a knowledge of aesthetic aspects including colour and texture

## Module Content

Outline Syllabus	<p>Module introduction Module guide; aims; learning outcomes; assessment and marking schemes. Outline syllabus; module timetable and student feedback. Availability of student version of Photoshop; minimum system requirements e.g. hard disk space, memory required, processor, video card.</p> <p>Knowledge &amp; understanding- Understanding perspectives- Understanding design aesthetics- Identifying the trend of design - Awareness of branding Skills &amp; other attributes- Hand sketching- Design presentation- Computer skills (2D software e.g. Photoshop...)- Ideating /concept generation</p> <p>Freehand sketching: Sketching tools, preparation. line types, arches, circles and ellipses, proportion and scale, one and two point projection, parallel projection, isometric projection. Shading and colour. Multi view sketches, construction lines, auxiliary and section views, annotations. Line weight, material, colour, texture, lighting, shadows, reflections, rendering, composition and backgrounds.</p> <p>Computer aided 2D sketching: Commercial and open source software for digital sketching and rendering 2D scenes. Underlying concepts e.g.: vector versus raster graphics; compression; file size versus quality; file formats: .PSD; .JPEG; .PNG; etc.</p> <p>Composition: Creating an environment. Focal point; overlapping; negative space (or shape); lines; balance; contrast; proportion. Position of lighting, resultant shadows, reflections and rendering of materials and textures.</p> <p>Compositing: Colour spaces; colour remapping; colour correcting; image manipulation; mattes; image-matte relationship.</p> <p>Digital drawing: Basic shapes and construction; lines; contours; hatching; colour; texture; rough and refined line work; scanning; digitising the drawing; image manipulation; cropping; sizing; filtering.</p> <p>Tools: Selection tools; drawing tools; rectangular marquee; move; crop; brush; eraser; paint; bucket; gradient tool; pen tool; etc.</p> <p>Other tools: Copy; merged; stroke; transform; image; size.</p> <p>Layers: Background; general layer; text Layer; group.</p>
Module Overview	The aim of this module is to develop your fundamental sketching, rendering and modelling skills.
Additional Information	This module is delivered using a variety methods including lectures, seminars, tutorials and practical sessions. The module will be delivered from a product design perspective.

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Practice	In class traditional sketchtest	50	0	MLO1, MLO3
Portfolio	Digital sketching portfolio	50	0	MLO2, MLO3

## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
Fang Bin Guo	Yes	N/A

**Partner Module Team**

Contact Name	Applies to all offerings	Offerings
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