

## Design Principles

### Module Information

2022.01, Approved

#### Summary Information

Module Code	4163PDE
Formal Module Title	Design Principles
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	11
Practical	33
Seminar	11

#### Module Offering(s)

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

#### Aims and Outcomes

Aims	The module aims to endow students with tools for the successful completion of a concept model using fundamental design theories and practices.
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**After completing the module the student should be able to:**

**Learning Outcomes**

Code	Number	Description
MLO1	1	Identify and reflect upon the following aspects of personal development: strengths and weaknesses, motivations and values, ability to work with others.
MLO2	2	Apply creative and imaginative approaches in problem solving and the development of designs.
MLO3	3	Create a concept model through iterative development of aesthetic forms using hand modelling techniques

**Module Content**

Outline Syllabus	The module focuses on creation and ideation skills and techniques. - Study of aesthetics- Introduction to 3D design (e.g. the disciplines of architecture, landscape architecture, industrial design & spatial design) - The basic elements of design (visually and conceptually)- 2D and 3D modelling exercises using various materials & tools. - Discovery through experimentation- Developing aesthetic judgment- Critical self-evaluationThe New Product Design process starts with an initial idea or inspiration, which will be sourced from the discovery phase in which user needs are identified. Activities will include:— Market research— User research— Managing information— Design research groupsAs part of the LJMU World of Work Bronze Award, students will explore their development as a designer; reflect on where you have come from, how you will develop while at LJMU and where you ultimately see yourself positioned in your profession in the future.
Module Overview	The module aims to equip you with the tools needed for the successful completion of a concept model using fundamental design theories and practices.
Additional Information	This module is delivered using a variety methods including lectures and hands-on workshop sessions.

**Assessments**

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Future Focus e-learning task	Self Awareness	10	0	MLO1
Report	NPD Report	30	0	MLO1, MLO2
Artefacts	Concept Product Models	60	0	MLO3

**Module Contacts**

**Module Leader**

Contact Name	Applies to all offerings	Offerings
Adam Papworth	Yes	N/A

**Partner Module Team**

Contact Name	Applies to all offerings	Offerings
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