

Design Project

Module Information

2022.01, Approved

Summary Information

Module Code	5500ICBTEL
Formal Module Title	Design Project
Owning School	Engineering
Career	Undergraduate
Credits	15
Academic level	FHEQ Level 5
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
International College of Business and Technology

Learning Methods

Learning Method Type	Hours
Lecture	30

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
APR-PAR	PAR	April	12 Weeks
JAN-PAR	PAR	January	12 Weeks

SEP_NS-PAR	PAR	September (Non-standard start date)	12 Weeks
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Aims and Outcomes

Aims	This module provides students with a broad understanding of a design and build engineering project in engineering, and intends to solve real engineering problems by using appropriate theories, tools and process.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Demonstrate the ability to work as a member of a team to achieve a shared aim and objectives within a specified time period.
MLO2	2	Investigate a valid problem identification and a project proposal with a clear aim and minimum four of objectives.
MLO3	3	Propose three conceptual designs, select & implement the optimum design and produce a working prototype.
MLO4	4	Demonstrate effective verbal communication and presentation skills to a technical and non-technical audience.

Module Content

Outline Syllabus	Identification of objectives, requirements and nature of the project; Formulation of design alternative and analysis of feasibility, social, economic and financial aspects; Planning of design phase and preparation of work breakdown structure (WBS); Project organization and team building, Creative Thinking and Leadership & Management. Introduction to Engineering Design, life cycles of engineering products and processes, design processes and design tools, concurrent engineering, creativity and reasoning, analysis and synthesis, simulation, evaluation and decision making. Several simple but comprehensive design case studies selected from different disciplines of engineering addressing the topics.
Module Overview	
Additional Information	Members per group – 3 to 5

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Coursework	50	0	MLO2, MLO3
Presentation	Presentation	50	0	MLO1, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
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Karl Jones	Yes	N/A
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Partner Module Team

Contact Name	Applies to all offerings	Offerings
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