

# Building Engineering Research Project

## Module Information

2022.01, Approved

### Summary Information

Module Code	6504ICBTBS
Formal Module Title	Building Engineering Research Project
Owning School	Civil Engineering and Built Environment
Career	Undergraduate
Credits	40
Academic level	FHEQ Level 6
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	20
Tutorial	20

### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-PAR	PAR	September	28 Weeks

## Aims and Outcomes

Aims	To enable students to complete a substantial piece of individual work and build on their expertise in a Building Engineering subject. To develop students' research, time management, presentation and written communication skills.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Identify a research question, problem or hypothesis and establish aims and objectives to support the investigation.
MLO2	2	Collate, and appraise existing knowledge in an Engineering field relevant to your programme and present a critical evaluation in the form of a literature review.
MLO3	3	Develop and refine a research and data collection strategy appropriate to the research question / problem posed.
MLO4	4	Source, collect, and analyse relevant and original qualitative and / or quantitative data.
MLO5	5	Conduct an appropriate practical and/or laboratory programme to validate theoretical research.
MLO6	6	Synthesise, analyse and critically evaluate the research findings using reasoned and logical arguments within a structured written framework and communicate the outcomes and methodology of research verbally and in written form.

## Module Content

Outline Syllabus	The outline syllabus is designed to understand the academic research process and the differing techniques, strategies and methods used to undertake engineering research in the built environment. Research methods, approaches and strategies will be taught at the commencement of the module. The project provides the opportunity to conduct a major supervised learning activity on a relevant engineering or technical topic. The project requires the student to demonstrate good project management, critical evaluation and presentation skills. 1. Introduction to the Dissertation: The selection of a Research Topic and formulation of a research question. Establishing a research aim and setting / tailoring objectives to fulfil that goal The structure and purpose of a dissertation Literature search/Writing a literature review 2. Research Methods, Approaches and Strategies: The Inductive versus Deductive Approach Qualitative and Quantitative Research Data Collection Strategies and Tools (Interviews, Field Tests, Lab Tests, Surveys, Questionnaires, Case Studies) The Knowledge Database. Effective Literature Searching and Literature Reviews 3. Data Analysis: Qualitative and Quantitative Data Analysis Data Analysis tools including SPSS and NVivo Data Presentation
Module Overview	
Additional Information	The dissertation enables students to personally select, and complete an in-depth study on, a topic related to Building Engineering. The module develops students' practical research skills and enhances their knowledge and expertise in Building Engineering. As the completion of a dissertation is principally student-led the module offers the opportunity to further develop time management, presentation and communication skills.

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping

Essay	Final dissertation report	90	0	MLO2, MLO3, MLO4, MLO5, MLO6
Presentation	Presentation of proposal	10	0	MLO1, MLO6

## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
Alison Cotgrave	Yes	N/A

### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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