

Summary Information

Module Code	6340BEUG
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

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Muhammad Ahmad	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
Jeffrey Cullen	Yes	N/A
Hu Du	Yes	N/A
Badr Abdullah	Yes	N/A
Saiful Bhuiyan	Yes	N/A
Laurence Brady	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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Teaching Responsibility

LJMU Schools involved in Delivery

Civil Engineering and Built Environment

Learning Methods

Learning Method Type	Hours
Lecture	20
Tutorial	20

Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-CTY	CTY	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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Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Identify a research question, problem or hypothesis and establish aims and objectives to support the investigation.
MLO2	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	Develop and refine a research and data collection strategy appropriate to the research question / problem posed.
MLO4	Source, collect, and analyse relevant and original qualitative and / or quantitative data.
MLO5	Conduct an appropriate practical and/or laboratory programme to validate theoretical research.
MLO6	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

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 Research Approaches and Strategies The Inductive versus Deductive Approach Qualitative and Quantitative Research Data Collection Strategies (Interviews, Field Tests, Lab Tests, Surveys, Questionnaires, Case Studies) The Knowledge Database. Effective Literature Searching and Literature Reviews Data Collection and Analysis Data Collection Tools including Bristol on-line surveys Qualitative and Quantitative Data Analysis Data Analysis tools including SPSS and NVivo

Module Overview

In this module students will complete a substantial piece of individual work and build on their expertise in a Building Engineering subject. In doing so, they will develop their research, time management, presentation and written communication skills.

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. On the Building Services Engineering Degree Apprenticeship programme, the knowledge learning outcomes are K3, K5, the skills learning outcomes are S1, S3, S8 and the behaviours learning outcomes is B6.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Presentation	Presentation of proposal	20	0	MLO1, MLO6
Dissertation	Final dissertation report	80	0	MLO5, MLO4, MLO2, MLO6, MLO3