Liverpool John Moores University

Title: CONSTRUCTION ENGINEERING RESEARCH PROJECT

Status: Definitive

Code: **6254BEUG** (125684)

Version Start Date: 01-08-2020

Owning School/Faculty: Civil Engineering and Built Environment Teaching School/Faculty: Civil Engineering and Built Environment

| Team | Leader |
|-----------------|--------|
| Jiangtao Du | Υ |
| Anil Sawhney | |
| Raj Shah | |
| Fiona Borthwick | |

Academic Credit Total

Level: FHEQ6 Value: 30 Delivered 40

Hours:

Total Private

Learning 300 Study: 260

Hours:

Delivery Options

Course typically offered: Semester 2

| Component | Contact Hours | |
|-----------|---------------|--|
| Lecture | 20 | |
| Tutorial | 20 | |

Grading Basis: 40 %

Assessment Details

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|--------------|----------------------|--|---------------|------------------|
| Dissertation | AS2 | Final dissertation report | 90 | |
| Presentation | AS1 | Presentation of proposal, reading to date and initial findings | 10 | |

Aims

To enable students to complete a substantial piece of individual work and build on their expertise in a Construction Engineering subject. To develop students' research, time management, presentation and written communication skills.

Learning Outcomes

After completing the module the student should be able to:

- Develop and refine a research and data collection strategy appropriate to the research question / problem posed.
- Source, collect, and analyse relevant and original qualitative and / or quantitative data.
- Source, collect, and analyse relevant and original data which can be from experimental, qualitative and / or quantitative data.
- 4 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.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Final dissertation report 1 4 3 2

Presentation of proposal 4

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

Learning Activities

Lectures and tutorials supported by the nominated supervisor. The student is expected to carry out individual study and investigation.

Notes

The dissertation enables students to personally select, and complete an in-depth study on, a topic related to Construction Engineering. The module develops students' practical research skills and enhances their knowledge and expertise in Construction 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.