

## Research Methodology

### Module Information

2022.01, Approved

#### Summary Information

|                     |   |
|---------------------|---|
| Module Code         | 7101CIVPG                               |
| Formal Module Title | Research Methodology                    |
| Owning School       | Civil Engineering and Built Environment |
| Career              | Postgraduate Taught                     |
| Credits             | 10                                      |
| Academic level      | FHEQ Level 7                            |
| Grading Schema      | 50                                      |

#### Teaching Responsibility

|   |
|---|
| LJMU Schools involved in Delivery       |
| Civil Engineering and Built Environment |

#### Learning Methods

| Learning Method Type | Hours |
|----------------------|-------|
| Lecture              | 14    |
| Seminar              | 8     |

#### Module Offering(s)

| Display Name | Location | Start Month | Duration Number Duration Unit |
|--------------|----------|-------------|-------------------------------|
| JAN-CTY      | CTY      | January     | 12 Weeks                      |

#### Aims and Outcomes

|      |  |
|------|--|
| Aims | To provide an understanding of the academic research process understanding the differing techniques, strategies and methods used to undertake research in the built environment. |
|------|--|

**After completing the module the student should be able to:**

## Learning Outcomes

| Code | Number | Description  |
|------|--------|--|
| MLO1 | 1      | Critically evaluate key theories, concepts and methodological issues related to research in Civil Engineering and/or Water, Energy and the Environment.            |
| MLO2 | 2      | Critically evaluate relevant published research literature in terms of its methodology.  |
| MLO3 | 3      | Evaluate the nature and purpose of each stage in the research process and be able to justify options related to the preparation of a post-graduate research study. |
| MLO4 | 4      | Design an experimental research proposal, with appropriate techniques for obtaining and analysing data and minimising errors.                                      |

## Module Content

|                        |  |
|------------------------|--|
| Outline Syllabus       | Overview of the research process focusing on research design and strategy. Formulation of a research question and specific area of study. Information sources and the purpose, nature and scope of literature reviewing. Data collection techniques used in quantitative and qualitative research. Process of data validation, inputting, and analysis. Interpretation, discussion and conclusions of research findings. |
| Module Overview        |  |
| Additional Information | The module develops students' understanding of the research process as well as skills in research design, implementation and presentation in terms of the preparation and production of a post-graduate research study.  |

## Assessments

| Assignment Category | Assessment Name   | Weight | Exam/Test Length (hours) | Module Learning Outcome Mapping |
|---------------------|-------------------|--------|--------------------------|---------------------------------|
| Portfolio           | Literature Review | 50     | 0                        | MLO1, MLO2, MLO3                |
| Centralised Exam    | Proposal          | 50     | 0                        | MLO1, MLO2, MLO3, MLO4          |

## Module Contacts

### Module Leader

| Contact Name | Applies to all offerings | Offerings |
|--------------|--------------------------|-----------|
| Patryk Kot   | Yes                      | N/A       |

### Partner Module Team

| Contact Name | Applies to all offerings | Offerings |
|--------------|--------------------------|-----------|
|--------------|--------------------------|-----------|