Module code: MOD002395	**Version:** 9 **Date Amended:** 13/Jun/2024

1. Module Title

Research Design and Methods

2a. Module Leader

Hussein Ibrahim

2b. School

School of Engineering and the Built Environment

2c. Faculty

Faculty of Science and Engineering

3a. Level

7

3b. Module Type

Standard (fine graded)

4a. Credits

15

4b. Study Hours

150

5. Restrictions

Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:	None		

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description
This Module is designed to provide postgraduate students with an in-depth understanding of the theories and methods of research and research design. It seeks to develop a theoretical and practical foundation in research that will enable students' to undertake their Major Project/Dissertation. The Module provides an understanding of a range of approaches to research, including quantitative, qualitative and mixed methods, together with an understanding of a number of specific research methods and their application to master's level research. The Module is structured to enable students to develop their knowledge of research design in order to critically consider the design for their research project and to prepare an acceptable proposal, including the consideration of ethics and ethical issues.

6b. Outline Content
Introduction to Research and Research Design Quantitative Theory and Methods Qualitative Theory and Methods Mixed Methods Theory and Use Developing the research question, methodologies and hypotheses Use of Literature Data Collection Questionnaire Design and Administration Data Analysis Presentation of results Research Ethics

6c. Key Texts/Literature
The reading list to support this module is available at: https://readinglists.aru.ac.uk/

6d. Specialist Learning Resources
None

7. Learning Outcomes (threshold standards)		
No.	Type	On successful completion of this module the student will be expected to be able to:
1	Knowledge and Understanding	Recognise the role and limitations of research in the context of academic and theoretical debates and of practical and organisational requirements.
2	Knowledge and Understanding	Critically evaluate alternative research approaches and select a design appropriate to their research proposal.
3	Knowledge and Understanding	Assess alternative research methods and select and justify a method(s) appropriate to their research.
4	Intellectual, practical, affective and transferrable skills	Devise an effective and practical research proposal for their dissertation.

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2025/6	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence

Learning Activities	Hours	Learning Outcomes	Details of Duration, frequency and other comments
Lectures	12	1-3	1 hour lecture per week
Other teacher managed learning	24	1-3	1 hour seminar/workshop per week 1 hour tutorial per week
Student managed learning	114	1-4	Self directed learning
TOTAL:	150		

9. Assessment for the above Module Occurrence

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Examination	1,3	50 (%)	Fine Grade	40 (%)

Multiple Choice Exam 1 hr (Maximum 1500 words equivalent)

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
011	Practical	2,4	50 (%)	Fine Grade	40 (%)

Individual Presentation (Maximum 1000 words equivalent)

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:
(a) achieve the qualifying mark for each element of fine graded assessment as specified above
(b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]