Module Definition Form (MDF)

Module code: MOD002695	**Version:** 4 **Date Amended:** 13/Jul/2022

1. Module Title
Research Methods

2a. Module Leader
Jin Zhang

2b. School
School of Computing and Information Sciences

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 helps to prepare a postgraduate student for undertaking research. Its purpose is twofold: to introduce students to the discipline of research and, at the same time, to help lay the essential foundations for a dissertation of MSc quality. Student interests, time constraints and other practical considerations usually set, and limit, the topic, the research approach and study, and the selection of suitable method(s) appropriate for a MSc dissertation. The module therefore includes: - a consideration of research design issues; - an introduction to research skills; - an evaluation of alternative research methods. A programme of lectures, discussions, seminars and workshops supports the module. Topics covered include, for example, research planning and design, alternative research methods, productive use of the Internet, research analysis and effective time management. During the module the student will define an area of study that could or will form the basis of their research project. The student will be expected to undertake an appropriate and critical review of the available literature and other information germane to the proposed project. If a laboratory-based project is envisaged the student will need to give due consideration to the instrumentation required, provide experimental design criteria, at least for the initial stages of the proposed work, and also take account of all health and safety regulations (including COSHH) and appropriate ethical considerations. If necessary, the student will need to prepare a formal application for ethical approval of their work. Students should be aware that failure to present in their report, as an appendix or otherwise, all necessary health and safety information (e.g. risk assessments of laboratory work) and/or consideration of ethical implications when these are required by law and/or University Regulations will result in failure of the module.

6b. Outline Content

Understanding research and the research process Research design and alternative approaches to research Choosing a suitable dissertation topic Preparing a research proposal Methods of data collection and appropriate methods of data analysis Presenting the results Ethical considerations in research

6c. Key Texts/Literature

The reading list to support this module is available at: https://readinglists.aru.ac.uk/

6d. Specialist Learning Resources

These will vary according to negotiated topic of study and indicative resources will be identified during the design phase.

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	Plan and document work in accordance with all best-practice requirements
2	Knowledge and Understanding	Critically evaluate complex issues from a variety of viewpoints and rigorously apply appropriate methodologies, techniques and practical strategies; being sensitive to the context
3	Intellectual, practical, affective and transferrable skills	Devise an effective and practical research proposal for their dissertation
4	Intellectual, practical, affective and transferrable skills	Demonstrate originality in the solution of identified practical problems

8a. Module Occurrence to which this MDF Refers				
Year	**Occurrence**	**Period**	**Location**	**Mode of Delivery**
2026/7	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	All	24 hours lectures and teacher managed learning
Other teacher managed learning	12	All	24 hours lectures and teacher managed learning
Student managed learning	126	All	Student managed learning
TOTAL:	150		

9. Assessment for the above Module Occurrence

The assessment for some modules includes a presentation (see below for details on how this particular module is assessed). We recognise that presenting, especially to a large group, can cause significant anxiety or distress for some students. If this may affect you, please contact your Module Leader or the Disability and Neurodiversity Service as early as possible. We will work with you to consider appropriate reasonable adjustments. Depending on your individual needs, these might include, for example, presenting to a smaller group or presenting only to a member of academic staff.

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Coursework	1-4	100 (%)	Fine Grade	40 (%)
3000 word Report					

Assessment components for Element 010

Component No.	Assessment Title	Submission Method	Weighting (%)	Components needed for Mark Calculation?
010/1	In class test (1 hour)	Scheduled Activity: Timetabled assessment task	20 (%)	All
010/2	Research proposal	Canvas	80 (%)	

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]