

Approved, 2022.02

# **Summary Information**

Module Code	7101COMP	
Formal Module Title	Research Methods	
Owning School	Computer Science and Mathematics	
Career	Postgraduate Taught	
Credits	20	
Academic level	FHEQ Level 7	
Grading Schema	50	

# **Module Contacts**

## Module Leader

Contact Name	Applies to all offerings	Offerings	
Rubem Pereira	Yes	N/A	

#### Module Team Member

Contact Name	Applies to all offerings	Offerings	
Partner Module Team			

Contact Name	Applies to all offerings	Offerings
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# **Teaching Responsibility**

LJMU Schools involved in Delivery	
Computer Science and Mathematics	

# **Learning Methods**

Learning Method Type	Hours
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Lecture	11
Practical	11
Tutorial	11

# Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-CTY	СТҮ	September	12 Weeks

### Aims and Outcomes

	Aims	To develop knowledge of effective and academic research design at masters leveland provide guidance on the purpose and design of literature reviews; the use of theory; writing strategies; citation
and ethical considerations.To p		and ethical considerations. To provide an understanding of how the range of qualitative, quantitative
		and mixedmethod data approaches can be most appropriately appliedTo provide help on establishing the most effectual research design and method for the dissertation project and write a successful research proposal.

### Learning Outcomes

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

Code	Description		
MLO1	Search, critically analyse and summarise published research in the disciplines of Computing and Information Systems, and identify relevant Legal, Social, Ethical and Professional Issues associated with published research.		
MLO2	Demonstrate how critical analysis of advanced scholarship and published research can be used to develop a project proposal that contributes to academic or professional knowledge and understanding, and identify relevant Legal, Social, Ethical and Professional Issues related to the proposed project.		
MLO3	Critically evaluate the range of qualitative and quantitative data and information collection strategies that can be used and make informed decisions about which are relevant for different purposes.		

### **Module Content**

#### **Outline Syllabus**

Research principles and design;Identifying research issues and developing research questions;Identifying Legal, Social, Ethical and Professional Issues related to computing and computing research;Relevant aspects of Entrepreneurship;Critiquing research and Research ethics;Literature searching, reviewing and citation;Research planning: writing project proposals, time management, costing;Qualitative methods and data analysis;Quantitative methods and data analysis;Performance Analysis and Simulation;Sampling and Presentation of data;Dissertation and report writing.

#### **Module Overview**

The aim of this module is to develop your knowledge of effective and academic research design at Masters level and provide guidance on the purpose and design of literature reviews; the use of theory; writing strategies; citation and ethical considerations. It provides an understanding of how the range of qualitative, quantitative and mixed method data approaches can be most appropriately applied. It provides the knowledge and research skills you need to:

establish the most effectual research design and method for the dissertation project and write a successful research proposal

prepare for the project module and for a possible future research career

#### Additional Information

This module provides generic and specific research methods skills, which will help equip the student for the project module and also for possible future research career.

#### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Portfolio	Critical review	40	0	MLO1
Report	Research proposal	60	0	MLO2, MLO3