Module Definition Form (MDF)

Module code: MOD007362	**Version:** 3 **Date Amended:** 27/Nov/2025

1. Module Title
Human Computer Interaction

2a. Module Leader
Arooj Fatima

2b. School
School of Computing and Information Sciences

2c. Faculty
Faculty of Science and Engineering

3a. Level
6

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:			

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

Designing effective, user-focused digital interfaces is essential in today's technology landscape, where user experience (UX) often determines the success or failure of a system. This module explores the principles and practices of HumanComputer Interaction (HCI), combining theory and applied work to help you understand how people interact with technology and how to design interfaces that are usable, inclusive and engaging.

You'll develop a strong foundation in interaction design, usability theory, cognitive psychology and accessibility. You'll learn how users form mental models of systems and how those models can be supported by well-designed conceptual interfaces. Emphasis is placed on understanding user needs through discovery methods such as persona development, task analysis and environmental or contextual analysis.

Throughout the module, you'll apply theory to practice by analysing, designing, prototyping and evaluating a functional horizontal prototype. This process includes creating storyboards, design rationales and visual mock-ups that reflect best practices in aesthetics, navigation and information architecture. The module also addresses ethical and professional considerations, particularly around designing for inclusivity and accommodating users with diverse needs.

By the end of this module, you'll have gained practical experience and insight into how effective interface design can improve user satisfaction and system performance, skills that are highly valued in careers such as UX Designer, UI Developer, Usability Consultant, Interaction Designer and Front-end Developer.

6b. Outline Content

- Understanding user needs and requirements
- Interaction design and the traditional software lifecycle
- Role of mental and conceptual models in user centred design
- Relevant issues from cognitive psychology and usability theory
- Discovery methods to support user needs analysis
- Conceptualising the problem space, including identification of the interaction style
- Logical storyboarding and design
- Discussion of visual style, aesthetics and user experience
- Implementation and evaluation of at least one limited functionality prototype
- Usability and accessibility for users with special needs
- Research in HCI and UXD

6c. Key Texts/Literature

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

6d. Specialist Learning Resources

Access to current HCI prototyping tools

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	Define and apply relevant theory to the process of determining a user needs analysis for a specific target application
2	Intellectual, practical, affective and transferrable skills	Design a corresponding interface for a target application, justifying design decisions in terms of the preceding user needs analysis, usability and psychological theory.
3	Intellectual, practical, affective and transferrable skills	Implement a prototype interface for an artefact which takes account of professional and ethical issues and the needs of a range of users
4	Intellectual, practical, affective and transferrable skills	Critically evaluate the prototype, including introspective evaluation and user evaluation.

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	24	1-4	2 hours lecture per week, including revision/recap in week 12.
Other teacher managed learning	12	1-4	1 hour practical per week including assignment preparation in week 12
Student managed learning	114	1-4	Private study and assignment preparation
TOTAL:	150		

9. Assessment for the above Module Occurrence					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
010	Coursework	1-4	100 (%)	Fine Grade	30 (%)
Report and artefact equivalent to 3000 words.					

Assessment components for Element 010				
Component No.	**Assessment Title**	**Submission Method**	**Weighting (%)**	**Components needed for Mark Calculation?**
010/1	Proposal	Canvas	15 (%)	All
010/2	Report	Canvas	85 (%)	

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]