

BSc Computer Science

Module Specification

Key Information				
Module title	Interaction design			
Level	6	Credit value	15	
Member Institution	Goldsmiths	Notional study hours and duration of module	150	
Module lead author/ Subject matter expert	Kate Devlin			
Module co-author				

Rationale for the module

This module provides you with knowledge and methods from the field of Human-Computer Interaction (HCI) about how to better design computer systems for use by humans. HCI is a major subfield of computer science, and it has informed the visual design and workflow of computer systems we use every day. This module complements other, more programming intensive modules by providing theory and techniques which will help you to design more usable computer systems.

Aims of the module

When taking this module, you will examine the notion of 'interaction with technology'. You will focus on the concepts behind modern user experience design and production. You will gain a solid grasp and practical experience of the process which allows the creation of interactive systems. This process involves specification, design, prototyping and evaluation. You will examine several design approaches and techniques, and consider how they enable usability engineering. You will learn how to evaluate interactive systems against criteria such as efficiency and usability. You will examine issues of accessibility from the perspective of different populations.

Topics covered in this module:

The topics listed here are an approximation of what will be covered. The topics presented may be slightly revised to ensure currency and relevance. Students will be advised of any changes in advance of their study.

- 1. History of HCI
- 2. Usability and Principles of design
- 3. User-centred design techniques
- 4. Evaluation of interaction design (Part 1)
- 5. Evaluation of interaction design (Part 2)
- 6. Designing for different users
- 7. Design case studies (Part 1)
- 8. Design case studies (Part 2)
- 9. Tools and techniques that support interaction development
- 10. Current trends in interaction design and HCI

Approximately 10-12 hours of study will be required per topic. The remaining study time is intended for coursework and examination preparation.

Learning outcomes for the module

Students who successfully complete this module will be able to:

- 1. Explain the main areas of HCI theory and practice and describe a set of design approaches that embody the theory and practice
- 2. Use appropriate design approaches and interaction prototyping methods to develop new interfaces and technologies
- 3. Make use of usability and interaction design concepts in critiquing, using and building interactive solutions for a range of applications
- 4. Use appropriate evaluation techniques to constructively criticise interface designs and explain how they can be improved
- 5. Explain new application areas and up-and-coming advanced technologies and explore these in the design of interactive systems and applications

Assessment strategy, assessment methods

Summative and Formative Assessments

The module will contain a range of summative and formative assessments. Summative assessments are assessments which contribute directly towards your final grade. Formative assessments do not count directly towards your final grade. Instead, they provide you with opportunities for low stakes practice, and will often provide some sort of feedback about your progress. For example, a practice quiz might provide you with feedback about why a particular answer was wrong.

Assessment Activities

The table below lists the assessment activity types you might encounter taking the module. It also states if that type of assessment can be automatically graded. For example, multiple choice quizzes can be automatically graded, and so can some programming assignments. It also states if that type of assessment will be found in the summative coursework and the summative examination. More details about the summative assessments are provided below.

Assessment activity type	Can it be automatically graded with feedback in some cases?	Coursework	Examination
Quiz	X	X	x
Writing task		x	x
Simulation task	X	Х	
Video task		Х	
Peer review task		Х	

Pass Mark

In order to pass this module, you must achieve at least 35% in each element of summative assessment and an overall weighted average of 40%, subject to the application of rules for compensation. Please refer to the programme regulations for more information.

Summative Assessment Elements

As this is a module that has a significant amount of theory it is assessed as a theory-based module. This means that the summative assessment is composed of two elements, whose weightings are listed in the table below.

Summative Assessment Component	Percentage of final credit	Deadline
Coursework	50%	Mid session
Examination	50%	End of session

The coursework comprises a variety of practical exercises and quizzes which in total will take up to 25 hours of study time to complete. The examination will be two hours long, and consist of written answer and multiple choice questions.

Learning resources

The module will draw on a number of different, largely web-based, public resources as well as the resources produced as bespoke material for this module. The standard text book(s) for the module will be:

Shneiderman et al. *Designing the User Interface: Strategies for Effective HumanComputer Interaction* (5th Edition), Addison-Wesley. 2009