MSc User Experience Engineering

Programme Specification

Awarding Institution:
University of London (Interim Exit Awards made by Goldsmiths' College)
Teaching Institution: Goldsmiths, University of London
Final Award: MSc User Experience Engineering
Programme Name:
MSc User Experience Engineering
Total credit value for programme: 180
Name of Interim Exit Award(s):
Postgraduate Certificate in User Experience Engineering
Postgraduate Diploma in User Experience Engineering
Duration of Programme: 1 year full-time or 2 years part-time
UCAS Code(s): Not applicable
HECoS Code(s): (
(100493) Applied Psychology
(100366) Computer Science
QAA Benchmark Group Computing
FHEQ Level of Award: Level 7
Programme accredited by: Not applicable
Date Programme Specification last updated/approved: February 2023
Home Department: Computing
Department(s) which will also be involved in teaching part of the programme:
Institute of Management Studies (IMS); Psychology

Programme overview

A user's experience of technology depends on the design and engineering choices that influence their interactions. Emerging and future technologies will exceed the capabilities available today, so our experts will give you the research needed to exploit and market new possibilities for the benefit of users.

This innovative programme will explore how people experience the world around them, particularly when using technology. You will learn how each layer of technology - from core hardware through to the way that media is handled - can affect user experience in practical tasks. Building on this, you will be given the skills for transforming user requirements into appropriate technical solutions.

A variety of optional modules in advanced technologies and psychology will enable you to choose a path that emphasises the technology of your choice. Given the vocational nature of the programme, there is an option to undertake a field study thesis project working on a question provided by an external collaborator as an alternative to the conventional academic thesis.

The importance of human computer interaction and good interface design is increasingly recognised as the key to the future of successful tech development. User-centric software and hardware continue to evolve and are becoming more important in product design as technological breakthroughs drive innovation. The ability to select and implement the appropriate technologies to deliver usable and satisfying solutions will address a current skill shortage and will equip students with in-demand vocational skills.

The programme has the aim that students will learn to design and produce computing based systems and solutions that have been validated to:

- meet the functional requirements of users
- be usable
- be accessible and inclusively meet the needs of the relevant user groups in any given context
- provide users with a satisfying and fulfilling user experience

Programme entry requirements

An undergraduate degree of at least upper second class standard in computing, psychology, design or related disciplines, and an interest in and capability for working in interdisciplinary contexts. In exceptional circumstances, outstanding practitioners or individuals with strong commercial experience may be considered. If your first language is not English, you should normally have an IELTS minimum score of 6.5.

Programme learning outcomes

Students who successfully complete either pathway in the Postgraduate Certificate will demonstrate:

Knowledge and understanding

Code	Learning outcome	Taught by the following module(s)
A1	Know the core capabilities and limitations of human performance, both biomechanically and cognitively	Human Factors Applied Topics/Guest Lectures Cognitive Neuroscience Interaction Science
A2	Know the spectrum of technologies from which solutions can be implemented to meet users functional and non-functional requirements	Computing the User Experience Applied Topics/Guest Lectures Designing Information & Services UX of Artificial Intelligence Augmented and Mixed reality
A3	Know the range of techniques available to elicit user requirements, to test that implemented systems are usable in ways that provide a positive user experience	Introduction to UX Research Methods Human Factors Applied Topics/Guest Lectures

Cognitive and thinking skills

Code	Learning outcome	Taught by the following module(s)
B1	Ability to consider the requirements of users and to propose designs for technical solutions that can be implemented and meet the requirements	Computing the User Experience Human Factors Introduction to UX Research Methods Interaction Science Designing Information & Services Applied Topics/Guest Lectures Academic Project OR Field Project

Code	Learning outcome	Taught by the following module(s)
B2	Ability to analyse the experience of users when trying out prototypes or implemented solutions during a validation phase and to propose appropriate changes	Computing the User Experience Introduction to UX Research Methods Human Factors Interaction Science Designing Information & Services Applied Topics/Guest Lectures Academic Project OR Field Project
B3	Ability to present solutions and to argue for designs that optimize user experience with other stakeholders involved in the implementation and deployment of solutions	Computing the User Experience Human Factors Marketing Strategy Academic Project OR Field Project

Subject specific skills and professional behaviours and attitudes

Code	Learning outcome	Taught by the following module(s)
C1	Ability to build prototypes and technology based solutions using design, prototyping and programming tools	Computing the User Experience Interaction Science Designing Information & Services Low Code for UX Academic Project OR Field Project
C2	Ability to run trials and validation sessions in ways that are scientifically robust and ethically defendable	Computing the User Experience Human Factors Introduction to UX Research Methods Interaction Science Designing Information & Services Applied Topics/Guest Lectures Academic Project OR Field Project
C3	Ability to analyse accessibility and inclusion issues in any application context and to propose appropriate solutions for these users	This will be taught throughout the programme, but will be a specific focus of Human Factors

Transferable skills

Code	Learning outcome	Taught by the following module(s)
D1	Team & interdisciplinary working	Computing the User Experience Introduction to UX Research Methods Human Factors Interaction Science Designing Information & Services Applied Topics/Guest Lectures Marketing Strategy Academic Project OR Field Project
D2	Present themselves and their work.	This will be taught throughout the programme
D3	Reflect on and evaluate their work.	This will be taught throughout the programme
D4	Be proactive, plan their activity in advance, and exercise personal responsibility in their work	This will be taught throughout the programme

Mode of study

On Campus

Programme structure

The first term focusses on presenting the core concepts of the programme and on choosing the research topic for the academic thesis or field project.

The programme provides the students with the opportunity to take three optional modules (one in 1st term, two in 2nd term) that will be useful for their thesis and will meet their individual vocational goals. It will also include modules that will demonstrate and explore vocational practices useful for UX professionals, including working within agile methods and interfacing with other disciplines, particularly marketing professionals. An indicative list is included in the list below. (Please note that this is an indicative list of modules and is not intended as a definitive list**.** Not all of these modules may be available every year.)

The students will apply their prior learning and new knowledge and skills in an academic thesis or in a field project. The field project supervision will be supported by an industrial partner working with a Goldsmith's academic and may be undertaken in a pair working on a real user experience problem faced by the external partner institution.

Module Title	Module Code	Credits	Level	Module Status	Term
Computing the User Experience	IS71090A	15	7	Compulsory	1
Introduction to UX Research Methods	IS71091A	15	7	Compulsory	1
Human Factors	IS71107A	15	7	Compulsory	1
Interaction Science	IS71092B	15	7	Compulsory	2
Applied Topics/Guest Lectures	IS71093A	15	7	Compulsory	2
Designing Information & Services	IS71108A	15	7	Compulsory	2
Academic Project OR Field Project	IS71094B/ IS71095B	60	7	Compulsory	3
Optional modules to the value of 30 credits from a list that is updated every year	Various	30	7	Optional	1 and 2

Part-time mode

Part-time students are afforded a certain amount of flexibility in recognition that they might be employed for significant hours of the week. The following are the modules students must take at specific times in order to fit with the learning outcomes of the programme.

In term 1 of year 1, students must complete Introduction to UX Research Methods (15 credit compulsory module) plus any optional or compulsory 15 credit module.

For the remaining terms students will choose all compulsory modules as well as their choice of optional modules in order to make up 120 credits of taught modules.

The generative part of the Final Project will be completed in term three of the 1st year and the summative part in term three of the 2nd year.

In early September the programme leader will send a form gathering initial selections and then will meet each student individually during welcome week to make sure that given each student's background their choices have been appropriate.

Academic support

Support for learning and wellbeing is provided in a number of ways by departments and College support services who work collaboratively to ensure students get the right help to reach their best potential both academically and personally.

All students are allocated a Personal Tutor (one in each department for joint programmes) who has overall responsibility for their individual progress and welfare. Personal Tutors meet with their student at least three a year either face-to-face, as part of a group and/or electronically. The first meeting normally takes place within the first few weeks of the autumn term. Personal Tutors are also available to students throughout the year of study. These meetings aim to discuss progress on modules, discussion of the academic discipline and reports from previous years if available (for continuing students). This provides an opportunity for progress, attendance and assessment marks to be reviewed and an informed discussion to take place about how to strengthen individual learning and success.

All students are also allocated a Senior Tutor to enable them to speak to an experienced academic member of staff about any issues which are negatively impacting their academic study and which are beyond the normal scope of issues handled by Programme Convenors and Personal Tutors.

Students are provided with information about learning resources, the Library and information available on Learn.gold (VLE) so that they have access to department/ programme handbooks, programme information and support related information and guidance.

Taught sessions and lectures provide overviews of themes, which students are encouraged to complement with intensive reading for presentation and discussion with peers at seminars. Assessments build on lectures and seminars so students are expected to attend all taught sessions to build knowledge and their own understanding of their chosen discipline.

All assessed work is accompanied by some form of feedback to ensure that students' work is on the right track. It may come in a variety of forms ranging from written comments on a marked essay to oral and written feedback on developing projects and practice as they attend workshops.

Students may be referred to specialist student services by department staff or they may access support services independently. Information about support services is provided on the Goldsmiths website and for new students through new starter information and induction/Welcome Week. Any support recommendations that are made are agreed with the student and communicated to the department so that adjustments to learning and teaching are able to be implemented at a department level and students can be reassured that arrangements are in place. Opportunities are provided for students to review their support arrangements should their circumstances change. The Disability and Wellbeing Services maintain caseloads of students and provide on-going support.

The Careers Service provides central support for skills enhancement, running The Gold Award scheme and other co-curricular activities that are accredited via the Higher Education Achievement Report (HEAR).

The Centre for Academic Language and Literacies works with academic departments offering bespoke academic literacy sessions. It also provides a programme of academic skills workshops and one

Placement opportunities

Recognising that many of the students taking this programme have limited work experience and that most students will leave the programme with the intention of pursuing a career in the UX industry rather than academia, the programme includes the option of a field project as an alternative to the academic thesis. This project is expected to be undertaken with academic rigour but the research question is set by an external partner (company, charity, service provider, governmental organisation etc). Students who take this option will find their work constrained by the practical realities within which the partner and their brand are operating under. Some students have subsequently been employed by the partner organisation following graduation from the programme.

Employability and potential career opportunities

Students will be able to graduate into a variety of job titles in the area of User Experience and Interaction Design, for example: UX Designer (e.g. at IKEA China), UX Engineer (e.g. at Mendix) and UX Researcher (e.g. at CV Library). These may be in specialist technology companies (e.g. Mendix) or in a wide range of large or small companies that use technology in their work (e.g. IKEA).

The programme team has established an Industrial Advisory Board. This group is providing advice on the employability aspects of the programme and reviewing the curriculum to ensure that it meets the current and foreseen needs of employers. In addition the field project and the guest speaker module will provide opportunities to gain insights into the professional aspects of working as a User Experience designer, developer or engineer.

Recognising that many of the students taking this programme have limited work experience and that most students will leave the programme with the intention of pursuing a career in the UX industry rather than academia, the programme includes the option of a field project as an alternative to the academic thesis. This project is expected to be undertaken with academic rigour but the research question is set by an external partner (company, charity, service provider, governmental organisation etc). Students who take this option will find their work constrained by the practical realities within which the partner and their brand are

operating under. Some students have subsequently been employed by the partner organisation following graduation from the programme.

Students are supported from the start to the finish of this programme in order to understand the different potential career journeys they can follow and to build a portfolio of work to demonstrate their capability to gain employment or freelance work in that area. Assessment has been designed to facilitate this process through the development of transferable or soft skills listed in the section above. Regular guest lectures from industry support the development of sector knowledge and awareness of different career paths.

The Department's External Advisory Board ensures relevance of all our programmes to the current and future needs of employers. All programmes are designed in consultation with employers to make sure you develop transferable skills to improve your career opportunities and you will be applying your skills to real-world problems through live project briefs and group projects. The board and other employers attend showcase events where you can present your ideas, get feedback and build important connections.

We have dedicated employability resource within the department to build employer relations and manage additional initiatives to support your future career opportunities, including regular communication of external opportunities for mentoring and work experience and an annual Career week (a focussed week of career support every June in the department where you can access alumni panels by programme and a range of industry talks).

Programme-specific requirements

Not applicable

Tuition fee costs

Information on tuition fee costs is available at: https://www.gold.ac.uk/students/fee-support/

Specific programme costs

Not applicable