MSc User Experience Engineering
Programme Specification

Awarding Institution:
University of London (Interim Exit Awards made by Goldsmiths’ College)

Teaching Institution: Goldsmiths, University of London

Name of Final Award and Programme Title: MSc User Experience Engineering

Name of Interim Exit Award(s): Not applicable

Duration of Programme: 1 year full-time or 2 years part-time

UCAS Code(s): Not applicable

HECoS Code(s): (100736) Human Computer Interaction

QAA Benchmark Group:

FHEQ Level of Award: Level 7

Programme accredited by: Not applicable

Date Programme Specification last updated/approved: December 2019

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 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.

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.

Aims of the programme

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
- to provide users with a satisfying and fulfilling user experience.

What you will be expected to achieve

Knowledge and understanding

<table>
<thead>
<tr>
<th>Code</th>
<th>Learning outcome</th>
<th>Taught by the following module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Know the core capabilities and limitations of human performance, both biomechanically and cognitively</td>
<td>Computing the User Experience, Applied Topics/Guest Lectures, Cognitive Neuroscience</td>
</tr>
<tr>
<td>A2</td>
<td>Know the spectrum of technologies from which solutions can be implemented to meet users functional and non-functional requirements</td>
<td>Computing the User Experience, Applied Topics/Guest Lectures</td>
</tr>
<tr>
<td>A3</td>
<td>Know the range of techniques available to elicit user requirements, to test that</td>
<td>Introduction to Research Methods, Applied Topics/Guest Lectures</td>
</tr>
<tr>
<td>Code</td>
<td>Learning outcome</td>
<td>Taught by the following module(s)</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>implemented systems are usable in ways that provide a positive user experience.</td>
<td></td>
</tr>
</tbody>
</table>

**Cognitive and thinking skills**

<table>
<thead>
<tr>
<th>Code</th>
<th>Learning outcome</th>
<th>Taught by the following module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>Ability to consider the requirements of users and to propose designs for technical solutions that can be implemented and meet the requirements</td>
<td>Computing the User Experience, Introduction to Research Methods, Interaction Science, Statistical Methods, Applied Topics/Guest Lectures, Computing Project OR Field Project</td>
</tr>
<tr>
<td>B2</td>
<td>Ability to analyse the experience of users when trying out prototypes or implemented solutions during a validation phase and to propose appropriate changes</td>
<td>Computing the User Experience, Introduction to Research Methods, Interaction Science, Statistical Methods, Applied Topics/Guest Lectures, Computing Project OR Field Project</td>
</tr>
<tr>
<td>B3</td>
<td>Ability to present solutions and to argue for designs that optimize user experience with other stakeholders involved in the implementation and deployment of solutions</td>
<td>IM71033A: Marketing Strategy, Computing Project OR Field Project</td>
</tr>
</tbody>
</table>

**Subject specific skills and professional behaviours and attitudes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Learning outcome</th>
<th>Taught by the following module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>Ability to build prototypes and technology based solutions using design, prototyping and programming tools</td>
<td>Computing the User Experience, Computing Project OR Field Project</td>
</tr>
<tr>
<td>C2</td>
<td>Ability to run trials and validation sessions in ways that are scientifically robust and ethically defendable</td>
<td>Computing the User Experience, Introduction to Research Methods, Interaction Science, Statistical Methods, Applied Topics/Guest Lectures, Computing Project OR Field Project</td>
</tr>
<tr>
<td>C3</td>
<td>Ability to analyse accessibility and inclusion issues in any application context and to propose appropriate solutions for these users.</td>
<td>This will be taught throughout the programme</td>
</tr>
</tbody>
</table>
Transferable skills

<table>
<thead>
<tr>
<th>Code</th>
<th>Learning outcome</th>
<th>Taught by the following module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Team &amp; interdisciplinary working</td>
<td>Introduction to Research Methods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interaction Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Statistical Methods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Applied Topics/Guest Lectures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marketing Strategy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project OR Field Project</td>
</tr>
<tr>
<td>D2</td>
<td>Present themselves and their work.</td>
<td>This will be taught throughout the programme</td>
</tr>
<tr>
<td>D3</td>
<td>Reflect on and evaluate their work.</td>
<td>This will be taught throughout the programme</td>
</tr>
<tr>
<td>D4</td>
<td>Be proactive, plan their activity in advance, and exercise personal responsibility in their work</td>
<td>This will be taught throughout the programme</td>
</tr>
</tbody>
</table>

How you will learn

The Departments of Computing, along with our partners in Psychology and the Institute of Management are committed to a diverse and stimulating range of learning and teaching methods that ensure the programme outcomes are addressed rigorously and effectively. Learning emphasises a close synthesis between theoretical understanding and practical application that helps students develop an advanced, critical approach to the subject. The teaching and learning methods to which you will be exposed have been designed in recognition of: (a) the different background expertise; (b) the learning requirements of different types of information and skills; and (c) the need for you to engage in a complementary range of learning activities leading to the synthesis of academic knowledge and professional skills/competencies.

Learning and assessment strategies

To achieve the learning outcomes a range of teaching/learning methods will be adopted, including formal lectures, workshops, computer labs, seminars, module work (essays), and the conduct of an independent research project. Professional competencies are integral to teaching throughout the programme, during which you will be provided with many opportunities for discussion and debate. This learning strategy is designed to challenge your preconceptions, facilitate your independent thought, and enable you to develop subject-specific critical abilities. You will attend lectures in order to gain the necessary background knowledge, and computer lab sessions to acquire the required level of technical skills. Both the background knowledge and the technical skills will then be used in the compulsory modules of the programme to leverage the acquisition of more advanced expertise required.
for the development, and application of, skills in addressing the User Experience
requirements and solutions.

These teaching/learning methods are integral to the acquisition of subject specific skills and
understanding, but also provide the opportunity for discussion and debate. An aim of the
programme is to facilitate independent thought and enable you to develop a critical
perspective. You will receive feedback on written work (essays and coursework) in the form
of structured numerical feedback, relating to the logic of arguments, their coherence,
references, coverage of background literature, as well as in the form of written constructive
criticism, highlighting the major strengths and weaknesses sufficient to allow you to know
how to improve your work.

During meetings with programme teaching staff, you will have a further opportunity to
receive feedback and academic guidance. The reliability and validity of these forms of
assessments are assured by group meetings between teaching staff. In addition, all written
work is either second marked or moderated. Detailed criteria for marking bands are
provided for students in the Programme Handbook on the University’s Virtual Learning
Environment (VLE).

Students are expected to engage in considerable independent reading and practical work
for all modules culminating in the software or field project. This independent work will be
supported by library resources, access to lab space and computing cluster facilities, and
supervision from teaching staff.

Finally, you will be invited to attend the Departmental Talk series at the Department of
Computing and Psychology, and the Whitehead lectures, jointly organised by both
departments. These series of talks, covering the broader areas of Computing, Psychology,
and Neuroscience, will expose you to module researchers and to contemporary ideas and
practices in these fields. This may help you with decisions concerning your future career.

How you will be assessed

The vocational domain that students will be expecting to work in following graduation is
characterised by the agile approach and team working within multi-disciplinary cohorts. For
this reason, the assessments within this programme will largely be based on the
presentation and demonstration of outcomes to assessed coursework and associated
reports.
## Marking criteria

<table>
<thead>
<tr>
<th>Mark</th>
<th>Descriptor</th>
<th>Specific Marking Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-100%</td>
<td>Distinction ( Outstanding/ Exceptional)</td>
<td>A grade in the range of 80-100% will be awarded in the case of really accomplished work that demonstrates high levels of scholarship and originality. This grade will reflect the overall achievement of the appropriate learning outcomes to an exceptionally accomplished level. In particular a grade in the 90s should be reserved for work deemed to be outstanding, and of publishable quality.</td>
</tr>
<tr>
<td>70-79%</td>
<td>Distinction</td>
<td>A grade in the range of 70-79% will be awarded when candidates show evidence of an excellent application of appropriate knowledge, understanding and skills as specified in the module learning outcomes. Demonstration of a thorough grasp of relevant concepts, methodology and content appropriate to the subject discipline; indication of originality in application of ideas, in synthesis of material or in performance; insight reflects depth and confidence of understanding of the material.</td>
</tr>
<tr>
<td>60-69%</td>
<td>Merit</td>
<td>Demonstration of a deep level of understanding based on a competent grasp of relevant concepts, methodology and content; display of skill in applying interpreting complex material; organisation of material at a high level of competence. Students should be able to demonstrate the ability to work independently to research and implement state of the art technologies.</td>
</tr>
<tr>
<td>50-59%</td>
<td>Pass</td>
<td>Demonstration of a sound level of understanding based on a competent grasp of relevant concepts, methodology and content; display of skill in organising, discussing and applying complex material. Students should be able to implement state of the art technologies under guidance.</td>
</tr>
<tr>
<td>30-49%</td>
<td>Fail</td>
<td>Represents an overall failure to achieve the appropriate learning outcomes. Students achieve some of the aims but were unable to demonstrate independence and originality beyond what would be expected at undergraduate level.</td>
</tr>
<tr>
<td>10-29%</td>
<td>Bad fail</td>
<td>Represents a significant overall failure to achieve the appropriate learning outcomes.</td>
</tr>
<tr>
<td>1-9%</td>
<td>Very bad fail</td>
<td>A submission that does not attempt to address the modules specified learning outcomes. It will be considered a non-valid attempt and the module must be re-sat.</td>
</tr>
</tbody>
</table>
### How the programme is structured

#### Full-time mode

The first semester focuses 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 1\textsuperscript{st} semester, two in 2\textsuperscript{nd} semester) 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 will be supervised by an industrial partner supported by a Goldsmith’s academic and may be undertaken in a pair working on a real user experience problem faced by the external institution partner.

#### Academic year of study 1

<table>
<thead>
<tr>
<th>Module Title</th>
<th>Module Code</th>
<th>Credits</th>
<th>Level</th>
<th>Module Status</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computing the User Experience</td>
<td>IS71090A</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
</tr>
<tr>
<td>Introduction to Research Methods</td>
<td>IS71091A</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
</tr>
<tr>
<td>Interaction Science</td>
<td>IS71092A</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>2</td>
</tr>
<tr>
<td>Applied Topics/Guest Lectures</td>
<td>IS71093A</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>2</td>
</tr>
<tr>
<td>Computing Project OR Field Project</td>
<td>IS71094A/</td>
<td>60</td>
<td>7</td>
<td>Compulsory</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IS71095A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optional modules to the value of 60 credits</td>
<td>Various</td>
<td>60</td>
<td>7</td>
<td>Optional</td>
<td>1 and 2</td>
</tr>
</tbody>
</table>
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.

Year 1 – term 1

- Introduction to Research Methods (compulsory module) – 15 credits
- Any optional or compulsory module of 15 credits

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.

Final Project

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 twice 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 Academic Skills Centre works with academic departments offering bespoke academic literacy sessions. It also provides a programme of academic skills workshops and one-to-one provision for students throughout the year.

**Links with employers, placement opportunities and career prospects**

The programme team has established an Industrial Advisory Board consisting of the following: Aled Evans (Kainos), David Walker (Philips Research), David Sloan (Paciello Group), Tim Pennick (BT), Amrit Bhachu (Realise), Melinda Klayman (Google), Katie Taylor (GDS). 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 immersion and insights into the professional aspects of working as a User Experience designer, developer or engineer.

The requirements of a Goldsmiths degree

All taught postgraduate degrees have a minimum total value of 180 credits and involve one calendar year of full-time study. Some programmes may extend over more than one calendar year and, when this is the case, they have a higher total credit value. Programmes are composed of individual modules, each of which has its own credit value. Part-time students normally take modules to the value of 90 credits each year. If a programme has a part-time pathway, the structure will be set out in the section “How the programme is structured” above. Normally, all modules are at level 7 of the Framework for Higher Education Qualifications.

More detailed information about the structure and requirements of a Goldsmiths degree is provided in the Goldsmiths Qualifications and Credit Framework.

Modules

Modules are defined as:

- “Optional” – which can be chosen from a group of modules
- “Compulsory” – which must be taken as part of the degree

Progression

Some programmes may require students to pass specific modules prior to completion of the dissertation/major project (or equivalent). Additionally, where a programme of study extends beyond one calendar year, students may be required to pass specific modules in their first year of study before progressing to the second year. Where this is the case, these requirements will be set out in this Programme Specification.

Award of the degree

In order to graduate, students must successfully complete all modules specified for the programme, as set out within the section “How the programme is structured” above.

Classification

Final degree classification is calculated on the basis of a student’s mean average mark (based on credit value) across all modules on the programme.
Masters degrees are awarded with the following classifications:

- Distinction – 70%+
- Merit – 60-69%
- Pass – 50-59%

More detail on the calculation of the final classification is on our website.

**Interim exit awards**

Some programmes incorporate interim exit points of Postgraduate Certificate and/or Postgraduate Diploma, which may be awarded on the successful completion of modules to the minimum value of 60 credits or 120 credits respectively. The awards are made without classification.

When these awards are incorporated within the programme, the relevant learning outcomes and module requirements will be set out within the “What you will be expected to achieve” section above.

The above information is intended as a guide, with more detailed information available in the Goldsmiths Academic Manual.

**Programme-specific rules and facts**

**General programme costs**

In addition to your tuition fees, you will be responsible for meeting standard costs associated with your study. Find out more information at gold.ac.uk/programme-costs.

**Specific programme costs**

Not applicable.

**How teaching quality will be monitored**

Goldsmiths employs a number of methods to ensure and enhance the quality of learning and teaching on its programmes.

Programmes and modules are formally approved against national standards and are monitored throughout the year, such as in departmental committees, a variety of student feedback mechanisms and through the completion of module evaluation questionnaires. Every programme has at least one External Examiner who reviews comments annually on
the standards of awards and student achievement. External Examiner(s) attend Boards of Examiners meetings and submit an annual written report.

Modules, programmes and/or departments are also subject to annual and periodic review internally, as well as periodic external scrutiny.

Quality assurance processes aim to ensure Goldsmiths’ academic provision remains current, that the procedures to maintain the standards of the awards are working effectively and the quality of the learning opportunities and information provided to students and applicants is appropriate.

Detailed information on all these procedures are published on the [Quality Office web pages](#).