PROGRAMME SPECIFICATION – POSTGRADUATE PROGRAMMES

KEY FACTS

Programme name	Human-Computer Interaction Design
Award	MSc
School	School of Science & Technology
Department or equivalent	Computer Science
Programme code	PSHCID
Type of study	Full Time Part Time
Total UK credits	180
Total ECTS	90

PROGRAMME SUMMARY

This programme will provide you with research, theories and techniques for designing and evaluating interactive systems, from web to mobile and multi-touch devices. You will acquire leading-edge knowledge in Human-Computer Interaction (HCI), evaluating the usability of interactive systems and expertise in designing and evaluating systems for diverse user groups, including people with disabilities.

This programme is delivered by the internationally renowned Centre for Human-Computer Interaction Design (HCID) and will equip you for a professional career in usability, user experience and Human-Computer Interaction. The programme has a strong record of placing graduates in roles such as user experience consultant, user researcher, user experience designer, usability specialist and accessibility specialist in leading consultancies and blue-chip IT companies. Some students may choose to continue their studies towards a doctoral level qualification.

This programme is offered both as full-time and part-time routes, with an optional internship of professional industry experience as part of your postgraduate degree.

The programme provides a range of modules which include 15 and 60 credit modules at Masters level. This programme includes seven core taught modules and one elective module, listed later in this document. The taught part of the programme will be followed by an independent research project. The programme provides you with a choice of exit routes.

POSTGRADUATE CERTIFICATE IN HUMAN-COMPUTER INTERACTION DESIGN
The first exit point is the Postgraduate Certificate in Human-Computer Interaction Design which you are able to achieve through successful completion of 4 taught modules (INM452, INM401, INM314, and INM315). Those completing these modules will gain a fundamental understanding of Human-Computer Interaction, usability and user experience and be able to apply basic techniques and methods appropriate in a user-centred design process. Students will be able after completion of this stage to create design and information architectures for common interactive systems and types of users. They will be able to evaluate designs for interactive systems using a variety of techniques.

The assessments you undertake to achieve this qualification will focus on activities that you need to undertake either as part of your role or to support you in developing your professional practice.

The postgraduate certificate will enable you to develop confidence in your knowledge and skills in a career in HCI/UX.

POSTGRADUATE DIPLOMA IN HUMAN-COMPUTER INTERACTION DESIGN
A Postgraduate Diploma in Human-Computer Interaction Design may be achieved if you have successfully met the requirements of either of the Postgraduate Certificate awards and then successfully complete INM391, INM313, INM373 and one 15 credit elective module.

For all of you completing the Postgraduate Diploma in Human-Computer Interaction Design in addition to the above you will gain basic research skills and deepen your understanding of more advanced theory in HCI which are applied to innovative and complex technology. You will gain a knowledge for user groups not commonly considered in HCI and apply specialist skills in assessing accessibility. You will choose one elective module to explore some areas further to broaden your expertise and skills.

The assessments you undertake to achieve this qualification will again on activities that you need to undertake either as part of your role or to support you in developing your professional practice you wish to implement or examine further.

The postgraduate diploma will provide you with an extended repertoire of skills needed as you develop into an experienced professional and introduce you to the broader theories and techniques related to HCI/UX.

MSc IN HUMAN-COMPUTER INTERACTION DESIGN For the MSc, you must in addition to achieving the requirements for one of the Postgraduate Diploma awards complete successfully the Dissertation module INM363.

For all of you completing the MSc in Human-Computer Interaction Design in addition to the above you will spend the project module examining an aspect of HCI that contributes some knowledge to the field in the form of HCI methodology, UX design practice or a better understanding of users' interaction with technology.

The assessment for the project module is in the form of a traditional dissertation reporting your work.

The MSc will provide an opportunity to explore an aspect of HCI in depth through the literature and empirical evidence and make recommendations to improve and develop HCI practice. It will also provide you with the confidence to undertake further studies related to your academic practice and support you disseminating this work.

<u>Aims</u>

- Develop your understanding of fundamental principles of Human-Computer Interaction, usability and user experience
- Apply techniques and methods appropriate in a user-centred design process

- Create designs for a wide variety of interactive systems and types of users
- Evaluate designs for interactive systems
- Demonstrate research skills appropriate to HCI
- Promote innovation that rest on users as the core for socio-technical systems

WHAT WILL I BE EXPECTED TO ACHIEVE?

On successful completion of this programme, you will be expected to be able to:

Knowledge and understanding:

- demonstrate detailed understanding of the importance of usability and the consequences of poor usability for interactive systems.
- explain the theoretical foundations in cognitive psychology for effective interaction design.
- critically evaluate key HCI research papers.
- interpret and apply a range of interaction design techniques including techniques for data collection, conceptual design, detailed design and evaluation.
- compare and contrast interaction technologies.
- demonstrate understanding of a variety of the latest processes for understanding design and evaluation in human-computer interaction, and understand when it is appropriate to undertake them.
- describe in detail a range of user-based and expert-based evaluation techniques, including techniques for specific situations such as the web and e-learning.
- compare and contrast the strengths and weaknesses of a wide range of evaluation techniques.
- demonstrate knowledge of research approaches appropriate to HCI
- demonstrate an understanding of professional issues, such as ethical conduct and data protection

Skills:

- apply accurately and effectively an iterative, interaction design process.
- design and conduct user research using a range of data collection techniques.
- develop conceptual and detailed designs for interactive technologies.
- evaluate prototype designs.
- interpret HCI principles and guidelines, including visual design guidelines, applying them to a variety of situations.
- work effectively as a team member.
- identify the requirements of users for a variety of interactive systems.
- create a variety of arguments to justify inclusive design in a range of different design situations to fulfil the needs of a diverse user group, including disabled users.
- design and conduct effective user-based evaluation techniques.
- create designs for interactive systems that can accommodate the needs of a diverse base of users, and identify any conflicts between the needs of different

user groups in specific designs.
- evaluate designs for interactive systems to assess whether they will be usable and acceptable to diverse users, and identify any conflicts between the needs of different user groups in specific designs.
- design and conduct effective usability inspections and expert-based reviews.
- undertake detailed and rigorous analyses of usability data.
- design and evaluate interactive systems for users with a variety of different special needs.
- assess, select and apply techniques and tools for stimulating creative thinking in the context of designing socio-technical systems
- evaluate a research activity in terms of the effectiveness of its approach and implementation.
- coherently summarise complex, subject-specific information and present it to others in a structured and professional manner using oral and written presentation skills.
- create designs for interactive systems that build on current ideas in HCI.
- exercise initiative and sustained effort to attain clear objectives within specified deadlines.

Values and attitudes:

- develop and apply a critical and reflective mindset to design
- embrace technical challenges as an opportunity for personal development
- rationally exploit both traditional and novel technological approaches
- rigorously assess alternative approaches and novel designs and implementations
- demonstrate an appreciation of the value of scientific research within this discipline from a critical perspective.
- respect the work and intellectual property of others and reference it in a professional manner that is clear, consistent and unambiguous.
- reflect on own functioning and apply self criticism in order to improve practice.
- understand the needs of a variety of different user groups not normally considered in the design process, for example, those with sensory, cognitive and physical impairments, and older users.
- demonstrate professional conduct, especially during research and activities involving users.
- become familiar and sensitive to issues related to designing interactive systems for the elderly and people with disabilities.
- promote innovation that rest on users as the core for socio-technical systems

HOW WILL I LEARN?

You will learn via a mix of learning and teaching strategies.

In taught modules you will learn through lectures and tutorials. Fundamental concepts are introduced in lectures. Demonstrations and videos exemplify the lecture material. You will then apply the concepts in small, interactive exercises and in practical work in

supervised tutorials.

In addition, you will engage in self-directed study to deepen your understanding, during which you will read recommended materials, engage in reflective exercises, participate in seminars and tutorials, and prepare for formative and summative assessments.

Some of the assessments and exercises will involve group work to enable you to learn how to work effectively in teams and learn other transferable skills. It will also result in the creation of a portfolio.

The face-to-face teaching is supported via online tools which will also enable feedback and engagement via discussion forums and the dissemination of additional material made available to you.

For the individual project, you will learn through regular meetings with your project supervisor, in addition to self-directed study.

WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?

Assessment and Assessment Criteria

Assessment is within each module, including the dissertation. Assessment methods vary according to the nature of the material. A combination of individual written assignments, exercises and unseen written examination is the norm, but some modules may use other methods, including individual practical exercises and group work projects. Many assessments have an element of choice, allowing students to focus on aspects of interest to them.

Assessment Criteria are descriptions, based on the intended learning outcomes, of the skills, knowledge or attitudes that you need to demonstrate in order to complete an assessment successfully, providing a mechanism by which the quality of an assessment can be measured. Grade- Related Criteria are descriptions of the level of skills, knowledge or attributes that you need to demonstrate in order achieve a certain grade or mark in an assessment, providing a mechanism by which the quality of an assessment can be measured and placed within the overall set of marks. Assessment Criteria and Grade-Related Criteria will be made available to you to support you in completing assessments. These may be provided in programme handbooks, module specifications, on the virtual learning environment or attached to a specific assessment task.

Feedback on assessment

Feedback will be provided in line with our Assessment and Feedback Policy. In particular, you will normally be provided with feedback within three weeks of the submission deadline or assessment date. This would normally include a provisional grade or mark. For end of module examinations or an equivalent significant task (e.g. an end of module project), feedback will normally be provided within four weeks. The timescale for feedback on final year projects or dissertations may be longer. The full

policy can be found at:
https://www.city.ac.uk/__data/assets/pdf_file/0008/68921/assessment_and_feedback_policy.pdf

Assessment Regulations

In order to pass your Programme, you should complete successfully or be exempted from the relevant modules and assessments and will therefore acquire the required number of credits.

The pass mark for each module is 50%.

If you fail an assessment component or a module, the following will apply:

1. Compensation: where you fail up to a total of 20 credits at first or resit attempt (15 for a Postgraduate Certificate), you may be allowed compensation if:
   - Compensation is permitted for the module involved (see the What will I Study section of the programme specification), and
   - It can be demonstrated that you have satisfied all the Learning Outcomes of the modules in the Programme, and
   - A minimum overall mark of no more than 10% below the module pass mark has been achieved in the module to be compensated, and
   - An aggregate mark of 50% has been achieved overall.

Where you are eligible for compensation at the first attempt, this will be applied in the first instance rather than offering a resit opportunity.

If you receive a compensated pass in a module you will be awarded the credit for that module. The original component marks will be retained in the record of marks and your original module mark will be used for the purpose of your Award calculation.

2. Resit: Where you are not eligible for compensation at the first attempt, you will be offered one resit attempt.

If you are successful in the resit, you will be awarded the credit for that module. The mark for each assessment component that is subject to a resit will be capped at the pass for the module. This capped mark will be used in the calculation of the final module mark together with the original marks for the components that you passed at first attempt.

If you do not meet the pass requirements for a module and do not complete your resit by the date specified you will not progress and the Assessment Board will require that you be withdrawn from the Programme.

If you fail to meet the requirements for the Programme, the Assessment Board will consider whether you are eligible for an Exit Award, as per the table below.

If you would like to know more about the way in which assessment works at City, please see the full version of the Assessment Regulations at:
http://www.city.ac.uk/__data/assets/word_doc/0003/69249/s19.doc

WHAT AWARD CAN I GET?

Master's Degree:

	HE Level	Credits	Weighting (%)
Dissertation	7	60	33
Taught	7	120	67

Class	% required
With Distinction	70
With Merit	60
Without Classification	50

Postgraduate Diploma:

	HE Level	Credits	Weighting (%)
Taught	7	120	100

Class	% required
With Distinction	70
With Merit	60
Without Classification	50

Postgraduate Certificate:

	HE Level	Credits	Weighting (%)
Taught	7	60	100

Class	% required
With Distinction	70
With Merit	60
With Pass	50

WHAT WILL I STUDY?

Six core modules plus two elective modules; this is followed by the dissertation component. Optionally, the dissertation can be carried out within a period of internship.

Taught component

The taught component is taken in one of two standard length patterns: full-time (one year) and part-time (two years).

Module Title	SITS Code	Module Credits	Core/ Elective	Can be Compen-sated?	Level
Inclusive Design	INM313	15	C	Y	7
Understanding User Interactions	INM314	15	C	Y	7
Evaluating Interactive Systems	INM315	15	C	Y	7
Interaction Design	INM452	15	C	N	7
Research Methods and Professional Issues	INM373	15	C	Y*	7
Information Architecture	INM401	15	C	Y	7

Design Justice	INM317	15	E	Y	7
Web Design and Development	INM316	15	E	Y	7
Creativity in Design	INM391	15	E	Y	7
Data Visualisation	INM402	15	E	Y	7
Virtual Reality Development	INM717	15	E	Y	7
Entrepreneurship in Practice	INM462	15	E	Y	7

* Compensation will only be applied at resit.

Dissertation component

A dissertation project of 60 credits is required for the Masters award.

Module Title	**SITS Code**	**Module Credits**	**Core/ Elective**	**Can be Compen-sated?**	**Level**
Individual Project	INM363	60	C	N	7

You are normally required to pass all taught modules before progressing to the dissertation. INM373 Research Methods and Professional Issues must be passed with a mark of at least 50% without compensation to proceed with INM363 Individual Project.

TO WHAT KIND OF CAREER MIGHT I GO ON?

The programme has a strong record of placing graduates in roles such as user experience consultant, information architect, usability specialist and accessibility specialist in leading consultancies and blue-chip IT companies. Some students may choose to continue their studies towards a doctoral level qualification.

If you would like more information on the Careers support available at City, please go to: http://www.city.ac.uk/careers/for-students-and-recent-graduates.

WHAT PLACEMENT OPPORTUNITIES ARE AVAILABLE?

Students who successfully complete the taught part of their programme without re-sits have the option of doing an internship on which they can base their dissertation. The internship period is from July to December. Students produce an internship-based proposal along with a back-up non-internship-based proposal by the deadlines stipulated in the MSc Project Guidance Document.

As well as the support of their academic supervisor, students on internship are supported by a work-based learning advisor from the Professional Liaison Unit.

Further details of the Postgraduate Internship Scheme are available from the Professional Liaison Unit - http://www.city.ac.uk/informatics/professional-liaison-unit

WILL I GET ANY PROFESSIONAL RECOGNITION?

Accredited by BCS The Chartered Institute for IT as partially meeting the educational requirement for CITP registration for a period of 5 intakes from the 2011 intake, up to

and including the 2015 intake, in the full time and part time modes.

Please contact BCS directly for information about partial accreditation and further details regarding the CITP registration process: http://www.bcs.org.

HOW DO I ENTER THE PROGRAMME?

Each application is considered on its merits and is given full consideration by admissions staff.

The usual minimum entrance requirement is a good second class honours degree from a UK university in a numerate discipline, a recognised equivalent from an accredited overseas institution or an equivalent professional qualification.

Applicants should have basic competence and familiarity with mathematics.

For those overseas applicants, whose first language is not English or their country has not been exempted from the English language requirement by the UK Home Office, they will need to provide one of the following English test qualifications:

- IELTS: 7.0 (minimum of 6.5 in all four test components).
- TOEFL 100 (minimum of 21 in Listening, 23 in Reading, 22 in Speaking and 24 in Writing)

To ensure that students are properly prepared for study, and to maximise the benefit gained from the programme, admissions staff will also take close account of the areas and nature of previous academic and other achievements.

Version: 8.0
Version date: March 2023
For use from: 2023-24