

## Course Specification: Research Courses of Study

### NEW COURSE FORM

#### SECTION 1: SCHOOL TO COMPLETE

Required Information	Data
Level of Course	PGR <input checked="" type="checkbox"/>
Name of Owning School	Graduate and Researcher College
Division	Division of Computing, Engineering and Mathematical Sciences
Date of the First Intake	Spring Term 2022/23
In Which Months will the Course have a Start Date?	September <input checked="" type="checkbox"/> January <input checked="" type="checkbox"/> May <input checked="" type="checkbox"/>
Title	PhD in Network Science
Degree Award	PhD
Alternative Exit Award	MPhil in Network Science
Location/Campus <i>Please select all that are applicable and give details, for example if there is a term abroad in Paris</i>	Canterbury <input type="checkbox"/> Medway <input type="checkbox"/> Brussels <input type="checkbox"/> Paris <input type="checkbox"/> Other: Northeastern University London
Mode of Attendance <i>Please select all that are applicable</i>	FT <input checked="" type="checkbox"/> PT <input checked="" type="checkbox"/> Distance Learning <input type="checkbox"/>
Length in Months <i>Including year abroad/placement year</i>	42 months
Teaching Institution	Northeastern University London
Is there a Work Placement and if so is it Compulsory?	Choose an item. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Year Abroad	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Number of Stages	One
Credits per Stage	N/A
Accreditations	N/A
Stage Weightings	N/A
Course Model	-

Author: QACO

Applies to: 2021/22

Approved by Senate: September 2020

Last Revised: September 2021

Next review: September 2022

## Course Specification: Research Courses of Study

Required Information	Data
Date of CASC Meeting the Course was Approved	Click or tap to enter a date.
FT Fee Amount and Fee Band	N/A See below
Notes	<b>The fee level will be set by Northeastern University London. Home and international students are eligible under the fee structure</b>

### Delivery Details

*(only required if different from the above i.e. a Partner College Course)*

Required Information	Data
School	Click or tap here to enter text.
Division	Click or tap here to enter text.
Location/Campus <i>Please select all that are applicable</i>	Click or tap here to enter text.
Teaching Institution	Choose an item.
Completed by	<b>Carolyn Barker, Carolyn Barker, Northeastern University London 23/01/2023</b>

---

Author: QACO  
 Applies to: 2021/22  
 Approved by Senate: September 2020  
 Last Revised: September 2021  
 Next review: September 2022

## Course Specification: Research Courses of Study

### SECTION 2: CSAO TO COMPLETE

Required Information	Data
<b>COS Code</b>	Click or tap here to enter text.
<b>Course Code</b>	Click or tap here to enter text.
<b>HECOS Code</b>	Click or tap here to enter text.
<b>Is ATAS required?</b>	Choose an item.
<b>If ATAS is required, please provide the CAH3 code</b>	Click or tap here to enter text.
<b>UCAS Code:</b>	Click or tap here to enter text.
<b>Completed by</b>	Click or tap here to enter text.      Click or tap to enter a date.

### SECTION 3: MORA TO COMPLETE

Required Information	Data
<b>Programmes Plant ID</b>	Click or tap here to enter text.
<b>Visit Day/Interview Subject Code <i>If applicable</i></b>	Click or tap here to enter text.
<b>UCAS Code <i>If applicable</i></b>	Click or tap here to enter text.
<b>Set up on KentVision</b>	Choose an item.
<b>Sent Protocol to School to Complete</b>	Choose an item.      Click or tap to enter a date.
<b>Protocol Set Up</b>	Choose an item.
<b>Added to Course Spreadsheet</b>	Choose an item.
<b>MCR Codes</b>	Click or tap here to enter text.
<b>Email Communication Sent</b>	<a href="mailto:Infoadm-staff@kent.ac.uk">Infoadm-staff@kent.ac.uk</a> <input type="checkbox"/> <a href="mailto:listings-update@kent.ac.uk">listings-update@kent.ac.uk</a> <input type="checkbox"/> Relevant School/Division <input type="checkbox"/>
<b>Data Quality Informed of UCAS Code and Requested to add the UCAS Choice Flag</b>	Choose an item.
<b>Notes</b>	Click or tap here to enter text.
<b>Completed by</b>	Click or tap here to enter text.      Click or tap to enter a date.

---

Author: QACO  
 Applies to: 2021/22  
 Approved by Senate: September 2020  
 Last Revised: September 2021  
 Next review: September 2022

**Course Specification: Research Courses of Study**

## **Course Specification for Research Courses of Study**

### **1 Award and Title**

PhD in Network Science

#### **1.1 Alternative Exit Award**

MPhil in Network Science

### **2 Length and Mode of Registration**

Full-Time (three to four years) or part-time (five to seven years)

### **3 Entry Requirements**

A first or upper second class bachelor's degree (or equivalent) in an appropriate subject. Optionally, a distinction in a master's programme (or equivalent) in an appropriate subject. Good command of English (average IELTS score of 7.0, with at least 6.5 for each component, or equivalent).

### **4 Campus**

Northeastern University London (NU London)

### **5 Anticipated Total Student Registrations**

Between three and six

### **6 Course Management**

A new, joint committee consisting of NU London senior management and Kent's Graduate and Researcher College (GRC) will be set up before the enrolment of students to ensure the smooth running and management of the programme.

### **7 Proposed Start Date**

April 2023

### **8 Opportunity and Need**

---

Author: QACO

Applies to: 2021/22

Approved by Senate: September 2020

Last Revised: September 2021

Next review: September 2022

## Course Specification: Research Courses of Study

NU London's strategic plan is to ambitiously grow its research environment by gaining research degree awarding powers and submitting to the REF in the next five years. As such, NU London has partnered with the University of Kent (PhD validation partner) to deliver forty PhD studentships, in priority research areas, fully funded through Northeastern University.

NU London already delivers a suite of bachelor's and taught master's degree programmes in subjects aligned to the proposed PhD programme. There has been considerable interest from existing and past NU London students, alongside US students in the Northeastern Global University System (12 campuses, 14,000 student enrolments a year).

### 9 Aims and Objectives (including assessment criteria)

On successful completion of a PhD candidates will have:

- i) met the Framework for Higher Education Qualification (FHEQ) level descriptor for a doctorate degree (outlined below);
- ii) met any subject specific assessment criteria outlined in the course specification (if applicable);
- iii) shown appropriate ability in the organisation and presentation of their material in the thesis.

*The Framework for Higher Education Qualifications (FHEQ) in England, Wales and Northern Ireland* states that:

Doctoral degrees are awarded to students who have demonstrated:

- i) the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline, and merit publication;
- ii) a systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice;
- iii) the general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems;
- iv) a detailed understanding of applicable techniques for research and advanced academic enquiry.

Typically, holders of the qualification will be able to:

---

Author: QACO

Applies to: 2021/22

Approved by Senate: September 2020

Last Revised: September 2021

Next review: September 2022

### **Course Specification: Research Courses of Study**

- i) make informed judgements on complex issues in specialist fields, often in the absence of complete data, and be able to communicate their ideas and conclusions clearly and effectively to specialist and non-specialist audiences;
- ii) continue to undertake pure and/or applied research and development at an advanced level, contributing substantially to the development of new techniques, ideas, or approaches;

and will have:

the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent environments.

The University's assessment criteria for research courses of study is outlined in Section 8.4 of the Regulations for Research Courses of Study.

## **10 Course Outline**

The Doctor of Philosophy (PhD) is an independent programme of research that makes a substantive and original contribution to the advancement of knowledge within the discipline of network science. Research may be single-discipline or interdisciplinary, theoretical or applied. The research is led by the student but closely supervised by an experienced multi-institutional supervisory team, whose knowledge and skills are complementary to the specific project.

The supervisory team will consist of a primary supervisor at NU London, a second primary supervisor at the University of Kent and a secondary supervisor within the Northeastern Global University System.

### **10a** Details of the research training that the student will be expected to complete:

The programme starts with a meeting between the research student and the primary supervisors (NU London and Kent), where an initial programme of study, to be completed by the end of the six-week induction period, is set out.

The student will also attend a 'Graduate Research induction', given by the NU London Graduate and Researcher School, faculty and the Northeastern PhD Network. The induction covers essential research skills, research integrity and ethics, signposting to support services, and an opportunity to network with the Northeastern research community.

---

Author: QACO

Applies to: 2021/22

Approved by Senate: September 2020

Last Revised: September 2021

Next review: September 2022

## Course Specification: Research Courses of Study

Students will then assess their skills at a mandatory 'Kickstart your PhD: Guidance, Skills and the Researcher Development Assessment' workshop, delivered by the University of Kent GRC. A individualised training programme will be drawn up following the 'Kickstart' meeting. The completion of the assessment is a requirement for successful completion of the probation review.

Students will embark on their independent research programme of study, with guidance from their primary supervisors (NU London and Kent) and support from the wider supervisory team. The supervisory team will provide individual training and networking opportunities for the student - for them to advance their research and develop as a researcher. The research programme will indicatively include, but is not limited to, attending and presenting at faculty research seminars, partaking in research visits to other institutions, attending formal training courses (not for credit), presenting at conferences, mentoring research masters or undergraduate students, preparing articles for publication and organising research workshops.

In year two, the programme will include an optional research visit to North America to visit Northeastern Global University System research colleagues, where the student may present their research, make new connections and advance their studies.

Regular monitoring and reviews ensure timely progression and tailored support, with supervisors monitoring progress every three months and formal reviews taking place at key points throughout the programme.

### 10b Details of other courses students may benefit from:

#### Faculty level

Optional taught courses will be identified at the regular review meetings between the student and the supervisory team. The student will have the opportunity to benefit from postgraduate courses in London and online courses offered through the US.

#### Institutional level

- Graduate and Researcher College's Researcher Development Programme (including online training provision), [www.kent.ac.uk/graduateschool/skills/programmes/tstindex.html](http://www.kent.ac.uk/graduateschool/skills/programmes/tstindex.html)
- The students will be members of the Northeastern PhD network: <https://phd.northeastern.edu/network/overview/>

---

Author: QACO

Applies to: 2021/22

Approved by Senate: September 2020

Last Revised: September 2021

Next review: September 2022

## Course Specification: Research Courses of Study

- 10c** Details of progression milestones that the student will need to reach and successfully pass:

Students will be subject to the progression milestones as outlined in Annex J of the Research Code of Practice.

- 10d** Details of the assessment method:

Students will produce an original piece of research written to a potentially publishable standard in English.

The length of research degree theses are outlined in the Instructions to Candidates for the Examination of Research Degrees.

The final assessment of the PhD will be by Viva Voce examination, during which the candidate will be expected to expound upon the new knowledge that their contribution to scholarship contains.

## **11 Chairs of Supervisory Teams**

All students will have a supervisory team as required by Annex H.

The current list of supervisory chairs at Kent is:

Alex Freitas, Andy King, Budi Arief, Carlos Perez-Delgado, Caroline Li, Christos Efstratiou, Colin Johnson, Daniele Soria, David Barnes, David Chadwick, Dominique Chu, Fernando Esteban Barril Otero, Frank Z Wang, Gareth Howells, Giovanni Luca Christian Masala; Marek Grzes; Howard Bowman; Ian Utting; Jason Nurse; Julio Hernandez-Castro; Mark Batty; Michael Kampouridis; Olaf Chitil; Palaniappan Ramaswamy; Peter Rodgers; Philippe De Wilde; Richard Jones; Rogerio de Lemos; Sally Fincher; Shujun Li; Stefan Marr.

There is a critical mass of research-active faculty in Computer Science to supervise PhD candidates across the different fields of the subject. All supervisors have appropriate credentials (higher degrees and scholarly publications).

NU London and Kent 'fall-back' supervisors will be identified and approved by the Graduate and Researcher College, before a project is permitted to commence. Fall-back supervisors will be reviewed and updated (if necessary) during the annual monitoring process.

---

Author: QACO

Applies to: 2021/22

Approved by Senate: September 2020

Last Revised: September 2021

Next review: September 2022



## Course Specification: Research Courses of Study

### 12 Research Environment

NU London, previously known as New College of the Humanities (NCH), was established in 2012 in Bloomsbury London. It delivers UG and PG degrees in economics, English, history, art history, law, philosophy, politics and international relations, computer science, AI, data science, bioscience and business. In 2019, NCH was acquired by Northeastern University, a large, private, HE institution based in Boston US, with 13 campuses, 27,000 students, 3,000 academic staff, \$180m in external research funding and categorised as 'R1' – the highest level of research activity in the US. Rapid expansion of NU London swiftly followed: registration with OfS and University title granted, opening of a brand new campus in St Katharine's dock next to Tower Bridge and the launch of digital degrees.

NU London currently has six faculties: economics, English, history (including art history), law, philosophy (including computer science), English, politics and international relations, and a dedicated experiential learning department: EDGE (Experiential Digital Global Education). NU London boasts a highly popular mobility programme with Northeastern University and LAUNCH a professional development programme. NU London currently has ~1500 students (UG/PG/apprenticeship/mobility) and ~100 academic staff, of whom around a half are engaged in research.

Students will be given a dedicated research space in NU London's central London campus, co-located with faculty supervisors and the NU London postgraduate community. Here network science students will sit alongside PhD and post doctoral scholars in the disciplines of English, law, politics, history, art history, economics, philosophy and computer science. Students will interact with scholars in Northeastern's Institute for Experiential AI and the Network Science Institute. This approach will encourage fluidity of thought, challenge thinking and provide a supportive and truly interdisciplinary environment with which to develop as a researcher.

Northeastern University has considerable computing resources, and students will have access to the University's [high performance computing facilities](#) for research.

The Network Science Institute is a thriving community of interdisciplinary scholars based in Boston, US and with a new European hub in London. The Institute's research and training programs are motivated by a desire to inspire and contribute to the growing community dedicated to understanding networks by discovering the underlying principles, properties and purpose of their connectivity. And to create new tools and perspectives that empower all people to better interact with networks, and ultimately improve the sustainability and wellness of our societies.

---

Author: QACO

Applies to: 2021/22

Approved by Senate: September 2020

Last Revised: September 2021

Next review: September 2022

## Course Specification: Research Courses of Study

The faculty's regular research seminars offer a lively and varied menu of talks and discussions involving both internal and invited speakers. Postgraduate students are invited and encouraged to attend these all year round.

Furthermore researchers have the opportunity to participate in the Ottoline club: a fortnightly forum to foster free and relaxed interdisciplinary exchange. Frequently, researchers present ideas at a fairly early stage of development.

### 13 Student Support and Guidance

#### Faculty-level support services

Each student is allocated a primary supervisor (NU London), a second primary supervisor (University of Kent) and a secondary supervisor (Northeastern University Global System). Supervisors are expected to offer guidance to students with regard to services offered by the Institute of Network Science as well as central university resources available to all students.

Students are monitored annually via a progress report sent to both students and supervisors. These reports outline progress made and expected, and indicate potential difficulties. These reports are scrutinized by the Divisional Director of Graduate Studies and the Graduate and Researcher College.

- [Northeastern Network Science Institute](#)

#### Institutional level support services

- [Northeastern's PhD Network](#)
- [NU London Student and Learner Support](#)
- [Graduate and Researcher College](#) (Provision of (i) Researcher Development Programme (workshops and on-line courses) (ii) institutional level induction and (iii) student-led initiatives such as social events, conferences and workshops)
- NU London Graduate and Researcher School

### 14 Quality Assurance and Enhancement

- The course will be overseen by the Graduate and Researcher College Board

---

Author: QACO

Applies to: 2021/22

Approved by Senate: September 2020

Last Revised: September 2021

Next review: September 2022

### **Course Specification: Research Courses of Study**

- Student feedback will be obtained from NU London student voice forums, postgraduate student representation on committees and postgraduate surveys
- The course will be reviewed via the annual monitoring process and the periodic review process.

#### **15 Resource Implications**

There are minimal resource implications as the students will be registered with and located at NU London. Supervisory time will be required by the University of Kent second primary supervisor and supervisory chair.

#### **16 Professional Accreditation**

N/A

#### **17 Inclusive Course Design**

The Collaborative Partner recognises and has embedded the expectations of current equality legislation, by ensuring that the course is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.