Durham University

Module Handbook

Incoming Students

Academic year 2026/2027

Part 2

Department of Computer Science

Content

A: THE DEPARTMENT

Facilities

In the Department of Computer Science high quality teaching and research come together to create a superb environment for undergraduates, postgraduates and researchers. Our undergraduate degree courses in Computer Science give a balanced approach to computing that is based on sound scientific and engineering principles.

Our range of undergraduate and master's degrees in Computer Science and our research spans the spectrum of Computer Science, from foundations to applications. This all makes for a thriving, dynamic and energetic department that seeks to push back the barriers of science and technology and produce graduates and researchers of the highest calibre.

Details of the overall undergraduate degree and stream structure are available from the prospective undergraduate pages at:
https://www.durham.ac.uk/departments/academic/computer-science/

The Department is housed in the new Mathematical Sciences and Computer Science Building at University's Upper Mountjoy Site, within easy reach of the city centre and all the Durham colleges. Lectures take place within the department and in lecture theatres across the Mountjoy Site. Students doing Level 3 and Level 4 projects will work under the supervision of a member of academic staff, often within one of the departments research laboratories.

A1: Exchange Staff in the Computer Science Department

Computer Science Exchange and Study Abroad Coordinator

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We look forward to welcoming you to the Department.

B: DEGREE STRUCTURE

The Department offers the following degrees:

- BSc Computer Science (3 years)
- MEng Computer Science (4 years)

All degrees at Durham have a modular structure, consisting of six modules (courses) each year for three or four years. Modules are usually studied over all three terms of the teaching year (October- December; January – March; April-June). Usually, most of the teaching takes place in terms 1 and 2 (Michaelmas and Epiphany), with exams in term 3 (Easter). Exchange students therefore need to be in Durham from October to June if they wish to fully complete modules. We are happy to accept students for study across terms 1 and 2 but not for terms 2 and 3 only. All modules are examined or assessed in the year in which they are taught. As assessment can be continuous assessment throughout the academic year and therefore no modules offered by Computer Science are suitable for less than 2 terms study (term 1 and 2). Consequently, **Computer Science does not accept students for a single term**. Most modules have an end-of-academic-year unseen

written examination taking place in May/June. **All teaching and assessments are in English.**

C: REQUIREMENTS AND RESTRICTIONS

This section contains important information for setting up your academic programme at Durham University. Please read through this section carefully before considering your modules and filling in the Learning Agreement

C1: General

Choice of Modules

IMPORTANT NOTE FOR STUDENTS: PLEASE READ BEFORE COMPLETING YOUR LEARNING AGREEMENT

At Durham University, Incoming European Exchange Programme agreements are signed by individual university departments and are not university-wide agreements. This means that, in general, students will have to choose modules (courses) within the Durham University department through which the Incoming European Exchange Programme agreement with their home university has been signed (students should check with the Exchange Coordinator in their university if they are not sure which department this is). Modules offered by other departments are subject to availability and can only be taken with prior consent from the relevant department. Certain restrictions may also apply to courses in some departments and students need to follow the advice below carefully before completing their Learning Agreements.

Please clearly indicate the modules you wish to take on your Learning Agreement (included in your application package) for approval by the respective department(s). Before completing your Learning Agreement, it is very important that you read carefully the relevant departmental section(s) of the Module Handbook to check which modules are available to you and any restrictions which may apply. It is imperative that a properly completed Learning Agreement is submitted as part of the application form. Only complete applications can be processed.

Section *D: Module Details* provides a list of modules available for Incoming European Exchange Programme students in the department where the agreement has been established (receiving department) as well as a list of modules available for students

coming in through other departments (external departments). Please choose from these modules only!

To find out about the details for each module (teaching methods and contact hours, prerequisite academic background, method of assessment, content, etc.) please refer to the Faculty Handbook online under http://www.dur.ac.uk/faculty.handbook/.

C2: Departmental Requirements and Restrictions

Incoming European exchange students usually take 2nd to 4th year modules. For a list of modules available in 2026/27 please see the list below.

Exchange students should provide information on what they have already studied and been examined on in their home institution, which is as clear and complete as possible. This will streamline the process of deciding whether your module choices are appropriate for your level.

We only accept students for a minimum of 6 months during term 1 and term 2 (October to December AND January to April). However, we advise students to study for a full teaching year (9 months) as this provides the best possible learning experience. No alternative assessments are available for the exam period in May/June.

D: MODULE DETAILS

ECTS credits:

The conversion ratio of Durham credits into ECTS is as follows:
20 Durham credits = 10 ECTS

Modules available in 2026/27

A description of programme content is available and provides an overview of all Computer Science modules.

Below are Computer Science modules available to Incoming European Exchange Programme students. You should however ensure that for modules in Year 2, 3, and 4 you have the necessary prerequisites, otherwise your request for enrolment to the module will be rejected.

YEAR 1

MODULE CODE	MODULE TITLE	ECTS	DURHAM CREDITS	AVAILABLE FOR 1/2 TERM STUDENTS*
COMP1101	PROGRAMMING (BLACK)†	10	20	N
COMP1111	PROGRAMMING (GOLD)†	10	20	N
COMP1021	MATHEMATICS FOR COMPUTER SCIENCE	10	20	N
COMP1051	COMPUTATIONAL THINKING	10	20	N
COMP1071	COMPUTER SYSTEMS	10	20	N
COMP1081	ALGORITHMS AND DATA STRUCTURES	10	20	N

†Only one of COMP1101 and COMP1111 can be taken. COMP1101 is aimed at those who did Computing at A-level or have a comparable programming experience. COMP1111 assumes no prior programming experience.

YEAR 2

MODULE CODE	MODULE TITLE	ECTS	DURHAM CREDITS	AVAILABLE FOR 1/2 TERM STUDENTS*
COMP2181	THEORY OF COMPUTATION	10	20	N
COMP2211	NETWORKS AND SYSTEMS	10	20	N
COMP2221	PROGRAMMING PARADIGMS	10	20	N
COMP2261	ARTIFICIAL INTELLIGENCE	10	20	N
COMP2271	DATA SCIENCE	10	20	N
COMP2281	SOFTWARE ENGINEERING	10	20	N

YEAR 3

MODULE CODE	MODULE TITLE	ECTS	DURHAM CREDITS	AVAILABLE FOR 1/2 TERM STUDENTS*
COMP3012	INDIVIDUAL PROJECT	20	40	N
COMP3477	ALGORITHMIC GAME THEORY	5	10	N
COMP3487	BIOINFORMATICS	5	10	N
COMP3507	COMPUTATIONAL COMPLEXITY	5	10	N
COMP3517	COMPUTATIONAL MODELLING IN THE HUMANITIES AND SOCIAL SCIENCES	5	10	N

COMP3527	COMPUTER VISION	5	10	N
COMP3547	DEEP LEARNING	5	10	N
COMP3557	DESIGN OF ALGORITHMS AND DATA STRUCTURES	5	10	N
COMP3607	RECOMMENDER SYSTEMS	5	10	N
COMP3637	COMPILER DESIGN	5	10	N
COMP3647	HUMAN-AI INTERACTION DESIGN	5	10	N
COMP3667	REINFORCEMENT LEARNING	5	10	N
COMP3677	NATURAL COMPUTING ALGORITHMS	5	10	N
COMP3721	INTRODUCTION TO MUSIC COMPUTING	10	20	N
COMP3731	CRYPTOGRAPHY	10	20	N
COMP3741	PARALLEL SCIENTIFIC COMPUTING	10	20	N
COMP3751	INTERACTIVE MEDIA, GAMING AND VR/AR TECHNOLOGIES	10	20	N

Year 4

MODULE CODE	MODULE TITLE	ECTS	DURHAM CREDITS	AVAILABLE FOR 1/2 TERM STUDENTS*
COMP4013	ADVANCED PROJECT	30	60	N
COMP4087	ADVANCED ALGORITHMS	5	10	N
COMP4097	ADVANCED COMPUTER GRAPHICS AND VISUALISATION	5	10	N
COMP4107	ADVANCED COMPUTER VISION	5	10	N
COMP4117	QUANTUM COMPUTING	5	10	N
COMP4137	BLOCKCHAIN AND CRYPTOCURRENCIES	5	10	N
COMP4167	NATURAL LANGUAGE PROCESSING	5	10	N
COMP4177	NETWORKS AND THEIR STRUCTURE	5	10	N
COMP4187	ADVANCED PARALLEL SCIENTIFIC COMPUTING	5	10	N
COMP4197	RANDOMISED ALGORITHMS AND PROBABILISTIC METHODS	5	10	N
COMP4221	ADVANCED MUSIC COMPUTING	10	20	N
COMP4227	DISTRIBUTED NETWORK COMPUTING AND ALGORITHMS	5	10	N
COMP4231	DATA COMPRESSION AND CODING THEORY	10	20	N

* This means that these modules may be taken by students coming to Durham for one or two terms only. Alternative assessment will be offered for these modules. This would however mean that official grades will not be given on the official Durham transcript, but an additional document will be produced for students.