

# Foundation Year in Computing

## Programme Specification

**Awarding Institution:** University of London

**Teaching Institution:** Goldsmiths, University of London

**Name of Final Award and Programme Title:** Foundation Year in Computing

**Name of Interim Exit Award(s):** Not applicable

**Duration of Programme:**

1 year full-time (Foundation) or two years part-time followed by 3 years full-time BSc

**UCAS Code(s):**

I200 (Computing)

G401 (Computer Science)

IN11 (Business Computing and Entrepreneurship)

G402 (Creative Computing)

I611 (Games Programming)

**HECoS Code(s):**

(100367) Computing and Information Technology

(100366) Computer Science

(100079) Business Studies

(100737) Multimedia Computing Science

(101020) Computer Games Programming

**QAA Benchmark Group:** Computing

**FHEQ Level of Award:** Level 3

**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:**

Not applicable

## Programme overview

This specification provides a summary of the main features of the Foundation Year for Computing. This includes the learning outcomes that typical students can reasonably be expected to achieve and demonstrate if they take full advantages of the learning opportunities that are provided.

This extension year leads to a 3-year Undergraduate degree in one of the following disciplines:

UCAS: I200 (Computing)

UCAS: G401 (Computer Science)

UCAS: IN11 (Business Computing and Entrepreneurship)

UCAS: G402 (Creative Computing)

UCAS: I611 (Games Programming)

## Programme entry requirements

We do not assume any prior knowledge of Computing for this programme. Candidates under the age of 21 will be expected to have recently undertaken some form of Advanced Level (GCE or equivalent) study and achieved the equivalent of two passes (E or better) at A2 level. The only requirement for candidates who are aged 21 and over will be to pass an aptitude test.

The module will be delivered in English, and, whilst language support is available at the college, we would normally expect candidates for whom English is an additional language to have a competency level equivalent to an IELTS score of 6.0.

## Aims of the programme

The purpose of the Foundation Year in Computing is to provide students with a challenging educational experience that will equip them, upon completion, to undertake undergraduate study within the Department of Computing at Goldsmiths. The programme aims to develop learners' interest in and knowledge and understanding of, the theory and practice of Computing and Information Technology. Learners will be given the opportunity to develop the critical and intellectual skills needed to be able to analyse problems, design and implement solutions, and communicate those solutions in a variety of forms.

## What you will be expected to achieve

Students who successfully complete the Foundation Year in Computing will demonstrate the following knowledge and skills:

### Knowledge and understanding

Code	Learning outcome	Taught by the following module(s)
A1	Fundamental concepts of computer programming	Foundations of Programming; Foundations of Problem Solving

<b>Code</b>	<b>Learning outcome</b>	<b>Taught by the following module(s)</b>
A2	Fundamental mathematical techniques and how they relate to computer systems	Foundations of Mathematics for Computing
A3	The architecture of processing and file storage in a computer system	Studying Computers
A4	Basic operations of operating systems	Studying Computers
A5	A variety of software packages applicable to an academic, software development and business environment	Studying Computers

### **Cognitive and thinking skills**

<b>Code</b>	<b>Learning outcome</b>	<b>Taught by the following module(s)</b>
B1	Create, analyse and operate simple computer programs	Foundations of Programming
B2	Identify, and apply appropriate mathematical techniques to solve specific problems	Foundations of Mathematics for Computing
B3	Manage file and data storage within a computer system	Studying Computers
B4	Use a variety of software packages applicable to a range of academic, software development and business situations	Studying Computers

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

<b>Code</b>	<b>Learning outcome</b>	<b>Taught by the following module(s)</b>
C1	Create, analyse and operate simple computer programs	Foundations of Programming
C2	Develop complete, though limited computing projects, individually and in groups	This will be taught by students doing practical work with guidance from staff in the practical modules in the first year.
C3	Manage file and data storage within a computer system	Studying Computers
C4	Use a variety of software packages applicable to a range of academic, software development and business situations	Studying Computers

## Transferable skills

Code	Learning outcome	Taught by the following module(s)
D1	Solve problems in a systematic, logical manner	Foundations of Problem Solving
D2	Organise information and determine relevance in a structured way	Studying Computers
D3	Manage time and work to deadlines	Studying Computers; Foundations of Programming; Foundations of Problem Solving; Foundations of Mathematics for Computing
D4	Communicate ideas effectively	Studying Computers

## How you will learn

Modules are taught by a combination of lectures, tutorials, workshops and laboratory sessions. These will introduce you to ideas and concepts related to specific topics, and you'll be encouraged to discuss and debate the issues raised. This will enhance your academic knowledge of the subject, improve your communication skills, and enable you to develop high level practical and technical skills in computing.

But this is just a small proportion of what we expect you to do on the degree. For each hour of taught learning, we expect you to complete another 5-6 hours of independent study. This typically involves carrying out research, preparing topics for discussion, or producing project work.

This emphasis on independent learning is very important at Goldsmiths. We don't just want you to accept what we tell you without question. We want you to be inspired to find out more, to develop your own ideas, and to find the evidence that will back them up. Independent study requires excellent motivation and time management skills. These skills will stay with you for life, and are the kind of transferable skills that are highly sought after by employers.

Learning and teaching on this degree will take place through:

Lectures

Tutorials

Workshops Laboratory sessions

Independent learning Presentations Assessments

## How you will be assessed

Unseen examinations (A1-5), coursework assignments (A1, A2, A5) and report writing (A1, A2).

A combination of unseen examinations (B/C1, B/C2), coursework assignments (B/C1-4), and report writing (B/C1, B/C4). Coursework (including report writing) and oral presentation in the Study Skills module will assess D1, D2 and D4 explicitly. All examinations, coursework, and project reports will implicitly assess D1-4.

## Marking criteria

Mark	Descriptor	Specific Marking Criteria
80-100%	1st: First (Exceptional)	Represents an exceptional achievement beyond the standard requirements of a first class degree. Students' work should demonstrate considerable creative thought and be based on a critical evaluation of prior work. Work is likely to achieve some outcomes that would be expected at a higher level degree
70-79%	1st: First (Excellent)	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 implementation; insight reflects depth and confidence of understanding of the material. Students should be able to design and create computer systems that demonstrate considerable independent thought and are based on independent learning of prior work and existing technologies. Students should be able to critically evaluate their own work.
60-69%	2.1: Upper Second (Very good)	Demonstration of a sound level of understanding based on a competent grasp of relevant concepts, methodology and content; display of skill in interpreting complex material; organisation of material at a high level of competence. Students should be able to demonstrate the ability to independently design, implement and evaluate a high quality and complex computer systems using knowledge from across the program.
50-59%	2.2: Lower Second (Good)	Demonstration of an adequate level of understanding of relevant concepts, methodology and content; display of sufficient skill to tackle some complex problems; appropriate organisation of material. Students should demonstrate the

Mark	Descriptor	Specific Marking Criteria
		ability to create complex computer software, making use of prior knowledge and material taught within the programme
40-49%	3rd: Third (Pass)	Represents the overall achievement of the appropriate learning outcomes to a threshold level (honours). Demonstration of a limited level of understanding of relevant concepts, methodology and content; clear if limited attempt to tackle problems; display of some skill in organisation of material. Students should demonstrate creation of a basic, complete and working computing system/ programme.
25-39%	Fail	Represents an overall failure to achieve the appropriate learning outcomes.
10-24%	Bad fail	Represents a significant overall failure to achieve the appropriate learning outcomes (shall be deemed a valid attempt and not necessarily required to be re-sat).
1-9%	Very bad fail	A submission that does not even attempt to address the specified learning outcomes (shall be deemed a non-valid attempt and unit must be re-sat).
0%	Non submission or plagiarised	Work was not submitted or it was plagiarised

## How the programme is structured

The modules run in the standard academic year. Full-time candidates take the four modules in one year. Part-time candidates take the programme over two-years, studying modules Studying Computers (SC) and Foundation of Mathematics for Computing (FMC) in their first year, and Foundations of Problem-Solving (FPS) in their second year. Part-time candidates who fail to pass their first year will be allowed to continue to the second year, but will be required to resit their examinations in SC and FMC.

Assessment tasks will be designed to ensure that a candidate's percentage score reflects the department's assessment criteria.

### Full-time mode

#### Academic year of study 1

Module Title	Module Code	Credits	Level	Module Status	Term
Studying Computers	IS50004C	30	3	Compulsory	1,2

Module Title	Module Code	Credits	Level	Module Status	Term
Foundations of Problem-Solving	IS50003C	30	3	Compulsory	1-2
Foundations of Programming	IS50001C	30	3	Compulsory	1,2
Foundation of Mathematics for Computing (FMC)	IS50002B	30	3	Compulsory	1,2

## Part-time mode

### Academic year of study 1

Module Title	Module Code	Credits	Level	Module Status	Term
Studying Computers	IS50004C	30	3	Compulsory	1,2
Foundation of Mathematics for Computing (FMC)	IS50002B	30	3	Compulsory	1,2

### Academic year of study 2

Module Title	Module Code	Credits	Level	Module Status	Term
Foundations of Problem-Solving	IS50003C	30	3	Compulsory	1-2
Foundations of Programming	IS50001C	30	3	Compulsory	1,2

## 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 explosive and ever-growing use of technology in business and commerce means that there's a whole range of different career possibilities for computing graduates. In terms of

job opportunities and salaries, the IT sector is well ahead of most other industrial and commercial sectors. The Foundation Year prepares you with the skills and knowledge necessary for studies in computing. If you successfully complete the Foundation Year and are admitted to one of our undergraduate degrees you'll benefit from the following skills and career possibilities.

Some of the recent graduate level careers for computing graduates have included:

Application programmer

Mobile App developer

Web developer

Video game developer

Film special effects and post-production Computer music/sound engineer Interface designer

Systems analyst Database manager

Employers include:

FDM Academy Hepco Motion ACL

Jigsaw Systems Ltd KCom

Sanna Systems Ltd

## **The requirements of a Goldsmiths degree**

Undergraduate degrees have a minimum total value of 360 credits. Some programmes may include a year abroad or placement year and this may be reflected in a higher total credit value. Programmes are composed of individual modules, each of which has its own credit value. Full-time students take modules to the value of 120 credits each year and part-time students not less than 45 credits and not more than 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. Each full-time year corresponds to a level of the Framework for Higher Education Qualifications (FHEQ), as follows:

Year 1 = Level 4

Year 2 = Level 5

Year 3 = Level 6

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
- “Compulsory (Non-compensatable)” – Some compulsory modules are central to the achievement of a programme’s learning outcomes. These are designated as “Non-compensatable” for that programme and must therefore be passed with a mark of at least 40% in order to pass the module.

## **Progression**

Full-time students are required to have passed modules to a minimum of 90 credits before proceeding to the next year. Part-time students must normally pass new modules to a minimum value of 45 credits before proceeding to the next year.

In addition, some programmes may specify particular modules which must be passed, irrespective of the minimum requirements, before proceeding to the next year.

## **Award of the degree**

In order to graduate with a classified degree, students must successfully complete modules to the minimum value of 360 credits, as set out within the section “The requirements of a Goldsmiths degree” above. A failed module with a mark of 35-39% may be compensated (treated as if it has been passed) so long as the average mean mark for all 120 credits at that level is 45% or above and the module has not been defined as “Non-compensatable”. No more than 60 credits may be compensated this way across a programme and no more than 30 credits at any one level.

## **Classification**

Final degree classification will usually be calculated on the basis of a student's best marks for modules equivalent to 90 credits at Level 4, 105 credits at level 5 and 105 credits at level 6, applying a relative weighting of 1:3:5 to modules at level 4, 5 and 6 respectively.

Degrees are awarded with the following classifications:

- 1st: First Class – 70%+
- 2.1: Upper Second – 60-69%
- 2.2: Lower Second – 50-59%
- 3rd: Third – 40-49%

Students who, following the application of compensation and having used all their permitted resit attempts, have passed modules to the value of 300-345 credits, at least 60 of which are at level 6 may be awarded a pass degree.

More detail on the [calculation of the final classification](#) is on our website.

## Interim exit awards

Some programmes incorporate interim exit points of Certificate of Higher Education and/or Diploma of Higher Education, which may be awarded on the successful completion of modules to the value of 120 credits at level 4 or 240 credits (120 of which at level 5) 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

Students who pass all four of the modules on the Foundation Year in Computing will be permitted to progress to any of the following undergraduate programmes offered in the Department of Computing:

- BSc Computing
- BSc Computer Science
- BSc Business Computing and Entrepreneurship
- BSc Games Programming
- BSc Creative Computing (subject to additional requirements detailed below)

Students wishing to progress to the BSc Creative Computing programme must obtain a high pass in Foundation Mathematics for Computing, and provide portfolio of original digital works (audio, image or video). The fundamental skills and knowledge related to digital work, essential for the Creative Computing programme, are not covered in this Extension Year.

## 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](http://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](#).