Goldsmiths
UNIVERSITY OF LONDON

Foundation in Computer Science

Programme specification

1. Programme details

Item	Information
a) Programme name (incl. pathways):	Foundation Year in Computer Science
b) Programme code(s)	Click or tap here to enter text.
c) Programme credit value(s)	120 CATS 60 ECTS
d) Programme author(s)	Dr Sarah Rauchas
e) Entry requirements	Numeracy skills at, or equivalent to a grade 4 (grade C) in GCSE Mathematics. Age: You must be 17 years of age or above. If English isn't your first language, an IELTS certificate with a score of 6.0 and no less than 5.5 in any part.
f) Academic year effective from	2025/26

2. Programme Aims & Overview

Aims

The aims of this programme are to equip students with understanding and skills, that will enable them to work with computers and software with confidence. This includes understanding what computation is, gaining confidence in the mathematics that underpins computing technology, being able to program, and becoming aware of the social and human issues connected to the use and making of computing technology.

Overview

Central to the programme is a twofold approach: the blend of underlying concepts and practical application. These are woven into a coherent whole through the modules. Students learn the underlying concepts of computation in order to support their understanding of the practical applications; these are then put into concrete scenarios where students apply their understanding to do things like writing code and developing algorithms. On completion of all modules, students will be able to work with current technology with confidence, but in addition to this they will be able to understand and use future technology through knowledge of the concepts that underly all computing technology.

3. External reference

Item	Information
a) FHEQ Level of Award:	3
b) UCAS Code(s):	Click or tap here to enter text.
c) HECoS Code(s):	Click or tap here to enter text.
d) QAA Benchmark group:	Foundation Characteristic Statement

4. Awards

Item	Information
g) Awarding institution:	University of London (Interim Exit Awards made by Goldsmiths' University)
h) Teaching institution:	Goldsmiths, University of London
i) Home School:	Computing
j) School(s) also involved in teaching of the programme:	1. Computing 2. None 3. None **If other, name here:** N/A
k) Entry awards:	☐ CertHE ☐ DipHE ☐PGCert ☐ PGDip
l) Interim exit awards:	☐ CertHE ☐ DipHE ☐PGCert ☐ PGDip
m) Final awards:	Foundation Certificate

5. Delivery

Item	Information	
a) Language of study:	English	
b) Valid intake points in year:	☒ January ☒ Sept/Oct ☒ Other If other, specify: First intake June 2026, then intakes in Sept, January and May	
c) Mode of study:	Online Distance Learning Indicate the overall balance of teaching modes in the table below.	
d) **Total hours directed learning/year**	**1200**	
e) In-person hours	0	0%
f) Online hours	1200	100%
g) Pace of study:	☐ Full time ☒ Part time	
h) Duration of programme	Full time: N/A ☐years ☐months Part time: 15 ☐years ☒months	

Item	Information
i) External accreditation:	N/A
j) Apprenticeship Standard:	N/A

6. Programme Learning Outcomes

Also, see the curriculum map at the end of document.

For UG exit awards, Learning Outcomes must be achieved in the level indicated below:

- CertHE = Level 4
- DipHE = Level 5

Learning outcomes are grouped in categories of:

- **Declarative learning** - knowledge, thinking & facts (D1-3)
- **Functional learning** - application of knowledge, thinking & facts (F1-3)
- **Professional and transferable skills and behaviours** (P1-3)

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

Learning Outcome		Level	Graduate Attribute
D1	Apply abstract reasoning to concrete problems	3	Responsible agency
D2	Describe basic mathematics concepts	3	Diversity of perspective
D3	Describe basic computation concepts	3	Diversity of perspective
F1	Write a program to achieve basic functions	3	Responsible agency
F2	Compare problem solving algorithms	3	Collaboration
F3	Apply mathematical techniques to solve computational problems	3	Collaboration
P1	Choose appropriate algorithms to solve specific problems	3	Diversity of perspective
P2	Solve complex problems through deconstruction into smaller units	3	Diversity of perspective
P3	Discuss the impact of technology use and development	3	Political in the personal

7. Programme Structure

For Undergraduate programmes (UG), each level must amount to at least **120 CATS** (60 ECTS).

Postgraduate (PGT) programmes must amount to at least 180 CATS (90ECTS), with exception to interim exit awards.

Compulsory modules must be taken by all students.

Option modules – you must choose one or more of the options available to this programme at this level and point. The option modules available from this list may vary from year to year, depending on student numbers and staff availability. Selection takes place during your studies, not before.

Also, see curriculum structure grid.

Phase 1 (FT)

Module Name	Code	Credit	Level	Type	Term	Year PT	Pathway
Introduction to Mathematics	TBC	15	3	Compulsory	Multi	N/A	N/A
Foundations of Programming	TBC	15	3	Compulsory	Multi	N/A	N/A
Fundamentals of Computation	TBC	15	3	Compulsory	Multi	N/A	N/A
Study skills for Computing (Fundamentals)	TBC	15	3	Compulsory	Multi	N/A	N/A

Phase 2 (FT)

Module Name	Module Code	Credit	Level	Module Type	Term	Year PT	Pathway
Mathematics for Computing	TBC	15	3	Compulsory	Multi	N/A	N/A
Applied Computation	TBC	15	3	Compulsory	Multi	N/A	N/A
Problem Solving and Programming	TBC	15	3	Compulsory	Multi	N/A	N/A
Critical Analysis and Thinking for Computing	TBC	15	3	Compulsory	Multi	N/A	N/A

8. Learning, Teaching & Assessment

Learning & Teaching methods

Teaching will be via a range of formats to be as relevant as possible to the topic and learning outcomes. This may be through workshops, practical labs, lectures and seminars. It may have a mix of in-person and online activities, designed to give you the best learning experience and to make the most out of your time on campus. You are expected to attend all your timetabled learning activities.

Specifically, this programme will be taught in the following ways:
An approach that highlights self-reflection is central to the teaching strategy for this programme. We see this as 'closing the feedback loop'. You will be taught fundamental concepts via lectures, forum engagement with tutors and peers and readings. You will be given some example problems and shown approaches to solutions to these. Then, slightly different problems are given, where you will be expected to provide their own solutions. Finally, students are asked to self-reflect on their own solutions and analyse how successful their own solution is in solving the problem. This may be done in a discussion context, with other students, thereby developing an ability to evaluate their own work and also the work of others. We see success as you, the student, being able to come up with a solution, but more importantly, be able to figure out whether that solution is actually correct.

Assessment modes and approaches

You will be assessed in a range ways throughout your course. These will be both Formative (for feedback and development), and Summative (required to pass and progress to the next level). Summative assessments are compulsory.

Feedback is a crucial part of your learning and development in this programme. You will receive feedback both on your Formative (work in progress) tasks/assessments, and your Summative (graded) assessments. This feedback will help the assessment to be a part of your learning, not just a test. It may be verbal, written or video based. Please engage with this feedback to improve your future work.

Specifically, this programme will be assessed in the following ways:
Formative assessment is via quizzes and discussion with peers and relevant academics. Summative assessment is in the form of examinations, the creation of portfolio work, code submissions, essays and papers, and presentations. These vary depending on the module focus and content.

Assessment diet (number of assessments for compulsory modules)

Mode	Level 3	Level 4	Level 5	Level 6	Level 7	Total
Coursework	1	0	0	0	0	1
Exam	2	0	0	0	0	2
Live (presentation, performance etc.)	2	0	0	0	0	2
Portfolio (multi-modal)	2	0	0	0	0	2
Practical / multimedia	0	0	0	0	0	0
Written	3	0	0	0	0	3
TOTAL:	**10**	**0**	**0**	**0**	**0**	**10**
Of which...	**Individual:**	**8**	**Group:**	**0**		

9. Other information

Item	Information
a) Assessment regulations	https://www.gold.ac.uk/gam/taught-programmes/assessment/
b) Placement opportunities	N/A
c) Programme-specific requirements	N/A
d) Programme specific costs and resources	N/A
e) Employability and potential career opportunities	The rapid and expanding integration of technology in industry has created diverse career opportunities for computing graduates. The IT sector consistently outperforms most other industries in terms of job prospects and salary levels. The Foundation programme equips students with the skills and knowledge required for further studies in computing, while also enabling them to pursue entry-level roles in IT. • Recent graduate careers from Goldsmiths include: • Application Programmer • Mobile App Developer • Web Developer • Video Game Developer • Film Special Effects and Post-Production Specialist • Computer Music/Sound Engineer • Interface Designer • Systems Analyst • Database Manager

10. Academic support

There is a range of support available to you to give you the best possible chance of success in this programme.

Please see your tutors and student portal/VLE for details of what's available and how to access this support.

11. Curriculum map

Programme Learning Outcomes assessed by each module:

Module name	Code	Type	D1	D2	D3	F1	F2	F3	P1	P2	P3
Introduction to Mathematics	TBC	Compulsory	☐	☒	☐	☐	☐	☐	☐	☐	☐
Foundations of Programming	TBC	Compulsory	☐	☐	☒	☒	☒	☐	☒	☒	☐
Fundamentals of Computation	TBC	Compulsory	☒	☐	☒	☐	☐	☐	☒	☐	☒
Study skills for Computing (Fundamentals)	TBC	Compulsory	☐	☒	☒	☐	☐	☐	☐	☐	☒
Mathematics for Computing	TBC	Compulsory	☒	☒	☐	☐	☐	☒	☐	☐	☐
Applied Computation	TBC	Compulsory	☒	☐	☒	☒	☒	☒	☒	☐	☐
Problem Solving and Programming	TBC	Compulsory	☒	☐	☒	☐	☒	☒	☐	☒	☐
Critcal Analysis and Thinking for Computing	TBC	Compulsory	☒	☐	☐	☐	☐	☐	☒	☒	☒