Computing Science FAQs

1. What are the compulsory modules/classes I will be taking in first year?

For our single Honours degree programmes there are 4 compulsory modules as shown below. Joint Honours students must take a prescribed subset of these.

First Term	Second Term
• Programming for Sciences and Engineering • Modelling and Problem-Solving for Computing	• Object-Orientated Programming • Computer Architecture

These courses are designed to provide a solid foundation in core areas of computing. We do not assume previous background in computing or programming before the first term courses.

2. Can I take optional modules/classes? How many? Are there any restrictions to what I can take?

In each term you will take a total of 4 modules, so you can choose optional courses to fill up any spaces not occupied by compulsory modules. Usually, this is 1 or 2 per semester. There are very few restrictions, provided the modules fit with the timetable of your compulsory modules. This can include languages, music, other sciences, etc. When you are choosing modules, you will have access to a timetable checker tool that lets you check there are no clashes before selecting your modules. For subjects for which we offer joint degrees, including Maths, Physics and certain Business topics, timetables are engineered in advance so that clashes are minimized.

3. What will my timetable in first year look like? How much contact time will I have with lecturers?

The standard format for a computing module consists of 11 weeks of lectures and 10 weeks of practical lab sessions. During each week, you'll have 2 hours of lectures and 2 hours of practical sessions, i.e., around 42 hours of contact time per module. In addition, we pride ourselves on being an open friendly department, with staff operating an `open-door' policy to help address any concerns a student may have, leading to additional contact time as needed.

4. What are the typical first year class sizes like?

There are 60-80 students in a typical first year lecture. However, you will also take part in small group exercises. Here, you will be in a group of fewer than 20 students.

5. Are there work placements available and are they built into the degree?

Around half of our students undertake a year-long placement in industry, typically between their 3rd and 4th years. Once they graduate, students often find employment where they undertook the work placement.

6. Will there be field trips in my classes?

Computing is predominantly a classroom/computer-lab based subject. However, we do run events such as the student showcase, giving you an opportunity to network with potential employers.

7. Will there be any group work/group projects?

Several of our modules have a group work component. In the 3rd year Software Engineering module you will undertake a year-long group project to build a large, industrially-relevant piece of software, preparing you to work as part of a software development team.

8. How are my modules/classes assessed? Exam, essays, in-class work?

Assessments differ between modules. Most modules have a significant continuous assessment component, such as a set of large programming exercises, essays or tests, together with a final exam to test more theoretical learning outcomes.

9. Is there an opportunity to study languages alongside my degree?

In the 1st and 2nd year, students take up to 50% non-Computing subjects, providing significant scope for language study or investigating other topics. In the 3rd and 4th years, students do more Computing content, but can nevertheless continue studying other topics, especially if pursuing a joint honours degree.

10. Should I be preparing for first year by reading anything specific? Do you have any suggestions?

We expect no subject-specific knowledge for students entering first year. However, practicing computational thinking has been found to help students achieve on the programme, and certain books are engaging and help in this regard. These include *The Lady or the Tiger & Other Logic Puzzles* by Raymond M Smullyan, and *Algorithmics: The Spirit of Computing* by David Harel. The main programming language currently used in the first year is Python and a good introduction for those with no previous experience is *The Python Workbook* by Ben Stephenson.

11. Are there any societies which would be good to join? E.g. societies that are for those studying my degree.

There is a very active computing society run by students, which offers programming competitions, hackathons, talks and support.

12. Can I study abroad with this degree? Where can I go?

Students have travelled and studied overseas as part of the exchange programmes such as Erasmus. Our students have gone to study across Europe, in the USA, and the Far East in the recent past.

13. How much time will I spend in labs each week?

You will typically spend 2 hours per module per week in one of our computer labs. However, you will spend significantly more time than this on independent work on practical topics. This can usually be done either on personal machines or in computer classrooms.