Second Year Computing Science (including Fast Track)

Building a solid platform for professional Computer Scientists and Software Engineers.

Second year courses in Computing Science

Object Oriented Software Engineering (OOSE2): basic concepts of object-oriented software engineering.


Web Application Development (WAD2): hands-on introduction to web software engineering.

Networks and Operating System Essentials (NOSE2): introduction to concepts and principles underpinning the Internet, and the basic behaviour of a computer operating system.

Algorithms and Data Structures (ADS2): fundamental data types and data structures, and algorithms which use these structures.

Algorithmic Foundations (AF2): foundational mathematics needed for Computing Science, and how they can be applied in understanding computational phenomena.

Second Year students progressing from the alternate First Year route take ADS2, AF2, CS1F, JP2, NOSE2, OOSE2, WAD2 (70 credits).
Second Year students progressing from the standard First Year route take ADS2, AF2, JP2, NOSE2, OOSE2, WAD2 (60 credits).
Fast Track students take ADS2, AF2, CS1F, CS1S, JP2, NOSE2, OOSE2, WAD2 (80 credits).
Second year BSc study requires one other subject: usually this will be a science subject.

The learning environment

Scheduled laboratory sessions are held in parallel with lectures, and focus on practical assignments, most of which involve programming.

Tutor-led examples classes and tutorials give students the opportunity to seek advice and to explore the material in more detail.