

Introduction to Computer Science

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We're delighted you're thinking about studying at Brunel University London.

Our lecturers have put together the following information to help you prepare for your course. This will give you a snapshot of the materials and reading list you'll be using. You'll get a full breakdown of information before you enrol.

On our website you can also [find out more about your modules](#) and [chat to a current student](#).

If you have any more questions, [please get in touch](#).

We look forward to welcoming you to Brunel.

Sample lecture/coursework questions

1. What do you think are the key themes in computing and how have they been influenced by computing history? (see Chapter 0 below)
2. What are the key roles of an operating system and why is each so important? (see Chapter 3 below)
3. Why is cybersecurity becoming one of the most important aspects of systems from a social and economic point of view? (see Chapter 4 below)
4. Why is sorting and searching so critical to computing and programming? Think about all the different areas where computing is used (see Chapter 5 below).
5. Discuss the pros and cons of the different programming language styles and approaches (see Chapter 6 below).
6. Is programming an art or a science? Discuss (see Chapter 7 below).



Reading list

- Computer Science: An Overview, Global Edition (Paperback) by Brookshear, Glenn, 13th edition. Pearson.
- If you're feeling ambitious, download and install [Eclipse](#) on your machine and get the "[Hello world](#)" program. This may take a while to do!

Indicative content

- **Brookshear:**
 - Chapter 0: Introduction: Background to Computer Science (includes history of computing)
 - Chapter 3: Operating Systems
 - Chapter 4: Networking and the Internet
 - Chapter 5: Algorithms
 - Chapter 6: Programming languages
 - Chapter 7: Software Engineering

