

These programme regulations should be read in conjunction with the University's <u>core regulations for</u> <u>undergraduate programmes</u>, and the <u>marking and classification conventions for undergraduate</u> <u>programmes</u>.

MEng Computer Science (G406), MEng Computer Science with Year Abroad (G407), MEng Computer Science with Placement (G410),

1. This programme is available at Durham city, in a full-time mode of study.

Level 1 (Certificate)

2. Candidates shall study and be assessed in the following modules:

| | | Credit value |
|----------------------------------|-----------------|--------------|
| Algorithms and Data Structures | <u>COMP1081</u> | 20 |
| Computational Thinking | <u>COMP1051</u> | 20 |
| Computer Systems | <u>COMP1071</u> | 20 |
| Mathematics for Computer Science | <u>COMP1021</u> | 20 |

3. Candidates shall also study and be assessed in one of the two following modules:

| | | Credit value |
|---------------------|-----------------|--------------|
| Programming (Black) | <u>COMP1101</u> | 20 |
| Programming (Gold) | <u>COMP1111</u> | 20 |

4. Candidates shall also study and be assessed in modules at the same level up to the value of 20 credits offered by any other Boards of Studies (including appropriate credit-bearing language modules offered by the University's Centre for Foreign Language Study).

Level 2 (Diploma)

5. Candidates shall study and be assessed in the following modules:

| | | Credit value |
|-------------------------|-----------------|--------------|
| Networks and Systems | <u>COMP2211</u> | 20 |
| Programming Paradigms | <u>COMP2221</u> | 20 |
| Theory of Computation | <u>COMP2181</u> | 20 |
| Artificial Intelligence | <u>COMP2261</u> | 20 |
| Data Science | <u>COMP2271</u> | 20 |
| Software Engineering | <u>COMP2281</u> | 20 |

Year 3 or 4 (Placement Year)

6. During the third or fourth year candidates shall undertake an approved placement in industry, or in an institution or organisation undertaking research, for 40 weeks.

Year 3 or 4 (Year Abroad)

7. Candidates shall spend an academic year at an overseas university, during which they will be required to follow a course of study in which computing related modules comprise a minimum of 50% of that study.

Level 3 (Degree)

- Candidates shall study and be assessed in the following module:
 Project Preparation <u>COMP3591</u> 20
- 9. Candidates shall also study and be assessed in modules to the value of 100 credits from the following

Credit value

| Compiler Design * | COMP3637 | 10 |
|--|-----------------|----|
| Computer Science into Schools * | COMP3421 | 20 |
| Advanced Computer Systems | COMP3467 | 10 |
| Algorithmic Game Theory | <u>COMP3477</u> | 10 |
| Bioinformatics | COMP3487 | 10 |
| Codes and Cryptography | COMP3491 | 20 |
| Computational Complexity | COMP3507 | 10 |
| Computational Modelling in the Humanities and Social | COMP3517 | 10 |
| Sciences | | |
| Computer Vision | COMP3527 | 10 |
| Contemporary Computer Science III * | <u>COMP3537</u> | 10 |
| Deep Learning and Reinforcement Learning | <u>COMP3547</u> | 10 |
| Design of Algorithms and Data Structures | <u>COMP3557</u> | 10 |
| Human-AI Interaction | <u>COMP3647</u> | 10 |
| Multimedia and Game Development | <u>COMP3567</u> | 10 |
| Parallel Scientific Computing I | <u>COMP3577</u> | 10 |
| Public Engagement in Computer Science | <u>COMP3621</u> | 20 |
| Project Management | <u>COMP3587</u> | 10 |
| Recommender Systems | COMP3607 | 10 |
| Security Engineering | <u>COMP3657</u> | 10 |
| Virtual and Augmented Reality | COMP3617 | 10 |
| Either Up to 20 credits of Level 2 or 3 modules offered by | | |
| another Board of Studies | | |
| Or a Level 1 language module offered by the University's | | |
| Centre for Foreign Language Study | | |

Level 4 (Degree)

10. Candidates shall study and be assessed in the following modules:

| | | Credit value |
|------------------|----------|--------------|
| Advanced Project | COMP4013 | 60 |

11. Candidates shall also study and be assessed in modules to the value of 60 credits from:

| | | Credit value |
|---|-----------------|--------------|
| Advanced Algorithms | <u>COMP4087</u> | 10 |
| Advanced Computer Graphics and Visualisation | <u>COMP4097</u> | 10 |
| Advanced Computer Vision | <u>COMP4107</u> | 10 |
| Alternative Computing | <u>COMP4117</u> | 10 |
| Automated Reasoning and Verification * | <u>COMP4127</u> | 10 |
| Blockchain and Cryptocurrencies | <u>COMP4137</u> | 10 |
| Contemporary Computer Science IV * | <u>COMP4147</u> | 10 |
| Learning Analytics | <u>COMP4157</u> | 10 |
| Natural Language Processing | <u>COMP4167</u> | 10 |
| Networks and their Structure | <u>COMP4177</u> | 10 |
| Parallel Scientific Computing II | <u>COMP4187</u> | 10 |
| Randomised Algorithms and Probabilistic Methods | <u>COMP4197</u> | 10 |
| | | |

Assessment, progression and award

- 12. Modules marked with * are not available in 2021-2022.
- 13. Students who fail to achieve the standard required under the Core Regulations for progression to Level 2 of the MEng but who achieve the standard required for progression to Level 2 of a Bachelors programme may progress to Level 2 of the BSc in Computer Science in the Ordinary stream in accordance with the Core Regulations.
- 14. Students who fail to achieve the standard required under the Core Regulations for progression to Level 3 of the MEng but who achieve the standard required for progression to Level 3 of a Bachelors programme may progress to Level 3 of the BSc in Computer Science in the Honours or Ordinary stream in accordance with the Core Regulations.

- 15. A student who is qualified to progress from Level 2 to Level 3 of the MEng programme but who wishes to transfer to Level 3 of the BSc in Computer Science shall be permitted to do so.
- Students whose achievement at the end of Level 3 does not qualify them to proceed to Level
 4 may be awarded the degree of BSc in Computer Science at either Honours or Ordinary level
 in accordance with the Core Regulations for the award of a Bachelors degree
- 17. Students whose achievement at the end of Level 4 does not qualify them to be awarded an MEng degree may be awarded the degree of BSc in Computer Science at either Honours or Ordinary level in accordance with the Core Regulations for the award of a Bachelors degree
- 18. Modules marked with the ~ symbol must be passed at 40% or above for the award of an honours degree. A mark of 30-39% cannot be compensated.

Placement Year – Year 3 or Year 4

- 19. Students admitted to the MEng Computer Science (G406) are able to apply to transfer to the MEng Computer Science with Placement (G410).
- 20. Candidates wishing to transfer to the MEng Computer Science with Placement (G410) to undertake a placement during their third year must:
 - a. have successfully completed Level 1 of the MEng Computer Science (G406) and progressed to Level 2 of the Honours programme; and
 - b. during the first term of Level 2 study, apply via the School's placement coordinator to the Board of Studies in Computer Science to be admitted to the MEng Computer Science with Placement (G410) and have their application approved by the Board of Studies; and
 - c. secure a placement opportunity with an institution or organisation and have this approved by the Board of Studies; and
 - d. successfully complete Level 2 of the MEng Computer Science so as to be eligible to progress to Level 3 of the MEng Computer Science (G406) Honours programme.
- 21. Candidates wishing to transfer to the MEng Computer Science with Placement (G410) to undertake a placement during their fourth year must:
 - a. have successfully completed Level 2 of the MEng Computer Science (G406) and progressed to Level 3 of the Honours programme; and
 - b. during the first term of Level 3 study, apply via the School's placement coordinator to the Board of Studies in Computer Science to be admitted to the MEng Computer Science with Placement (G410) and have their application approved by the Board of Studies; and
 - c. secure a placement opportunity with an institution or organization and have this approved by the Board of Studies; and
 - d. successfully complete Level 3 of the MEng Computer Science so as to be eligible to progress to Level 4 of the MEng Computer Science (G406) Honours programme.
- 22. During the placement year:
 - a. Students will receive a salary from the placement provider in their year away, Durham will charge a lower tuition fee (20% of full fee).
 - b. During the placement, students will have an assigned 'placement advisor' staff member who will provide advice and guidance. In some cases, a visit may be made to the placement provider premises.

Year Abroad – Year 3 or Year 4

23. Students admitted to the MEng Computer Science (G406) are able to apply to transfer to the MEng Computer Science with Year Abroad (G407). Students undertaking the MEng Computer Science with Year Abroad (G407) will undertake an approved exchange in an overseas university taking a course of study chosen in consultation with the departmental exchange coordinator or their academic adviser and the host institution.

- 24. Candidates wishing to transfer to the MEng Computer Science with Year Abroad (G407) to undertake a year abroad during their third year must:
 - a. have successfully completed Level 1 of the MEng Computer Science (G406) and progressed to Level 2 of the Honours programme; and
 - b. during the first term of Level 2 study, apply via the School's exchange coordinator to the Board of Studies in Computer Science to be admitted to the MEng Computer Science with Year Abroad (G407) and have their application approved by the Board of Studies; and
 - c. secure an exchange opportunity with an approved international partner institution of the University; and
 - d. successfully complete Level 2 of the MEng Computer Science so as to be eligible to progress to Level 3 of the MEng Computer Science (G406) Honours programme.
- 25. Candidates wishing to transfer to the MEng Computer Science with Year Abroad (G407) to undertake a year abroad during their fourth year must:
 - a. have successfully completed Level 2 of the MEng Computer Science (G406) and progressed to Level 3 of the Honours programme; and
 - b. during the first term of Level 3 study, apply via the School's exchange coordinator to the Board of Studies in Computer Science to be admitted to the MEng Computer Science with Year Abroad (G407) and have their application approved by the Board of Studies; and
 - c. secure an exchange opportunity with an approved international partner institution of the University; and
 - d. successfully complete Level 3 of the MEng Computer Science so as to be eligible to progress to Level 4 of the MEng Computer Science (G406) Honours programme.
- 26. The marks achieved by the student during the period of study abroad will not contribute to the marks for degree classification. Students who the Board of Examiners for Computer Science deem to have made satisfactory progress on the year abroad will continue to Level 3 or Level 4 of the MEng Computer Science with Year Abroad (G407) programme. Students who have not made satisfactory progress on the year abroad will not be permitted to continue on the MEng Computer Science with Year Abroad (G407) programme, but must instead proceed to Level 3 or Level 4 of the MEng Computer Science (G406) programme.

Professional accreditation

- 27. The MEng Computer Science (G406), MEng Computer Science with Year Abroad (G407) and MEng Computer Science with Placement (G410) programmes are accredited by the British Computer Society, the Chartered Institute for IT for the purposes of fully meeting the academic requirement for registration as a Chartered IT Professional (CITP) for students entering Level 1 up to and including October 2020.
- 28. The MEng Computer Science (G406) programme was accredited by the British Computer Society, the Chartered Institute for IT on behalf of the Science Council for the purposes of partially meeting the academic requirement for registration as a Chartered Scientist (CSci) for students entering Level 1 up to and including October 2020. The British Computer Society withdrew from Science Council membership in February 2019, there will no longer be an opportunity for CSci registration with BCS.