

Durham University Faculty Handbook Online www.durham.ac.uk/faculty.handbook/

C-- d:4

One al!4 . . . l. . .

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

 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)

8. Candidates shall study and be assessed in the following module:

Project Preparation	COMP3591	20

 Candidates shall also study and be assessed in modules to the value of 100 credits from the following

Credit value

Advanced Computer Systems	COMP3467	10
Algorithmic Game Theory	COMP3477	10
Bioinformatics	COMP3487	10
Compiler Design *	COMP3637	10
Computational Complexity	COMP3507	10
Computational Modelling in the Humanities and Social	COMP3517	10
Sciences		
Computer Science into Schools	COMP3421	20
Computer Vision	COMP3527	10
Contemporary Computer Science III *	COMP3537	10
Cryptography	COMP3697	10
Data Compression	<u>COMP3687</u>	10
Deep Learning	<u>COMP3547</u>	10
Design of Algorithms and Data Structures	COMP3557	10
Human-Al Interaction	<u>COMP3647</u>	10
Introduction to Music Processing	<u>COMP3717</u>	10
Multimedia and Game Development	<u>COMP3567</u>	10
Natural Computing Algorithms	<u>COMP3677</u>	10
Parallel Scientific Computing I	COMP3577	10
Project Management	COMP3587	10
Recommender Systems	COMP3607	10
Reinforcement Learning	<u>COMP3667</u>	10
Virtual and Augmented Reality	<u>COMP3617</u>	10
Either Up to 20 credits of Level 2 or 3 modules offered by		

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	COMP4087	10
Advanced Computer Graphics and Visualisation	COMP4097	10
Advanced Computer Vision	<u>COMP4107</u>	10
Applied Cryptography *	COMP4217	10
Blockchain and Cryptocurrencies	<u>COMP4137</u>	10
Coding and Information Theory *	COMP4207	10
Contemporary Computer Science IV *	COMP4147	10
Distributed Network Computing and Algorithms	COMP4227	10
Learning Analytics	<u>COMP4157</u>	10
Natural Language Processing	COMP4167	10
Networks and their Structure	COMP4177	10
Parallel Scientific Computing II	<u>COMP4187</u>	10
Quantum Computing	COMP4117	10
Randomised Algorithms and Probabilistic Methods	COMP4197	10

Assessment, progression and award

- 12. Modules marked with the # symbol must be passed at 40% in order to progress to the next level of study.
- 13. Modules marked with the * symbol are not available in2023-24.
- 14. 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 accordance

- with the Core Regulations.
- 15. 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 accordance with the Core Regulations.
- 16. 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.
- 17. 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
- 18. 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
- 19. 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

- 20. Students admitted to the MEng Computer Science (G406) are able to apply to transfer to the MEng Computer Science with Placement (G410).
- 21. 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 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) programme.
- 22. 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 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) programme.

23. 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

- 24. 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.
- 25. 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
 - 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) programme.
- 26. 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
 - 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.
- 27. 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

28. 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.