

## Programme Specification 2025-26

<b>1.</b>	<b>Programme title</b>	MSc Computer Science
<b>2.</b>	<b>Awarding institution</b>	Middlesex University
<b>3a</b>	<b>Teaching institution</b>	Middlesex University London
<b>3b</b>	<b>Language of study</b>	English

<b>4a</b>	<b>Valid intake dates and mode of study</b>
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<b>Mode of Study</b>	<b>Cohort</b>	<b>Delivery Location</b>	<b>Duration</b>
Full-time (FT)	Semester 1	Hendon	1 Years
Full-time (FT)	Semester 1	Hendon	15 Months
Full-time (FT)	Semester 1	Hendon	24 Months
Full-time (FT)	Semester 2	Hendon	1 Years
Full-time (FT)	Semester 2	Hendon	15 Months
Full-time (FT)	Semester 2	Hendon	24 Months
Part-time (PT)	Semester 1	Hendon	30 Months
Part-time (PT)	Semester 2	Hendon	30 Months

<b>4c</b>	<b>Delivery method</b>	On Campus/Blended Learning
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<b>5. Professional/Statutory/Regulatory body (if applicable)</b>
N/A

<b>6.</b>	<b>Apprenticeship Standard (if applicable)</b>	N/A
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<b>7. Final qualification(s) available</b>
<b>Target Award Title(s)</b>
MSc Computer Science
MSc Computer Science with Professional Placement (15 months)
MSc Computer Science with Professional Placement (24 months)
<b>Exit Award Title(s)</b>
PGCert Computer Science
PGDip Computer Science

<b>8. Academic year effective from</b>	2025-26
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<b>9. Criteria for admission to the programme</b>
<p>The University aims to ensure that its admissions processes are fair, open and transparent and aims to admit students who, regardless of their background, demonstrate potential to successfully complete their chosen programme of study where a suitable place exists and where entry criteria are met. The University values diversity and is committed to equality in education and students are selected on the basis of their individual merits, abilities and aptitudes. The University ensures that the operation of admissions processes and application of entry criteria are undertaken in compliance with the Equality Act.</p> <p>We take a personalised and fair approach to how we make offers. We feel it's important that our applicants continue to aspire to achieving great results and make offers which take into account pieces of information provided to us on the application form.</p> <p>This includes recognition of prior learning and experience. If you have been working, or you have other learning experience that is relevant to your programme, then we can count this towards your entry requirements and even certain modules once you start studying.</p> <p>Applicants for MSc Computer Science should normally have one of the following:</p> <ul style="list-style-type: none"> <li>•A second class or higher honours degree in a computing discipline awarded by a UK university or a qualification deemed by the University to be equivalent.</li> <li>•A second class or higher honours degree in an appropriate engineering discipline (e.g. electrical engineering) or mathematics, with a minimum of five years industrial experience pertaining to a relevant full-time role (such as a software developer) within the computing sector.</li> </ul> <p>International students whose first language is not English or who have not been taught in the English medium throughout must achieve an IELTS score of 6.5 with a minimum score of 6.0 in each band.</p>

<b>10. Aims of the programme</b>
<p>The programme aims to:</p> <p>The MSc Computer Science aims to offer contemporary programme that is underpinned by research groups in the department. To this end, the programme:</p> <p>Provides a balance of advanced computer science theory with the opportunity to gain practical, hands-on experience.</p> <p>Directs postgraduate students to relevant strands of contemporary research activity as appropriate and the knowledge and skills to undertake further research.</p> <p>Develops postgraduate students' critical thinking, enabling reflection on, and evaluation of, a range of advanced topics in computer science.</p> <p>Facilitates the necessary skills and knowledge to analyse and choose from a range of software development technologies and paradigms, and to plan and develop software in the chosen paradigm.</p> <p>Promotes an ability to critically appraise the professional, legal, and ethical framework applicable to careers in computing.</p>

Conveys the values, attitudes, and competence to apply the principles and concepts learnt in the programme when undertaking continual professional development and self-directed learning throughout their careers.

## **11. Programme learning outcomes**

### **Programme - Knowledge and Understanding**

On completion of this programme the successful student will have a knowledge and understanding of:

1. The ideas and concepts underlying a selected set of advanced topics in computer science.
2. Appropriate computer science techniques to apply to a given problem.
3. How to analyse a complex design problem and create an appropriate solution.
4. How to appraise the professional, legal, and ethical framework within which a computing professional must operate.

### **Programme - Skills**

On completion of this programme the successful student will be able to:

5. Analyse complex problems systematically and implement effective solutions.
6. Utilise a range of modelling and abstraction techniques for the specification and design of software systems.
7. Communicate effectively in writing, verbally and by presentation.
8. Display effective team working skills to make a positive contribution, as a member or leader, to the work of a group.
9. Plan and execute a challenging and substantial computing project by application of appropriate research methods.

## **12. Teaching/learning methods**

Students gain knowledge and understanding through a combination of interactive workshops, seminar discussions, key concept videos, small group and individual exercises, assignments, lab sessions, and the individual project. These provide an opportunity to address questions, raise queries, and discuss problem solving approaches, cultivating an environment for critical evaluation and selection of relevant techniques to map theory to practice. Students learn cognitive and practical skills through this teaching and learning strategy. Throughout their studies, students are encouraged to undertake independent study both to supplement and consolidate what is being learned, and to broaden their individual knowledge and understanding of the subject.

Approx. number of timetabled hours per week (at each level of study, as appropriate), including on-campus and online hours. FT 12 hours, PT 6 hours.

Approx. number of hours of independent study per week (at each level of study, as appropriate). FT 28 hours, PT 14 hours.

Approx. number of hours on placement (including placement, work-based learning or year abroad, as appropriate). FT 3 months (15 months programme) or minimum 36 weeks (24 months programme), PT N/A.

### **13. Employability**

#### **13a Development of graduate competencies**

#### **13b Employability development**

##### Development of graduate competencies

Graduate competencies are developed through a combination of curriculum design, practical learning experiences, and assessment strategies that align academic knowledge with industry expectations. For example, the programme incorporates modules with a focus on both expanding knowledge and problem solving, in addition to cultivating technical skills in areas such as machine learning, cybersecurity and software engineering, reflecting current industry demands. Other topics delivered by the programme align with professional skills such as project management, leadership, communication, teamwork and ethical considerations in technology. The assessment strategy of the programme facilitates project-based learning where students solve real-world problems. The programme also offers placement options to provide real-world, hands-on experience which can in turn facilitate opportunities to work in an interdisciplinary environment and foster entrepreneurship. By developing these employability competencies, the programme ensures graduates are not only proficient in technical knowledge but also well-equipped to meet the challenges and expectations of the professional world.

##### Employability development

Technical skills pertaining to employability are embedded within modules that equip students with cutting-edge knowledge and practical expertise in high-demand areas such as data-driven decision-making (machine learning), secure and efficient application development (software and blockchain development), and innovative technologies (virtual reality and smart environments). Students engage in projects that simulate real-world challenges, such as developing secure blockchain applications, designing intelligent systems for smart cities, or creating immersive VR experiences for industries like healthcare and education. Group assignments and collaborative challenges foster teamwork, communication, and project management skills essential for modern workplaces. Assessments focus on delivering practical, portfolio-ready outputs such as functional prototypes, software solutions, or research-based innovations aligned with current technological trends. Modules such as intelligent environments and blockchain development address evolving fields, preparing students for roles in growing commercial sectors, and the curriculum integrates professional practices, ethical considerations, and standards compliance, ensuring graduates understand their roles in secure, responsible technology development. Through guest lectures and placement opportunities, students gain exposure to workplace dynamics, build connections, and develop employability skills tailored to the commercial sector. In addition, support and embedded workshops on a range of career topics are available from the university's employability service.

#### **13c Placement and work experience opportunities (if applicable)**

For MSc Computer Science with Professional Placement (15 months) and MSc Computer Science with Professional Placement (24 months) only

As well as the normal programme structure, a programme with a placement is available (via application) for full-time students. Students can choose to apply for either a 3-month or extended placement duration (minimum 36 weeks). Students are responsible for securing

their placement through independent applications, with support available from the university's employability service. Suitable placements will typically be an appropriate role in the commercial sector relating to computer science or information systems, such as developer, IT support, or software quality assurance.

#### **13d Future careers / progression**

Successful students will be well placed for a range of roles in the professional computing sector, such as software development, quality assurance, business analysis. The strong research underpinning of the programme provides a platform for further research activity, for example the potential to secure a role in an industry-based research setting or progress to further PhD study.

#### **14. Assessment methods**

Students' knowledge and understanding is assessed by a combination of coursework, formative in-class tests, and an individual dissertation. Coursework may comprise group and individual assignments, online formative assessment via the University virtual learning (i.e., e-learning) environment, and presentations. The dissertation is assessed by a thesis report and a viva-voce examination.

Students' skills are assessed by practical assignments, such as individual and group assignments to design and develop a range of software artefacts mapping to the topics presented in the taught modules. These assignments comprise (in addition to the prototype software artefacts) written design reports, with several assessments involving presentations (both individual and group presentations).

#### **15. Programme Structure (level of study, modules, credits and progression requirements)**

Structure is indicative for Part-time routes.

Students must take all of the compulsory modules and choose following programme requirements from the optional modules.

Non-compensatable modules are noted below.

#### **Available Pathways**

Not Applicable

#### **Year 1**

##### **Year 1 Level 7 FT and PT**

<b>Code</b>	<b>Type</b>	<b>Module Title</b>	<b>Credits at FHEQ Level</b>
CST4930	Compulsory	Preparing for the Professional Placement 2025-26	0 at Level 7

CST4136	Compulsory	Cybersecurity & Cloud Systems 2025-26	30 at Level 7
CST4014	Compulsory	Immersive Application Development 2025-26	15 at Level 7
CST4015	Compulsory	Intelligent Environments 2025-26	15 at Level 7
CST4125	Compulsory	Blockchain Development 2025-26	30 at Level 7
CST4012	Compulsory	Machine Learning for Developers 2025-26	15 at Level 7
CST4011	Compulsory	Software Development 2025-26	15 at Level 7
CST4990	Compulsory	Research Methods and Postgraduate Project 2025-26	60 at Level 7

## **Year 2**

**Year 2 Level 7 Hendon FT students with placement option only**

**Year 2 Level 7 Hendon FT students with placement option only Placement Module**

<b>Code</b>	<b>Type</b>	<b>Module Title</b>	<b>Credits at FHEQ Level</b>
CST4940	Optional	Postgraduate Work Placement 2026-27	0 at Level 7
CST4950	Optional	Postgraduate Work Placement (extended) 2026-27	0 at Level 7

**Year 2 Level 7 PT**

<b>Code</b>	<b>Type</b>	<b>Module Title</b>	<b>Credits at FHEQ Level</b>
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CST4014	Compulsory	Immersive Application Development 2026-27	15 at Level 7
CST4015	Compulsory	Intelligent Environments 2026-27	15 at Level 7
CST4012	Compulsory	Machine Learning for Developers 2026-27	15 at Level 7
CST4011	Compulsory	Software Development 2026-27	15 at Level 7
CST4990	Compulsory	Research Methods and Postgraduate Project 2026-27	60 at Level 7

\*Please refer to your programme page on the website re availability of option modules

#### **16. Programme-specific support for learning**

For more information, please visit:

<https://mymdx.mdx.ac.uk/campusm/home#menu>

The Department of Computer Science Teaching and Learning approach aligns with the University's goal to promote learner autonomy and resource-based learning. To enhance the experience of Computer Science students:

Specialist Laboratories and Software:

Students have access to state-of-the-art labs equipped with industry-standard software and hardware. These facilities support areas such as programming, data analysis, machine learning, and software development. Labs are available for both structured teaching sessions and self-directed projects.

Induction and Diagnostic Assessments:

All new Computer Science students participate in an induction programme, which may include early diagnostic testing in numeracy, programming logic, and technical literacy. The University offers one-to-one tutorials and workshops for students needing additional support.

Digital and Networked Facilities:

Students are provided with a personal email account, secure networked storage, and remote access to essential software and systems, enabling effective study and collaboration.

Programme and Module Handbooks:

An electronic version of the programme handbook is posted on My Learning. distributed during enrolment. In addition, Module-specific handbooks and online learning resources covering foundational and advanced computer science topics are also provided.

Library and Support Services:

Extensive library resources, including access to technical books, academic journals, and digital archives, are available to support Computer Science learning. Students can also access personalised advice and guidance on academic and personal matters through the student support services.

**Small Group Tutorials and Continuous Feedback:**

Small group tutorials (up to 25 students) are provided for each module, enabling interactive learning and in-depth discussions on topics such as algorithms, systems architecture, and software engineering. Feedback is consistently provided on all formative assessments to facilitate continuous improvement.

**Research and Collaboration Opportunities:**

The department's research initiatives in fields such as artificial intelligence, cybersecurity, and software engineering inform teaching. Students may have the chance to collaborate on research projects with faculty members, gaining hands-on experience in cutting-edge developments.

**Support for Students with Disabilities:**

Middlesex University is committed to supporting students with disabilities. Some practical elements of the Computer Science programme, such as hands-on lab work, may require adaptations. Prospective students are encouraged to visit the campus to discuss their specific needs confidentially. For additional support, contact the Disability Support Service at [disability@mdx.ac.uk](mailto:disability@mdx.ac.uk).

**17. HECos code(s)**

100366: Computer Science

**18. Relevant QAA subject benchmark(s)**

Computing 2022

**19. University Regulations**

This programme will run in line with general University Regulations: [Policies | Middlesex University](#)

<https://www.mdx.ac.uk/about-us/policies/#regulations> This programme will run in line with general University Regulations: Policies | Middlesex University

**20. Reference points**

- QAA Computing subject benchmark statement, Computing (March, 2022) (<https://www.qaa.ac.uk/quality-code/subject-benchmark-statements/computing>)
- QAA Quality Code for Higher Education (June, 2024) (<https://www.qaa.ac.uk/quality-code>)
- QAA Master's Degree Characteristics Statement (2020) (<https://www.qaa.ac.uk/the-quality-code/characteristics-statements/characteristics-statement-masters-degrees>)
- British Computer Society (BCS) guidelines on course accreditation (April, 2022) (<https://www.bcs.org/media/1209/accreditation-guidelines.pdf>)
- Certifications for IT Professionals (<https://www.bcs.org/qualifications-and-certifications/certifications-for-professionals/>)
- Skills Framework for the Information Age (SFIA) (<https://sfia-online.org/en>)
- Association for Computing Machinery (ACM) Guidelines for Undergraduate Degree Programmes in Information Systems (2010) (<https://www.acm.org/education/curricula-recommendations>)
- European e-Competence Framework that is now known as IT Professionalism Europe (<https://itprofessionalism.org/>)
- DigiCompEdu Framework ([https://joint-research-centre.ec.europa.eu/digcompedu/digcompedu-framework\\_en](https://joint-research-centre.ec.europa.eu/digcompedu/digcompedu-framework_en))



- Middlesex University Learning and Quality Enhancement Handbook (section 3) (<https://www.mdx.ac.uk/about-us/policies/academic-quality/handbook>)
- Middlesex University Policies (<https://www.mdx.ac.uk/about-us/policies>)
- Middlesex University Graduate Competencies
- Middlesex University Learning Framework Principles for Postgraduate Programmes

## **21. Other information** *(if applicable)*

Please note programme specifications provide a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if they take full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the rest of your programme handbook and the university regulations.

## Curriculum map for MSc Computer Science Programme learning outcomes

## Knowledge and understanding

A1	The ideas and concepts underlying a selected set of advanced topics in computer science.
A2	Appropriate computer science techniques to apply to a given problem.
A3	How to analyse a complex design problem and implement an appropriate solution.
A4	How to appraise the professional, legal and ethical framework within which a computing professional must operate.

## Skills

B1	Analyse complex problems systematically and implement effective solutions.
B2	Utilise a range of modelling and abstraction techniques for the specification and design of software systems.
B3	Communicate effectively in writing, verbally and by presentation.
B4	Display effective team working skills to make a positive contribution, as a member or leader, to the work of a group.
B5	Plan and execute a challenging and substantial computing project by application of appropriate research methods.

**Programme learning outcomes - Highest level achieved by graduates**

A1	A2	A3	A4	B1	B2	B3	B4	B5
7	7	7	7	7	7	7	7	7

### Mapping by level of study and module

Module Title	Module Code by Level of study	A 1	A 2	A 3	A 4	B 1	B 2	B 3	B 4	B 5
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