Programme Specification 2025-26

1.	**Programme title**	MSc Network Management and Cloud Computing
2.	**Awarding institution**	Middlesex University
3a	**Teaching institution**	Middlesex University London
3b	**Language of study**	English

4a	**Valid intake dates and mode of study**

Mode of Study	Cohort	Delivery Location	Duration
Full-time (FT)	Semester 1	1 Hendon, 2 Dubai, 3 Mauritius	1 Years
Part-time (PT)	Semester 1	1 Hendon, 2 Dubai, 3 Mauritius	2 Years
Full-time (FT)	Semester 1	Hendon	15 Months
Full-time (FT)	Semester 1	Hendon	24 Months
Full-time (FT)	Semester 2	Dubai	1 Years
Part-time (PT)	Semester 2	Dubai	2 Years

4c	**Delivery method**	On Campus/Blended Learning

5. Professional/Statutory/Regulatory body (if applicable)
N/A

6.	**Apprenticeship Standard** (if applicable)	N/A

7. Final qualification(s) available
Target Award Title(s)
MSc Network Management and Cloud Computing
MSc Network Management and Cloud Computing with Professional Placement (15 months) (London, full time only)
MSc Network Management and Cloud Computing with Professional Placement (24 months) (London, full time only)
Exit Award Title(s)

PGCert Network Management and Cloud Computing
PGDip Network Management and Cloud Computing

8. Academic year effective from	2025-26

9. Criteria for admission to the programme

Applicants for the programme should normally have one of the following:
•A second class or higher honours degree in Cybersecurity, Computer Science, or a closely related discipline awarded by a UK university or a qualification deemed equivalent by the University.
•A second class or higher honours degree in Engineering (e.g. Electrical Engineering), Mathematics, or another technical discipline, with a minimum of three years of industry experience in Network Management and Cloud Computing or have been accepted through an interview as part of the application process.
Using the Recognition of Prior Learning (RPL) Framework

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.

English Language Requirements
International students whose first language is not English, or who have not been taught in English throughout their academic career, must achieve an IELTS score of 6.5, with a minimum of 6.0 in each component. Equivalent English language qualifications may also be considered.
By implementing these criteria, the programme ensures inclusivity while maintaining the highest academic standards, preparing students for the evolving challenges of cybersecurity.

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.

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.

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

10. Aims of the programme

The programme aims to:

The programme aims to equip students with:
An awareness of the fundamental importance of cloud computing and information management related to the business objectives of an organisation

Ability to involve both the management and the user in the process of awareness, decision and implementation of a computer network

Ability to prepare a project budget and implementation strategy appropriate for the management of a major IT project

Ability to evaluate cloud computing architecture as well as organisational and economic aspects of developments as new opportunities for business process redesign and/or expansion

Ability to make a functional and technical design of an information system based on project goals and company's standards and quality systems.

Ability to evaluate the performance of a communication system using analytical and/or simulation tools and manage the implementation of a complete communication design project

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 evalution of information networks and cloud computing systems in an organisational context.
2. The application of network modelling, analysis and simulation skills.
3. The creation of a network model, and the use of this model to describe the current network situation, identify system risks and security issues.
4. The analysis and identification of the main threats to network security and cloud computing systems.
5. The appraisal of the use and operation of network management software and cloud computing access policies.
Programme - Skills
On completion of this programme the successful student will be able to:
6. Design and implement computer networks for companies and organisations.
7. Configure and operate network management software (SNMP)
8. Troubleshoot network faults and develop solutions to fix them.
9. Implement and monitor network forensics and disaster recovery techniques.

10. Apply research methods and domain-specific knowledge to plan, manage and execute a significant research project, demonstrating originality, critical thinking, and effective problem-solving.

12. Teaching/learning methods

Delivery Approach: Workshops, hands-on lab sessions, group projects, and online sessions including key concept videos
Independent Study: Students are expected to spend approximately 28 hours per week per module (full-time) on independent study, in addition to contact hours.
Inclusive Learning: Research-informed teaching, accessibility considerations, and diverse learning resources are embedded throughout the program.

The programme aims to produce graduates who are confident, capable, and highly motivated. They will be equipped to make significant contributions in industry and research in the exciting fields of Network Management and Cloud Computing. This programme has a solid track record in producing graduates that are well-known and well respected in these areas of endeavor.

This is achieved by a comprehensive development programme to develop key skills and competencies including network simulation and analysis, building real networks, as well as business strategy and economic impact considerations and evaluation. This approach, in turn, will lead to new abilities including designing and administering Enterprise-Class networks and new Data Centers using AWS and Hadoop Cloud Platforms.

The graduates of our MSc Network Management and Cloud Computing Programme have found jobs all over the world as the global demand for these skills continue to increase.

13. Employability

13a Development of graduate competencies

13b Employability development

Development of graduate competencies
The MSc Network Management and Cloud Computing programme is designed to develop advanced competencies that align with Middlesex University's Graduate Competencies at the Postgraduate Level, ensuring graduates are equipped to navigate and lead in the rapidly evolving network management techniques. Competencies are integrated through theoretical instruction, practical applications, interdisciplinary research, and industry collaborations.
Key Graduate Competencies
Leadership and Influence
•Competency: Graduates will proactively lead networking teams, research initiatives, and professional projects, influencing decision-making and policy development.
•How Achieved: Leadership in group projects, engagement in research-led learning, and industry-based challenges in modules such as CST4990 (Research Methods & PG Individual Project) and CST4542 (Network Management and Disaster Recovery).
Entrepreneurship (Mindset)
•Competency: Students will develop an entrepreneurial mindset, identifying and addressing complex challenges using interdisciplinary approaches.

•How Achieved: Real-world problem-solving in Cloud Systems via CST4575 (Virtualisation and Cloud Infrastructure Management), integrating insights from such as CST4622 (Operating Systems for Secure Environments).

Curiosity and Learning
•Competency: Graduates will demonstrate intellectual curiosity by exploring emerging network management techniques contributing original insights to the field.
•How Achieved: Independent research assignments, self-directed study opportunities, and participation in CST4542 (Network Management and Disaster Recovery) and CST4585 (Enterprise Troubleshooting and Network Forensics) and CST4622 (Operating Systems for Secure Environments).

Communication, Empathy, and Inclusion
•Competency: Students will be able to articulate complex networking and security concepts to technical and non-technical stakeholders while fostering an inclusive culture.
•How Achieved: Presentations, technical report writing, and teamwork-based assessments in modules such as CST4542 (Network Management and Disaster Recovery) and CST4545 (Programming, Systems, and Networks for Modern Computing).

Collaborative Innovation
•Competency: Graduates will lead and contribute effectively to network management and cloud systems research and problem-solving teams, ensuring knowledge exchange and critical evaluation.
•How Achieved: Group-based research projects, and team-oriented coursework in CST4575 (Virtualisation and Cloud Infrastructure Management)

Resilience and Adaptability
•Competency: Graduates will demonstrate resilience in addressing evolving cyber threats, adapting to new regulations and technological shifts.
•How Achieved: Exposure to real-world security case studies, adaptive problem-solving assignments, and industry projects in CST4565 (Network Security Principles and Mechanisms).

Problem Solving and Delivery
•Competency: Students will solve real-world cybersecurity challenges through advanced methodologies and data-driven decision-making.
•How Achieved: Application of AI and ML technologies in network management and cloud systems, complex modelling exercises, and simulations within CST4542 (Network Management and Disaster Recovery) and CST4622 (Operating Systems for Secure Environments).

Technological Agility
•Competency: Graduates will be proficient in the use of cutting-edge networking tools, AI-driven security analysis, and forensic techniques.
•How Achieved: Hands-on training with cloud platforms, AI integration in security frameworks, and exposure to quantum computing methodologies within CST4565 (Network Security Principles and Mechanisms) and CST4585 (Enterprise Troubleshooting and Network Forensics).

Integrated Learning Approach
•Practical learning through labs, workshops, and scenario-based cybersecurity assessments.
•Research-informed teaching delivered by academics with industry experience.

•Real-world engagement through guest lectures, network management and cloud industry talks, and applied projects.

This comprehensive development of competencies ensures graduates are career-ready, adaptable, and equipped to lead in the rapidly evolving field of network management and cloud computing.

Employability development
The programme is designed to ensure career readiness through a combination of practical learning and exposure to real-world challenges. Modules are developed and delivered by academics with significant experience in both industry and research, providing students with insights into current trends and best practices in cybersecurity. The Programme Leader (PL) and Module Leaders (ML) will actively invite guest speakers from industry to run workshops and deliver talks, offering students valuable opportunities to learn from and network with professionals. Hands-on learning is further emphasized through lab-based activities, case studies, and scenario-based assessments, enabling students to develop practical skills directly applicable to professional environments.

13c Placement and work experience opportunities (if applicable)

For MSc Network Management and Cloud Computing with Professional Placement (15 months) and MSc Network Management and Cloud Computing 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

Graduates will be equipped to pursue roles such as Cloud Architect, Networking Manager, Cloud Infrastructure Developer, Network Strategist, and Future Networks Designer. For those wishing to do further study, doctoral research in new technologies such as Connected and Autonomous Vehicles, 6G and Quantum Computing would be great topics to pursue.

14. Assessment methods

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 of 36 weeks (24 months programme), PT N/A.

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

Code	Type	Module Title	Credits at FHEQ Level
CST4542	Compulsory	Network Management and Disaster Recovery 2025-26	30 at Level 7
CST4533	Compulsory	Operating Systems for Secure Environments 2025-26	15 at Level 7
CST4930	Optional	Preparing for the Professional Placement 2025-26	0 at Level 7
CST4990	Compulsory	Research Methods and Postgraduate Project 2025-26	60 at Level 7
CST4585	Compulsory	Enterprise Troubleshooting and Network Forensics 2025-26	15 at Level 7
CST4575	Compulsory	Virtualisation and Cloud Infrastructure Management 2025-26	30 at Level 7

CST4562	Compulsory	Network Security Principles and Mechanisms 2025-26	15 at Level 7
CST4545	Compulsory	Programming, Systems, and Networks for Modern Computing 2025-26	15 at Level 7

Year 2

Year 2 Level 7 Hendon FT students with placement option only

Code	Type	Module Title	Credits at FHEQ Level
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

Code	Type	Module Title	Credits at FHEQ Level
CST4990	Compulsory	Research Methods and Postgraduate Project 2026-27	60 at Level 7
CST4575	Compulsory	Virtualisation and Cloud Infrastructure Management 2026-27	30 at Level 7
CST4542	Compulsory	Network Management and Disaster Recovery 2026-27	30 at Level 7

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

16. Programme-specific support for learning
Programme-specific Support for Learning: Network Management and Cloud Computing

For more information, please visit:
https://mymdx.mdx.ac.uk/campusm/home#menu

Specialist Labs and Software:
The programme includes access to state-of-the-art laboratories equipped with industry-standard hardware and software for hands-on practice in network setup, security configuration, and cloud deployment. Labs are designed to support both guided learning and independent exploration.

The Department of Computer Science Teaching and Learning approach aligns with the University's goals to promote learner autonomy and resource-based learning. To enhance the experience of students in the Network Management and Cloud Computing programme:

Induction and Diagnostic Support:
All new students participate in an induction programme that includes diagnostic assessments in areas such as networking fundamentals, cloud concepts, and technical literacy. One-to-one tutorials and workshops to support students who may require additional help in these areas will be provided.

Access to Digital Resources:
Students are provided with a personal email account, secure networked storage, and remote access to tools and systems essential for network configuration and cloud management, including virtual environments and industry-standard platforms.

Programme and Module Handbooks:
An electronic copies of the programme handbook is accessible through My Learning. Module-specific handbooks and online resources covering topics such as virtualisation, cloud architecture, and network protocols are also provided.

Library and Support Services:
Extensive library facilities provide access to textbooks, research articles, and online repositories covering advanced networking, cloud computing, and cybersecurity. Students can also access advice and guidance from the student support services.

Small Group Tutorials and Feedback:
Tutorials are organized for small groups (up to 20 students) to provide additional teaching support and facilitate discussions on topics like network troubleshooting, load balancing, and cloud service optimization. Formative assessments are regularly reviewed with constructive feedback to enhance learning outcomes.

Research and Collaboration Opportunities:
The department's research in network technologies, cloud scalability, and IoT integration directly informs the teaching programme. Students may have the opportunity to work with academic staff on innovative projects, gaining hands-on experience in cutting-edge developments.

Support for Students with Disabilities:
Middlesex University is dedicated to supporting students with disabilities. Practical aspects of the Network Management and Cloud Computing programme, such as the use of complex software tools or hardware configurations, may require specific accommodations.

Prospective students are encouraged to visit the campus to discuss their individual needs. For further support, contact the Disability Support Service at disability@mdx.ac.uk.

17. HECos code(s)	100365: Computer Networks
17. HECos code(s)	100367: Computing and Information Technology

18. Relevant QAA subject benchmark(s)	Computing 2022

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

20. Reference points
•QAA Subject Benchmark Statement Computing (2022) •QAA Framework for Higher Education Qualifications (2024) •Middlesex University 2031 Learning Framework •Middlesex University Regulations 24/25 •Middlesex University Learning and Quality Enhancement Handbook (section 3) •QAA Characteristics Statement Master's Degree (2020) •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 Network Management and Cloud Computing
Programme learning outcomes

Knowledge and understanding

A1	The evaluation of information networks and cloud computing systems in an organisational context.
A2	The application of network modelling, analysis and simulation skills.
A3	The creation of a network model, and the use of this model to describe the current network situation, identify system risks and security issues.
A4	The analysis and identification of the main threats to network security and cloud computing systems.
A5	The appraisal of the use and operation of network management software and cloud computing access policies.

Skills

B1	Design and implement computer networks for companies and organisations.
B2	Configure and operate network management software (SNMP).
B3	Troubleshoot network faults and develop solutions to fix them.
B4	Implement and monitor network forensics and disaster recovery techniques.
B5	Apply research methods and domain-specific knowledge to plan, manage and execute a significant research project, demonstrating originality, critical thinking, and effective problem-solving.

Programme learning outcomes - Highest level achieved by graduates

A 1	A 2	A 3	A 4	A 5	B 1	B 2	B 3	B 4	B 5
7	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	A 5	B 1	B 2	B 3	B 4	B 5
Level 7											
Programming, Systems, and Networks for Modern Computing	CST4545	□	□	□			□				
Network Security Principles and Mechanisms	CST4562				□	□	□		□		
Network Management and Disaster Recovery	CST4542	□		□	□	□		□	□	□	
Enterprise Troubleshooting and Network Forensics	CST4585				□	□				□	
Virtualisation and Cloud Infrastructure Management	CST4575	□		□	□	□	□	□		□	
Operating Systems for Secure Environments	CST4622	□	□			□	□		□		
Research Methods and Postgraduate Project	CST4990		□	□	□		□	□	□		□