Programme Specification 2025-26

1.	Programme title	MSc Building Information Modelling Management & Sustainable Digital Delivery
2.	Awarding institution	Middlesex University
3a	Teaching institution	1 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	Distance Learning	1 Years
Part-time (PT)	Semester 1	Distance Learning	2 Years

4c	Delivery method	Distance Education

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 Building Information Modelling Management & Sustainable Digital Delivery
Exit Award Title(s)
PGCert Building Information Modelling Management & Sustainable Digital Delivery
PGDip Building Information Modelling Management & Sustainable Digital Delivery

8. Academic year effective from	2025-26

9. Criteria for admission to the programme

Degree qualification (minimum lower 2nd class) in an appropriate construction discipline (e.g. architecture, architectural technology, civil, mechanical, electrical engineering, surveying etc.) + 3 years relevant industrial experience

OR

• Corporate membership of a relevant professional body including 3 years of relevant industrial experience

OR

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• Relevant industrial experience on a case by case basis Candidates should also have creative, proactive qualities, ability to engage with technology, exercise leadership as an individual and work efficiently in teams. Applicants should supply evidence of the previous qualities in their personal statement.

Non-English native speakers are required to show high level of competence in the use of English, equivalent to at least 6.5 in the IELTS test or TOEFL 575 (paper based), 237 (computer based).

10. Aims

10. Aims of the programme

The programme aims to:

1.Build the knowledge of how Building Information Modelling Management (BIMM) is a managed, enhanced processes and workflows approach to the collection and exploitation of information and 3D models across a construction/infrastructure project from conception to demolition.

2.Ensure that the candidates leaving the programme are BIM enabled with a critical awareness of contemporary Integrated Digital Delivery methods and techniques informed by technology, research and management skills in standard and unpredictable scenarios.

3.Provide practitioners in the property, construction and facilities sector, and related stakeholders providing services for it, with a qualification to be employed in a management role in Building Information Modelling (BIM) projects. These include technical BIM management positions, operational/administrative BIM management positions, and strategic BIM management positions.

4.Develop skills and understanding to work in a collaborative work environment

5.Develop critical thinking, leadership, team/personal and decision- making skills, and the ability to reflect upon strategic decisions.

6.Learners' capabilities to negotiate, design and complete BIM projects/inquiries/activities which meet both their own needs and those of their employers/sponsors/organisations.

11. Programme learning outcomes

Programme - Knowledge and Understanding

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

1. Evaluation and analysis of the interactive processes involved in designing, constructing and managing a building through use of BIM 3D models and data sets, while recognising the importance of collaborative working between disciplines nationally and internationally and applying techniques and competencies to work collaboratively.

2.	2.Creative risk management techniques/procedures required for the successful implementation of a BIM project and integration of Quality assurance with risk registers.
3.	Innovative BIM management and Sustainable Digital Delivery techniques to achieve sustainable and circular desired deliverables/handover and performance outcomes aligning with all the UN SDGs, through project, facilities and operations management, considering their social and economic global impacts.
4.	Applications and implications of contractual and legal requirements within the BIM processes, realising legal relationships of all the parties involved and their impact on related insurance issues, to take actions accordingly in their management activities.
5.	Required roles and responsibilities of all stakeholders/ supply chain, involved in a BIM or digitally enabled project to collaborate across different disciplines, and develop standards/protocols at institutional, sector and project level for control, feedback and analysis.
6.	Contributions of BIM and Sustainable Digital Delivery to enhance buildings energy and carbon performance, sustainable and environmental efficiency, indoor user climate, to manage the processes required to optimise these outcomes.
7.	Mitigative solutions for complex, unpredictable situations problem solving and recovery, in order to express good judgement decision-making for specialist and non-specialist stakeholders using new industry 4.0 technologies

Programme - Skills

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

8.	Manage the application of various BIM software packages, their integration, the necessary protocols and procedures needed for networks, database systems and information sharing.
9.	Identify and apply professional ethics, codes of conduct in different work scenarios and methods to protect the integrity of the models, datasets and process workflows.
10.	Apply and analyse suitable research strategies & tools, including numeracy, qualitative/quantitative analysis on existing projects or case studies and logical reasoning skills to conduct in-depth research on management issues of projects, while also presenting an argument and formulating suitable conclusions.
11.	Identify and evaluate Key Performance Indicators (KPIs) to help define and reach goals of BIM processes and Sustainable Digital Delivery, through success in cost, quality and time.
12.	Critically analyse and apply organisational strategic management processes to human resource development, Sustainable Digital Delivery of projects, developing commercial, business, and marketing opportunities in adopting BIM processes, implementing Quality Assurance and Control procedures.
13.	Utilise communication skills (within interactive webinar discussions / debates, and written assessments) to prepare clear, referenced reports, case studies, presentations and conferences objectively in both face-to-face and online scenarios.
14.	Manage self-learning plans, encouraging Continuous Professional Development (CPD) and training to incorporate BIM and Sustainable digital delivery and demonstrate virtual management competences

12. Teaching/learning methods

Students gain knowledge and understanding through given face-to-face or online lectures, analysis of existing or new design projects, case studies, researching, reading, listening and working with industrial practitioners, observing, experimenting, drawing, writing, presenting and discussing Assessment.

Students develop cognitive skills through analysis of existing or new design projects, face-to-face or online lectures, case studies, problem solving, analysis of a variety of scenarios and example applications, technical skills enhancement, observing, experimenting, presenting and discussing.

Approx. number of timetabled hours per week (at each level of study, as appropriate), including on-campus and online hours FT - 6, PT - 4

Approx. number of hours of independent study per week (at each level of study, as appropriate) FT - 34, PT - 16

13. Employability

13a Development of graduate competencies

13b Employability development

Graduates of this programme can proceed to take on further studies e.g. PhD, like numerous alumni currently have, industry CPDs, and professional body accreditations, e.g. with the (Chartered Institute of Building (CIOB), Chartered Institute of Architectural Technology (CIAT), Royal Institute of Chartered Surveyors (RICS), Joint Board of Moderators (JBM) etc.

Graduates from the programme will be qualified and well positioned to take on a managerial role in Building Information Modelling construction and infrastructure projects either on a technical, operational or strategic level within an organisation. Examples are Model managers, BIM coordinators, BIM leads, BIM managers, BIM champions, BIM directors from any stakeholder's side whether the consultant, contractor, client etc. Graduates will have highly specialised technical, analytical and collaborative operational and strategic decision-making skills that are much sought after qualities due to the novelty of the area in concern worldwide. The programme content will be enriched by keeping industrial engagement and collaboration active and offering sponsored projects. This will help reveal current opportunities and future trends in their relevant employment sector.

Many alumni of this programme now hold positions as directors in many construction organisations globally, and some are authors of international guidance documents related to BIM and digital technologies.

13c Placement and work experience opportunities (if applicable)

There will be no placement requirement for this programme. However the programme will arrange industrial visits and seek relevant industrial partnerships. There will be strong involvement from industrial partners in terms of sponsored projects and specialist lectures. A series of 30 online/face-to-face guest lectures are compulsory for attendance and analysis by the candidates throughout the course of the programme.

13d Future careers / progression

Graduates from the programme will be qualified and expected to take on a managerial role in Business Information Modelling construction and infrastructure projects either on a technical, operational or strategic level within an organisation. Examples are Model managers, BIM coordinators, BIM leads, BIM managers, BIM champions, BIM directors from any stakeholder's side whether the consultant, contractor, client etc. Graduates will have highly specialised technical, analytical and collaborative operational and strategic decision-making skills that are much sought after qualities due to the novelty of the area in concern worldwide. The programme content will be enriched by keeping industrial engagement and collaboration active, and offering sponsored projects. This will help reveal current opportunities and future trends in their relevant employment sector.

14. Assessment methods

Students' knowledge and understanding is assessed by reflective reports on competency checkpoints and issues analysed from previous or current projects they are involved in or given. Also online research and discussion journal feedbacks, project work evaluation, coursework, presentations, publications and critical analysis dissertation of module requirements.

Students' cognitive skills are assessed by reflective reports on competency checkpoints and issues analysed from previous or current projects, project work evaluation, report and thesis writing, peer and self assessment, e- journal research and discussions, creative writing in problem solving, critical thinking, multitasking, strategic decision- making , appropriate design solutions, planning, prioritising tasks, validating and improving processes and project management.

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

The MSc Building Information Modelling Management programme is studied over either 12 months full time or 24 months part time. Study is entirely undertaken at level 7. The programme is made up of 3 consecutive modules comprising a 3-stage structure.

The 1st stage requires the mandatory module PDE4301 to be studied and awards 60 credits and the Certificate award on its successful completion. Its content about Technical BIM Management is taught using online synchronous webinars, discussion journals, case studies, occasional arranged face-to-face meetings, online material etc. The module is divided into 2 parts: i) taught competencies and ii) critical analysis for a simulated case study or for a project from prior experience of the candidate (APEL). Assessment requires preparing a reflective report by the participant showing evidence for performing the checklist of competencies and critical analyses required for this module upon analysing a simulated project or using a project from previous work experience. Assessment also includes weekly reflective journals about the topics discussed.

After completion of the 1st module, the candidate may wish to exit the programme or continue to study the 2nd stage - module PDE4302 - which awards another 60 credits and the Diploma award on its successful completion. Its content is about Operational BIM Management and is taught and assessed in the same manner as above.

After completion of the 2nd module, the candidate may wish to exit the programme or continue to study the 3rd stage - module PDE4303 - which awards another 60 credits and the Masters award on its successful completion and final accumulation of 180 credits. The module involves submission of a thesis providing original contribution to knowledge.

Throughout the stages of the programme there will be 24 weekly online synchronous webinars including Q & A delivered by experts in industry to the cohort about different learning objectives required in 3 stages of the programme.

Before starting the 3rd thesis module and in preparation for it, a "summer school" week of compulsory university full-day workshops must be attended in June/July, which can be taken in the 1st or 2nd year before or after completion of the 2nd module, but at minimum after the 1st module is completed. During these workshops the cohort will reflect and provide feedback on all prior knowledge acquired within the previous 2 modules and guest lectures, with introduction of business games/scenarios/role-play and case studies. They will also propose their thesis topics, which will be discussed with the tutors and the rest of the cohort to enhance the research arguments to provide novel contribution to knowledge regarding Strategic BIM Management.

The programme starts with a 2-day compulsory induction workshop to set the theme for the whole programme, objectives, explain learning outcomes as aligned to government policies, provide an overview introduction to Building Information Modelling Management and induction for university online resources. Also by alignment of different backgrounds and experiences of the participants together, analysing how they reason and process information and identifying their individual requirements from the programme, it would be possible to collaborate and merge their experiences.

The programme runs from the Autumn term through to the Spring term (24 weeks contact) during which the 1st only or 1st and 2nd modules may be completed leading to the 3rd thesis module that takes place over the Summer term, and which may only be taken upon completion of the first 2 modules. If only the 1st module is completed in the first year by the end of the Spring term, the candidate will finish the 2nd module in the 2nd year and must wait till summer term of the 2nd year to begin the 3rd thesis module.

Each module has a value of 60 credits. Each 60-credit module represents approximately 540 hours of student learning, endeavour and assessment. The candidate may exit the programme after any module to be awarded with a PGCert after 1st module (60 credits), PGDip after the second module (120 credits) or MSc upon completion of all 3 modules (180 credits). Classification of the PgCert award will be based on the grade for PDE4301 and this will conform to University regulation Table A. The PgDip award is not classified. Classification of the MSc award will be based on the distribution of Level 7 grades and the Thesis grade and this will conform to University regulation E4.2.

The programme will not actively recruit for PGCert or PGDip awards but will use these awards to compensate students who will need to exit during the programme based on the number of credits completed at the time.

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
PDE4331	Compulsory	Technical BIM Management: Global Frameworks 2025-26	30 at Level 7
PDE4333	Compulsory	Operational BIM Management: Global Frameworks 2025-26	30 at Level 7
PDE4332	Compulsory	Technical BIM Management: Sustainable Practice 2025-26	30 at Level 7
PDE4334	Compulsory	Operational BIM Management: Sustainable Practice 2025-26	30 at Level 7
PDE4335	Compulsory	Strategic BIM Management and Planning 2025-26	60 at Level 7

Year 2

Year 2 Level 7 PT

Code	Type	Module Title	Credits at FHEQ Level
PDE4333	Compulsory	Operational BIM Management: Global Frameworks 2026-27	30 at Level 7
PDE4334	Compulsory	Operational BIM Management: Sustainable Practice 2026-27	30 at Level 7
PDE4335	Compulsory	Strategic BIM	60 at

		Management and Planning 2026-27	Level 7

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

16. Programme-specific support for learning
Meeting the learning outcomes of this programme requires active participation in the subject and development of autonomous practice in meeting objectives. Supporting this level of active participation is achieved via regular weekly face-to-face or online tutorial contact with academic staff, productive and informed support from technical staff, the use of online resource based learning materials and discussion tools. The programme cohort will normally have weekly discussion sessions for interaction, collaboration and sharing of experiences to guide development of work through peer support. In the case of sponsored projects, industrial partners will also be part of the panel for offering guidance and support. There will also be weekly seminars/webinars with Q&A delivered by guest lecturer experts in industry in different issues related to the studied modules. The subject provides extensive studio, laboratory and workshop facilities where students can engage with their coursework assignments in a supported and productive environment.

17. HECos code(s)	100751: Information Modelling

18. Relevant QAA subject benchmark(s)	

19. University Regulations
This programme will run in line with general University Regulations: Policies	Middlesex University Refer to the University Regulations for generic guidance, and the Programme Handbook, under the Assessment section, for additional information

20. Reference points
QAA Engineering subject benchmark statement (2006) • QAA Framework for Higher Education Qualifications in England, Wales and Northern Ireland • CIOB Education Framework for Masters Degree Programmes (2010) • Middlesex University Regulations • Middlesex university's learning, teaching and assessment policy strategy

21. Other information *(if applicable)*
Additional costs include travel of students to attend the compulsory induction 2-days and the 5-day thesis workshop

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 Building Information Modelling Management & Sustainable

Programme Learning Outcomes

Knowledge and understanding

A1	Evaluation and analysis of the interactive processes involved in designing, constructing and managing a building through use of BIM 3D models and data sets, while recognising the importance of collaborative working between disciplines nationally and internationally and applying techniques and competencies to work collaboratively.
A2	Creative risk management techniques/procedures required for the successful implementation of a BIM project and integration of Quality assurance with risk registers.
A3	Innovative BIM management and Sustainable Digital Delivery techniques to achieve sustainable and circular desired deliverables/handover and performance outcomes aligning with all the UN SDGs, through project, facilities and operations management, considering their social and economic global impacts.
A4	Applications and implications of contractual and legal requirements within the BIM processes, realising legal relationships of all the parties involved and their impact on related insurance issues, to take actions accordingly in their management activities.
A5	Required roles and responsibilities of all stakeholders/ supply chain, involved in a BIM or digitally enabled project to collaborate across different disciplines, and develop standards/protocols at institutional, sector and project level for control, feedback and analysis.
A6	Contributions of BIM and Sustainable Digital Delivery to enhance buildings energy and carbon performance, sustainable and environmental efficiency, indoor user climate, to manage the processes required to optimise these outcomes.
A7	Mitigative solutions for complex, unpredictable situations problem solving and recovery, in order to express good judgement decision-making for specialist and non-specialist stakeholders using new industry 4.0 technologies.

Skills

B1	Manage the application of various BIM software packages, their integration, necessary protocols and procedures needed for networks, database systems and information sharing.
B2	Identify and apply professional ethics, codes of conduct in different work scenarios and methods to protect the integrity of the models, datasets and process workflows.
B3	Apply and analyse suitable research strategies & tools, including numeracy, qualitative/quantitative analysis on existing projects or case studies and logical reasoning skills to conduct in-depth research on management issues of projects, while also presenting an argument and formulating suitable conclusions.
B4	Identify and evaluate Key Performance Indicators (KPIs) to help define and reach goals of BIM processes and Sustainable Digital Delivery, through success in cost, quality and time.
B5	Critically analyse and apply organisational strategic management processes to human resource development, Sustainable Digital Delivery of projects, developing commercial, business, and marketing opportunities in adopting BIM processes, implementing Quality Assurance and Control procedures
B6	Utilise communication skills (within interactive webinar discussions / debates, and written assessments) to prepare clear, referenced reports, case studies, presentations and conferences objectively in both face-to-face and online scenarios.

B7	Manage self-learning plans, encouraging Continuous Professional Development (CPD) and training to incorporate BIM and Sustainable digital delivery and demonstrate virtual management competences

Programme learning outcomes - Highest level achieved by graduates

A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	B6	B7
7	7	7	7	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	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	B6	B7
Technical BIM Management: Global Frameworks	PDE4331	X	X	X		X			X	X	X			X	X
Technical BIM Management: Sustainable Practice	PDE4332	X	X	X		X			X	X	X			X	X
Operational BIM Management: Global Frameworks	PDE4333	X	X	X	X					X	X	X		X	X
Operational BIM Management: Sustainable Practice	PDE4334	X	X	X	X					X	X	X		X	X
Strategic BIM Management and Planning	PDE4335				X	X	X	X			X	X	X	X	X