

## Programme Specification 2025-26

<b>1.</b>	<b>Programme title</b>	MSc Engineering Management with Professional Placement (24 months) (London only)
<b>2.</b>	<b>Awarding institution</b>	Middlesex University
<b>3a</b>	<b>Teaching institution</b>	1 Middlesex University London
<b>3b</b>	<b>Language of study</b>	English

<b>4a</b>	<b>Valid intake dates and mode of study</b>
-----------	---

<b>Mode of Study</b>	<b>Cohort</b>	<b>Delivery Location</b>	<b>Duration</b>
Full-time (FT)	Semester 1	Hendon	

<b>4c</b>	<b>Delivery method</b>
-----------	------------------------

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

<b>6.</b>	<b>Apprenticeship Standard (if applicable)</b>	N/A
-----------	--	-----

<b>7. Final qualification(s) available</b>
<b>Target Award Title(s)</b>
MSc Engineering Management with Professional Placement (24 months)
<b>Exit Award Title(s)</b>
PGCert Engineering Management with Professional Placement (24 months) (London only)
PGDip Engineering Management

<b>8. Academic year effective from</b>	2025-26
--	---------

<b>9. Criteria for admission to the programme</b>
Applicants will be expected to have a second-class honours degree 2:2 or above in an engineering-based discipline. Graduates from other related disciplines may also be

considered on a case-by-case basis.

Successful applicants must have competence in English language. For international applicants whose first language is not English the requirement is that they have IELTS 6.5 (with minimum 6.0 in each component) or an equivalent qualification recognised by Middlesex University.

#### Principle of fair admission

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 aspires to transform graduates into visionary leaders equipped with advanced knowledge and skills in Engineering Management, enabling them to drive innovation, optimize operations and lead engineering enterprises to success in competitive global markets.

A key feature of the programme is its group project module, where students collaborate on real-world projects that closely mirror industry scenarios. This hands-on experience empowers students to tackle complex challenges, apply engineering management principles in practical contexts and develop innovative solutions. By integrating real-world industry processes, cutting-edge tools and global best practices, the programme bridges the gap between academic learning and professional practice, fostering collaboration, leadership and communication skills

### 11. Programme learning outcomes

#### Programme - Knowledge and Understanding

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

1. Application of a comprehensive knowledge of relevant subject principles (engineering, statistics, mathematics, management) to the solution of complex problems in engineering management. (AHEP4 M1).

2. Formulation and critical analysis of complex engineering management systems leading to conclusions and recommendations. (AHEP4 M2)
3. Design of solutions for complex problems that demonstrate some originality to address stakeholder needs (user, business, societal, environmental, cultural, diversity, inclusion, etc.), as well as comply with constraints such as commercial, legal, professional and industry standards. (AHEP4 M5)
<b>Programme - Skills</b> On completion of this programme the successful student will be able to:
4. Select and apply computational and analytical techniques to model complex problems related to engineering management. (AHEP4 M3)
5. Carry out technical literature reviews and the critical evaluation of these to solve complex problems related to the programme. (AHEP4 M4)
6. Evaluate the business, environmental and societal impact of solutions to complex problems and the management of their impact by considering Product Lifecycle Management approaches, including Product Data management and Application Lifecycle Management. (AHEP4 M7)
7. Work effectively as a reflective practitioner as a member of a team as well as an individual and assess own and team performance. (AHEP4 M16)
8. Communicate complex technical and academic content effectively in both oral and written forms to a technical and non-technical audience. (AHEP4 M17)

## 12. Teaching/learning methods

To achieve the programme learning outcomes, a range of delivery methods will be employed to cater to different learning styles and ensure comprehensive skill development. These methods will be a combination of both face-to-face and online learning activities to ensure flexibility and accessibility, while also encouraging engagement and independent learning. Face-to-face learning activities will include workshops and seminars, which will introduce key concepts and facilitate in-depth discussions. These sessions will encourage collaborative problem-solving, enabling students to engage with both peers and instructors. Through these activities, students will connect theoretical concepts with practical applications in real-world scenarios. Additionally, oral presentations will be integrated into modules, where students will present their assignments to the class, enhancing their communication skills and ability to defend their ideas. Collaborative team projects will also be scheduled, particularly in the later stages of the programme, to build teamwork and interpersonal skills, with a focus on project management and leadership.

Online learning activities will include real-time online sessions, designed to mirror face-to-face interactions. These sessions will provide opportunities for live feedback, discussions, and collaborative activities. Students will also participate in online team projects, working remotely on joint assignments, which will help them develop digital communication and project coordination skills. These online activities will support students in applying what they have learned while adapting to a digital workspace.

To ensure the delivery methods are inclusive and research-informed, several strategies will be adopted. The programme will incorporate diverse learning activities to cater to various learning styles, using digital tools and collaborative platforms to ensure accessibility for all

students, including those with disabilities. Additionally, course content and assessments will reflect diverse perspectives and experiences. The teaching will be grounded in current research and best practices in the field, with teaching materials regularly updated to reflect the latest developments. Students will be encouraged to engage with cutting-edge research in their assignments, and research activities, including case studies and problem-based learning, will be integrated into the curriculum to enhance student engagement with real-world challenges.

Students will be encouraged to take responsibility for their own independent study, which will play a crucial role in their learning journey. Self-guided learning will be supported through access to various learning resources, including reading materials and key concept videos. Students will be encouraged to explore topics related to the course content and deepen their understanding through independent research and reflection. An online learning platform, such as MyMDX, will provide access to learning and teaching materials, discussion forums and interactive learning tools that support independent study. This platform will also facilitate the submission of assignments and the completion of self-reflection tasks to monitor progress. Independent study will also include preparing reports for assignments, where students will research relevant topics, analyse data, and produce their findings, further developing their research and report-writing skills.

#### Distance Education:

Distance education would be supported through video conferencing solutions like MS Teams for live sessions. Recordings of the sessions will be available for students along with a detailed weekly study plan. Activity discussions will take place on module forums, where the Module Tutor will provide guidance and responses. All learning materials including reading resources, and supplementary content will be accessible on the module page within the Learning Environment.

Live in-class group work will be structured by dividing the class into teams (either randomly or through selection) and allocating them to individual meeting rooms on the online platform, such as Teams breakout rooms. Within each breakout room, students will be able to collaborate independently, while the Module Tutor can visit different groups to provide support and guidance. After the activity, all groups will return to the main session for a joint discussion and review.

Asynchronous group work will be conducted through discussion forums, where students will engage in question-based discussions and collaborative activities.

To complement the online learning experience, students will also have the opportunity to participate in a two-week residential session, where they will engage in face-to-face intensive workshops, networking events, and hands-on learning experiences. These optional, non-credit bearing components will allow students to apply their knowledge in real-world scenarios, interact with faculty and peers in a structured environment, and participate in collaborative projects, case studies, and practical sessions. Attendance at these sessions will provide a valuable opportunity for deeper engagement and experiential learning, ensuring that students gain practical skills alongside their theoretical knowledge.

A unique feature of the programme is the inclusion of placements as a structured learning method. Placements provide students with an immersive experience, allowing them to apply theoretical knowledge in real-world industry settings. This hands-on approach enables students to develop professional skills, gain valuable insights into engineering management practices, and build confidence in tackling industry challenges. Placements also allow

students to bridge the gap between academic learning and practical application, enhancing their employability and preparing them for leadership roles in the engineering sector.
<p>Approx. number of timetabled hours per week (at each level of study, as appropriate), including on-campus and online hours FT -12, PT - 6</p> <p>Approx. number of hours of independent study per week (at each level of study, as appropriate) FT -28, PT - 14</p> <p>Approx. number of hours on placement (including placement, work-based learning or year abroad, as appropriate). FT - 3 months (15 months programme) or 36-48 weeks (24 months programme)</p>

<b>13. Employability</b>
<b>13a Development of graduate competencies</b>
<b>13b Employability development</b>
<p>Graduate competencies will be developed and articulated throughout the MSc Engineering Management programme through a combination of academic coursework and practical projects. Key competencies such as problem-solving, teamwork, and communication will be embedded in the programme via real-world projects, industry simulations, and guest speakers from industry professionals. The programme is designed to cultivate Leadership and Influence, Curiosity and Learning, Communication, Empathy, and Inclusion, Collaborative Innovation, Resilience and Adaptability, Problem Solving and Delivery, Technological Agility, and an Entrepreneurial Mindset to ensure graduates are fully prepared for dynamic engineering management roles.</p> <p>Students will work on industry-integrated projects, where they will be tasked with projects sourced directly from industry. These projects will provide students with the opportunity to apply their theoretical knowledge in practical, real-world scenarios, enhancing their Problem Solving and Delivery, Technological Agility, and Collaborative Innovation skills. Through these projects, students will focus on developing critical skills such as problem-solving, project management, and communication, reinforcing their ability to lead, adapt, and innovate within complex engineering environments. This hands-on experience will allow them to connect their learning with actual industry practices and demands, developing Resilience and Adaptability in responding to real-world challenges.</p> <p>The programme will also incorporate reflective practice and portfolio development. Students will engage in reflective activities and create a portfolio of their work, which will be assessed throughout the course. This portfolio will enable students to track their progress, gain insights into their learning journey, and articulate their competencies in both academic and industry contexts. By reflecting on their experiences, students will better understand their strengths and areas for development, supporting their Curiosity and Learning, Leadership and Influence, and Entrepreneurial Mindset.</p> <p>Industry experts will be invited to share their expertise and real-world experiences through interactive sessions and case studies, providing students with valuable insights into how their academic learning applies in the workplace. These sessions will also create opportunities for students to discuss current industry trends and challenges, fostering Communication, Empathy, and Inclusion by encouraging diverse perspectives and collaborative thinking. By engaging with professionals, students will gain a deeper understanding of the evolving needs of the industry, ensuring that the programme remains aligned with real-world demands and prepares students for successful careers in engineering management.</p>

Graduate competencies will be developed and articulated throughout the MSc Engineering Management programme through a combination of academic coursework and practical projects. Key competencies such as problem-solving, teamwork, and communication will be embedded in the programme via real-world projects, industry simulations, and guest speakers from industry professionals. The programme is designed to cultivate Leadership and Influence, Curiosity and Learning, Communication, Empathy, and Inclusion, Collaborative Innovation, Resilience and Adaptability, Problem Solving and Delivery, Technological Agility, and an Entrepreneurial Mindset to ensure graduates are fully prepared for dynamic engineering management roles.

Students will work on industry-integrated projects, where they will be tasked with projects sourced directly from industry. These projects will provide students with the opportunity to apply their theoretical knowledge in practical, real-world scenarios, enhancing their Problem Solving and Delivery, Technological Agility, and Collaborative Innovation skills. Through these projects, students will focus on developing critical skills such as problem-solving, project management, and communication, reinforcing their ability to lead, adapt, and innovate within complex engineering environments. This hands-on experience will allow them to connect their learning with actual industry practices and demands, developing Resilience and Adaptability in responding to real-world challenges.

The programme will also incorporate reflective practice and portfolio development. Students will engage in reflective activities and create a portfolio of their work, which will be assessed throughout the course. This portfolio will enable students to track their progress, gain insights into their learning journey, and articulate their competencies in both academic and industry contexts.

By reflecting on their experiences, students will better understand their strengths and areas for development, supporting their Curiosity and Learning, Leadership and Influence, and Entrepreneurial Mindset.

Industry experts will be invited to share their expertise and real-world experiences through interactive sessions and case studies, providing students with valuable insights into how their academic learning applies in the workplace. These sessions will also create opportunities for students to discuss current industry trends and challenges, fostering Communication, Empathy, and Inclusion by encouraging diverse perspectives and collaborative thinking. By engaging with professionals, students will gain a deeper understanding of the evolving needs of the industry, ensuring that the programme remains aligned with real-world demands and prepares students for successful careers in engineering management.

Graduate competencies will be developed and articulated throughout the MSc Engineering Management programme through a combination of academic coursework and practical projects. Key competencies such as problem-solving, teamwork, and communication will be embedded in the programme via real-world projects, industry simulations, and guest speakers from industry professionals. The programme is designed to cultivate Leadership and Influence, Curiosity and Learning, Communication, Empathy, and Inclusion, Collaborative Innovation, Resilience and Adaptability, Problem Solving and Delivery, Technological Agility, and an Entrepreneurial Mindset to ensure graduates are fully prepared for dynamic engineering management roles.

Students will work on industry-integrated projects, where they will be tasked with projects sourced directly from industry. These projects will provide students with the opportunity to apply their theoretical knowledge in practical, real-world scenarios, enhancing their Problem Solving and Delivery, Technological Agility, and Collaborative Innovation skills. Through these projects, students will focus on developing critical skills such as problem-solving, project management, and communication, reinforcing their ability to lead, adapt, and innovate within complex engineering environments. This hands-on experience will allow them to connect their learning with actual industry practices and demands, developing Resilience and Adaptability in responding

to real-world challenges.

The programme will also incorporate reflective practice and portfolio development. Students will engage in reflective activities and create a portfolio of their work, which will be assessed throughout the course. This portfolio will enable students to track their progress, gain insights into their learning journey, and articulate their competencies in both academic and industry contexts. By reflecting on their experiences, students will better understand their strengths and areas for development, supporting their Curiosity and Learning, Leadership and Influence, and Entrepreneurial Mindset.

Industry experts will be invited to share their expertise and real-world experiences through interactive sessions and case studies, providing students with valuable insights into how their academic learning applies in the workplace. These sessions will also create opportunities for students to discuss current industry trends and challenges, fostering Communication, Empathy, and Inclusion by encouraging diverse perspectives and collaborative thinking. By engaging with professionals, students will gain a deeper understanding of the evolving needs of the industry, ensuring that the programme remains aligned with real-world demands and prepares students for successful careers in engineering management.

Employability services play a critical role in supporting MSc Engineering Management (MSc EM) students in their career progression by providing tailored services and opportunities to develop their employability. These services are closely aligned with the programme's focus on bridging academic knowledge with real-world application, ensuring students are well-prepared to excel in engineering management roles.

**Employability Skills and Training:** MSc EM students benefit from workshops designed to develop essential skills in project management, leadership, and strategic decision-making, aligning with the programme's objectives. Additional training in CV writing, interview preparation, and personal branding equips students with the tools to confidently present their expertise to potential employers.

**Personalised 1:1 Support for the MSc EM Cohort:** Tailored guidance is provided to MSc EM students to address their specific career goals in engineering management. This includes career coaching to explore roles such as project managers, supply chain managers, or operations directors, ensuring alignment with their aspirations and the skills gained during the programme.

**Employer Engagement, Vacancy Sourcing, and Advocacy:** Employability services collaborate with industry partners to connect MSc EM students with job opportunities, internships, and placements that match their skills in engineering management. The emphasis on industry engagement aligns with the programme's practical focus, including real-world projects and placements.

**Workshops with Industry Experts:** Guest speakers and panels featuring professionals from engineering and management sectors provide MSc EM students with insights into industry trends, emerging technologies, and global challenges. This complements the programme's integration of industry practices and prepares students for leadership roles.

**Career Fairs and Networking Events:** MSc EM students can network with employers from sectors such as construction, manufacturing, renewable energy, and technology. These events align with the programme's focus on preparing graduates for diverse roles in global markets.

**Access to an Online Careers Portal:** MSc EM students can access job postings, employer profiles, and sector-specific resources tailored to engineering management. The portal also offers tools to prepare for job applications and track employment opportunities globally.

Through these initiatives, Employability services support MSc Engineering Management students in translating their advanced knowledge, technical expertise and practical experience into rewarding careers. This integrated approach ensures that graduates are confident, industry-ready, and equipped to take on leadership roles in engineering management worldwide

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

Compulsory
<b>13d Future careers / progression</b>
<p>Graduates of the MSc Engineering Management programme are well-prepared to excel in a variety of engineering leadership roles, thanks to a curriculum designed to bridge advanced technical knowledge with essential management skills. The programme's modules, including Financial Management in Engineering, Human Resource Management in Engineering, Engineering Simulation, Logistics and Supply Chains, and Engineering Project Management, are tailored to provide students with the tools to navigate both the technical and strategic challenges faced by modern engineering organizations. These areas of focus ensure that graduates can lead projects, manage teams, and contribute to innovation while considering sustainability and ethical practices in their decision-making processes.</p> <p>Alumni from the programme have built successful careers in industries such as construction, renewable energy, manufacturing, and technology, stepping into roles like engineering project managers, supply chain managers, and operations directors. The in-depth study of financial management and human resource strategies equips graduates to make informed, effective decisions, while the Engineering Simulation module empowers them with the ability to apply modeling and simulation techniques to improve engineering systems. Additionally, the Logistics and Supply Chains module ensures students are capable of optimizing material flow, production, and distribution within complex systems.</p> <p>The Engineering Project Management module prepares students to manage the lifecycle of projects, from initial planning and budgeting to execution and delivery. This emphasis on project management, combined with hands-on experience through real-world industry projects, enables graduates to navigate the complexities of large-scale engineering projects with confidence.</p> <p>An added advantage of the MSc Engineering Management programme is its accreditation by the Institution of Engineering Designers (IED). This accreditation sets a clear path for students to pursue Chartered Engineer (CEng) status, enhancing their career prospects and affirming their commitment to high engineering standards. This distinction, paired with the programme's focus on leadership and problem-solving, ensures that graduates are not only prepared for immediate career success but also positioned as future leaders in the engineering field.</p> <p>In addition to these career-ready skills, the programme's integration with the university's Careers and Employability Service ensures that graduates have the continued support they need to stay competitive in a rapidly evolving job market. This ongoing guidance helps alumni remain at the forefront of engineering innovation, whether they enter the workforce directly or pursue further academic opportunities in emerging fields such as smart technologies and sustainable engineering practices.</p>

<b>14. Assessment methods</b>
Students' knowledge, understanding and skills are assessed through a combination of individual coursework, group coursework, group and individual presentations, and team projects.
<b>15. Programme Structure (level of study, modules, credits and progression requirements)</b>
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

Code	Type	Module Title	Credits at FHEQ Level
PDE4232	Compulsory	Financial Management in Engineering 2025-26	15 at Level 7
PDE4911	Compulsory	Engineering Project Management 2025-26	30 at Level 7
PDE4241	Compulsory	Engineering Management Group Project 2025-26	60 at Level 7
PDE4910	Compulsory	Logistics and Supply Chains 2025-26	30 at Level 7
PDE4905	Compulsory	Engineering Simulation 2025-26	30 at Level 7
PDE4260	Compulsory	Preparing for the Professional Placement 2025-26	0 at Level 7

### Year 2

#### Year 2 Level 7 FT

Code	Type	Module Title	Credits at FHEQ Level
PDE4262	Compulsory	Postgraduate Professional Placement (extended) 2026-27	0 at Level 7
PDE4261	Compulsory	Postgraduate Professional Placement 2026-27	0 at Level 7

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

<b>16. Programme-specific support for learning</b>	
<p>Meeting the learning outcomes of this programme requires active participation in the subject and the development of autonomous practice in meeting objectives. Supporting this level of active participation and autonomous practice is achieved via regular weekly tutorial contact with academic staff, productive and informed support from technical staff and the use of online, resource-based learning materials where appropriate. The subject provides extensive facilities where students can engage with their coursework assignments in a supported and productive environment.</p> <p>Distance education students are supported through video conferencing solutions like MS Teams for live sessions. All the learning material, reading material and instructions are accessible on the module page on the Learning Environment (MyMDX).</p>	
<b>17. HECos code(s)</b>	100184: General Or Integrated Engineering
<b>18. Relevant QAA subject benchmark(s)</b>	
<b>19. University Regulations</b>	
<p>This programme will run in line with general University Regulations: <a href="#">Policies   Middlesex University</a></p>	
<b>20. Reference points</b>	
<b>21. Other information (if applicable)</b>	

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 Engineering Management / MSc Engineering Management with Professional Placement (15 months) / MSc Engineering Management with Professional Placement (24 months)

## Programme learning outcomes

### Knowledge and understanding

A1	Application of a comprehensive knowledge of relevant subject principles (engineering, statistics, mathematics, management) to the solution of complex problems in engineering management.
A2	Formulation and critical analysis complex engineering management systems leading to conclusions and recommendations.
A3	Design of solutions for complex problems that demonstrate some originality to address stakeholder needs (user, business, societal, environmental, cultural, diversity, inclusion, etc.), as well as complying with constraints such as commercial, legal, professional and industry standards.

### Skills

B 1	Select and apply computational and analytical techniques to model complex problems related to engineering management.
B 2	Carry out technical literature reviews and critically evaluation of these to solve complex problems related to the programme.
B 3	Evaluate the business, environmental and societal impact of solutions to complex problems and the management of their impact by considering using Product Lifecycle Management approaches, including Product Data management and Application Lifecycle Management.
B 4	Work effectively as a reflective practitioner as a member of a team as well as an individual and assess own and team performance.
B 5	Communicate complex technical and academic content effectively in both oral and written forms to a technical and non-technical audience.

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

A1	A 2	A3	B 1	B2	B3	B 4	B 5
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	B 1	B 2	B 3	B 4	B 5
Level of study (year)									
Financial Management in Engineering	PDE4232						X	X	
Human Resource Management in Engineering	PDE4233			X	X	X	X	X	

Engineering Simulation	PDE4905	X	X	X	X	X		X	X
Logistics and Supply Chains	PDE4910	X		X	X	X	X	X	
Engineering Project Management	PDE4911	X	X	X	X	X	X	X	
Engineering Management Group Project	PDE4241	X	X	X			X	X	X

