UNIVERSITY OF EAST LONDON
COURSE SPECIFICATION

Course Aim and Title	MSc Construction Engineering Management
Additional Versions of this Course	MSc Construction Engineering Management with Industrial Placement
Intermediate Awards Available	PG Cert, PGDip
Teaching Institution(s)	UEL on campus
Alternative Teaching Institutions (for local arrangements see final section of this specification)	N/A
UEL Academic School	Architecture, Computing and Engineering
UCAS Code	
Professional Body Accreditation	
Relevant QAA Benchmark Statements	Engineering
Date Specification Last Updated	30/06/21

Course Aims and Learning Outcomes

This course is designed to give you the opportunity to:

- Develop specialists in how to manage multidisciplinary organisation in construction industry from different perspective such as client, contractor, designer, and supplier.
- Develop management skills and a critically reflective practice in construction.
- Apply theory into practice in the field of construction industry
- Maximise management skills and capability to work in an international environment.
- Maximise range of skills and knowledge in the area of construction and engineering such as project management, Information Communication technology, Construction law, Supply chain management, Procurement.

What you will learn:

Knowledge

- Develop and apply students' proficiency in communicating ideas to a technical and non- technical audience.
- Think critically and to solve problems in a structured logical way.
- Identify and apply appropriate theoretical frameworks to the practice.
- Demonstrate and embrace the potential of information and communication technologies
- Evaluate the standard form of subjects' used in construction
- Implement the skills and knowledge that underline management and leadership

effectiveness in the global environment

- Develop and identify the social, environmental, contractual and economic performance of design and production construction process

Thinking skills

- Critical thinking and evaluating knowledge
- Systematically analyse problems and implementation of the effective solution
- Demonstrate critical self-reflection on the knowledge and suggest further development
- Demonstrate a critical awareness of the issues and challenges involved in construction engineering management area and subjects
- Demonstrate and evaluate procurement process in construction area

Subject-Based Practical skills

- Apply and examine different methods to analyse and control construction projects
- Evaluate how different findings and results in construction can be used in decision making process
- Demonstrate and evaluate different legislation and environmental law in relate to construction
- Analyse different strategies, planning and leadership style to construction and discuss the key issues on organisation performance and team formation

Skills for life and work (general skills)

- Develop and Improve interpersonal skills and extend the ability to work effectively in a team
- Develop the ability to meet the deadline delivery under tight condition
- Apply and maximise the ability to undertake complex problem and develop appropriate solutions

Learning and Teaching

To reflect the course objectives and learning outcomes each taught module is usually assessed through a combination of various assessment techniques. These typically include group and individual work, written reports, examinations, and essays. The project module is assessed through a research proposal and the dissertation.

1. The course is supported by an integrated teaching, learning and assessment strategy that demonstrates the appropriateness of the learning, teaching and assessment methods used in relation to the intended learning outcomes. The following methods are adopted:
    - Lectures
    - Tutorials
    - Coursework assignments
    - Seminars
    - Practical work, for example in design workshops
    - The use of textbooks, journal papers, electronic databases and other self-study and e- learning materials

- Project work
- Practice sessions and learning through case studies

2. The use of coursework components for most modules will strengthen the learning strategy by providing opportunities for the students to enhance their critical thinking skills to evaluate different engineering solutions and adjust their plans in a changing environment. The aim is to enable them to deal the evolving and open-ended nature of engineering projects in the "real world". The coursework assignments will require creativity, engineering judgement, applied engineering science acquired during their current course plus skills in team working and communication.

3. The research dissertation module is designed to provide the opportunity and challenge to develop a thorough understanding of a particular problem, collect data and carry out a background research on the state-of-the-art to help devise a suitable solution, make and communicate conclusions. This module is instrumental in developing critical judgement and independent thought.

Knowledge is developed through
- Guided reading
- Knowledge-based activities with feedback

Thinking skills are developed through
- Reflective activities with feedback

Practical skills are developed through
- IT activities with feedback
- Research skills-based activities with feedback

Skills for life and work (general skills) are developed through
- The demands of the study medium
- Planning activities with feedback
- Project work

In addition, the industrial placement will provide opportunities to apply key technical knowledge and skills learnt in the taught modules, enhance their communication and interpersonal skills and improve their employment potential.

Assessment

1. To reflect the course objectives and learning outcomes each taught module is usually assessed through a combination of various assessment techniques. These typically include group and individual work, written reports, examinations, and essays. The project module is assessed through a research proposal and the dissertation.

2. The proposed expansion of coursework provision will also enhance the assessment strategy to ensure that the learning outcomes are achieved at the appropriate level, in particular that the students can apply the acquired knowledge critically to deal with various problems.

3. The following assessment methods are adopted:
   - Coursework
   - Examinations
   - Research dissertation
   - Evaluation of literature
   - Solutions to practical problems
   - Seminars
   - Use of design models
   - Use of design aids
   - Use of computer aided design packages

   Students with disabilities and/or particular learning needs should discuss assessments with the Course Leader to ensure they are able to fully engage with all assessment within the course.

Work or Study Placements

Students on the placement version of the course will undertake a placement within a partner organisation (or by means of alternative arrangements such as projects led by industry and carried out on campus) to complete a 120 P-credit Industrial Placement Module. The module is graded at either Pass or Fail, assessed by the partner industrial organisation and the University and grades reflected on the students' academic transcripts.

The industrial placement component is for a duration of an academic year, ie, normally 30 weeks including minimum 24 weeks of delivery time. It starts after students have completed the 1st year of study, ie, all the taught modules and the dissertation component of the MSc course which together form 180 credits.

Students on the two-year MSc with placement courses must pass all taught modules of their respective course plus dissertation, ie, 180 credits, before they become eligible to progress to the next stage and undertake industrial placement.

Students on the MSc course with placement will also normally be required to fulfil the 80% attendance requirement (on all modules) to be eligible to progress to the industrial placement module.

Students unable to meet the above requirements and progress successfully will normally be moved to the one-year full-time version of the course and their student visa, if any, will be curtailed accordingly.

The structure of the extended version of the MSc courses that includes the industrial placement is summarised in the following table:

For September intake:	
Term 1 (Y1: Sep – Jan)	Taught modules
Term 2 (Y1: Jan – May)	Taught modules
Term 3 (Y1: May – Sep)	Dissertation
End of July Y1	Deadline for confirming placement
Term 1 and 2 (Y2: Sep – May)	Industrial placement

For January intake:	
Term 2 (Y1: Jan – May)	Taught modules
Term 1 (Y1: Sep – Jan)	Taught modules
Term 2 (Y1: Jan – May)	Dissertation
End of March	Deadline for confirming placement
Term 3 and 1 (Y2: May – Jan)	Industrial placement

Students must check the Academic Calendar for start and end of term dates.

It is ultimately the student's responsibility to secure their placement. The University will offer guidance and support; and recommend students to our industrial partners who are interested in participating in the course. But the onus to find and secure the placement is on the students. If they are unable to secure a placement at the end of taught modules, they will be transferred back to the full time taught course without the placement component and your student visa, if applicable, will be curtailed accordingly by UKVI.

Students undertaking the Placement Module will also normally need to meet the following requirements:

- 80% attendance at the 12 week employability module workshops and classes.
- Registration on the UEL Employment Hub with CV and Covering Letter uploaded.
- Details of placement provided to the Placement Officer by 31st July (Sept starters) and 31st March (January starters).
- Placement Agreement form signed by the student and partner organisation at least 3 weeks before the placement start date.

Course Structure

All courses are credit-rated to help you to understand the amount and level of study that is needed.

One credit is equal to 10 hours of directed study time (this includes everything you do e.g. lecture, seminar and private study).

Credits are assigned to one of 5 levels:

3 Equivalent in standard to GCE 'A' level and is intended to prepare students for year one of an undergraduate degree course.
4 Equivalent in standard to the first, second, third year of a full-time undergraduate degree course.
5 Equivalent in standard to a Masters degree.
6 Equivalent in standard to the third year of a full-time undergraduate degree course.
7 Equivalent in standard to a Master degree.

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Courses are made up of modules that are each credit weighted. The

module structure of this course:

Level	Module Code	Module Title	Credit Weighting	Core/Option	Available by Distance Learning? Y/N
7	EG7034	Mental Wealth: Professional Life (Engineering Management)	30	Core	N
7	EG7036	Business Procurement and Contractual Practice	30	Core	N
7	EG7037	Environmental Sustainable Engineering and Logistics	30	Core	N
7	EG7035	Digital Construction and BIM	30	Core	N
7	EG7020	Research Skills and Dissertation	60	Core	N
7	EG7021	Industrial Placement	120P	Core for MSc with Industrial placement	N

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Please note: Optional modules might not run every year, the course team will decide on an annual basis which options will be running, based on student demand and academic factors, in order to create the best learning experience.

A core module for a course is a module which a student must have passed (i.e. been awarded credit) in order to achieve the relevant named award. An optional module for a course is a module selected from a range of modules available on the course.

The overall credit-rating of this course (not including the industrial placement) is 180 credits. If for some reason you are unable to achieve this credit you may be entitled to an intermediate award, the level of the award will depend on the amount of credit you have accumulated. You can read the University Student Policies and Regulations on the UEL website.

Typical Duration

Course without industrial placement

The full-time duration of this course is 12 months for the September intake and 17 months for the January intake:

For September intake:	
Term 1 (Y1: Sep – Jan)	Taught modules
Term 2 (Y1: Jan – May)	Taught modules
Term 3 (Y1: May – Sep)	Dissertation
For January intake:	
Term 2 (Y1: Jan – May)	Taught modules
Term 1 (Y1: Sep – Jan)	Taught modules
Term 2 (Y2: Jan – May)	Dissertation

For those not on a student visa, it is possible to move from full-time to part time study and vice-versa to accommodate any external factors such as financial constraints or domestic commitments. Many of our students make use of this flexibility and this may impact on the overall duration of their study period.

Course with industrial placement

The course with industrial placement is offered in full-time mode only. The duration of this course is two academic years (including the industrial placement element). See “Work or Study Placements” section for more detail

The time limit for completion of a course is four years after first enrolment on the course.

Further Information

More information about this course is available from:

- The UEL web site (www.uel.ac.uk)
- The course handbook
- Module study guides
- UEL Manual of General Regulations (available on the UEL website)
- UEL Quality Manual (available on the UEL website)
- School web pages

All UEL courses are subject to thorough course approval procedures before we allow them to commence. We also constantly monitor, review and enhance our courses by listening to student and employer views and the views of external examiners and advisors.

Additional Costs

None

Alternative Locations of Delivery

N/A