

## Template C4



# Programme Specification

**Title of Course:** *MSc Structural Design and Construction Management*

<b>Date first produced</b>	01/03/2018
<b>Date last revised</b>	28/08/2024
<b>Date of implementation of current version</b>	01/08/2024
<b>Version number</b>	6
<b>Faculty</b>	Faculty of Engineering, Computing and the Environment
<b>School</b>	School of Built Environment and Geography
<b>Department</b>	Department of Geography, Geology & the Environment
<b>Delivery Institution</b>	Kingston University

This Programme Specification is designed for prospective students, current students, academic staff and employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes and content of each modules can be found in the course VLE site and in individual Module Descriptors.

## SECTION 1: GENERAL INFORMATION

<b>Award(s) and Title(s):</b> <i>Up to 10 pathways</i>	MSc Structural Design and Construction Management
<b>Intermediate Awards(s) and Title(s):</b> <i>There are 4 Intermediate awards for each pathway</i>	PGDip PGCert
<b>Course Code</b> <i>For each pathway and mode of delivery</i>	PPSDE2CMN03 PFSDE2CMN01
<b>UCAS code</b> <i>For each pathway</i>	H425

<b>Award(s) and Title(s):</b> <i>Up to 10 pathways</i>	MSc Structural Design and Construction Management with Sustainability
<b>Intermediate Awards(s) and Title(s):</b> <i>There are 4 Intermediate awards for each pathway</i>	PGDip PGCert
<b>Course Code</b> <i>For each pathway and mode of delivery</i>	PPCMS1CMS01 PFCMS1CMS01
<b>UCAS code</b> <i>For each pathway</i>	

<b>RQF Level for the Final Award:</b>	Level 7
<b>Awarding Institution:</b>	Kingston University
<b>Teaching Institution:</b>	Kingston University
<b>Location:</b>	Roehampton Vale Campus, Kingston
<b>Language of Delivery:</b>	English
<b>Modes of Delivery:</b>	Full-time Part-time With Professional Placement
<b>Available as:</b>	Full field
<b>Minimum period of registration:</b>	Full-time - 1 Part-time - 2 With Professional Placement - 2
<b>Maximum period of registration:</b>	Full-time - 2 Part-time - 4 With Professional Placement - 4

<b>Entry Requirements:</b>	<p>Kingston University typically uses a range of entry requirements to assess an applicant's suitability for our courses. Most postgraduate taught course requirements are based on having been awarded a relevant undergraduate degree and are normally coupled with minimum grades expectation of 2:2, specific courses in certain areas may have a stricter grade requirement. We may also use interview, portfolio and performance pieces to assess a person's suitability for some courses. We recognise that every persons journey to a postgraduate taught education is different and unique and in some cases we may take into account work experience and other non-standard pathways onto University level study.</p> <p>Additionally, all non-UK applicants must meet our English language requirements,</p> <p>Please see our course pages on the Kingston University website for the most up to date entry requirements.</p>
<b>Programme Accredited by:</b>	<p>This degree is accredited by the Joint Board of Moderators (JBM) comprising of the Institution of Civil Engineers, Institution of Structural Engineers, Institute of Highway Engineers, the Chartered Institution of Highways and Transportation and the Permanent Way Institution on behalf of the Engineering Council as meeting the academic requirement for Further Learning for registration as a Chartered Engineer (CEng). To hold accredited qualifications for CEng registration, candidates must also hold a Bachelor (Hons) degree that has been accredited as partially meeting the academic requirement for registration as a Chartered Engineer (CEng). See <a href="http://www.jbm.org.uk">www.jbm.org.uk</a> for further information.</p> <p>The degree also accredited by Chartered Institute of Building (CIOB)</p>
<b>QAA Subject Benchmark Statements:</b>	Engineering
<b>Approved Variants:</b>	Yes, we have approved variants required to meet the new Engineering Council (compensation-and-condonement-policy), to allow 4 x 15-credit modules
<b>Is this Higher or Degree Apprenticeship course?</b>	

***For Higher or Degree Apprenticeship proposals only***

<b>Higher or Degree Apprenticeship standard:</b>	n/a
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<b>Recruitment, Selection and Admission process:</b>	n/a
<b>End Point Assessment Organisation(s):</b>	n/a

## SECTION 2: THE COURSE

### A. Aims of the Course

- Produce graduates with a detailed advanced knowledge and understanding of structural design and management practices and procedures relating to the successful delivery construction projects.
  - Allow graduates to acquire interpersonal design thinking, system thinking complex problem-solving, business and subject-specific skills and the ability to analyse, evaluate, judge and critically reflect upon issues in those areas.
- Develop graduates with research and investigative skills and a critical and research-oriented approach to the study of structural design and construction management
  - Provide graduates with Further Learning as required to contribute to the educational base for a Chartered Engineer
  - Offer an opportunity to graduates for life-long learning and continuing professional development that meets current and future market demands and significantly enhances their career opportunities
  - Create a unique and dynamic educational environment that seeks to benefit from the practical experience of mature and part-time students

In addition, the aim of the course with pathway Sustainability is to:

- Produce graduates with a detailed advanced knowledge and understanding of environmental and social Sustainability and sustainable construction.

### B. Intended Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, cognitive skills and subject practical skills as outlined in the following table. The learning outcomes are referenced to the QAA subject benchmarks for Land, Construction, Real Estate and Surveying (2019) and Engineering (2023), the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2014) and are align to the levels set out in 'Sector Recognised Standards in England' (OFS 2022).

The programme learning outcomes are the high-level learning outcomes that will have been achieved by all students receiving this award. They must align to the levels set out in the ['Sector Recognised Standards in England'](#) (OFS 2022).

Programme Learning Outcomes					
	Knowledge and Understanding		Intellectual Skills		Subject Practical Skills
	On completion of the course students will be able to:		On completion of the course students will be able to		On completion of the course students will be able to
A1	Advanced methods in the design of structures in concrete and steel and composite structures	B1	Submit areas studied to critical analysis and evaluation	C1	Carry out the conceptual & detailed design of modern structures in concrete or steel using state-of-the- art design techniques and up-to- date design codes
A2	Advanced methods in the design of structures subjected to seismic actions.  (MSc Structural Design and Construction Management only)	B2	Analyse problems and issues, taking due account of any incompleteness of data or information, and arrive at well-reasoned and supportable conclusions	C2	Carry out sophisticated analysis and design of structures subjected to seismic actions using latest methods and design codes (MSc Structural Design and Construction Management only)
A3	Advanced methods in the design of substructures and foundations	B3	Carry out a critical literature review and, design & develop a programme of independent research and data collection/analysis	C3	Design and critically review solutions to substructures and foundations
A4	Procurement strategies, estimating procedures and controlling cost of projects	B4	Think originally, creatively and imaginatively to solve problems	C4	Advise on the appropriate procurement route, the evaluation of tender returns and the conversion of an estimate into a tender
A5	Project management tools and techniques including risk, health & safety and quality management	B5	Carry out a critical literature review and, design & develop a programme of independent research and data collection/analysis	C5	Use project management tools and techniques to assess risk and control quality

A6	Sustainable construction and the environmental, social and economic credentials of concrete as applied in practice.	B6	Submit analyse problems and issues, taking due account of any incompleteness of data or information, and arrive at well-reasoned and supportable conclusions	C6	Analyse, evaluate and reflect upon issues of sustainable structural design and construction management.
A7	Understanding coastal processes including erosion, sediment transport, and shoreline dynamics (Structural Design and Construction management with Sustainability only)	B7	The ability to draw on knowledge and expertise from different disciplines to solve complex problems and understand and appreciate the interconnectedness of different systems and how they interact.	C7	Analyse, assess, design, and implement effective coastal and flood defence systems (Structural Design and Construction management with Sustainability only)
		B8	Students opting for a degree with professional placement will additionally be able to:  Synthesise the experiences of the practical work-based environment to the academic study of Civil Engineering	C8	Students opting for a degree with professional placement will additionally be able to:  Transcribe and apply the experiences of the practical work-based environment to academic study and chosen career aspirations.

In addition to the programme learning outcomes, the programme of study defined in this programme specification will allow students to develop the following range of Graduate Attributes:

1. Creative Problem Solving
2. Digital Competency
3. Enterprise
4. Questioning Mindset
5. Adaptability
6. Empathy
7. Collaboration
8. Resilience
9. Self-Awareness

### **C. Outline Programme Structure**

This course is made up of modules that are designated at level 7. The course comprises six taught modules, including two 30 credits and four 15 credits, and a dissertation worth 60 credits. The dissertation comprises research methods, a research proposal, an oral presentation and the final dissertation. The minimum requirement for an MSc is 180 credits i.e., the successful completion of the six modules and the dissertation. The minimum requirement for a PgDip is 120 credits i.e. the completion of the six modules without dissertation. The minimum requirement for a PgCert is the successful completion of 60 credits. The course offers the PG Certificate as an exit award only and is based on the student passing any coherent subset of the taught modules. All students will be provided with information about the regulations in the student handbook.

The Course is offered as 1 year full-time, and normally 2-3 years part-time. Students are able to commence the programme in September or January each year. Taught module lectures and tutorials will be held from September to May each academic year. Students will work on their dissertation between May and the following September. Part-time students will normally complete their taught modules over the course of the two years and complete their dissertation between May and September of their second year.

Normally, each 15-credit module will include approximately 33 hours contact time, followed by directed learning resulting in a total of 150 hours of student effort. The equivalent hours for 15 credit modules are 60 and 300, respectively. The dissertation is the equivalent of two modules and requires 600 hours of student effort.

#### **Professional and Statutory Regulatory Bodies**

JBM comprising the Institution of Civil Engineers, the Institution of Structural Engineers, the Chartered Institution of Highways and Transportation, and the Institute of Highway Engineers and CIOB (Chartered Institute of Building).



## MSc Structural Design and Construction Management

<b>Level 7</b>							
<b>MSc Structural Design and Construction Management</b>							
<b>Core modules</b>	<b>Module code</b>	<b>Credit Value</b>	<b>Level</b>	<b>Teaching Block</b>	<b>Pre-requisites</b>	<b>Full Time</b>	<b>Part Time</b>
Design of Composite Structures and Design of Steel Structures	CE7020	30	7	TY13	None	1	2
Design of Concrete Structures	CE7721	15	7	TB2	None	1	2
Digital Technologies and Construction Modelling	CE7720	15	7	TB1	None	1	1
Dissertation and Research Project Development	CE7724	60	7	TB3	None	1	2
Foundation Design of Substructures	CE7019	15	7	TB2	None	1	2
Management of Project Risk, Quality and Safety	CE7722	30	7	TB1	None	1	1
<b>Optional Modules</b>							
Professional Placement	CI7900	120	7	TY13	None	2	3

## MSc Structural Design and Construction Management with Sustainability

<b>Level 7</b>							
<b>MSc Structural Design and Construction Management with Sustainability</b>							
<b>Core modules</b>	<b>Module code</b>	<b>Credit Value</b>	<b>Level</b>	<b>Teaching Block</b>	<b>Pre-requisites</b>	<b>Full Time</b>	<b>Part Time</b>
Civil Engineering Group Design Project	CE7727	30	7	TY13	None	1	2
Coastal and Flood Defence System	CE7017	15	7	TB1	None	1	1

Design of Concrete Structures	CE772 1	15	7	TB2	None	1	2
Digital Technologies and Construction Modelling	CE772 0	15	7	TB1	None	1	1
Dissertation and Research Project Development	CE772 4	60	7	TB3	None	1	2
Management of Project Risk, Quality and Safety	CE772 2	30	7	TB1	None	1	2
Sustainable Construction Methods and Materials	CE701 8	15	7	TB2	None	1	2
<b>Optional Modules</b>							
Professional Placement	CI7900	120	7	TY13	None	2	3

#### Level 7 information

Students starting the course in September and January will work on the placement for between 10 – 12 months. The suitability of the placement requires the approval of the Course Leader.

Students on placement must complete a portfolio assessment which includes a reflection on how the theories they have learnt during their teaching year have helped them in their placement and demonstrate ability to apply their teaching in a real-world situation.

#### **D. Principles of Teaching, Learning and Assessment**

The course has been designed, considering the Kingston University Curriculum Design Principles, to help develop students into graduates that are professional, thoughtful, creative, resilient, proactive, and globally aware independent, equipping them to be lifelong learners. These principles also encompass the KU Townhouse Strategy. All students on the course are working towards a professional career in which they must be able to exercise judgement, communicate with clients and the public and throughout take an ethical approach to all that they do.

The role of teaching and assessment is to underpin student learning and throughout the programme the strategy is to engage students with a wide range of activities that enable them to develop the knowledge, skills and professional competencies that they will need as practitioners alongside their knowledge base. The student should, as far as practicable, be empowered to take responsibility of their learning but be supported strongly through the process. It follows that as the student progresses through the levels the emphasis will be from lecturer-led to student-led work though lectures will feature at all levels of the programme. In delivering on this principle, much of the teaching related to knowledge and understanding will be focused on simulated real-life study and projects in which students will be led through the materials and required to develop their skills through the tasks set. Field trips and site visits are therefore key components of the strategy and support sessions aimed at skills development are an important part of the delivery strategy.

A wide range of teaching and learning methods is utilised, allowing students to be fully engaged throughout the Course. Teaching, learning and assessment methods are constructed to suit the learning outcomes and syllabus content of the modules. The assessment regime of a module is designed to provide formative opportunities that allow

students to improve their performance following feedback in preparation for later summative assessment. Key skills are developed throughout the Course, which are assessed formatively and summatively. Students also have access to Academic Success Centre for additional support on a drop-in basis giving students the opportunity to take responsibility for their own achievements and consequent learning. Generally, the Course will be delivered by instructional lectures whilst associated tutorials and design classes are used to enhance the lecture material.

The teaching and learning strategies are formulated to promote and develop key transferable skills which are considered central to academic, vocational and personal development. These skills underpin how students learn, their ability to recognise their own achievements and the ability to review and evaluate that achievement and identify future learning requirements. The Course is devised to encourage and develop students with confident interpersonal and communication skills, as well as emphasising group work, data analysis and ICT skills.

Module information on Canvas, which is issued to students before the start of each module, provide guidance to students on the scope, aims, outcomes and demands of each module and of the preparatory reading and reflection required for each seminar. It is intended that lectures and tutorials be used to provide an opportunity for the student to develop and practise the skills required for the module assessment (such as the analysis of problem scenarios, the critical evaluation of rules, ideas and opinions, group work etc), to give guidance on private study and to provide an opportunity for the exchange and development of ideas by means of group interaction.

In general, there is no regulatory attendance requirement for the taught modules. However, a student cannot submit the Research Proposal and the Dissertation without having first attended the Research Methods. The majority of the learning time of the student in relation to the taught modules will be spent in independent study, consisting of:

- Directed learning, giving the student specific tasks in preparation for, and in support of, class-based programmes, for example, the preparation of oral or written presentations, case analysis etc.
- Private learning time, comprising the preparation of material for seminars and workshops, reviewing of ideas introduced during contact time and directed research and development through reading, using recommended reading as a starting point.
- Preparation of assessed work.

### Sustainability

The course is designed to encourage the students through the design and execution of the curriculum to be both knowledgeable in terms of how sustainability principles apply to their own field but also develop a responsible attitude towards the role that built environment professionals can play in helping to manage resources in ways which promote environmental sustainability, good governance, respect for people, well-being and the pursuit of economic goals. Sustainability may not be mentioned specifically in many of the titles of modules, however, the principles of regenerative design, intervention which has societal benefit, and sustainable development are reflected in the learning outcomes, and it underpins all that we teach and the way we encourage students to approach their own learning in a reflective way seeking to find themselves as individuals. In addition, reflecting our commitment to the United Nations Sustainable Development Goals (SDGs), the course specifically addresses four of these goals in the teaching of the core modules and their assessment activities: Quality education (SDG 4), Industry, innovation and infrastructure (SDG 9), Sustainable cities and communities (SDG 11), and Responsible consumption and production (SDG 12).

Teaching and Learning Strategies: Dissertation  
The Research Methods

The Research Methods (which will comprise the equivalent of three days of seminars) aims to equip students with the knowledge and skills sufficient to plan and complete the dissertation.

#### The Research Proposal and Dissertation

This will involve preparation of a proposal, an evolving discussion of that proposal between student and supervisor, data collection (if appropriate), literature search, analysis and conclusions. The precise subject-matter of the dissertation must be aligned with the awarded title and connected with a subject related to structural design.

#### Assessment Strategies

The overall aims of the assessment strategies are to enable the student to demonstrate that they have met the aims and outcomes of each individual module, to help facilitate the achievement of the overall course aims, to enable the student to measure their level of achievement at each stage of the programme, to highlight individual strengths and weaknesses of the student and to accurately reflect the student's abilities in determining the award to be made to the student.

A combination of assessment methods will be used throughout the course. These elements include module assignments, module examinations, in-class tests, experiment reports, industrial visit reports, seminars, oral presentations and the project dissertation. Each module leader is responsible for ensuring that the method of assessment reflects the aims and learning objectives of the module, is demanding and stimulating and at the appropriate Masters' level.

#### Inclusive Curriculum, Teaching and Assessment Practices

The school implements an inclusive curriculum framework that is guided by three key principles: create an accessible curriculum; enable students to see themselves reflected in the curriculum; and equip students with the skills they need to positively contribute to and work in a global and diverse environment. In line with this framework, this MSc course learning outcomes are clear, accessible and structured to be incremental and attainable. Care is taken to ensure that the learning outcomes do not present any barriers to particular social groups. On a practical level, the learning outcomes cover multiple perspectives of civil engineering practices and is designed to accommodate experiences of individuals from multiple cultures, international setting and backgrounds.

Learning content covers the knowledge, skills and competencies required for working in a wide range of subdisciplines and projects and from retrofitting old infrastructure to the sustainable design and construction of new builds in various regions and contexts.

The School also, recognises and values that students learn in different ways. The course curriculum therefore incorporates a wide variety of methods for delivering learning, including, lectures, tutorials, workshops, seminars, practical sessions, computing sessions, site visits, and field trips. Active learning exercises are typically embedded into lecture sessions to actively and experientially involve students in the learning process. Exercises include small group discussions, debates, role play, case studies, games, and flipped learning exercises appropriately aligned with the learning objectives for the session. Learning materials are made available in a variety of formats on Canvas, the School's Virtual Learning Environment (VLE). These could be in the form of lecture slides, lecture notes, recorded lectures, podcasts, videos, suggested reading material, self-assessment quizzes, discussion boards, and solutions to tutorial problems.

Student Voice Committees and School Education Committee provide opportunities for student to make suggestion on how to develop a more inclusive curriculum by taking into account the specific circumstances of the student body. The variety of teaching activities also takes account of the student's different learning preferences and experiences and there is a careful balance of individual and group-based activities.

Marking criteria are provided for all assessments as part of the assessment booklet at the beginning of the year for each module and care is taken to ensure that the language used is

clear. Assessment and marking criteria for all substantial assessments are discussed in class so all students have an opportunity to interrogate the criteria. In the programme as a whole, the following components are used in the assessment of the various modules:

- Practical exercises: to assess students' understanding and technical competence.
- Individual and group-based case project work: to assess ability to understand requirements, to provide solutions to realistic problems and to interact and work effectively with others as a contributing member of a team. The outcomes can be:
- Written reports, where the ability to communicate the relevant concepts, methods, results and conclusions effectively will be assessed.
- Oral presentations, where the ability to summarise accurately and communicate clearly the key points from the work in a brief presentation will be assessed.
- Video, which may replicate features of oral presentations but allows advance preparation away from the audience (which may suit some students better).
- Multiple choice or short answer questions: to assess competence in basic techniques and understanding of concepts.
- Long answer structured questions in coursework assignments: to assess ability to apply learned techniques to solve simple to medium problems and which may include a limited investigative component.
- Long answer structured questions in end-of-module examinations: to assess overall breadth of knowledge and technical competence to provide concise and accurate solutions within restricted time.
- Project: The individual project module represents an opportunity for students to draw together different aspects of their learning on the course and to apply the techniques learned in an extended study. As such the assessment here will place a greater emphasis on ability to plan work, manage time effectively, and research background information, culminating in a written report and interview.
- Individual and group practical laboratory reports
- Posters: The group project is presented in posters to / and assessed by academic staff as well as members of the industrial advisory board.
- Model building: in the first year, where students make a structure with little wooden sticks and tape e.g., a small bridge and load it to breaking point.
- Short in-class tests and on-line assessments: throughout a number of modules.

At the beginning of each academic year deadlines for submission and feedback are planned carefully and a full "assessment timeline calendar" is constructed to ensure that there is no summative assessment bunching and thus student workloads are managed. In addition, this calendar is then presented to the cohorts for consultation before it is formally fixed. The calendar then offers a synchronised and coherent delivery of the programme that is clearly understood by staff and students who can appreciate the integrated nature of their learning emanating from various module assessments.

#### Research Informed Teaching

Many academic staff are engaged in a range of research and consultancy activities funded by the Research Councils, the European Union, the government, trade unions and industry. These activities ensure our staff are in touch with the latest industry thinking and bring best practice to your studies. Current PhD students are also invited to provide lectures on their area of research where it is relevant to the taught programme.

In many of the modules guest lectures are given by professionals from industry who are expert in their field. The use of guest lecturers provides students with up-to-date information on current industry practices.

Engineering research within the Faculty of Engineering, Computing and the Environment is organised into a number of research centres, which provide focus and encourage the cross-

fertilisation of ideas. In addition, the School's strategy is fully supported by an active Industrial Advisory Board comprising of academics and professionals from industry who meet quarterly.

The School's Centre for Engineering, Environment and Society Research (CEESR) provides a vibrant research community that students' join right from the start. PhD students assist in the classroom and the labs, and many PG students choose a research subject for their dissertation and, sometimes, follow it up with a PhD. With regard to Professional Practice, the School is pushing the boundaries of learning through professional practice by a) providing teaching that is continuously informed by professional practice b) employing academics who actively engage in the development of their professional discipline and c) enabling students to fulfil professional employment.

The research themes within the Sustainable Technology Research Centre cover a wide range of topics, including:

1. Civil Engineering and Construction
2. Earth, Environmental and Social Sciences
3. Fire, Explosion and Fluid Dynamics
4. Nanomaterials and Composites
5. Medical Engineering
6. Ground and Aerospace Transportation Engineering
7. Energy

## **E. Support for Students and their Learning**

Students are supported by:

The Personal Tutor (PT) scheme is central to the efforts to provide a personalised learning experience (See PT section of programme specification). Students are supported by:

- A Module Leader for each module
- A Course Leader to help students understand their programme structure and provide academic support.
- A Personal Tutor (PT) to foster a close and engaged academic relationship with students and advise and refer students to other University services.
- There is a Student Support and Engagement Team to help students with any problem that is affecting their studies.
- Undergraduate Course Administrators
- An induction/re-induction programme and study skills sessions at the start of each academic year
- Academic Success Centre is a one-to-one drop-in Study Skills session for students every weekday. Help is available on a range of academic skills from writing reports, note-taking, to exam revision, referencing, programming and mathematical skills.
- VLE – a versatile on-line interactive intranet and learning environment accessible both on-site and remotely.
- Course Representative scheme
- A University Future Skills Employability Team, Future Skills Employability Team - ECE
- Comprehensive University support systems including the provision of advice on finance, regulations, legal matters, accommodation, international student support, disability and equality support.
- Union of Kingston Students
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#### Personal Tutor Scheme (PTS) in the School of Engineering and the Environment

The following provides the aims and structure of the Personal Tutor Scheme (PTS) for the School of Engineering. It is intended that the PTS is embedded within the modular provision of the MSc Course.

##### Aims

- To build a rapport between staff and students and contribute to personalising students' experience within the School of Engineering and the Environment
- To support students in the development of their academic skills providing appropriate advice and guidance to students throughout their time at Kingston, while monitoring their progress, helping to identify individual needs and referring students to other University services as appropriate.
- To help students to develop the ability to be self-reliant and confident self-reflective learners who use feedback to their best advantage.
- To explore students' research aspirations
- To reflect on how to use feedback at Masters' level, and also contribute to, and learn from constructive peer review.
- To encourage students to reflect learning relates to a wider context and their professional career development

##### Allocation of Personal Tutors

Personal tutors will be allocated during induction week on a course basis. Students will keep the same tutor throughout their course of study. The PTS is embedded in core curriculum modules in each MSc course and for all students in the module CE7XXX Dissertations, and it is adopted practice the allocated supervisors to be the personal tutors. For the short period before allocating dissertation supervisors the Course Leader is acting as Personal Tutor for all students.

There are specific aims and outcomes for each course that will be assessed, as the PTS is a progressive and cumulative scheme building on the skills developed at undergraduate levels. Formative assessment will be provided in the form of regular feedback during meetings when the student will be able to put forward draft work for evaluation. Reference to the PTS is also included in the standard agenda on SSCCs, with the purpose of promoting a two-way conversation between students and staff.

##### Specific aims of PTS at Level 7: Getting the most out of the Masters' Course

- To help students to make the transition to Masters' level study and understand how to use feedback on the postgraduate course.
- To encourage students to be proactive in making links between their course and their professional and/or academic aspirations
- To explore students' research aspirations
- To help students gain confidence in contributing to, and learning from, constructive peer review.
- To encourage students to become part of a wider disciplinary and/or professional community.
- To help students to prepare for the dynamics of supervision.

## **F. Ensuring and Enhancing the Quality of the Course**

The University has several methods for evaluating and improving the quality and standards of its provision. These include:

- External examiners
- Annual Monitoring and Enhancement
- Continuous Monitoring of courses through the Kingston Course Enhancement Programme (KCEP+)
- Student evaluation including Student Voice Committees, Early Module Reviews (EMR), Module Evaluation Questionnaires (MEQs) and the National Student Survey (NSS)
- Moderation policies and procedures
- Feedback from employers (varying forms including IAB)
- Quality is also assured by the requirement for professional bodies (CIOB and JBM) reaccreditation, generally at a five-year interval.

## **G. Employability and work-based learning**

This curriculum embeds the development of employability skills throughout the course and is designed to equip students with the ability to relate the knowledge and skills that they have learnt to real world contexts in which they work or may work in the future. The use of expert guest lecturers from industry and having an active Industrial Advisory Board are both important assets for students attending the programme.

In order to stimulate student and academic interaction the social and professional media network 'LinkedIn' is utilised to encourage discussion and promote business opportunities for both current and former students.

This Course in its Civil Engineering pathway has been designed to support the curriculum requirements of Further Learning for Chartered Engineer (CEng) status. Most graduates already will aspire to have careers in the construction industry and to becoming Chartered Engineers. The pathway will give them the educational base to achieve the latter. Graduates develop careers in all branches of the civil engineering industry, both in the UK and throughout the world, as contractors and consulting engineers, and within local authorities, water authorities, government organisations and the defence industry.

This programme will also prepare graduates for senior technical and managerial positions such as Civil/ Structural Engineer, Technical Manager, Designer/ Consultant, Project Engineer, Construction Engineer, Construction Manager, Engineering Consultant, Project Manager.

### ***Work-based learning, including sandwich courses and higher or degree apprenticeships***

Work placements are actively encouraged – although it is the responsibility of individual students to source and secure such placements. University staff develop and promote relationships with industry and provide assistance to students in the process of finding a placement.

All students are encouraged to make use of the opportunity to enhance their learning and personal development by undertaking an industrial placement after the second year of their programme. All placements are reviewed to ensure that they provide a relevant experience in which students can apply their learning in a practical situation. Students have the responsibility for securing an industrial placement; placements are not guaranteed. All students on the course receive support from the placement specialists from the Careers and Employability Service in securing a position and while in the workplace. The Careers and Employability Services also organises employers' events for student recruitment.



An Industrial Placement comprises a period of at least 36 weeks with an approved employer. Students have a support network that includes assistance during the process from preparation of their curriculum vitae through applications and the interview/assessment to agreeing their contract. Students are required to produce quarterly reports on their placement and are supported throughout the period by their personal tutor, who will visit them at their place of work on at least one occasion. The personal tutor will discuss progress with the student and employer and will recommend any improvements to the learning opportunities, if appropriate. This allows students to reflect upon their own personal experience of working in an applied setting, to focus on aspects of this experience that they can clearly relate to theoretical concepts and to evaluate the relationship between theory and practice. Students fulfilling the requirements for an Industrial Placement will be awarded with a Professional Placement on the completion of level 7.

## H. Other sources of information that you may wish to consult

Engineering subject benchmark:

- QAA Subject Benchmark Statement for Engineering
- QAA Subject benchmarks Statement for Land, Construction, Real Estate and Surveying

Professional bodies:

[www.ice.org.uk/](http://www.ice.org.uk/)  
[www.istructe.org/](http://www.istructe.org/)  
[www.theihe.org/](http://www.theihe.org/)  
[www.ciht.org.uk/](http://www.ciht.org.uk/)

Professional accreditation (Civil Engineering pathway):

[www.jbm.org.uk/](http://www.jbm.org.uk/)  
<http://www.engc.org.uk/>

Construction Management accreditation for both pathways:

<https://www.ciob.org/>

School Website:

<https://www.kingston.ac.uk/faculties/science-engineering-and-computing/about/schools/engineering/>

## I. Development of Course Learning Outcomes in Modules

This table maps where course learning outcomes are **summatively** assessed across the modules for this course. It provides an aid to academic staff in understanding how individual modules contribute to the course aims, a means to help students monitor their own learning, personal and professional development as the course progresses and a checklist for quality assurance purposes.

Module Code	Level 7
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		CE7720	CE7722	CE7724	CE7020	CE7019	CE7721	CE7727	CE7018	CI7900	CE7017
<b>Knowledge &amp; Understanding</b>	A1										
	A2										
	A3										
	A4										
	A5										
	A6										
	A7										
<b>Intellectual Skills</b>	B1										
	B2										
	B3										
	B4										
	B5										
	B6										
	B7										
	B8										
<b>Practical Skills</b>	C1										
	C2										
	C3										
	C4										
	C5										
	C6										
	C7										
	C8										

Students will be provided with formative assessment opportunities throughout the course to practise and develop their proficiency in the range of assessment methods utilised.