Template C4

Programme Specification

Title of Course: *BSc (Hons) Building Surveying*

Date first produced	01/12/2023
Date last revised	04/09/2024
Date of implementation of current version	03/09/2024
Version number	6
Faculty	Faculty of Engineering, Computing and the Environment
School	School of Engineering
Department	Department of Aerospace and Aircraft Engineering
Delivery Institution	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

Award(s) and Title(s): ***Up to 10 pathways***	BSc (Hons) Building Surveying
Intermediate Awards(s) and Title(s): ***There are 4 Intermediate awards for each pathway***	Cert HE in Building Surveying Dip HE in Building Surveying
Course Code ***For each pathway and mode of delivery***	
UCAS code ***For each pathway***	K261 (3 Years Full-time) K230 (4 Years Sandwich) Apply direct to the University (5 Years Part-time)

RQF Level for the Final Award:	Level 6
Awarding Institution:	Kingston University
Teaching Institution:	Kingston University
Location:	Penrhyn Road
Language of Delivery:	English
Modes of Delivery:	Part-time Full-time With Professional Placement
Available as:	Full field
Minimum period of registration:	Part-time - 5 Full-time - 3 With Professional Placement - 4
Maximum period of registration:	Part-time - 10 Full-time - 6 With Professional Placement - 8
Entry Requirements:	The minimum entry qualifications for the programme are: From A levels: 112-128 UCAS Points from at least 2 GCE A-Levels. BTEC Level 3: Extended Diploma and Diploma in a related subject Access Diploma: Pass Access to HE Diploma in engineering, science, business and maths subjects. 5 GCSE subjects at grade C/4 or above including Maths and English Language. Recognition of Prior Learning: Transfer from a similar course is possible at Level 5 with passes in comparable Level 4 modules – but is at the

	discretion of the course team and meeting KU Admissions Policy.
Programme Accredited by:	Chartered Institute of Building (CIOB) Royal Institute of Chartered Surveyor (RICS)
QAA Subject Benchmark Statements:	All subject benchmark statements can be found here: QAA subject benchmarks for Land, Construction, Real Estate and Surveying (2019)
Approved Variants:	None.
Is this Higher or Degree Apprenticeship course?	

For Higher or Degree Apprenticeship proposals only	
Higher or Degree Apprenticeship standard:	n/a
Recruitment, Selection and Admission process:	n/a
End Point Assessment Organisation(s):	n/a

SECTION 2: THE COURSE

A. Aims of the Course

The general aim of the course is:

- To equip graduates with the necessary skills and knowledge needed to be able to manage a construction project from inception and design through occupation, working towards cost-efficient, safely and on time whilst gaining the necessary employability skills such as problem-solving, digital competence and adaptability enabling graduates to follow careers in related professional disciplines.

More specific aims of the course are:

- To produce graduates with a breadth and depth of knowledge and a thorough comprehension of the key aspects of the construction industry within a business perspective.
- To understand and advise on the procurement process and be able to play a key advisory role within the decision-making team.
- To develop a critical knowledge of the theory and practice of estimating, cost planning and pricing taking due account of risks and life cycle costs.
- To furnish students with a sound working knowledge of existing and emerging measurement techniques including the ability to measure complex structures, and the role of IT within measurement.
- To allow students to develop analytical skills and an ability to evaluate evidence and assumptions to reach sound judgements and communicate these effectively.
- To provide quantity surveying graduates to the construction industry who have a creative approach to the solution of problems and the requisite technical skills to realise these solutions.
- To furnish graduates with a firm grasp of Sustainability and Health and Safety within the context of their discipline.
- To provide graduates with reflective skills to recognise the need to continually develop themselves in order to exercise their professional judgement.
- To develop the understanding, knowledge, and skills to become, after appropriate further practical experience, competent practitioners of quantity surveying.
- To equip students with the research skills required for postgraduate study and the employability skills required for work in the construction and related industries.

B. Intended Learning Outcomes

The course outcomes are referenced to the relevant QAA subject benchmarks QAA subject benchmarks for Land, Construction, Real Estate and Surveying (2019) and the Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (2014) And relate to the typical student. The course provides opportunities for students to develop and demonstrate knowledge and understanding specific to the subject, key skills, and graduate attributes in the following areas:

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 On completion of the course students will be able to:		**Intellectual Skills** On completion of the course students will be able to		**Subject Practical Skills** On completion of the course students will be able to
A6	Relate all their studies to a knowledge and holistic understanding of sustainability including social, economic and environmental aspects within the context of the built environment.	B5	Demonstrate a positive attitude to learning that encourages continuing professional development throughout their careers	C5	Prepare construction documentation including producing estimates, cost planning and compiling pricing and tender documents.
A5	Demonstrate understanding of the theory and practice of cost planning, risk, life-cycle and sustainability initiatives to support application of key theories and principles used in the management of construction and the other disciplines of the built environment.	B4	Manage projects, people, resources and time taking account of sustainability, legal and statutory requirements, risk, safety, quality and reliability	C4	Use digital technologies to support interdisciplinary collaborative working in the construction management process.
A4	Demonstrate an appreciation of principles and processes that deliver an inclusive environment recognising the diversity of user needs including communities and the stakeholders, and the importance of professional ethics.	B1	Critically analyse the information and knowledge base within which they are working and be able to challenge ideas rationally and constructively.	C3	Utilise management techniques to control design and construction
A2	Demonstrate in-depth understanding of the various professional roles and parties involved in all stages of the project life cycle and the law and its regulatory context relating to land, contracts, tortious liability, conflict avoidance and dispute resolution, matters pertaining to professional	B2	Identify practice related problems and prepare logically sound and evidence-based plans for their solutions;	C2	Use standard industry software packages for estimating measurement and project management.

	practice and ethics and to have developed a critical appreciation of legal matters relating to contract administration;				
A1	Demonstrate a sound understanding of professional issues affecting the construction technology and use of resources in residential/commercial structures and infrastructure projects, procurement, cost estimating/control and the construction management process;	B3	Think creatively and imaginatively to solve management and design problems.	C1	Prepare project appraisals, measure and quantify construction works, produce estimates, cost plans, cost reports to support the design development process and production of project information used in the commercial management of projects.
A3	Demonstrate knowledge and understanding of the management of construction identifying the key concepts and principles used in construction management including business, legal, cultural and ethical and recognising the regulatory systems including building and planning regulations.	B6	Recognise the importance of professional bodies and the professional conduct expected of Construction Managers and Professional Engineers.	C6	Apply procedures relevant to standard contracts and statutory controls.

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

Please refer to the Course Diagram at the end of this document.
Each level is made up of four modules each worth 30 credit points. Typically a student must complete 120 credits at each level. All students will be provided with the University regulations and specific additions that are sometimes required for accreditation by outside bodies (e.g. professional or statutory bodies that confer professional accreditation). Full details of each module will be provided in module descriptors and student module guides. All Building Surveying, Quantiy Surveying and Construction Mangement undergraduate students at Kingston University take a common set of four (30 credit) modules at Level 4. This allows all students to experience various disciplines before deciding on an area of specialisation. Due to a specialist strand in TB2 for one of the modules, students are expected to pick the chosen pathway at the end of TB1.

BSc (Hons) Building Surveying

Level 4							
BSc (Hons) Building Surveying							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Introduction to Construction Technology	CE4036	30	4	1 & 2		1	1
Introduction to Law and Regulatory Context	CE4035	15	4	1		1	1
Introduction to Site Measurement	CE4037	15	4	2		1	1
Navigate for Professional Engineers	CE4021	15	4	TB1		1	1
People and Organisation Management	CE4033	15	4	2		1	1
Principles of Surveying Practice in Context	CE4032	30	4	1 & 2		1	1

Optional Modules							

Progression to Level 5

Progression to Level 5 requires 120 credits including passes in all Level 4 modules.

Level 5							
BSc (Hons) Building Surveying							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Construction Technology and Environmental Services	CE5033	15	5	2		1	1
Design and Specification	CE5029	30	5	1 & 2		1	1
Digital Technologies and Construction Modelling	CE5032	15	5	1		1	1
Exploring Engineering Project Management	EG5017	15	5	TB2		2	2
Legal and Regulatory Compliance	CE5030	30	5	1 & 2		1	1
Procurement and Contract Administration	CE5031	15	5	1		1	1
Optional Modules							

Progression to Level 6

Progression to level 6 requires 120 credits including passes in all Level 5 modules.

Level 6							
BSc (Hons) Building Surveying							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Applied Business Management	EG6026	15	6	TB1		3	3
Construction Information Management Systems	CE6035	15	6	2		1	1
Construction Law and Contract Practice	CE6036	15	6	2		1	1

Individual Project	CE6014	30	6	1 & 2		1	1
Inspection and Building Pathology	CE6032	30	6	1 & 2		1	1
Project Management	CE6033	15	6	1		1	1
Optional Modules							

Level 6 requires the completion of

Level 6 requires the completion of all modules to give 120 credits and qualify for BSc (Hons) Building Surveying.

Level 7 information

n/a

D. Principles of Teaching, Learning and Assessment

The BSc (Hons) Building Surveying course has been designed, taking into account 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.

Overarching principles

All students on the programme 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; we also encourage them 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, or even in the learning outcomes but 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.

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 and skills that they will need as practitioners alongside their knowledge base. The student should, as far as practicable, be empowered to take control 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.

Teaching & Learning

A solid and comprehensive technical and professional knowledge base is non-negotiable and is delivered through lectures and seminars provided in a collaborative working environment which aims to facilitate lecturer/learner and learner-to-learner interaction across disciplines.

Lectures are used to impart key information and will normally be followed up by tutorials and workshops which provide opportunities for problem-based learning, flipped classrooms and game learning via a range of in-class activities including for instance scenario analysis, role-play and simulations.
Module guides set out clear expectations for guided independent learning. Students will be directed to reading and Technology Enhanced Learning (TEL) packages to prepare for individual topics or sessions and also to problem sets or exercises to consolidate and test their learning afterwards. This will be introduced at level 4.The Virtual Learning Environment (VLE) at Kingston will support learning throughout the course through a variety of TEL objects such videos, screencasts, on-line MCQs, discussion boards and interactive teaching packages. It will also deliver teaching material such as lecture notes/presentations, problems sets and worked examples. In the case of **EG4020 Structures, Materials and Construction Methods** and **CE5104 Commercial Construction Technology** the use of online videos reinforces the students learning and helps them to understand how construction elements are put together. This helps support an inclusive approach as students can access learning material at their convenience and work through it at their own pace with the opportunity to pause and rewind as they wish. Teaching may be augmented by on-line discussion boards to aid understanding. We recognise that an ability to be comfortable with a range of digital media is important to employability skills and effective learning. Students also need to be computer literate and able to operate industry standard computer packages.
Developing skills is also critical to successful vocational education. These skills are practical – such as the ability to design and draw building details and layouts both free hand and with the use of IT programmes such as computer aided design software. Students will also have skills in Excel and will have developing skills in project management software programmes and in Building Information Modelling; they will also learn to access research databases efficiently. They will develop professional skills, such as how to write and present reports on strategic advice and programmes of building works of maintenance and alteration and intellectual skills, such as resolving problems such as construction contract disputes and to debate some of the ethical and policy issues that they may face in their subsequent professional lives. The learning and assessment philosophy also places emphasis on personal skills development, through extensive use of group-based activities which develop team working skills and respect for colleagues and reflective diaries which are critical dimensions of professional practice.
At level 4 there is a clear structure and guidance for students' learning with an emphasis on the acquisition of fundamental design knowledge and IT skills in **EG4010 Engineering Design and Professional Practice** and **EG4030 Applied Mathematics and Computing Applications** respectively. This provides a solid foundation for students to undertake a deeper study in a specific discipline at level 5. At level 5 there will be an increased expectation of independent study, supported by a reduced emphasis on the use of traditional lectures. At level 6 students will be expected to take greater ownership of their independent study with academics taking on more of a supervisory role of student independent study, this is exemplified in the individual and group project modules in **CE6101 Building Design and Application** and **CE6014 Individual Project** modules**.**

Focus on active learning and enhancing student engagement

A feature of the learning, teaching and assessment strategy in the School of Engineering is that many instructional lectures have been replaced by collaborative, problem solving or enquiry-based learning workshops and tutorials. These require students to prepare for, and participate in, the classroom activities, rather than passively listening to the lecturer. Students are expected to engage with the guided learning to prepare for these teaching sessions and consolidate their learning after the session. These interactive sessions also provide students with opportunities for peer learning, group work and presentation practice. In these sessions the lecturer facilitates learning by supporting students in creating their own knowledge and understanding. Lecturers may also introduce and summarise key concepts with short mini-lectures.

Project based Learning (PBjL) is introduced in **EG4010 Engineering Design and Professional Practice** and developed further in **CE5107 Contract Administration** and **CE6101 Building Design and Application**. These collaborative activities encourage students to draw on their own set of experiences and cultural backgrounds when tackling real world challenges. The Flipped classroom approach is introduced in **EG4010 Engineering Design and Professional Practice** where the curriculum (lecture content) of a small topic is delivered via on-line materials (e.g. screencasts, videos or study packs) and then developed and applied in workshops. At level 5, **CE5211 Building Maintenance and Management** has a more substantial Flipped classroom approach.

Active and collaborative learning is also incorporated in traditional lectures which may have question-and-answer sessions, brief student discussions, clicker activities integrated into the lecture. These methods ensure that valuable contact time is focussed on the application and critical analysis of knowledge and the development of key skills such as problem solving, communication, and group-work.

The high percentage use of active learning sessions in the teaching hours is aimed at improving student engagement, creativity, confidence and self-reliance. The course endeavours to further secure student engagement by making students feel part of a community and increasing their sense of belonging which supports to improved retention and progression. This is achieved by providing opportunities to interact with staff and students both socially and academically. In addition, to the active learning sessions and group work, this is achieved through: the PT scheme, field work, industrial visits, extra-curricular seminars, research internships, course representative system, student ambassador work, peer mentoring, civic engagement and outreach opportunities.

Focus on team work to embed learning and enhance employability skills

All these skills are developed systematically through the programme with concepts introduced at level 4, developed into applications in Level 5 and challenged through complex practice-based exercises at Level 6. Skills development takes place in all modules but it is specifically addressed through project based work which takes place extensively and is a critically important learning methodology. It is most strongly emphasised in field trips in which all students participate, unless for some reason they cannot travel in which a simulated alternative exercise is provided, thus better ensuring full accessibility.

At level 4, in **EG4010 Engineering Design and Professional Practice** students will be introduced to the principles and importance of group work. The opportunity to study and work with students from different branches of engineering and construction is a distinct feature of the course at Kingston through project-based learning (PjBL) is employed; requiring interdisciplinary teams to design, build and present solutions to small scale engineering challenges, the outputs of these will be part of the summative assessment.

At level 5, a residential field trip to a European destination is undertaken by students on all surveying programmes. For Building Surveying students it is delivered as part of module **CE5107 Contract Administration** and enables students to prepare pre/post-contract documentation for a proposed scheme of works in relation to a live project whilst also requiring them to integrate their learning from other modules, for example in relation to construction. This module has a large element of team work and students work in cross-disciplinary teams bringing their own route expertise to the task, thus developing an appreciation of the need for professionals to work together; it culminates in presentations often to practitioners, thus heightening their awareness of the requirements of industry. In this way the Level 5 major project integrates knowledge and understanding and skills and is designed to enhance their employment and research skills.

At level 6, there is a residential field trip within module **CE6101 Building Design and Application** in which students will undertake a task relating to a client brief, design a scheme of work, prepare a specification and associated documentation and analyse costings. This task will synthesise knowledge of law and regulation, construction, building analysis and project management skills and it will act as a capstone project opportunity, taking place at the end of the whole programme.

The last element of project work is via the individual research project in module **CE6014 Individual Project** which is student-selected in terms of topic and methodology and students are encouraged to use their creative and imaginative powers to design projects which have real applicability in the industry and which enable them to draw down on all their skills as well as knowledge base. For example students who have undertaken a placement may work with their placement employer on a problem that faces that organisation; alternatively they might wish to undertake a design project as long as their academic tutors deem they have developed sufficient skills in this area. Others will opt for a more traditional dissertation. In all cases they are strongly encouraged to integrate empirical investigations, thus demonstrating research and inter-personal and analytical skills.

We recognise that many students find research work daunting, so they are prepared over the entire programme for the major Level 6 individual project. Most modules contain the need to research material using web and library searches and through extensive use of professional body material. However, survey work in the form of questionnaires and interviews are introduced in some modules and are important elements of the field trip briefs. Academic writing skills are developed through writing essays, reflective diaries and professional reports which are required in most modules. These provide a learning vehicle prior to the requirement to undertake the individual project at Level 6.

Hands-on Practical work

Hands on practical experience in undertaking surveys and in laboratories is a fundamental in developing practical skills as well as enhancing data collection and analysis skills. Students will have the opportunity to work in laboratories and undertake surveys in some of their modules. Practical work is closely related to the taught content to provide context for the theoretical work. For Building Surveyors specifically an understanding of how materials fail enhances their understanding of defects which they observe during condition surveys. At level 4, students are introduced to basic measurement and manufacturing processes and how to apply these in a laboratory and testing environment in **EG4010 Engineering Design and Professional Practice** and in **EG4040 Construction Management and Site Investigation.** At level 5, the focus is on structural testing and manufacture of materials which are then tested to failure in **CE5103 CAD & Building Science**. This is delivered through supervised practical sessions with experiment protocols. At level 6, students are expected to select and apply requisite practical skills in their own independent research work in **CE6014 Individual Project.**

Research-informed Teaching

Our approach to research-informed teaching is one that places students at the heart of constructing new knowledge. It seeks to transform students from passive recipients of information to active self-motivated independent learners and researchers who are enabled to challenge existing knowledge bases and partake in the creation and dissemination of new knowledge that furthers and advances scholarship and professional practice within their discipline. There are varied manifestations of research-informed teaching in the course taking several forms of experiential learning achieved through in-class problem-based learning, field work and laboratory work.

These create opportunities for students to investigate and critique theory and its application and share their reflective findings with other staff and students. Research-informed teaching is also achieved through research undertaken by academic staff teaching on the course, which in turn informs the design of learning activities as well as collaborative research projects involving staff and students which often result in publishable research outputs.

Practice-informed Teaching

Embedded in our teaching and learning practice is another major shift in pedagogy, specifically, our teaching is both practice-informed. In addition to academic staff, the teaching of specialist topics for instance, Party Wall, dilapidations etc. is delivered by experienced practitioners including recent graduates. The involvement of practitioners in our teaching delivers a range of benefits to the student experience. Practitioners are able to share their professional experience and bring a wealth of knowledge in relation to current and emerging issues within the respective discipline and industry-led practice. Practitioners also serve as inspiring role models for students preparing to enter practice.

Assessment for Learning

The assessment strategy has been designed to help students to learn and prepare them for employment, rather than just a tool to measure their learning. The assessment is designed to be authentic, inclusive and transparent. The assessment tasks focus on the real world-engineering activities that enhance students' employability. This is particularly the case for **CE5122 Building Maintenance and Management** and **CE6110 Existing Built Environment** which both require surveys and building inspections. The major assignment in **CE6101 Building Design and Application** acts as a capstone project and encompasses all the skills the students have acquired during their degree programme.

All modules have explicit formative assessments to provide opportunities for practice and the chance to use 'feed forward' to help students improve their work in subsequent summative assessments. Examinations are still used as they are an effective way of assessing basic knowledge and understanding, and professional bodies expect to see examination covering key curriculum content. However, the strategy recognises that other assessment methods are better suited to assessing higher level problem solving skills. This is reflected in the decreasing use of examination from level 4&5 to level 6&7. The use of a well-balanced range of assessment methods is key part of our inclusive assessment strategy. Group and teamwork assessment is instrumental in developing and recognising this important employability skill.

Assessment is both formative (i.e. the work is marked and feedback given but the mark does not count towards the module achievement mark) and summative (the assessed mark counts towards the module grade awarded). Formative assessment is important as it encourages students and supports their overall learning. Examples of formative work include:

- Draft submissions of coursework for comment;
- On-line discussion groups monitored by staff;
- In-class quizzes to test recently covered lecture material;
- Formal 'client meetings' in which notes are made and feedback given; and
- The preparation of portfolios based on weekly seminar work, where only the final portfolio is assessed summatively.

Summative feedback takes a wide range of forms, some of which have been outlined under the teaching and learning section above and all of which are detailed in the module descriptors. A special feature of the course is the small number of formal examinations which are included (normally only one per level). Whilst we hold that examinations do have a role to play in testing knowledge and critical reasoning, there are other methods which have possibly greater applicability to the work that graduates will subsequently undertake.

Therefore as far as possible, emphasis is placed on developing simulated and real world experiences. Students undertake traditional academic tasks such as writing reports and essays but a range of academic skills is also tested in more innovative ways in various modules including for instance the simulated projects undertaken in the context of fieldwork and the production of short videos to showcase the students' work.

As the programme is focused on developing employability skills, the ability to present orally, to produce well-presented and appropriately structured professional reports, and to sketch and produce scheme designs using IT are also assessed. Professionals working in the real estate environment also need to communicate effectively with people from a wide range of backgrounds, all the time demonstrating an ability to sustain an argument, whilst having due consideration for those with whom they are dealing. Therefore oral negotiation, advocacy and debate are all used as assessment methods and the School has developed specific experience in these methods.

Each module is designed to test up to six learning outcomes; therefore in each module a range of assessment is undertaken with up to three formal summative points, spread throughout the year better to ensure an even workload for the student. Normally the last assessment task will be synoptic in nature in that it will test all or most learning outcomes, thereby assuring the assessment boards that each student has fulfilled the learning objectives before progressing to the next stage of study.

Feedback to students on summative assessment is vitally important. This is delivered through a number of means such as formal written individual feedback which contains pointers for future improvement; class collective feedback; issuing of model answers. The method used will vary depending on the task that was undertaken but staff realise the need for it to be timely and supportive.

Inclusive Teaching Practice

Staff Student Consultative Committees and Boards of Study 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

E. Support for Students and their Learning

Student support recognises that the student experience is unique to each student. A key part of our approach to an inclusive curriculum is that we acknowledge and where possible accommodate their individual circumstances. The personal tutor scheme is central to the efforts to provide a personalised learning experience. (See PT section of programme specification) At levels 4 and 5, a core set of problems for each quantity surveying module are issued to students. These cover the whole curriculum for a particular level. Students are required to work through these formative assessment problems as they cover the relevant curriculum. This allows students to test their learning and measure their progress. Discussion of progress on these problem sets will be a key part of the personal tutor scheme. Students

are required to upload their progress on these activities onto the **Learning Log** created on the University VLE system. The Learning Log will be available to the relevant personal tutors for further discussion during one-to-one meetings. There will be milestones for students to meet at every level, and it will be one of the personal tutor's roles to monitor the students' progress and give appropriate advice. Where difficulties are encountered PTs will be able to help or direct students to available support including peer mentoring schemes, PAL, Maths aid and on-line resources etc.

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 engaging academic relationship with the students and advise and refer them to other University services.
- There is a **Student Support and Engagement Team** to help students with any problem that is affecting their studies.
- A dedicated Undergraduate Course Administrator
- **An induction programme** and study skills sessions at the start of each academic year
- **SEC Academic Success Centre (SASC)** 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**
- **Talent A University Careers** and Employability Service
- Comprehensive University support systems including the provision of advice on finance, regulations, legal matters, accommodation, international student support, disability and equality support.
- The Students' Union
- An Academic Team that seeks to maintain an open door policy in the spirit of supporting students.

Personal Tutor Scheme (PTS) in the School of Engineering

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

Overall Aims

- To build a rapport between staff and students and contribute to personalising students' experience within the School of Engineering
- 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 encourage students to reflect on how their learning relates to a wider context and their personal career progression

Allocation of Personal Tutors

- Personal tutors will be allocated during induction week
- Tutors will be allocated on a course basis where appropriate with student numbers being equally divided amongst the staff within the School
- Students will keep the same tutor throughout their course of study
- If they change discipline at the end of TB1 a change of PT is likely to occur to allow comprehensive support through the programme.

There are specific aims and outcomes for each level, as the PTS is progressive and cumulative, students will find that they are building on the skills developed in previous levels. Formative assessment will be provided in the form of regular feedback during meetings.

Level 4: Settling in and building confidence

Aims and Learning Outcomes

- To assist students in making the transition to Higher Education and to generate a sense of belonging to the School Engineering with an emphasis on widening participation issues
- To help students to develop good academic habits and to gain the confidence to operate successfully in a university context
- To prepare students to make the most of feedback throughout their course

Contact:

- Teaching block 1: three one-to-one meetings during induction week, weeks 2 and 6-7
- Teaching block 2: two one-to-one meetings during week 1 and week 6-7
- End of academic year individual 'wrap up' email

In addition to a core set of problems for each module students are also given a list of engagement activities that they are encouraged to take advantage of at level 4. PT will discuss progress on problem sets and engagement with certain activities with tutees throughout the year. The Learning Log will be available to the relevant personal tutors for further discussion during one-to-one meetings. There will be milestones for students to meet at every level, and personal tutor's will monitor the students' progress and give appropriate advice.

The module **EG4010 Engineering Design and Professional** Practice is closely linked to the Personal tutor scheme as it introduces key academic and employability skills. In addition it focuses on reflective practice on feedback and their progress with academic and employability skills. It is expected that these are topics of conversation personal tutor meetings.

Level 5: Stepping it up and broadening horizons

Aims and Learning Outcomes

- To help students comprehend and plan for the academic demands of level 5 and to support increasing independence
- To encourage students to look forward, to take up opportunities to develop wider skills and to take responsibility for their personal development
- To foster students' ability to build on and respond proactively to the feedback they have received
- To assist students in reflecting on the skills that they are developing and consider how they relate to employability

Contact:

- One-to-one meeting in week 1
- Email contact at the end of teaching block 1
- Individual 'wrap up' email at end of academic year

Throughout the year, students are expected to reflect on their acquisition of skills and preparation for and industrial placement and employment with their personal tutors. This activity is integrated into **CE5107 Contract Administration** where students are required to produce a reflective diary and provide a self-evaluation of the competences developed and their learning journey up to that level.

Level 6: Maximising success and moving on

Aims and Learning Outcomes

- To support students with the planning necessary to maximise success in their penultimate undergraduate year
- To encourage students to reflect on the employability skills they have developed and be proactive in moving towards a professional life and/or further study
- To help students to make best use of the feedback they have received so that they can build on their strengths and take steps to address any weaknesses

Contact:

- One-to-one meeting in week 1

- Email contact at the end of teaching block 1
- Individual ‘wrap up’ email at end of academic year

Personal Tutors would have access to all the formative and summative assessment results of their tutees and would be responsible to discuss them with their tutees and assist them to prepare plans for further improvements and advise on any academic issues they may have. The personal tutors are also responsible for giving a bigger and more complete picture of learning, teaching, learning outcome and assessment and their linkage to the tutees.

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
- Boards of study with student representation
- Annual review and development
- Periodic review undertaken at subject level
- Student evaluation
- Moderation policies

G. Employability and work-based learning

The 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 the real world contexts in which they may work in the future. Group work in conjunction with external organisations at level 4 will provide students with relevant experience to add to their CV when they are applying for placement in level 5. Students are required to produce a CV early at level 5 and to improve this following feedback. The School strongly encourages and supports all students in applying for positions in industry for an Industrial Placement year between levels 5 and 6, the School emphasises the benefits to be obtained from an approved placement in industry.

An Industrial Placement comprises a period of at least 36 weeks with an approved employer. Students are required to maintain a log book of their activities and involvement and produce a final report on their activities as well as organisational and business aspects of the company. They are supported throughout the period by their personal tutor, who will visit them at their place of work on at least one occasion. The University tutor will discuss progress with the student and employer and will recommend any improvements to the learning opportunities.

Most graduates will aspire to become quantity surveyors and many to become chartered quantity surveyors and/or chartered construction managers. Graduates develop careers in all branches of the construction industry both here in the UK and throughout the world; as contract and consulting quantity surveyors, within local authorities, utility, infrastructure and transport companies, government organisations and private practices. In many cases, students taking an industrial placement are able to secure employment with the placement organisation following graduation. The academic and key skills developed throughout a surveying course also allow graduates to follow careers in other professions such as ICT, finance, accountancy and teaching.

Professional practice is introduced in the first year in the module **EG4010 Engineering Design and Professional Practice** in which the students are introduced to the employment opportunities in the specialist quantity surveying field, this is followed through all other modules at levels 5 and 6 especially in CE5107 Contract Administration, **CE6101 Building Design and Application, CE6014 Individual Project**

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

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; placement are not guaranteed. All students on the course receive support from the placement specialists (Talent Preparation Officers) within the KU Talent team in securing a position and while in the workplace. 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.

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

Subject benchmark
http://www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code/subject-benchmark-statements/honours-degree-subjects

Professional Body:
www.rics.org
www.ciob.org

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 4						Level 5						Level 6					
		CE4037	CE4032	CE4033	CE4035	CE4036	CE4021	EG5017	CE5030	CE5032	CE5029	CE5031	CE5033	CE6035	CE6036	CE6033	CE6014	CE6032	EG6026
Knowledge & Understanding	A6																		
	A5																		
	A4																		

	A2																		
	A1																		
	A3																		
Intellectual Skills	B5																		
	B4																		
	B1																		
	B2																		
	B3																		
	B6																		
Practical Skills	C5																		
	C4																		
	C3																		
	C2																		
	C1																		
	C6																		

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