PROGRAMME SPECIFICATION

KEY FACTS

Programme name	Civil and Infrastructure Engineering Civil and Infrastructure Engineering with Placement
Award	MEng (Hons)
School	Science and Technology
Department or equivalent	Engineering
UCAS Code	H292 H293
Programme code	USCIEN ENMECIE01 USCIEP ENMECIE01
Type of study	Full Time
Total UK credits	480 600
Total ECTS	240 300

PROGRAMME SUMMARY

This degree has the objectives of developing a fundamental understanding together with actionable methods for the workplace, studying the scientific, mathematical, technical and managerial skills required to allows students to develop skills in decision making, risk management, safety, increased productivity, design optimisation and cost reduction in today's civil and engineering infrastructures such as buildings, roads, railways, bridges, tunnels, costal protection and offshore infrastructures.

Engineering knowledge is built-up and nurtured, with specific objectives associated with each component Programme Stage. Most modules in Stage 1 are common across all of the engineering degrees offered by City St George's. This introductory year is intended to give you a thorough grounding in the fundamental and applied science and mathematics appropriate for an engineer, as well as developing personal skills such as time and quality management. You will have the opportunity to undertake preliminary engineering designs through group activity. Common to all stage 1 and 2 and across all Engineering programmes, you will be offered a core module termed as the Engineer in Society, which will introduce the engineering discipline with particular emphasis on some key topics such as sustainability and the environment. It will also incorporate personal tutoring and a series of seminars to improve your soft skills (presentations, CV building...). During the second year, the module will focus on an introduction to the engineering management and the circular economy. It will also incorporate training in employability and promote multi-skills engineering. In stage 3 and stage 4, the same module is tailored to the Civil and Infrastructure Engineering discipline you have chosen. Emphasis will be given to an interdisciplinary approach to engineering, sustainability, societal and moral impact of engineering. Further help in building your curriculum and enhancing your employability potential will also be provided.

At the end of Programme Stage 1 (assuming that you have met the academic requirements described below) you will have the opportunity to decide whether to remain on the MEng (Hons) Civil and Infrastructure Engineering degree or switch to one of the 2 other engineering MEng (Hons) degrees that share all stage 1 modules, namely Mechanical and

Design Engineering or Aerospace Engineering.

Students who complete Kaplan International Year 1 programme with average mark better than the qualifying mark as outlined in the Agreement document with Kaplan may progress to Stage 2 of this programme.

In Programme Stage 2 you will start to specialise and develop your experience of civil and infrastructure engineering. In addition to expanding your knowledge of Mathematics and the role of Engineering in society, you will gain specialist understanding of geology, structures and soil mechanics, as well as their integration in design, and you will advance your knowledge of fluid mechanics while also studying measurement and data analysis techniques.

Your studies become more applied in Programme Stage 3 including the analysis and design of specialist geotechnical, hydraulic and structural forms, and the use of computational analysis techniques. As with other years, a significant proportion of Programme Stage 3 is focused upon design and individual project. Your design tasks require you to draw together and apply knowledge gained over a number of subject areas. This year you will also study construction management and address the challenges of providing sustainable and ethical designs that are safe to construct. The Engineer in Society module in Programme Stage 3 focuses on the design for net zero carbon emission targets, with case studies and invited lectures from industry professionals.

In Stage 4 you learn to apply advanced solutions to complex civil and infrastructure engineering problems. There is a challenging design activity for a live large-scale integrated civil engineering infrastructure project, such as a port development. Level-7 studies in advanced analytical methods applied to geotechnical, hydraulics and structural systems support your design activities. In this stage you have to complete 2 elective subjects to give you the opportunity to direct your degree to your specific area of interest.

If you wish to gain practical experience during your degree, then you have the option of spending 12 months on a paid industrial placement. This industrial placement can be taken either between Programme Stages 2 and 3 or between Programme Stages 3 and 4. We strongly recommend this (see the subsequent section entitled ‘What Placement opportunities are available?’).

Certificate of Higher Education
Upon successful completion of Programme Stage 1 you will be able to: (i) discuss underlying concepts and principles associated with fundamental science and technology, (ii) to develop skills in time and quality management and (iii) present, interpret and evaluate quantitative and qualitative data within your subject of study appropriate to the formation of an engineer. At this stage, having gained all the necessary credits, you will either: (i) automatically progress onto Programme Stage 2 of the MEng (Hons) in Civil and Infrastructure Engineering or (ii) decide to switch onto one of the 2 other MEng (Hons) engineering degrees that share all stage 1 modules, namely Mechanical and Design Engineering or Aerospace Engineering, or (iii) leave the University with a Certificate of Higher Education in Engineering.

Diploma of Higher Education
Upon successful completion of Programme Stage 2 you will have: (i) built upon your

previous knowledge and experience, (ii) developed critical understanding of the well-established principles, and of the way in which those principles have developed in your area of study and (iii) advanced your skills of enquiry and different approaches to problem-solving as well as identify the limitations of your knowledge in your subject. At this stage, having gained all the necessary credits, you will either: (i) automatically progress onto Programme Stage 3 of the MEng (Hons) in Civil and Infrastructure Engineering, if you have achieved an overall aggregate mark of at least 50%, (ii) transfer to Programme Stage 3 of the BEng (Hons) in Civil and Infrastructure Engineering, if you have achieved an overall aggregate mark of at least 40%, or (iii) leave the University with a Diploma of Higher Education in Civil and Infrastructure Engineering.

BEng (Hons) Degree

Upon successful completion of Programme Stage 3 you will: (i) have developed a coherent systematic, detailed knowledge of your discipline and (ii) be able to confidently develop and employ appropriate techniques and methods in mathematical modelling and experimentation for engineering problem-solving, analysis and design. At this stage, having gained all the necessary credits, you will either: (i) automatically progress onto Programme Stage 4 of the MEng (Hons) in Civil and Infrastructure Engineering or (ii) exit the University with a BEng (Hons) degree in Civil and Infrastructure Engineering provided all Stage 3 credits have been awarded for studies undertaken on the MEng degree programme or (iii) leave the University with a bachelors ordinary degree in Civil and Infrastructure Engineering if you failed to gain sufficient credits for the award of a BEng (Hons) degree.

MEng (Hons) Degree

Upon successful completion of Programme Stage 4 (having gained all of the necessary credits) you will have met the requirements of the MEng (Hons) in Civil and Infrastructure Engineering degree and will: (i) have developed an in-depth and comprehensive knowledge and understanding of Civil and Infrastructure engineering, (ii) be able to create, apply and synthesize techniques and methods in mathematical modelling and experimentation for problem-solving, analysis and design of a wide variety of civil engineering infrastructures and situations, (iii) be able to develop originality in the application of knowledge and techniques and advance scholarship in your area of study and (iv) be able to lead or participate in group design activities which mirror realistic engineering practices and situations.

Aims

The overall aim of the MEng (Hons) in Civil and Infrastructure Engineering is to provide an excellent education in engineering with specialised training for a professional career in Civil and Infrastructure Engineering. In addition, students are expected to exercise leadership in project management and initiate independent research and critical analysis into specialized and advanced fields in engineering.

The specific aims are to produce graduates who:

- have a broad and in-depth knowledge and comprehensive understanding to solve a range of complex technical problems in civil engineering, scientific research, design environments and professional practice,
- are equipped to perform at a high technical level,
- are able to apply and integrate knowledge and understanding of other engineering disciplines to support their studies in civil and infrastructure engineering,
- are logical, numerate, have a natural curiosity about the scientific world and are able to problem-seek as well as problem-solve,

- demonstrate an attention to detail, without losing sight of the overall picture,
- have a sound knowledge and a practical understanding of business and management and participate effectively in team work,
- are aware of their professional and ethical responsibilities, the global and societal impact of engineering solutions, as well as the economic and political issues,
- are able to communicate effectively to a wide range of audiences,
- exhibit team loyalty and have the ability and confidence to be a leader in industry, and
- are able to undertake postgraduate level study in engineering with minimum supervision.

WHAT WILL I BE EXPECTED TO ACHIEVE?

This programme has been developed in accordance with the QAA Subject Benchmark for Engineering. Learning outcomes which must be delivered by MEng Programmes, accredited by the Joint Board of Moderators (JBM) as meeting the educational requirements for registration as a Chartered Civil Engineer, are defined in general terms in the 4th edition of the Accreditation of Higher Education Programmes (AHEP), published at www.engc.org.uk. The programme learning outcomes listed below are cross-referenced to these mandated AHEP4 learning outcomes as numbered in Section 4 of the Guidelines for Degree Programmes (available at https://www.jbm.org.uk/media/hdojdcyf/guidelines-for-developing-degree-programmes_ahep4.pdf).

On successful completion of this programme, you will be expected to be able to:

Knowledge and understanding:

- Apply a knowledge of mathematics, statistics, natural science and engineering principles to the solution of complex problems. Much of the knowledge will be at the forefront of the particular subject of study and informed by a critical awareness of new developments and the wider context of engineering. (M1).
- Formulate and analyse complex problems to reach substantiated conclusions. This will involve evaluating available data using first principles of mathematics, statistics, natural science and engineering principles, and using engineering judgment to work with information that may be uncertain or incomplete, discussing the limitations of the techniques employed (M2).
- Select and apply appropriate computational and analytical techniques to model complex problems, recognising the limitations of the techniques employed and selecting and evaluating critically technical information and other information resources (M3, M4)
- Design solutions for complex integrated problems that evidence some originality and meet a combination of societal, user, business and customer needs as appropriate. This will involve consideration of applicable health and safety, diversity, inclusion, cultural, societal, environmental and commercial matters, codes of practice and industry standard (M5, M6).
- Evaluate the environmental and societal impact of solutions to complex problems (to include the entire lifecycle of a product or process) using holistic risk management processes, and minimise adverse impacts identifying and analysing ethical concerns informed by professional codes of conduct (M7, M8, M9, M10).
- Adopt an inclusive approach to civil engineering practice and recognise the responsibilities, benefits and importance of supporting equality, diversity and

inclusion (M11).
- Use practical laboratory and workshop skills to investigate complex problems selecting and applying appropriate materials, equipment, engineering technologies and processes, recognising their limitations (M12, M13).
- Discuss the role of quality management systems and continuous improvement in the context of complex problems, and apply knowledge of civil engineering management principles, commercial context, and relevant legal matters (M14, M15).
- Evaluate effectiveness of own and team performance (M16).
- Plan and record self-learning and development as the foundation for lifelong learning/CPD (M18).

Skills:

- Tackle confidently unfamiliar engineering problems (M18).
- Gather, integrate and critically evaluate information from various sources including technical literature to solve complex problems (M4).
- Break down a problem into a series of engineering tasks to be solved with evidence of some originality under a set of multi-disciplinary constraints (M5).
- Communicate effectively in technical and non-technical languages, written, oral and graphical forms to individuals and large audiences, evaluating the effectiveness of the methods used (M17).
- Be proficient with computational tools and communications systems (M3, M17).
- Use laboratory equipment for data measurement, processing, interpreting and analysis, critically evaluating its limitations (M3, M13).
- Use laboratory equipment to produce or modify an engineering component (M12).
- Be proficient with analytical, computational and experimental techniques (including assessing the limitations of the results obtained), coupled with experience and decision-making, to solve engineering problems (M2, M3).
- Apply initiative, creativity and innovation to design, construct and test a system, component or process to meet specifications, evidencing some originality(M5).
- Evaluate designs, processes or products and make improvements, taking into consideration associated commercial risks, societal and environmental impact in the entire life-cycle of the product or process (M7, M9, M10).
- Work with technical uncertainty (M2).
- Plan for and manage time/cost/quality of an engineering project and, where necessary, use theory or experimental research to mitigate deficiencies, including adjusting plans to changing circumstances and controlling such adjustments (M7, M9, M10, M14).
- Function effectively as an individual, and as a member or leader of a team in which is able to communicate proficiently, willing to take the lead in difficult situations and being able to evaluate the individual and team performance (M16, M17).
- Be proficient in the application of analytical and computational techniques specifically to the analysis and design of different civil and infrastructure engineering systems with critical understanding on the limitations and uncertainty of the techniques employed (M2, M3).

Values and attitudes:

- Put the needs of the team ahead of one's own needs (M16).

- Willingly take on the professional and ethical responsibilities of engineers in society (M8); commit to continuous improvement to enhance professional skills and benefit society (M18).
- Value the impact of civil and infrastructure engineering to society and to the global economy while recognising the need for civil and infrastructure engineering industry to contribute in a sustainable way (M7).
- Recognise that there is only one type of engineer, a person that tackles and solves problems, independently of gender, religion or race. Our graduates will be aware of the social and moral importance of equality and diversity, and of promoting inclusion (M11).

HOW WILL I LEARN?

Contact hours are made up of: lectures, which direct you towards the most important topics in the field and which allow discussion and clarification of areas of uncertainty with expert staff; tutorials where staff are on hand to help with problem-solving exercises; laboratory and workshop classes where practical situations and methods are encountered; and research or design/build projects, both individually and in groups, where personal skills, teamwork, creativity and critical thinking are developed and where knowledge built up elsewhere in the programme is integrated and developed. Site visits and field courses are used to place taught sessions in the context of real-world industries or products. Residential field courses allow you to undertake longer practical sessions in geology outside in the field.

The majority of learning in Higher Education is typically conducted through private study. Engineering is a practical discipline which benefits from significant supervised study, but it cannot be learnt through lectures alone. In Programme Stages 1 and 2 there is a higher proportion of supervised study (compared with Programme Stages 3 and 4), with typically 20-24 hours of contact timetabled each week. These supervised contact hours are designed to assist and to focus your private study. Teaching involves a combination of theoretical, experimental and computational study. Our approach is to encourage critical thinking and foster your curiosity. By the time that you reach Programme Stage 3, the tutorial and practical elements are managed more by you, especially in relation to your individual project work. The remaining hours of private study each week are essential to the achievement of the learning outcomes and are guided using both formative and summative coursework tasks set during the academic year.

In Programme Stage 3 the Individual Project gives you an opportunity to work independently, under the guidance of members of staff, to undertake research into a topic that you may not have covered in taught material. You will plan and conduct the project using experimental and/or computational methods and critically assess the findings in the context of a review of existing work.

Your private study is also supported by the use of Moodle, City St George's Online Learning Environment. This provides online access to module content, feedback, guidance on completing coursework, audio-visual resources etc.

WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?

Assessment and Assessment Criteria

The Programme is subdivided into Programme Stages (years of study) and each Programme Stage into modules (coherent groupings of syllabus topics addressing particular Learning Outcome types). Each module in the programme may have one or more assessment components of differing types. Assessment components may involve more than one assessment task (e.g. they may be an aggregate of different coursework marks or multiple examination papers). Modules that contain multiple assessment components (either coursework or exam) for which individual minimum pass marks are required are specified in the relevant module specifications.

Part of the modules will have an examination component as well as a coursework (continuous assessment) component. The split between examination and coursework assessment is included in the corresponding module specifications. Many skills need to be honed by practice: to this end formative assessments, may be organised within each module with appropriate and timely feedback mechanisms.

Examinations are used because they provide a controlled environment in which to assess knowledge and understanding and problem-solving skills. The time pressure and lack of prior warning about specific issues to be tackled is representative of real-world situations faced by practicing engineers. Coursework assessments vary from paper assignments (which may be similar to examinations but with longer time scales and with access permitted to information sources) to the assessment of practical skills which cannot be done in the exam hall. For example, communication skills (e.g. presentations, drawings and written reports), personal skills (such as team work or leadership), planning and design (both software and hardware), data analysis, critical review of information and the use of laboratory apparatus for measurement of properties and modelling of behaviour are usually assessed by means of coursework tasks.

Often coursework tasks may be set which are not to be assessed but which are valuable as a learning experience. This is known as formative coursework and is often the key to improving grades on assessed or summative coursework. You will receive feedback from all coursework assessments, both formative and summative, to enable you to develop and enhance your assessment performance. Real-life design projects are proposed in every stage of the Civil and Infrastructure Engineering program to offer a unique project-based learning approach with a significant industrial input.

Assessment Criteria are descriptions, based on the intended learning outcomes, of the skills, knowledge or attitudes that you need to demonstrate in order to complete an assessment successfully, providing a mechanism by which the quality of an assessment can be measured. Grade-Related Criteria are descriptions of the level of skills, knowledge or attributes that you need to demonstrate in order achieve a certain grade or mark in an assessment, providing a mechanism by which the quality of an assessment can be measured and placed within the overall set of marks. Assessment Criteria and Grade-Related Criteria will be made available to you to support you in completing assessments. These may be provided in programme handbooks, module specifications, on the virtual learning environment or attached to a specific assessment task.

Feedback on assessment

Feedback will be provided in line with our Assessment and Feedback Policy. In particular, you will normally be provided with feedback within three weeks of the

submission deadline or assessment date. This may be written (on the hard copies and online) or oral (in class), specific to you or generally applicable, and would normally include a provisional grade or mark. If the coursework submitted is a laboratory report, then your work will not be returned until three weeks after the last report has been submitted. Laboratories are undertaken by groups of you in rotation over periods of many weeks and consequently the last group of you may complete the laboratory and submit the report many weeks after the first group.

For end-of-module examinations or an equivalent significant task (e.g. an end-of-module project), a generic feedback will normally be provided within four weeks of the last day of exam period. The timescale for feedback on final year projects or dissertations may be longer and starts from the date of the final presentation of the project. The full policy can be found at: Assessment and Feedback policy.

Assessment Regulations
In order to pass your programme, you should complete successfully (or be exempted from) the relevant modules and assessments and will therefore acquire the required number of credits. You also need to pass each preceding Programme Stage of your Programme in order to progress to the following Programme Stage.

Your overall aggregate mark will be calculated by combining the aggregate marks from Programme Stages 1, 2, 3 and 4 in the ratio 1:2:3:4.

The pass mark for each module is 40%, except for Level-7 modules where the pass mark is 50%. In some modules there will be a requirement to pass the written exam of the module (where the pass mark will also be 40%, or 50% for Level-7 modules). Details of which assessment components need to be passed individually is provided in the Module Specification.

If you fail an assessment component or a module, the following will apply.

Compensation: where, if you fail up to a total of 30 credits in your entire programme, at your first or resit attempt, you may be allowed compensation if the following applies:

- The maximum amount of compensation that can be applied across one or more Modules within a Programme Stage or for the Programme is as follows:
- Undergraduate: A mark of no more than 10% below the Module pass mark must have been achieved in the Module to be compensated.
- Please refer to the 'what will I study' section in this specification for specific information on which modules can be compensated.
- It can be demonstrated that the Learning Outcomes of the Modules in the Programme Stage have been satisfied. Core modules and core/elective modules cannot be compensated. Modules that must be taken by the student (compulsory modules or compulsory/elective modules), but are not designated as core modules, and elective modules may be compensated where this is approved in the Programme Specification.
- Taking the mark to be compensated into account:

Undergraduate: an overall aggregate mark of 40% must have been achieved for the Programme Stage calculated on the basis of the Module marks weighted according to their credit value.

Integrated Masters Programmes: an overall aggregate for the Programme Stage (40% for Stages 1-3, and 50% for Stage 4), must have been achieved calculated on the basis of the Module mark weighted according to their credit value.

- A student who receives a compensated pass in a Module will be awarded the credit for the Module. The mark used to calculate the Award will be the original Module mark. The original component mark(s) (i.e. those below the pass mark) will be retained in the record of marks.
- A pass/fail module cannot be compensated

Where you are eligible for compensation at the first attempt, this will be applied in the first instance rather than offering a resit opportunity.

If you receive a compensated pass in a module then you will be awarded the full credits for that module. The original component marks will be retained in the record of marks and your original module mark will be used for the purpose of your Award calculation.

A maximum of 30 credits of compensation may be applied in the programme in total.
Resit: Where you are not eligible for compensation at the first attempt, you will normally be offered one resit attempt.

If you are successful in the resit, you will be awarded the full credit for that module. The mark for each assessment component that is subject to a resit will be capped at the pass mark for the module. This capped mark will be used in the calculation of final module mark together with the original marks for the components that you passed at first attempt.

If you do not meet the pass requirements for a module and do not complete your resit by the date specified, you will not progress to the next Programme Stage and the Assessment Board will require you to be withdrawn from the Programme.

If you fail to meet the requirements for a particular Programme Stage or the Programme, the Assessment Board will consider whether you are eligible for an Exit Award as per the tables shown below.
If you would like further information about the way in which assessment works at City St George's, please see the full version of the Assessment regulations (Regulation 19) here: City St Georges, University of London Senate regulations • City St George's, University of London

WHAT AWARD CAN I GET?

Integrated Masters degree with honours in Civil and Infrastructure Engineering

Programme Stage	HE Level	Credits	Weighting %
1	4	120	10
2	5	120	20
3	6	120	30
4	7	120	40

Class	% Required
I	70
II upper division	60
II lower division	50

Integrated Masters degree with honours in Civil and Infrastructure Engineering with Placement

Programme Stage	HE Level	Credits	Weighting %
1	4	120	8
2	5	120	16
3	6	120	26
4	7	120	40
Placement	6	120	10

Class	% Required
I	70
II upper division	60
II lower division	50

Bachelor's degree with honours in Civil and Infrastructure Engineering

Programme Stage	HE Level	Credits	Weighting %
1	4	120	10
2	5	120	30
3	6	120	60

Class	% Required
I	70
II upper division	60
II lower division	50
III	40

Ordinary degree in Civil and Infrastructure Engineering

Programme Stage	HE Level	Credits	Weighting %
1	4	120	10
2	5	120	30
3	6	60	60

Class	% Required
With Distinction	70
With Merit	60
Without Classification	40

Diploma of Higher Education in Civil and Infrastructure Engineering

Programme Stage	HE Level	Credits	Weighting %
1	4	120	25
2	5	120	75

Class	% Required
With Distinction	70
With Merit	60
Without Classification	40

Certificate of Higher Education in Engineering

Programme Stage	HE Level	Credits	Weighting %
1	4	120	100

Class	% Required
With Distinction	70
With Merit	60
Without Classification	40

WHAT WILL I STUDY?

Programme Stage 1

Programme Stage 1 comprises 8 core Level-4 modules, totalling 120 credits. To pass Stage 1 you must obtain all 120 credits, as specified in the Programme Scheme.

Module Title	SITS Code	Module Credits	Core/ Compulsory/ or Elective	Can module be compensated?	Level
The Engineer in Society - Social Responsibility	EG1000	15	Core	No	4
Engineering Design I	EG1002	15	Core	No	4
Introduction to Mechanics of Materials and Manufacturing	EG1004	15	Core	No	4
Electronics I	EG1005	15	Core	No	4
Introduction to Programming	EG1007	15	Core	No	4
Engineering Science	EG1003	15	Core	No	4
Mathematics I	EG1001	15	Core	No	4
Introduction to Thermodynamics and Fluid Mechanics	EG1008	15	Core	No	4

Programme Stage 2

Programme Stage 2 comprises 8 core Level-5 modules, totalling 120 credits. To pass Programme Stage 2 you must obtain all 120 credits, as specified in the Programme Scheme.

If you wish to gain practical experience you have the option of spending a year on paid industrial placement between Programme Stages 2 and 3.

Module Title	SITS Code	Module Credits	Core/ Compulsory/ or Elective	Can module be compensated?	Level
The Engineer in Society - Sustainability and Circular Economy	EG2000	15	Core	No	5
Mathematics II	EG2001	15	Core	No	5
Engineering Design II - Infrastructure	EG2700	15	Core	No	5
Fluid Mechanics	EG2101	15	Core	No	5
Geology and Soil Mechanics	EG2701	15	Core	No	5
Structural Mechanics and Materials	EG2702	15	Core	No	5

Sensor Systems, Instrumentation and Surveying	EG2302	15	Core	No	5
Data Analysis for Engineers	EG2002	15	Core	No	5

To continue to Programme Stage 3 of the MEng Programme, you must have achieved a module average of at least 50% at the end of Programme Stage 2. If you fail to meet the requirement to progress to MEng Programme Stage 3, but pass all modules in Programme Stage 2, then you will be allowed to progress to Programme Stage 3 of the BEng Programme.

Programme Stage 3

Programme Stage 3 comprises 1 core and 6 compulsory Level 6 modules, totalling 120 credits. To pass Programme Stage 3 you must obtain all 120 credits, as specified in the Programme Scheme.

If you wish to gain practical experience you have the option of spending a year on paid industrial placement between Programme Stages 3 and 4, if not taken already between Programme Stages 2 and 3.

Module Title	**SITS Code**	**Module Credits**	**Core/ Compulsory/ or Elective**	**Can module be compensated?**	**Level**
Individual Project	EG3000	30	Core	No	6
The Engineer in Society - Infrastructure for Net Zero	EG3700	15	Compulsory	Yes	6
Finite Element Analysis of Structures	EG3701	15	Compulsory	Yes	6
Geotechnical Engineering	EG3702	15	Compulsory	Yes	6
Design of Urban Infrastructure	EG3703	15	Compulsory	Yes	6
Hydrodynamics for Civil and Marine Infrastructure	EG3704	15	Compulsory	Yes	6
Construction Management	EG3705	15	Compulsory	Yes	6

Having exhausted all re-sit opportunities, if you fail to progress to MEng Programme Stage 4, then you will be transferred to the BEng programme and considered for the award of a BEng (Hons) Degree.

Programme Stage 4

Programme Stage 4 comprises 1 core and 4 compulsory Level 7 modules, totalling 90 credits, and 2 elective Level 7 modules of 15 credits each. To pass the Programme Stage 4 you must obtain 120 credits, as specified in the Programme Scheme.

Module Title	SITS Code	Module Credits	Core/ Compulsory/ or Elective	Can module be compensated?	Level
Design Group Project - Integrated Infrastructure Project	EGM701	30	Core	No	7
The Engineer in Society - Infrastructure Resilience	EGM700	15	Compulsory	Yes	7
Structural Dynamics and Stability	EGM703	15	Compulsory	Yes	7
Analysis of Geotechnical Infrastructure	EGM704	15	Compulsory	Yes	7
Advanced Hydrodynamic Analysis	EGM702	15	Compulsory	Yes	
Bridge Engineering	EPM715	15	Elective	Yes	7
Blast & Earthquake Analysis of Structures	EPM694	15	Elective	Yes	7
Reliable Structural Systems	EPM695	15	Elective	Yes	7
Construction Methods & Temporary Works	EGM705	15	Elective	Yes	7

With Placement route:

Module Title	SITS Code	Module Credits	Core/ Elective	Can be compensated?	Level
Professional Placement & Career Development module.	IN3053	120	Core	N	6

TO WHAT KIND OF CAREER MIGHT I GO ON?

Most graduates choose to enter the civil engineering profession either with consultants or contractors. Recent graduates have joined leading design consultants such as AECOM, Atkins, Building Design Consultants, London Bridge Associates, Mott MacDonald, Arup and Ramboll or contracting engineering practices in the UK such as Balfour Beatty Engineering, Jacobs Engineering and Skanska. Graduates also join companies overseas.

However, beyond civil engineering, this degree equips you with the required technical

expertise, initiative and management skills to be able to face modern challenges in any number of branches of the engineering industry. Your creativity and innovation in design will serve you well in the broad profession.

The Centre for Career & Skills Development provides a service to current undergraduates and postgraduates, as well as recent graduates of the University. Their aim is to provide you with advice, information and skills that you need to make a smooth transition into the world of professional engineering. If you would like further information on the careers support available at City St George's, please go to: https://www.citystgeorges.ac.uk/prospective-students/career-development/pathways

WHAT STUDY ABROAD OPTIONS ARE AVAILABLE?

At present these options are not available; they remain under development.

WHAT PLACEMENT OPPORTUNITIES ARE AVAILABLE?

You will have the opportunity to undertake a one-year placement before the final year of your programme. You will be given the opportunity to secure a role in a diverse range of companies from multinational organisations to small and medium sized (SMEs) including dynamic startup ventures both in the UK and internationally. The broad spectrum of roles available will enable you to focus on your interests whilst being exposed to new experiences and challenges.

Your placement should be approved by the Corporate Relations & Employability Unit (CREU).

You will need to source and apply for any placement opportunities independently however support and guidance will be provided throughout the application process by the CREU.

The placement year will be worth 120 credits and weighted at 10% of your final degree grade. Your placement grade will be based on the grades achieved on successful completion of IN3053 Professional Placement & Career Development module.

WILL I GET ANY PROFESSIONAL RECOGNITION?

Accrediting Body: Joint Board of Moderators (Institution of Civil Engineers, Institution of Structural Engineers, Institute of Highway Engineers, The Chartered Institution of Highways and Transportation, The Permanent Way Institution).

Nature of Accreditation
Our current Civil Engineering degrees are accredited by the above institutions, providing a path for students on those programmes to gain Chartered Engineering status. This programme has been designed to satisfy the above institutions' accreditation criteria and an application for accreditation will be made in due course. We have every expectation that these degrees will similarly receive full accreditation.

HOW DO I ENTER THE PROGRAMME?

The following entrance requirements typically apply.

UCAS tariff points
120.

A-levels
BBB; including A-Level Mathematics. You are also required to have passed GCSE English Language and Mathematics at grade 4 (C), or higher.

International Baccalaureate:
30 points with 'Higher Level Mathematics at grade 5' OR 'Standard Level Mathematics at grade 7 AND Higher-Level Physics/Biology/Chemistry at grade 5' and minimum of grade 5 in Standard Level English.

BTEC
DDM (128) including Distinction in either Unit 7 (Calculus) or Unit 8 (Further Mathematics)

T-Level
in Design, Surveying and Construction. Must have an overall “Distinction” with at least B in the core. Must have “Distinction” in the Occupational specialism of Civil Engineering.

K9 Mathematical techniques (in the Civil Engineering specialism), K9.1 Algebra, including indices, logarithms, linear equations, K9.2 Trigonometric and standard formulae, including circular and triangular measures, K9.3 Elementary calculations and techniques, including integration and differentiation K9.4 Statistical methods, including averages, tendency and dispersion. This may be sufficient.

English language requirements
If your first language is not English, we will require evidence of English language proficiency. Minimum requirements are:

For overseas candidates, an IELTS score of 6.0 (with a minimum of 6.0 in all components) is required or a PTE Academic score of 59 overall (with a minimum of 59 in each component).

TOEFL is not accepted as evidence of English language ability for students that require a Confirmation of Acceptance for Studies.

Entry via Foundation Course
You will be offered a place on the MEng (Hons) degree in Civil and Infrastructure Engineering should you both (i) successfully satisfy the City St George’s University London interview panel and (ii) obtain an overall grade of at least 75% on an Engineering Foundation programme at: Westminster-Kingsway College, INTO City St George’s University London International or Kaplan International College.

RPL/RPEL
Direct entry into Programme Stage 2 may be considered for candidates who have successfully completed the first year of a similar accredited MEng or BEng degree.

Details on additional entry routes are available on the programme page on the City St George's website.

Scholarships
Undergraduate students are considered for a wide range of awards (scholarships, bursaries and prizes) throughout their studies in the School. These (internally and externally funded) awards range from £500-£9000 and they are based on a combination of academic merit and hardship. A number of these awards are also available to international students. Further information can be found at:
https://www.citystgeorges.ac.uk/prospective-students/finance/funding

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