# PART 1: COURSE SUMMARY INFORMATION

## Course summary

<table>
<thead>
<tr>
<th>Final award</th>
<th>BEng (Hons) Civil Engineering with Construction Management</th>
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<tbody>
<tr>
<td>Intermediate award</td>
<td>BEng  Civil Engineering</td>
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<tr>
<td></td>
<td>Dip HE  Civil Engineering</td>
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<td></td>
<td>Cert HE  Civil Engineering</td>
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</tbody>
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## Course status

Validated

## Awarding body

University of Brighton

## School

Environment & Technology

## Location of study/ campus

Moulsecoomb

## Partner institution(s)

<table>
<thead>
<tr>
<th>Name of institution</th>
<th>Host department</th>
<th>Course status</th>
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<tbody>
<tr>
<td>1.</td>
<td>SELECT</td>
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<td>2.</td>
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<td>3.</td>
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## Admissions

<table>
<thead>
<tr>
<th>Admissions agency</th>
<th>UCAS</th>
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<tbody>
<tr>
<td>Entry requirements</td>
<td>Check the University’s website for current entry requirements</td>
</tr>
</tbody>
</table>

Include any progression opportunities into the course.

A-Level or BTEC

A good score at A level (BBB to BCC which typically translates to 120 to 104 points in the UCAS tariff). A-level maths, or its equivalent, is normally a requirement for entry. You will be considered if your predicted grades fall above or within this range.

- BTEC Extended Diploma with overall DDM-DMM and a minimum M in further mathematics.
- Pass with 60 credits overall at Access to HE Diploma. At least 45 credits at level 3, with 24 credits at merit or above. Must achieve maths level 3 units at distinction.
- Suitable score of an approved foundation year.

The following entry requirements are also acceptable:

International Baccalaureate 28 points with 3 subjects at HL and at least 5 points in HL Mathematics.

Other applications will be compared with the British Council International Guide to Qualifications in Education. Applicants with non-standard qualifications should contact the School office at entec@brighton.ac.uk.

For non-native speakers of English:

IELTS 6.0 overall, with 6.0 in writing and a minimum of 5.5 in the other elements.
Direct Entry to Second Year:
Students holding a Foundation Degree or HND in Civil Engineering, or an equivalent qualification with a suitable mathematics qualification may be considered for direct entry on an individual basis.

Studying part-time:
Part-time students should apply direct to the university.

<table>
<thead>
<tr>
<th>Start date (mmm-yy)</th>
<th>September 2020</th>
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### Mode of study

<table>
<thead>
<tr>
<th>Mode of study</th>
<th>Duration of study (standard)</th>
<th>Maximum registration period</th>
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<tr>
<td>Full-time</td>
<td>3 years</td>
<td>8 years</td>
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<tr>
<td>Part-time</td>
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<td>Sandwich</td>
<td>4 years</td>
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<td>Distance</td>
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### Course codes/categories

<table>
<thead>
<tr>
<th>UCAS code</th>
<th>H2K2</th>
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### Contacts

<table>
<thead>
<tr>
<th>Course Leader (or Course Development Leader)</th>
<th>Dr Ourania Tsioulou</th>
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<tbody>
<tr>
<td>Admissions Tutor</td>
<td>Dr Alessandro Tombari</td>
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### Examination and Assessment

<table>
<thead>
<tr>
<th>External Examiner(s)</th>
<th>Name</th>
<th>Place of work</th>
<th>Date tenure expires</th>
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<tbody>
<tr>
<td></td>
<td>Dr S Mitchell</td>
<td>University of Portsmouth</td>
<td>30/09/2021</td>
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</table>

<table>
<thead>
<tr>
<th>Examination Board(s) (AEB/CEB)</th>
<th>AEB/CEB Built Environment &amp; Civil Engineering</th>
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### Approval and review

<table>
<thead>
<tr>
<th>Approval date</th>
<th>Review date</th>
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<tr>
<td>Validation</td>
<td>January 2013¹</td>
</tr>
<tr>
<td>Programme Specification</td>
<td>January 2019³</td>
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<tr>
<td>Professional, Statutory and Regulatory Body 1 (if applicable): Joint Board of Moderators</td>
<td>Accredited March 2013</td>
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¹ Date of original validation.
² Date of most recent periodic review (normally academic year of validation + 5 years).
³ Month and year this version of the programme specification was approved (normally September).
⁴ Date programme specification will be reviewed (normally approval date + 1 year). If programme specification is applicable to a particular cohort, please state here.
⁵ Date of most recent review by accrediting/approving external body.
<table>
<thead>
<tr>
<th>Professional, Statutory and Regulatory Body 2 (if applicable):</th>
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<tbody>
<tr>
<td>Professional, Statutory and Regulatory Body 3 (if applicable):</td>
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</table>
PART 2: COURSE DETAILS

AIMS AND LEARNING OUTCOMES

Aims
The aims of the course are:

- Develop competent and innovative Civil Engineers with the distinct characteristics to be experts in the management of constructions (in an environmentally friendly way).

- Provide a learning environment in which the graduate will be exposed to: the construction management process within the project life cycle, the interface of the natural and built environment and the deep understanding of their interaction.

- To develop a range of problem solving, interpersonal and teamwork skills across the modules, which complement the theory and enhance its application in the industrial environment.

These aims are reflected in the learning objectives for professional and personal development of the three main core subjects (Structures, Materials and Geotechnics) and the chosen additional core subjects (Hydraulics and Construction Management) in the context of design with appropriate account of sustainability, health and safety, and buildability issues.

Learning outcomes
The outcomes of the main award provide information about how the primary aims are demonstrated by students following the course. These are mapped to external reference points where appropriate.

<table>
<thead>
<tr>
<th>Knowledge and theory</th>
<th>Science and mathematics</th>
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</thead>
<tbody>
<tr>
<td>Engineering is underpinned by science and mathematics, and other associated disciplines, as defined by the relevant professional engineering institution(s). Graduates will need the following knowledge, understanding and abilities:</td>
<td></td>
</tr>
<tr>
<td>- Knowledge and understanding of scientific principles and methodology necessary to underpin their education in their engineering discipline, to enable appreciation of its scientific and engineering context, and to support their understanding of historical, current, and future developments and technologies;</td>
<td></td>
</tr>
<tr>
<td>- Knowledge and understanding of mathematical principles necessary to underpin their education in their engineering discipline and to enable them to apply mathematical methods, tools and notations proficiently in the analysis and solution of engineering problems;</td>
<td></td>
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</tbody>
</table>

Engineering analysis involves the application of engineering concepts and tools to the solution of engineering problems. Graduates will need:

- Understanding of engineering principles and the ability to apply them to analyse key engineering processes
- Understanding of, and the ability to apply, an integrated or systems approach to solving engineering problems.

Design

Please refer to Course Development and Review Handbook or QAA website for details.
Design at this level is the creation and development of an economically viable product, process or system to meet a defined need. It involves significant technical and intellectual challenges and can be used to integrate all engineering understanding, knowledge and skills to the solution of real and complex problems. Graduates will therefore need the knowledge, understanding and skills to:

- Understand and evaluate business, customer and user needs, including considerations such as the wider engineering context, public perception and aesthetics

**Economic, legal, social, ethical and environmental context**

Engineering activity can have impacts on the environment, on commerce, on society and on individuals. Graduates therefore need the skills to manage their activities and to be aware of the various legal and ethical constraints under which they are expected to operate, including:

- Understanding of the need for a high level of professional and ethical conduct in engineering and a knowledge of professional codes of conduct
- Knowledge and understanding of the commercial, economic and social context of engineering processes
- Knowledge and understanding of management techniques, including project management, that may be used to achieve engineering objectives
- Understanding of the requirement for engineering activities to promote sustainable development and ability to apply quantitative techniques where appropriate
- Awareness of relevant legal requirements governing engineering activities, including personnel, health & safety, contracts, intellectual property rights, product safety and liability issues
- Knowledge and understanding of risk issues, including health & safety, environmental and commercial risk, and of risk assessment and risk management techniques.

**Engineering Practice**

This is the practical application of engineering skills, combining theory and experience, and use of other relevant knowledge and skills. This can include:

- Understanding of contexts in which engineering knowledge can be applied (e.g. operations and management, application and development of technology, etc)
- Knowledge of characteristics of particular materials, equipment, processes, or products
- Understanding of the use of technical literature and other information sources
- Knowledge of relevant legal and contractual issues
- Understanding of appropriate codes of practice and industry standards
- Awareness of quality issues and their application to continuous improvement
- Understanding of, and the ability to work in, different roles within an engineering team.

**Skills**

Includes intellectual skills (i.e. generic skills relating to academic study, problem solving, evaluation, research etc.) and professional/practical skills.

**Science and mathematics**

- Ability to apply and integrate knowledge and understanding of other engineering disciplines to support study of their own engineering discipline.

**Engineering Analysis**

- Ability to identify, classify and describe the performance of systems and components through the use of analytical methods and modelling techniques
- Ability to apply quantitative and computational methods in order to solve engineering problems and to implement appropriate action.
Design
• Investigate and define the problem, identifying any constraints including environmental and sustainability limitations; ethical, health, safety, security and risk issues; intellectual property; codes of practice and standards
• Work with information that may be incomplete or uncertain and quantify the effect of this on the design
• Apply advanced problem-solving skills, technical knowledge and understanding, to establish rigorous and creative solutions that are fit for purpose for all aspects of the problem including production, operation, maintenance and disposal
• Plan and manage the design process, including cost drivers, and evaluate outcomes
• Communicate their work to technical and non-technical audiences.

Engineering Practice
• Ability to apply relevant practical and laboratory skills
• Ability to work with technical uncertainty

Additional general skills
Graduates must have developed transferable skills, additional to those set out in the other learning outcomes, that will be of value in a wide range of situations, including the ability to:
• Apply their skills in problem solving, communication, working with others, information retrieval, and the effective use of general IT facilities
• Plan self-learning and improve performance, as the foundation for lifelong learning/CPD
• Plan and carry out a personal programme of work, adjusting where appropriate
• Exercise initiative and personal responsibility, which may be as a team member or leader.

QAA subject benchmark statement (where applicable)?
See the following links for further information:

PROFESSIONAL, STATUTORY AND REGULATORY BODIES (where applicable)
Where a course is accredited by a PSRB, full details of how the course meets external requirements, and what students are required to undertake, are included.

This course is accredited by the Joint Board of Moderators (JBM) representing the Institution of Civil Engineers, the Institution of Structural Engineers, the Chartered Institution of Highways and Transportation, and the Institute of Highway Engineers, as fully satisfying the educational base for an Incorporated Engineer and partially satisfying the educational base for a Chartered Engineer. A programme of accredited Further Learning will be required to complete the educational base for CEng. See www.jbm.org.uk for further information.

Accredited by the Chartered Institution of Highways and Transportation (CIHT) on behalf of the Engineering Council as fully satisfying the educational base for an Incorporated Engineer and partially satisfying the educational base for a Chartered Engineer. A programme of accredited Further Learning will be required to complete the educational base for CEng.

7 Please refer to the QAA website for details.
Accredited by the Institute of Highway Engineers (IHE) on behalf of the Engineering Council as fully satisfying the educational base for an Incorporated Engineer and partially satisfying the educational base for a Chartered Engineer. A programme of accredited Further Learning will be required to complete the educational base for CEng.

Accredited by Institution of Civil Engineers (ICE) on behalf of the Engineering Council as fully satisfying the educational base for an Incorporated Engineer and partially satisfying the educational base for a Chartered Engineer. A programme of accredited Further Learning will be required to complete the educational base for CEng.

Accredited by the Institution of Structural Engineers (IStructE) on behalf of the Engineering Council as fully satisfying the educational base for an Incorporated Engineer and partially satisfying the educational base for a Chartered Engineer. A programme of accredited Further Learning will be required to complete the educational base for CEng.

**LEARNING AND TEACHING**

**Learning and teaching methods**

This section sets out the primary learning and teaching methods, including total learning hours and any specific requirements in terms of practical/clinical-based learning. The indicative list of learning and teaching methods includes information on the proportion of the course delivered by each method and details where a particular method relates to a particular element of the course.

**Introduction**

Students typically take the equivalent of 6 modules per year. A module is designed to comprise 200 hours total learning time and is typically studied over a 15 week semester. A typical 20 credit module comprises a combination of tutor-led contact sessions and guided independent study (including time spent in preparing and completing assessment tasks). A broad range of teaching methods is employed to meet the intellectual, academic and professional objectives of the course whilst ensuring a diverse need of students. These include lectures, tutorials, seminars, case studies, laboratory classes and practical classes, fieldwork, flipped learning, student-centred IT projects, workshops, computer modelling/simulation, practical classes and both individual and group project work. In addition, the multifaceted aspects of the application of engineering, information technology and computing form a continuing theme throughout the course.

The general learning approach in the common first year is for individual students to be encouraged and supported to achieve their learning potential and develop their confidence through tutor-led learning. The learning progressively becomes student-centred towards the later stages of their course, whereby students are able to operate in complex and unpredictable contexts, requiring selection and application from a range of standard techniques and information sources. Furthermore, a greater choice of modules is available in the final year for the students to enable specialism in their chosen areas of interest.

Key features of our learning and teaching methodology are:

**Enquiry and Research led Learning**

Enquiry and research led learning pedagogies are at the heart of student learning throughout the course. During Level 4 (first year of study), students are exposed to research through a group based project linked to the Engineering for people design UK challenge as part of module CE472 – Civil Engineering Practice. There is also an intensive design activity (CE512 – Concrete Technology and Design of Reinforced Concrete structures), whereby the students will design and build a simple small scale structure to a required capacity and physically test this in the laboratory to confirm their design. Whilst the enquiry led and project based learning is a common theme in many modules, the depth, extent, and complexity of such methods increase progressively at higher levels, such as a group project at Level 6 in module CE612 – Design of Steel Structures that facilitates the students to integrate their learning from the individual modules to achieve the design of a simplified structure. At Level 6 in module CE613 – Design of Structures, a multidisciplinary group design project aims at designing a complete structure using a complex and incomplete client brief and best industry practice guidelines. Furthermore, at this...
Level students will conduct an individual independent research project in a chosen topic within their own subject area of interest and write a dissertation report (CE690).

**Research Informed Teaching**

This course is delivered by research-active academic staff, and specialist aspects of the curriculum reflect the research interests of these staff. All final year option modules are taught by staff who are actively engaged in research and publication in their specific topic areas, and who are currently undertaking research or consultancy with leading bodies. This level of integration is particularly true for final year projects, where students spend an extended period of time undertaking research with a subject specialist, who is linked into a network of international scholars with shared interests. Throughout the course, students develop competencies enabling them to become independent researchers, with specialist skills sessions scheduled to support their development. Teaching and learning strategies for the course are developed in consultation with the UK's Built Environment as well as Engineering subject centres, often with support from specialists in pedagogic research, based in the University's Centre for Learning and Teaching.

**Formative Assessment and Feedback**

Formative assessments play an important role within the learning and teaching on this course. Students are able to practise their learning through the formative assessments in each module, such as mock exams, online quizzes, weekly tutorial exercises with feedback, facilitated group discussions, etc, which do not count towards the final mark, but provide a safe environment for students to evaluate their strengths and areas of development through feedback received on such assessments.

**Staff and Student working in Partnership**

Throughout the course, staff and students work together to develop learning activities to suit the diverse need of students. Students’ feedback on the course through module and course evaluations are obtained systematically throughout the course and informs continual curriculum development and enhancement. This information also assists (at module level) to plan and design learning activities suitable for the cohort needs. Examples of these are within CE612 and CE613 whereby facilitated group discussions are used to evaluate the needs of individuals and learning activities and support is provided to fill their knowledge gaps.

**Diversity, Inclusivity and Blended Learning:**

Consideration of diversity and inclusivity is embedded throughout the curriculum primarily through a range of learning and teaching activities adopted at each Level, practice based learning, and group work (whereby students are provided with safe spaces to share their own interests, backgrounds and opinions). Strong emphasis on formative assessments and coursework helps to cater for the needs of students from diverse backgrounds whilst ensuring transparency and equality. As an example the following modules give scope for these activities: CE472, BE535, CE512, CE612, BE615, BE636, and BE655.

Blended learning is another mean to enhance diversity and inclusivity, which is strongly embedded within the courses. All modules within the course are complemented with online digital space and is a mean to engage student peers and staff outside of contact time. Some modules are delivered through flipped learning e.g. BE475, CE412, CE571, CE612, BE635, BE636 and BE657. The blended learning provides flexibility for students to learn at their own pace and a safe environment to share their individualised views with their peers and academic staff.

**Visiting Lecturers**

A number of research and consultancy activities provide both scholarly and direct support for the undergraduate programme. The main research areas are Structures, Hydraulics, Geotechnics, Materials, Earth and Environmental Science and Environmental/Public Health and construction management. Visiting lecturers contribute to the delivery of modules such as CE472 – Civil Engineering Practice in which visiting lecturers from the industry give an introduction to professional practice and explain the content of the Civil Engineering role by providing examples from their own professional experience.

**Education for Sustainable Development**

The University of Brighton is committed to the principles of sustainable development through its Education for Sustainable Development policy. The subject area of Construction and Civil Engineering provides a useful platform from which to examine the issues associated with sustainable development.
Built Environment & Civil Engineering students are trained to identify and analyse current and future problems, and to critically examine the prospects for achieving a just and environmentally sound future for all. By incorporating elements of both physical, natural and social sciences, Built Environment & Civil Engineering courses provide a framework that enables understanding, assessment of and intervention in the physical world, whilst at the same time, critically examining the prospects for and effects of intervention. Graduates in the Built Environment & Civil Engineering division are thus equipped to make a significant contribution to ensuring that future generations not only have an equivalent quality of life, but are likely to have an improved one.

This is evident for example in module CE472 – Civil Engineering Practice and BE636-Sustainable Construction. Module CE472 is linked to the Engineering for people design UK challenge and involves the selection of a research topic and design of creative solutions to real world problems in a developing country.

**Employability Skills:**

Preparing students for professional life and the associated skills are an important feature of this course. These skills relate to the University of Brighton Graduate Toolkit and are embedded throughout the curriculum in various module that are mapped for each module in the Module Briefs, which are available to students through studentcentral (University of Brighton Virtual Learning Environment). Many of these skills are gained through integrated design projects at each Level of the course. The integration between taught subjects (through the integrated design modules) and practice places additional demands on the students, such as management, communication, analysis and synthesis of problems, information retrieval and design of appropriate solutions. As an example the following modules give scope for these activities: CE472-Civil Engineering Practice, BE535-Construction Methods & Technology and CE613-Design of Structures.

**Module Specifications**

Each module specification includes the learning and teaching strategy for that module. The strategy for each module is designed by the module team with due regards to the needs of the student and then presented and justified to the ‘Area’. Each student's programme thus possesses a corporate learning and teaching approach that arises from the composition of the individual module strategies. The learning and teaching strategy for each module is reviewed and revised where necessary through a process of module review following each completion of delivery. Revisions are undertaken in response to student performance, student views, external examiners’ advice and dissemination of educational research, innovative development and industrial and professional evolution.

**Lectures, Tutorials and Case Studies**

Formal lectures provide the essence of the required body of knowledge and to guide the students in their personal study. The lecture material is reinforced through the tutorial system in which the students are given problems to solve which address all the various aspects of theory and its application to the design process. Case study material is used across all subject disciplines to highlight particular aspects of civil engineering theory, practice, design and construction. Much of the case study material is drawn from lecturers’ previous experiences in professional practice and their current activities in research and consultancy.

**Laboratories**

The School has well-established laboratories in which the students are given practical experience in carrying out directed fundamental experimental work to test the tenets of engineering science. In addition, students are required to undertake open-ended experimental work in which the objectives, but not the methodology, are specified, thereby encouraging personal development of the skills specified in the intellectual objectives. (Refer also to section “computing and laboratory facilities”).

**Field Courses**

Fieldwork forms an integral part of the modules BE475-Land & Construction Surveying Practice and CE431-Engineering Geology and Soil Mechanics. Many aspects of these subjects can only be realistically taught within the context of a field course. During the field courses, academic staff are able to teach in an environment where they are able to illustrate directly the relevance of taught material and the students thus gain valuable practical experience.
**Coursework**

Many modules throughout the course have significant coursework content. The inclusion of such items as design appraisals, open-ended laboratory investigations, essays, presentations and technical reports brings variety and added relevance to the teaching of civil engineering. Well-designed coursework also promotes student involvement and enthusiasm whilst enabling the student to develop investigative and organisational capabilities.

**Design Weeks/Projects**

The concept of devoting a period of dedicated time to an extended structural design problem motivates students and enables them to gain direct experience of the design process whilst working in small groups. These activities are carried out in special design activity that form a part of the Concrete Technology and Design of Reinforced Concrete structures (CE512) module. Integration of various modules is enhanced through design group projects at each Level of study so that students can practise inter-disciplinary work and enhance their practical skills, independence and confidence.

**Computing**

This has been an area of rapid development in education as well as in many areas of the civil engineering industry. The speed and convenience of computer software can be used to enhance and expand the understanding of fundamentals whilst also providing a medium for improving methods of design and analysis. Commercial and academic software is now used within all subject disciplines.

Student use of word processors, spreadsheets and electronic sources of information (such as networked databases and the Internet) is encouraged as their use enables them to improve their organisational and presentational skills. Open access to this software is available for students in a variety of locations throughout the University.

All students are required to undertake the Computational Mechanics (CE571) module at Level 5 of their studies. This module aims to equip students with the necessary skills in computer programming and mathematical modelling in order to perform numerical simulations of common engineering systems made of 1D, 2D as well as 3D solid elements. Also, students can select the optional module BE575 - Building Information Modelling (BIM) which equips students with the necessary skills in computer programming, data management and modelling skills and understanding in order to simulate common design and construction scenarios and applications to professional practice producing 2D and 3D solutions.

**Individual Projects**

All final year students are required to undertake the CE690: Individual Project module. This is equivalent to a 40-credit module, taken over two semesters, with an average allocation of 13 hours equivalent study per week. This is a substantially independent research project negotiated, designed and completed in collaboration with an academic tutor.

These projects give students a choice of subject matter. The form of study always includes a literature search and acquisition of in-depth knowledge of a specialist subject area. The study must then be extended by some combination of field studies, experimental work, computer-aided engineering, design, evaluation of practical information or theoretical developments. The culmination of the study is the preparation and submission of a formal project report detailing all aspects of the work undertaken and an oral examination of the work.

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**ASSESSMENT**

**Assessment methods**

This section sets out the summative assessment methods on the course and includes details on where to find further information on the criteria used in assessing coursework. It also provides an assessment matrix which reflects the variety of modes of assessment, and the volume of assessment in the course.

The assessment scheme is seen as an integral part of the system of teaching and learning strategies for the course. As such its aims are to foster, develop and test knowledge, skill, understanding and personal qualities as they may apply in the context of an engineering degree. To this end, a range of techniques is employed throughout the course which may be broadly categorised as continuous or periodic.

Periodic testing techniques are normally appropriate to check the students’ comprehension of basic
principles and their application in specific contexts. Continuous methods are generally used to test the students’ abilities in the fields of observation, measurement, deduction, communication and group skills. De-briefing procedures are a regular and essential feature of the scheme that is thus both formative and summative.

The main features of the strategy can be summarised as: (i) detailed induction procedures to introduce students to their courses; (ii) curricula that reflect overall aims and objectives and deliver an applied course that is informed by professional practice and scholarship; (iii) formal and informal procedures for validation, delivery, monitoring and review; (iv) modules and methods of assessment designed to establish both knowledge based and transferable skills, that are clearly based on specified learning outcomes to test knowledge and skills, are calibrated to the level of study and are transparent and fairly applied; (v) progressive development of student choice and autonomy in learning.

A variety of forms of assessment are used across the three levels of the degree programme to demonstrate ability in a range of skills. Inclusivity and diversity is embedded within the assessment strategy. Students are given choice on the type of assessment within an appropriate field of different but equivalent assessment task types at least once during each level of study for example in modules CE472 Civil Engineering Practice, BE535 Construction Methods & Technology, CE613 Design of Structures, BE635 Project Planning and analysis and CE690 Individual Project.

The following definitions are included within the Civil Engineering Course Handbook issued to all students:

**Examination/Test** (including open book, seen and unseen examinations): a demonstration of knowledge, understanding, analytical skill and ability to apply knowledge.

**Project (including individual, group work and Level 6 project)**: a demonstration of independent research skills and written communication skills.

**Report (including laboratory reports and field reports)**: a demonstration of reporting and written communication skills. Laboratory reports additionally demonstrate laboratory skills whilst field reports demonstrate field and group research skills.

**Presentations / Poster presentation**: a demonstration of knowledge, understanding, and written and visual communication skills.

**Portfolio (including article reviews)**: a demonstration of reflective engagement in workshop activities, reflective reading skills, and written communication skills.

**Other methods** (including assessment methods such as mapping and bibliographic writing exercises).

The assessment philosophy reflects the need of the profession for mathematical, analytical and conceptual skills, with progressively more complex assessment procedures being adopted to match the developing expertise. The aims of each module are given with each module description and the assessment method is defined in relation to the learning objectives of the module.

**Levels 4 and 5 Assessment**
At Level 4 and Level 5 the curriculum is based around a series of core subjects in engineering. In all subjects, a combination of coursework and/or examination is designed to assess students’ appreciation of fundamental engineering principles and their application. The coursework may be based on laboratory work, literature research or integration of assignments designed to test the abilities of students to organise and work in groups.

**Level 6 Assessment**
At Level 6 students are required to take modules in core subjects including Design of Structures and Design of Steel Structures. In all subjects, a combination of coursework and/or examination is designed to assess students’ appreciation of fundamental engineering principles and their application. The coursework may be based on laboratory work, literature research or integration of assignments designed to test the abilities of students to organise and work in groups.

**Assessment Criteria**
The Standard University of Brighton Criteria for undergraduate programmes are used for assessment and grading. These criteria are included within the Civil Engineering Course Handbook issued to all students. Where criteria for specific items of assessment differ from these requirements, full details are
### Learning Outcome

#### Science and Mathematics

1) Knowledge and understanding of scientific principles and methodology necessary to underpin their education in their engineering discipline, to enable appreciation of its scientific and engineering context, and to support their understanding of historical, current, and future developments and technologies;

2) Knowledge and understanding of mathematical principles necessary to underpin their education in their engineering discipline and to enable them to apply mathematical methods, tools and notations proficiently in the analysis and solution of engineering problems;

3) Ability to apply and integrate knowledge and understanding of other engineering disciplines to support study of their own engineering discipline.

<table>
<thead>
<tr>
<th>Assessment method</th>
<th>Module</th>
<th>Number of credits</th>
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<tbody>
<tr>
<td>Exam Scripts and Coursework</td>
<td>CE411 CE412 CE472 CE511 CE512 CE532 CE571 CE612 BE475 BE556 BE657</td>
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<tr>
<td>Final year project dissertation.</td>
<td>CE411 CE412 CE471 CE511 CE512 CE532 CE571 CE612 CE613 CE690 BE475</td>
<td>2) 240</td>
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<tr>
<td>Final year project dissertation.</td>
<td>CE411 CE471 CE511 CE512 CE532 CE571 CE613 BE535 BE556 BE636 BE657</td>
<td>3) 240</td>
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</table>

#### Engineering Analysis

1) Understanding of engineering principles and the ability to apply them to analyse key engineering processes;

2) Ability to identify, classify and describe the performance of systems and components through the use of analytical methods and modelling techniques;

3) Ability to apply quantitative methods and computer software relevant to their engineering discipline, in order to solve engineering problems and to implement appropriate action;

4) Understanding of and ability to apply an integrated or systems approach to engineering problems.

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<tr>
<th>Assessment method</th>
<th>Module</th>
<th>Number of credits</th>
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<tbody>
<tr>
<td>Exam scripts and Coursework. Final year project dissertation.</td>
<td>CE411 CE412 CE472 CE511 CE512 CE532 CE571 CE612 CE613 BE475 BE535 BE635 BE657</td>
<td>1) 260</td>
</tr>
<tr>
<td>Final year project dissertation.</td>
<td>CE411 CE511 CE532 CE571 CE612 CE613 BE535 BE635 BE657</td>
<td>2) 160</td>
</tr>
<tr>
<td>Final year project dissertation.</td>
<td>CE411 CE471 CE511 CE532 CE571 CE613 CE690</td>
<td>3) 160</td>
</tr>
</tbody>
</table>
| Final year project dissertation. | CE411 CE412 CE571 CE613 BE535 BE556 | 4)
## Design
Graduates will need the knowledge, understanding and skills to:

1) Understand and evaluate business, customer and user needs, including considerations such as the wider engineering context, public perception and aesthetics

2) Investigate and define a problem and identify constraints including environmental and sustainability limitations, ethical, health, safety, security and risk issues; intellectual property; codes of practice and standards

3) Work with information that may be incomplete or uncertain and quantify the effect of this on the design

4) Apply advanced problem-solving skills, technical knowledge and understanding, to establish rigorous and creative solutions that are fit for purpose for all aspects of the problem including production, operation, maintenance and disposal

5) Plan and manage the design process, including cost drivers, and evaluate outcomes

6) Communicate their work to technical and non-technical audiences.

<table>
<thead>
<tr>
<th>Coursework; group design projects and exam scripts; Final year project dissertations.</th>
<th>CE472 CE512 CE532 CE612 CE613 BE615 BE556 BE657</th>
<th>1) 160</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE472 CE512 CE612 CE613 BE615 BE556 BE657</td>
<td>2) 160</td>
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</tr>
<tr>
<td>CE472 CE612 CE613 BE535 BE556 BE635 BE636 BE657</td>
<td>3) 120</td>
<td></td>
</tr>
<tr>
<td>CE472 CE512 CE511 CE512 CE612 CE613 BE535 BE556 BE615 BE635 BE663 BE657</td>
<td>4) 220</td>
<td></td>
</tr>
<tr>
<td>CE472 CE512 CE532 CE612 CE613 BE535 BE556 BE615 BE635 BE657</td>
<td>5) 200</td>
<td></td>
</tr>
<tr>
<td>CE472 CE512 CE612 CE613 BE535 BE556 BE635 BE657 BE615</td>
<td>6) 180</td>
<td></td>
</tr>
<tr>
<td>3-6) some CE690 dissertations, depending on project</td>
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</tbody>
</table>

## Economic, legal, social, ethical and environmental context

1) Knowledge and understanding of the commercial, economic and social context of engineering processes;

2) Knowledge and understanding of

<table>
<thead>
<tr>
<th>Coursework and Exam scripts; final year project dissertation</th>
<th>CE472 CE512 CE613 BE556 BE636 BE657</th>
<th>1) 120</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE472 CE512 CE612 BE475 BE535 BE556 BE575 BE635 BE657</td>
<td>2) 180</td>
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</tr>
</tbody>
</table>
management techniques which may be used to achieve engineering objectives within that context;

3) Understanding of the requirement for engineering activities to promote sustainable development and ability to apply quantitative techniques where appropriate

4) Awareness of the framework of relevant legal requirements governing engineering activities, including personnel, health, safety, contracts, intellectual property rights, product safety and liability issues;

5) Understanding of the need for a high level of professional and ethical conduct in engineering and a knowledge of professional codes of conduct;

6) Knowledge and understanding of risk issues, including health & safety, environmental and commercial risk, and of risk assessment and risk management techniques.

| Coursework and Exam scripts; Final year project dissertation. | 1) CE411 CE412 CE431 CE511 CE571 CE612 CE613 BE475 BE636 | 1) 180
| | 2) CE411 CE412 CE431 CE472 CE532 CE612 BE475 | 2) 140
| | 3) CE411 CE472 CE512 CE612 BE475 BE535 BE556 BE635 BE667 BE636 BE657 | 3) 280
| | 4) CE411 CE472 CE511 CE512 CE532 CE571 CE612 CE690 BE535 BE556 BE635 BE636 BE657 | 4) 280
| | 5) CE690 BE615 | 5) 280

**Engineering Practice**

Practical application of engineering skills, combining theory and experience, and use of other relevant knowledge and skills. This can include:

1) Knowledge of characteristics of particular materials, equipment, processes, or products;

2) Ability to apply relevant practical and laboratory skills;

3) Understanding of contexts in which engineering knowledge can be applied (e.g. operations and management, technology development, etc);

4) Understanding of the use of technical literature and other information sources;

5) Knowledge of relevant legal and contractual issues;

6) Understanding of
appropriate codes of practice and industry standards;
7) Awareness of quality issues and their application to continuous improvement;
8) Ability to work with technical uncertainty.
9) Understanding of, and the ability to work in, different roles within an engineering team

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<table>
<thead>
<tr>
<th>Additional general skills</th>
<th>BE556 BE657</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students must have developed transferable skills that will be of value in a wide range of situations. These are exemplified by the Qualifications and Curriculum Authority Higher Level Key Skills and include:</td>
<td></td>
</tr>
<tr>
<td>1) Apply their skills in problem solving, communication, working with others, information retrieval, and the effective use of general IT facilities</td>
<td></td>
</tr>
<tr>
<td>2) Plan self-learning and improve performance, as the foundation for lifelong learning/CPD</td>
<td></td>
</tr>
<tr>
<td>3) Plan and carry out a personal programme of work, adjusting where appropriate</td>
<td></td>
</tr>
<tr>
<td>4) Exercise initiative and personal responsibility, which may be as a team member or leader.</td>
<td></td>
</tr>
</tbody>
</table>

Coursework and final year project dissertation.

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<table>
<thead>
<tr>
<th>Coursework and final year project dissertation.</th>
<th>CE411 CE412 CE431 CE472 CE511 CE512 CE532 CE571 CE612 CE613 <strong>CE690</strong> BE475 BE535 BE556 BE615 BE635 BE636 BE657</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>1) 380</td>
</tr>
<tr>
<td>2)</td>
<td>2) 300</td>
</tr>
<tr>
<td>3)</td>
<td>3) 340</td>
</tr>
</tbody>
</table>
SUPPORT AND INFORMATION

Institutional/ University

All students benefit from:
University Welcome Week

The University of Brighton Student Contract:
https://www.brighton.ac.uk/studying-here/student-contract.aspx

Extensive library facilities, which include:

- Extended opening hours (until 2am each day in term time and 24 hours during exam revision periods)
- Help Desk - enquiries, IT support
- Information Adviser, Joyce Storey and Assistant Information Adviser, Edward Boyden who support the School
- The Online Library web portal providing access to thousands of full text electronic journals and e-books which are accessible 24/7
- Resource discovery tools - OneSearch, library catalogue
- 870 individual study spaces, equipped with network points for personal laptops, and 14 bookable group study rooms
- Wireless access throughout the whole library
- 181 open access PCs, 24 loanable laptops, colour and black and white networked printing, scanning and photocopying facilities

Computer pool rooms (including 181 workstations and network points for personal PCs in the Aldrich library). All are linked to the University network and SuperJANET services and have daily user support help desk.

Email, file storage, studentcentral (virtual learning environment), UniCard and free access to Microsoft Office 365 for the duration of studies

Student Services, which includes:

- Chaplaincy
- Childcare facilities
- Counselling service
- Disability and Dyslexia Team
- Student Advice Service (finance, immigration, international student support)
<table>
<thead>
<tr>
<th>Student Support and Guidance Tutor</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A service that provides confidential and non-judgmental support and advice to students across a range of academic, personal, financial and other issues. Provides direct support through informal drop in sessions and one-to-one meetings and guidance on accessing further help.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Academic Tutor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation Office</td>
</tr>
<tr>
<td>Careers Service (including Graduate Toolkit, Active Student volunteering, Work Placements)</td>
</tr>
<tr>
<td>Student Charter (relationship between the university, the students union and students)</td>
</tr>
</tbody>
</table>

**Course-specific**

Additional support, specifically where courses have non-traditional patterns of delivery (e.g. distance learning and work-based learning) include:

**In addition, students on this course benefit from:**

**a) Handbooks and Guidance Notes**
- Civil Engineering Course Handbook
- Study Skills Handbook
- Civil Engineering Dissertation/Project Handbook
- Module briefs
- Guidance Notes for Fieldwork and Laboratory Safety
- Placement Guidelines

**b) Academic and Administrative Support**
- Course Leader who monitors academic and personal progress of students on the course.
- All students are allocated Personal Tutors for personal and academic support.
- Studentcentral that hosts supplementary learning resources in support of modules and provides links to additional resources and communication from staff to students.
- School administrative support for module registration.
- Placement Office.
- Students on Placement during their Sandwich year receive several planned visits from a designated Placement Tutor to support learning and progress in the workplace.
- Information Adviser who works with staff and students to enable access to paper-based and electronic resources.
- School of Environment & Technology Learning Technology Adviser who works with staff and students to enable access to, and use of, Information Technology facilities.

**c) Computing and Laboratory Facilities**
- School of Environment and Technology Computer Suites containing 165 networked terminals running software suite for structural analysis and design (SAP2000), rock mechanics (including the programs: Phase2, Dips, Unwedge, Rocfall, Rockplane, Slide, Swedge, Rocksupport, Rocdata, Examine2d), CRISP (FE analysis), GIS (ArcView 3.2) and other software (Matlab, AutoCad, Power Project, Oasys, Plaxis, Hevacomp, Pertmaster, Adobe Photoshop CS2 9, Dreamweaver, Microsoft Office, Rhino SP4, Solidworks).
Concrete Laboratory with mixing, testing and curing facilities

Soil Mechanics Laboratory with drying ovens, sediment sieving facilities, top pan balances, triaxial testing and shear box equipment, ring shear apparatus and a dedicated creep laboratory.

Geotechnical Centrifuge

Materials Testing Laboratory that includes three hydraulically powered actuators capable of delivering loads in both compression and tension up to 200kN.

Structural Dynamics Laboratory which includes shakers, model hammer acquisition systems and a 0.5 x 0.5 m shake table.

A drawing studio with 50 drawing tables

A modelling laboratory for the preparation of scale models.

Environment & Public Health Laboratory, seating up to 10, equipped with bench top spectrophotometers for basic water chemistry, membrane filtration equipment, balances, incubators, centrifuge, UV cabinet and sterilisation equipment for public health microbiology procedures

Dedicated Geology Laboratories, with 3 Nikon research-quality petrological microscopes (1 with Nikon SLR camera, 2 with Nikon video camera attachments and monitors), 38 petrological teaching microscopes, extensive rock and fossil samples, extensive teaching thin-section collection, and 4 computer terminals,

Hydraulics Laboratories, with 16m x 0.5m wave flume, Armfield 10m x 0.4m recirculating wave flume, Gunt 10m x 0.4m sediment flume, Armfield 5m x 0.3m flume and two Gunt 2.5m x 0.1m narrow flumes with plate weirs

Environmental Simulation Laboratory with 6m x 4m hydraulic stream table.

Access to laser cutters and 3D printers.

Extensive range of Surveying equipment including automatic levels, total stations, dGPS and environmental monitoring equipment.

d) In addition, students on this course benefit from:
Please refer to information held in studentcentral.

e) Visiting lecturers
A number of research and consultancy activities provide both scholarly and direct support for the undergraduate programme. The main research areas are Structures, Hydraulics, Geotechnics, Materials, Earth and Environmental Science and Environmental/Public Health. Visiting lecturers contribute to the delivery of modules such as CE472 – Civil Engineering Practice in which visiting lecturers from the industry give an introduction to professional practice and explain the content of the Civil Engineering role by providing examples from their own professional experience

f) Education for Sustainable Development
The University of Brighton is committed to the principles of sustainable development through its Education for Sustainable Development policy. The subject area of Construction and Civil Engineering provides a useful platform from which to examine the issues associated with sustainable development. Built Environment & Civil Engineering students are trained to identify and analyse current and future problems, and to critically examine the prospects for achieving a just and environmentally sound future for all. By incorporating elements of both physical, natural and social sciences, Built Environment & Civil Engineering courses provide a framework that enables understanding, assessment of and intervention in the physical world, whilst at the same time, critically examining the prospects for and effects of intervention. Graduates in the Built Environment & Civil Engineering division are thus equipped to make a significant contribution to ensuring that future generations not only have an equivalent quality of life, but are likely to have an improved one.
This is evident for example in module CE472: Civil Engineering Practice which all students are required to undertake at Level 4. This module is linked to the Engineering for People Design UK challenge and involves the selection of a research topic and design of creative solutions to real world problems in a developing country.

**g) Research Informed Teaching**

This course is delivered by research-active academic staff, and specialist aspects of the curriculum reflect the research interests of these staff. All final year option modules are taught by staff who are actively engaged in research and publication in their specific topic areas, and who are currently undertaking research or consultancy with leading bodies. This level of integration is particularly true for final year projects, where students spend an extended period of time undertaking research with a subject specialist, who is linked into a network of international scholars with shared interests.

Throughout the course, students develop competencies enabling them to become independent researchers, with specialist skills sessions scheduled to support their development. Teaching and learning strategies for the course are developed in consultation with the UK’s Built Environment as well as Engineering subject centres, often with support from specialists in pedagogic research, based in the University’s Centre for Learning and Teaching.
COURSE STRUCTURE
This section includes an outline of the structure of the programme, including stages of study and progression points. Course Leaders may choose to include a structure diagram here.

The full time course is studied over 3 years of 31 weeks per year. The academic year is divided into two semesters, of fifteen or sixteen weeks. An optional Sandwich year (normally 48 weeks of study) may be undertaken between Levels 5 and 6 (Years 2 and 3 for full time study). Study is undertaken at Levels 4, 5 and 6 of the national qualifications framework, and is divided into modules. The standard value of a module is 20 credits (equivalent to 200 hours learning) and the structure allows the use of multiples of this (for example the Level 6 individual project module is awarded 40 credits/400 hours). Full-time students study for 120 credits (6 module equivalents) each year, beginning at Level 4 and progressing through Levels 5 and 6.

The Course conforms to the University's modular framework. Students may graduate after three years of full-time study or its equivalent in other modes of attendance. Intermediate exit points exist at certificate level (equivalent to one year of full-time study), and diploma level (two years full-time study). A supervised work experience may be undertaken during a placement year in industry leading to an award 'in the sandwich mode'.

The aims of each Level of study are incremental and are given below:

CertHE will:
- Provide a fundamental understanding of analysis and material behaviour.
- Bring to students an appreciation of the role of the engineer in relation to business, society and sustainability of the built and natural environment.
- Introduce students to a range of fieldwork, laboratory and IT skills, together with transferable skills including oral, graphical and written communication, teamwork, interpretation and analysis of qualitative and quantitative data, critical analysis and problem-solving.

DipHE will additionally:
- Increase the amount of independent learning required in the use of various learning packages, design software and personal assignments complemented by teamwork in laboratories and in the design weeks/projects.
- Encourage in each student a critical and systematic approach to problem solving.
- Develop an ability to retrieve, edit, and apply information in civil and environmental engineering design and construction tasks.
- Treat subjects under study from a professional engineering point of view, with practical applications taken, wherever possible, from real-life cases of civil engineering.
- Prepare students for an optional year of industrial experience.
- Prepare students for success in their final year individual project.

BEng Civil Engineering will additionally:
- Promote the enhanced development of personal and professional skills.
- Enable students to make informed choices of specialization within the course and in their future careers.
- Enable the ability of graduates to undertake a variety of supporting roles as technician engineers in the Civil Engineering industry.

BEng (Hons) Civil Engineering with Construction Management will additionally:
- Expect students to become increasingly critical and self-sufficient in their studies.
- Promote the enhanced development of personal and professional skills, enabling graduates to
successfully conduct and report on investigations in the field of Civil engineering.

- Enable the ability of graduates to undertake a wide variety of roles as incorporated engineers in consulting, contracting or research throughout their career.

**Placement year** - A supervised work experience in industry of at least 40 weeks may be undertaken after Level 5 leading to an award ‘in the sandwich mode’.

**Programmes Of Study** – Programmes of study are divided into Levels Four, Five and Six (equivalent to the years of a traditional full-time Honours Degree) with students being required to study 20 credit modules up to 120 credits per level. A programme of study for the Honours Degree consists of a set of modules to the value of 360 credits, which meet the requirement as regards content, sequencing and level for the Course.

New or revised modules may be included after being validated on an individual basis. The listing of a module as optional/acceptable does not guarantee its availability to an individual student; this will depend on time-tabling logistics and viable class size. All Compulsory Modules will be available to students.

**Modes of attendance** – The University’s standard academic year is divided into two equal semesters. Modules can be delivered either within a semester or throughout the year. Students are expected to complete 60 credits per semester.

**Themes at Level 6:** (i) Civil Engineering; (ii) Construction and Building

In the final year (Level 6) of this course, students will undertake 40 credits of Individual project. The students will be required to undertake 40 credits of modules each from the two themes of ‘Civil Engineering’ and ‘Construction and Building’ (20 credits of which are optional within the theme of ‘construction and building’).

**Modules**

**Status:**

M = Mandatory (modules which must be taken and passed to be eligible for the award)

C = Compulsory (modules which must be taken to be eligible for the award)

O = Optional (optional modules)

A = Additional (modules which must be taken to be eligible for an award accredited by a professional, statutory or regulatory body, including any non-credit bearing modules)

* Optional modules listed are indicative only and may be subject to change, depending on timetabling and staff availability

<table>
<thead>
<tr>
<th>Level</th>
<th>Module Code</th>
<th>Status</th>
<th>Module Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>BE475</td>
<td>C</td>
<td>Land &amp; Construction Surveying</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>CE411</td>
<td>C</td>
<td>Structural and Stress Analysis</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>CE412</td>
<td>C</td>
<td>Construction Materials</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>CE431</td>
<td>C</td>
<td>Engineering Geology &amp; Soil Mechanics</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>CE471</td>
<td>C</td>
<td>Mathematics for Civil Engineering</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>CE472</td>
<td>C</td>
<td>Civil Engineering Practice</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>BE535</td>
<td>C</td>
<td>Construction Methods &amp; Technology</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>BE556</td>
<td>C</td>
<td>Construction Project Management</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>CE511</td>
<td>C</td>
<td>Structural Analysis</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>CE512</td>
<td>C</td>
<td>Concrete Technology and Design of Reinforced</td>
<td>20</td>
</tr>
</tbody>
</table>

* All modules have learning outcomes commensurate with the FHEQ levels 0, 4, 5, 6, 7 and 8. List the level which corresponds with the learning outcomes of each module.

Page 21 of 24
The areas of Design, Health and Safety Risk Management, Sustainability, Professionalism and Ethics are embedded in several modules spanning all levels of study. However, modules having specific focus on the area of ‘Design’ are CE472, CE512, BE615, CE612, CE613, CE614. The modules having specific focus on the area of ‘Health and Safety Risk Management’ are CE412, CE472, BE535, CE512, CE612, CE613. The modules having specific focus on the area of ‘Sustainability’ are CE412, CE472, BE636, CE613. The modules having a specific focus on the area of ‘Professionalism and Ethics’ are CE472 and CE690.

### BEng Civil Engineering with Construction Management Course Structure

<table>
<thead>
<tr>
<th>Level 4</th>
<th>Sem1</th>
<th>BE475 Land &amp; Construction Surveying</th>
<th>CE412 Construction Materials</th>
<th>CE472 Civil Engineering Practice</th>
<th>CE471 Mathematics for Civil Engineering</th>
<th>CE411 Structural and Stress Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>CE431 Engineering Geology and Soil Mechanics</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>CE504, CE511 Structural Analysis</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>CE690 BEng Individual Project</td>
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<td></td>
<td></td>
<td></td>
<td>CE612 Design of Steel Structures</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Options: BE615(8), BE635(8), BE655(8)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>CE613 Design of Structures</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Options: BE657(8)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Options: BE636(8)</td>
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</tr>
</tbody>
</table>

After Level 4 you may change to MEng Civil Engineering if your overall mark is at least 70%.

### Level 5

<table>
<thead>
<tr>
<th>Sem1</th>
<th>CE532 Fluid and Soil Mechanics</th>
<th>BES535 Construction Methods &amp; Technology</th>
<th>CE571 Computational Mechanics</th>
<th>CE511 Structural Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BE556 Construction Project Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CE690 BEng Individual Project</td>
<td>CE612 Design of Steel Structures</td>
<td>Options: BE615(8), BE635(8), BE655(8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CE613 Design of Structures</td>
<td>BE657 Construction Management</td>
<td>Options: BE636(8)</td>
<td></td>
</tr>
</tbody>
</table>

After Level 5 you may take one year Industrial Placement (Sandwich mode) if your overall mark (Level 4 and 5 combined) is at least 60%.

### Level 6

<table>
<thead>
<tr>
<th>Sem1</th>
<th>CE690 BEng Individual Project</th>
<th>CE612 Design of Steel Structures</th>
<th>Options: BE615(8), BE635(8), BE655(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CE613 Design of Structures</td>
<td>BE657 Construction Management</td>
<td>Options: BE636(8)</td>
</tr>
</tbody>
</table>
## AWARD AND CLASSIFICATION

<table>
<thead>
<tr>
<th>Award type</th>
<th>Award*</th>
<th>Title</th>
<th>Level</th>
<th>Eligibility for award</th>
<th>Classification of award</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total credits(^9)</td>
<td>Minimum credits(^{10})</td>
</tr>
<tr>
<td>Final</td>
<td>BEng (Hons)</td>
<td>Civil Engineering with Construction Management</td>
<td>6</td>
<td>Total credit 360 (Including the compulsory final year project)</td>
<td>Minimum credit at level of award 90</td>
</tr>
<tr>
<td>Final</td>
<td>BEng (Hons)</td>
<td>Civil Engineering with Construction Management (Sandwich)</td>
<td>6</td>
<td>Total credit 360</td>
<td>Minimum credit at level of award 90</td>
</tr>
<tr>
<td>Intermediate</td>
<td>BEng</td>
<td>Civil Engineering</td>
<td>6</td>
<td>Total credit 300</td>
<td>Minimum credit at level of award 60</td>
</tr>
<tr>
<td>Intermediate</td>
<td>Dip HE</td>
<td>Civil Engineering</td>
<td>5</td>
<td>Total credit 240</td>
<td>Minimum credit at level of award 90</td>
</tr>
<tr>
<td>Intermediate</td>
<td>Cert HE</td>
<td>Civil Engineering</td>
<td>4</td>
<td>Total credit 120</td>
<td>Minimum credit at level of award 90</td>
</tr>
</tbody>
</table>

*Foundation degrees only

Progression routes from award:

<table>
<thead>
<tr>
<th>Award classifications</th>
<th>Mark/ band %</th>
<th>Foundation degree</th>
<th>Honours degree</th>
<th>Postgraduate(^{12}) degree (excludes PGCE and BM BS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70% - 100%</td>
<td>Distinction</td>
<td>First (1)</td>
<td>Distinction</td>
<td></td>
</tr>
<tr>
<td>60% - 69.99%</td>
<td>Merit</td>
<td>Upper second (2:1)</td>
<td>Merit</td>
<td></td>
</tr>
<tr>
<td>50% - 59.99%</td>
<td>Pass</td>
<td>Lower second (2:2)</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>40% - 49.99%</td>
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<td>Third (3)</td>
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</tbody>
</table>

\(^9\) Total number of credits required to be eligible for the award.

\(^{10}\) Minimum number of credits required, at level of award, to be eligible for the award.

\(^{11}\) Algorithm used to determine the classification of the final award (all marks are credit-weighted). For a Masters degree, the mark for the final element (e.g., dissertation) must be in the corresponding class of award.

\(^{12}\) Refers to taught provision: PG Cert, PG Dip, Masters.
**EXAMINATION AND ASSESSMENT REGULATIONS**

Please refer to the *Course Approval and Review Handbook* when completing this section.

The examination and assessment regulations for the course should be in accordance with the *University’s General Examination and Assessment Regulations for Taught Courses* (available from staffcentral or studentcentral).

<table>
<thead>
<tr>
<th>Specific regulations which <strong>materially</strong> affect assessment, progression and award on the course</th>
<th>In line with the University of Brighton General Examination and Assessment Regulations (GEAR).</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. Where referrals or repeat of modules are not permitted in line with the University’s General Examination and Assessment Regulations for Taught Courses.</td>
<td>Students may be permitted to study up to 20 credits, usually other than those which are a normal component of the course, either one Level above or one Level below current Level of study.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exceptions required by PSRB</th>
<th>For the award of BEng (Hons) Civil Engineering and BEng (Hons) Civil Engineering (Sandwich) titles, students should undertake an individual investigative final year project that is not of a routine nature.</th>
</tr>
</thead>
<tbody>
<tr>
<td>These require the approval of the Chair of the Academic Board</td>
<td></td>
</tr>
</tbody>
</table>

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