

## FdSc Civil Engineering and Construction Management

Course Aim and Title	FdSc Civil Engineering and Construction Management
Intermediate Awards Available	Certificate HE, Diploma HE
Teaching Institution(s)	UEL on campus
Alternative Teaching Institutions (for local arrangements see final section of this specification)	None
UEL Academic School	ACE
UCAS Code	HK22
Professional Body Accreditation	JBM Accredited: IEng (Partial), EngTech (Full)
Relevant QAA Benchmark Statements	Construction, Property and Surveying (March 2008) Foundation Degrees (May 2010)
Additional Versions of this Course	None
Date Specification Last Updated	01 August 2019

### Course Aims and Learning Outcomes

The FdSc in Civil Engineering & Construction Management integrates academic and work based learning through close collaboration between employers and the course development team. The aim of the course is to be highly valued in the job market and meet skills shortages within the anticipated growth area of construction and civil engineering, particularly in London and the South-East. It is distinctive in five specific areas:

- Employer involvement – where the course has been designed, delivered and assessed with assistance from employers
- Accessibility - enabling students from varied backgrounds to engage with industry and also education and training in their chosen discipline.
- Articulation and progression – enabling students to progress onward to complete an honours degree and archive professional status
- Flexibility – to allow flexibility in the delivery of the learning outcomes and how the student integrates this with the working world (i.e. full time or part-time day release).
- Partnership – where the course links up with employers, careers and professionals providing a holistic grounding in the skills that employers need.

The subject content aims to reflect current industrial practice, with core skills developed through work based learning placements, a course of guest lecturers, field visits and work related assignments and assessment.

The specific objectives for students on the course are:

- To train technician engineers/surveyors/construction managers to a level that will enable them to function effectively in industry
- To provide a knowledge and understanding of current theories and developments in civil engineering/surveying or construction management
- To enhance their understanding of the design and management processes relevant to civil engineering/surveying or construction management
- To encourage critical awareness and understanding of other professionals in the construction and civil engineering industries
- To contribute to the development of the technician into membership of his or her relevant professional body at Incorporated or Technician level and to play their part in as an important professional in society and the built environment
- To allow progression in career and educational development giving opportunities to study for an accredited civil engineering / surveying or construction management degree.

The design of the courses allows for progression to level 6 of the existing accredited BSc (Hons) in Civil Engineering or the BSc (Hons) in Construction Management.

### **Knowledge**

- recognise the nature of the relevant specific discipline and its relationships within the context of the subject
- describe and apply a range of relevant key concepts, theories and principles
- identify and recognise relevant issues and why they are important
- recognise and apply all relevant aspects of management and other specialisms within the context of regulatory requirements, the needs of society and ethical correctness
- select and apply ICT applications appropriate to the discipline
- identify project requirements and the processes for project development

### **Thinking skills**

- present original ideas and reflections via a range of methods to convey appropriate standards of literacy and the use of numeric data
- identify and explain the nature of the various working interactions and relationships in a professional context.
- describe strategies and the requirements of environmental sustainability
- review organisational strategies and processes in a relevant industry
- investigate factors affecting potential developments
- explain the processes for the control of work within projects

### **Subject-Based Practical skills**

- survey, map and test specified characteristics of the natural and built environment
- produce basic valuations of built assets

- appraise the financial and cost factors affecting construction projects
- select procurement and contract processes
- specify construction and installation operations

### **Skills for life and work (general skills)**

- participate in teams in the context of effective professional practice.
- use methods for acquiring knowledge and apply appropriate research strategies and methods
- gather and summarise information, cite evidence and make judgements about merits, contrast points of view and develop ensuing discussion, making judgements of a routine nature
- understand interpersonal relationships and understand and apply leadership, teamwork and self-development
- demonstrate a basic understanding of the workings of business and other types of organisation
- summarise and use a range of appropriate means of communication, including information technology for a particular topic or audience.

### **Learning and Teaching**

a) Learning and Teaching approaches

Knowledge is developed through

- Guided reading
- Attending lectures / guest presentations
- Knowledge-based activities with feedback
- Online discussions and activities
- preparation for examinations and timed controlled assignments
- a course of construction site visits

Thinking skills are developed through

- Reflective activities with feedback
- Tutorial activities & discussions.
- Online discussions and activities
- Preparation of coursework assignments
- Discussions with Industry professional
- participation in real time construction project field schemes

Practical skills are developed through

- IT activities with feedback
- Research skills-based activities with feedback
- Seminar preparation and presentations
- Applying technical regulations to given scenarios
- Application to real life and simulated case studies
- communicating via visual forms such as sketches, drawings and models

Skills for life and work (general skills) are developed through

- The demands of the study medium
- Planning activities with feedback

- Project and team work
- Using specialist ICT and software

b) Details of assessment arrangements, i.e. administration, submission, deadlines, Assessment Boards, notification of results, timing of reassessment, in-year assessment retrieval, marking, feedback etc.

### **Assessment**

Each module has a module specification that contains information about the module such as the aims, the learning outcomes you are expected to be able to demonstrate on completing the module and a reading list. This is in your module guide and on the module Moodle site. Your module guide also contains details on the assessment, its criteria and how this should be submitted. Each piece of assessment is referred to as a 'component'. If you do

not pass a component, you will be required to undertake reassessment. This reassessment may take place either during the academic year (in-year retrieval) or after the June assessment boards at the end of June, beginning of July, your module guide provides further information.

Throughout the year progression and assessment boards are held where your marks are formally confirmed. For undergraduate students these boards are held in the summer after the Term 2 examinations, usually around the beginning of June. At these boards a decision is also made on your progression to the next level of study.

Further information on progression is available in section 6 of the Manual of General Academic Part 3: <https://www.uel.ac.uk/discover/governance/policies-regulationscorporate-documents/student-policies/manual-of-general-regulations> UEL Direct is a portal that provides access to your record held on our database. Here you can access your personal details, check your module registration, access your module results and re-enrol for the next academic year.

We strongly suggest that you try to submit all coursework by the deadline set as meeting deadlines is expected in employment. However, in our regulations, UEL has permitted students to be able to submit their coursework up to 24 hours after the deadline. The deadline will be published in your module guide.

Coursework which is submitted late, but within 24 hours of the deadline, will be assessed but subjected to a fixed penalty of 5% of the total marks available (as opposed to marks obtained).

Please note that if you submit twice, once before the deadline and once during the 24 hour late period, then the second submission will be marked and 5% deducted.

Further information is available in the Assessment & Feedback Policy at <https://www.uel.ac.uk/Discover/Governance/Policies-Regulations-Corporatedocuments/>

Student-Policies (click on other policies)

### **Work or Study Placements**

Students on the FdSc Civil Engineering and Construction Management require a compulsory element of work placement in order to fully satisfy the requirements of the 'QAA Foundation Degree Benchmark May 2010'. The placement requires full-time student to attend a relevant industrial placement in level 5 whilst still attending university for ideally one full day a week for their taught modules. Part-time students will undertake their 'placements' within their own work environment provided they are working in a relevant industrial context. There are specific and auditable processes in place to help full-time students seek, secure and undertake a successful placement. The length of the placement shall be in the region of 300-600 hours for full-time students and 600 hours for employed part-time students in a relevant Industry. A placement cannot be guaranteed as most are obtained through competitive selection with the sponsoring employer but the Course team will do its utmost to support the student in securing a placement via CV sessions, interview training and placement finding workshops. If a student is unsuccessful at securing a placement they can achieve the intermediate Award of UEL Higher Diploma and still progress onto level 6 of their respective BSc (Hons) courses.

## Course Structure

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

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

Credits are assigned to one of 5 levels:

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

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

### The module structure of this course:

Level	Module Code	Module Title	Credit Weighting	Core/Option	Available by Distance Learning ? Y/N
4	EG4019	Mental Wealth: Professional Life 1	20	Core	N

4	EG4012	The Built Environment	20	Core	N
4	EG4013	Construction Technology	20	Core for Construction Management route	N
4	EG4018	Land and Construction Surveying	20	Core	N
4	EG4010	Analytical skills in built environment	20	Core	N
4	EG4021	Building Science and Materials	20	Core	N
4	EG4015	Engineering Mechanics	20	Core for Civil Engineering route	N
5	EG5010	Mental Wealth: Professional Life 2	20	Core	N
5	EG5035	Contract Procedures	20	Core for Construction Management route	N
5	EG5012	Construction planning and production	20	Core for Construction Management route	N
5	EG5036	Measurement	20	Core for Construction Management route students unsuccessful in securing a placement for EG5021 module	N
5	EG5014	Advanced Sustainable Technology	20	Core for Construction Management route	N
5	EG5015	Tendering, Estimating, and cost control	20	Core for Construction Management route	N

				Core for Civil Engineering route students unsuccessful in securing a placement for EG5021 module	
5	EG5016	Engineering Surveying	20	Core for Civil Engineering route	N
5	EG5017	Ground Engineering	20	Core for Civil Engineering route	N
5	EG5022	3D Data Modelling and Analysis	20	Core for Civil Engineering route	N
5	EG5018	Structural Analysis & Element Design	20	Core for Civil Engineering route	N
5	EG5021	Employment Internship	20	Core	N

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

Additional detail about the course module structure:

1. The course has been developed in line with the Academic Framework Modular Regulations.
2. The academic year is organised into two terms: Term 1 (from September to January), Term 2 (from February to May)
3. Delivery will be by formal lectures supplemented by tutorials, coursework and project assignments, seminars, workshops, laboratory exercises, practical sessions and site visits where appropriate.

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

The overall credit-rating of this course is 240 credits. If for some reason you are unable to achieve this credit you may be entitled to an intermediate award, the level of the award will depend on the amount of credit you have accumulated. You can read the University Student Policies and Regulations on the UEL website.

## Course Specific Regulations

None

## Typical Duration

It is possible to move from full-time to part-time study and vice-versa to accommodate any external factors such as financial constraints or domestic commitments. Many of our students make use of this flexibility and this may impact on the overall duration of their study period.

The expected duration of this course is 2 years full-time or 3 years part-time.

A student cannot normally continue study on a course after 4 years of study in full time mode unless exceptional circumstances apply and extenuation has been granted. The limit for completion of a course in part time mode is 8 years from first enrolment.

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

## Further Information

More information about this course is available from:

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

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

## Additional Costs

Students undertaking a work placement will be expected to cover their own travel costs to and from the place of work.