

**DEFINITIVE COURSE RECORD**

Course Title	<b>FdSc Civil Engineering</b>
Awarding Bodies	<b>University of Suffolk</b>
Level of Award <sup>1</sup>	<b>FHEQ Level 5</b>
Professional, Statutory and Regulatory Bodies Recognition	<b>Joint Board of Moderators</b>
Credit Structure <sup>2</sup>	<b>240 Credits Level 4: 120 Credits Level 5: 120 Credits</b>
Mode of Attendance	<b>Part-time</b>
Standard Length of Course <sup>3</sup>	<b>3 years part-time</b>
Intended Award	<b>FdSc Civil Engineering</b>
Named Exit Awards	<b>None</b>
Entry Requirements <sup>4</sup>	<b>Typical Offer: 80 UCAS tariff points from a relevant level 3 qualification (or equivalent) All students will have an assessment to establish that they can demonstrate appropriate levels of work experience and commitment. Students are required to be in relevant work for the duration of the course or to find a relevant work placement</b>
Delivering Institution(s)	<b>University of Suffolk at Suffolk New College</b>
UCAS Code	<b>N/A</b>

This definitive record sets out the essential features and characteristics of the FdSc Civil Engineering course. The information provided is accurate for students entering level 4 in the 2017-18 academic year<sup>5</sup>.

**Course Summary**

This course is aimed specifically at those students who are working as engineers and managers in roles involving the design, production and maintenance of the national infrastructure and in structural design. As such, the programme aims to provide a general understanding of the function and operation of the construction industry together with opportunities for modules covering the more specialist areas of each student's chosen area of study. Typically, students will come from a variety of employment backgrounds including general civil engineering, local government highways management and specialist sub-contracting companies. A number of modules are delivered by tutors who are primarily employed as practicing professionals within the industry. Graduates have found employment as site engineers, CAD technicians, technician engineers, highway engineers and estimators.

<sup>1</sup> For an explanation of the levels of higher education study, see the [QAA Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies \(2014\)](#)

<sup>2</sup> All academic credit awarded as a result of study at the University adheres to the [Higher education credit framework for England](#).

<sup>3</sup> Where the course is delivered both full-time and part-time, the standard length of course is provided for the full-time mode of attendance only. The length of the part-time course is variable and dependent upon the intensity of study. Further information about mode of study and maximum registration periods can be found in the [Framework and Regulations for Undergraduate Awards](#).

<sup>4</sup> Details of standard entry requirements can be found in the [Admissions Policy](#)

<sup>5</sup> The University reserves the right to make changes to course content, structure, teaching and assessment as outlined in the [Admissions Policy](#).

## **DEFINITIVE COURSE RECORD**

Students completing the FdSc course have the option of progressing on to the BSc (Hons) Civil Engineering (Progression Route).

### **Course Aims**

- The ability to develop, monitor and update a plan, to reflect a changing operating environment
- The ability to monitor and adjust a personal programme of work on an on-going basis and to learn independently
- An understanding of different roles within a team, and the ability to exercise leadership
- The ability to learn new theories, concepts, methods etc. in unfamiliar situations

### **Course Learning Outcomes**

The following statements define what students graduating from the FdSc Civil Engineering course will have been judged to have demonstrated in order to achieve the award. These statements, known as learning outcomes, have been formally approved as aligned with the generic qualification descriptor for level 5 awards as set out by the UK Quality Assurance Agency (QAA)<sup>6</sup>.

### **Knowledge and Understanding**

1. A thorough understanding of current practice and its limitations, and some appreciation of likely new development
2. Extensive knowledge and understanding of a wide range of engineering materials and components
3. Ability to apply engineering techniques taking account of a range of commercial and industrial constraints
4. A comprehensive understanding of the scientific principles of own specialisation and related disciplines
5. An awareness of developing technologies related to own specialisation
6. A comprehensive knowledge and understanding of mathematical and computer models relevant to the engineering discipline, and an appreciation of their limitations
7. An understanding of concepts from a range of areas including some outside engineering, and the ability to apply them effectively in engineering projects

### **Mental or cognitive skills**

8. Integrate the knowledge acquired from the study of a range of subjects and formulate solutions to relevant problems
9. Understand and apply appropriate levels of numeracy, communications and ICT competence

---

<sup>6</sup> As set out in the [QAA Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies \(2014\)](#)

**DEFINITIVE COURSE RECORD**

10. Developed their cognitive skills to enable them to process technical information, to be able to relate this to a broader context and will have begun to understand the relationships between the individual modules
11. Developed their ability to evaluate alternative theories and techniques both in the broad context of construction issues and in relation to specific, specialist construction situations

**Subject Specific and Practical Skills**

12. Ability to use fundamental knowledge to investigate new and emerging technologies
13. Ability to apply mathematical and computer-based models for solving problems in engineering, and the ability to assess the limitations of particular cases
14. Ability to extract data pertinent to an unfamiliar problem, and apply in its solution using computer based engineering tools when appropriate
15. Wide knowledge and comprehensive understanding of design processes and methodologies and the ability to apply and adapt them in unfamiliar situations
16. Ability to generate an innovative design for products, systems, components or processes to fulfil new needs
17. Extensive knowledge and understanding of management and business practices, and their limitations, and how these may be applied appropriately
18. The ability to make general evaluations of commercial risks through some understanding of the basis of such risks
19. Demonstrate and apply their knowledge and understanding of the qualities of good design using appropriate technology, including the management of innovation, and how to ensure high quality construction on site
20. Demonstrate an understanding of the economic context in which Civil Engineering and the Construction Industry operates and in the financial administration of construction projects
21. Demonstrate their knowledge and understanding of the law as it applies to the management of civil engineering and the construction process
22. Developed skills in engineering technology, structural analysis, legislation, ICT & CAD, materials testing, and be able to apply these in a work context

**Key Skills**

23. Absorbing the ethos of lifelong learning by continuing professional development (CPD)
24. Communication/inter-personal/social skills
25. Development of flexibility/initiative
26. Development of team working and leadership skills
27. Study skills

## DEFINITIVE COURSE RECORD

28. Employability skills

29. Number skills

30. Use of information technology (IT)

### Course Design

The design of this course has been guided by the following QAA Benchmark and Professional Standards

QAA Benchmarks:

- Engineering (2010)

Professional Standards:

- JBM
- UK-SPEC Engineering Technician, Incorporated Engineer and Chartered Engineer Standard

### Course Structure

The FdSc Civil Engineering comprises modules at levels 4 and 5.

Module Specifications for each of these modules are included within the course handbook, available to students on-line at the beginning of each academic year.

	Module	Credits	Module Type <sup>7</sup>
Level 4			
	Civil Engineering Technology A	20	M
	Foundation Mathematics	20	M
	Engineering and Sustainable Development	20	M
	Engineering Materials	20	M
	Engineering Concepts	20	M
	Engineering Surveying	20	M
Level 5			
	Engineering Mathematics with Hydraulics	20	M
	Civil Engineering Technology B	20	M
	Soil Mechanics	20	M
	Structural Analysis & Design A	20	M
	Contractual and Procurement Procedures	20	M
	Engineering Research & Practice	20	M

### Awards

On successful completion of the course, students will be awarded a FdSc Civil Engineering.

<sup>7</sup> Modules are designated as either mandatory (M), requisite (R) or optional (O). For definitions, see the [Framework and Regulations for Undergraduate Awards](#)

## DEFINITIVE COURSE RECORD

### Course Delivery

The course is delivered at Suffolk New College. Students studying part-time on FdSc Civil Engineering are likely to have approximately 7 contact hours per week. The contact hours will be a mix of lectures, individual and group exercises and practical work. The majority of students will be employed full-time in the civil engineering industry and those that are not will need to gain a total of 240 hours work experience per year. Students would need to find their own work experience placement. Students will normally be expected to undertake approximately 17 hours of independent study in an average week, but should be prepared for this to vary based on assignment deadlines and class exercises.

### Course Assessment

A variety of assessments will be used on the course to enable students to experience and adapt to different assessment styles. The assessment methods used will be appropriate to assess each module's intended learning outcomes. Assessment on the course overall will be approximately 75% coursework (including assignments, reports, case studies and practical work write-ups) and 25% examinations. Some modules are 100% examination based.

### Course Team

The academic staff delivering this course are drawn from a team that includes teaching specialists and current practitioners. All staff are qualified in their subjects with their own specialist knowledge to contribute.

### Course Costs

Students undertaking FdSc Civil Engineering will be charged tuition fees as detailed below.

Student Group	Tuition Fees
Full-time UK/EU	Not applicable
Part-time UK/EU	£1,370 per 20 credit module
Full-time International	Not applicable
Part-time International	£1,680 per 20 credit module

Payment of tuition fees is due at the time of enrolment and is managed in accordance with the Tuition Fee Policy.

Site visits are organised during the course and costs to students are usually limited to paying for transport. Students may spend up to £60 on books but this is not compulsory. No specialist equipment is required.

### Academic Framework and Regulations

This course is delivered according to the Framework and Regulations for Undergraduate Awards and other academic policies and procedures of the University and published on the [website](#).