Nottingham Trent University Course Specification

Basic Course Information

1. Awarding Institution: Nottingham Trent University

2. School/Campus: Architecture, Design and the Built

Environment

3. Final Award, Course Title and BSc (Hons) Civil Engineering

Modes of Study: Part Time

4. Normal Duration: 4 years on day release basis

5. UCAS Code:

6. Overview and general educational aims of the course

This degree course is aimed at students already working within the construction industry who wish to develop their education further and open up new career opportunities. Entry to the course is normally directly into Year 2 (level 5) studies and builds upon the foundation of prior qualifications such as a Foundation Degree or HNC in civil engineering or a related discipline.

The course develops the theory and practice of civil engineering with an emphasis on the practical nature of civil engineering and the application and management of current technologies. The final year of the courses builds upon the engineering knowledge and practice developed earlier in the course and broadens the curriculum addressing issues such people management, finance, transportation issues and professional ethics.

The course is recognised the Joint Board of Moderators (JBM) on behalf of the Engineering Council UK, and satisfies the educational requirements for Incorporated Engineer (IEng) status. The JBM represents the Institution of Civil Engineers (ICE), the Institution of Structural Engineers (IStructE), the Chartered Institution of Highways and Transportation, and the Institute of Highway Engineers.

In summary, the course aims to:

- Encourage students to achieve and surpass their expectations through dedicated tutorial and pastoral support.
- Equip students with the skills required to be valued member of the civil engineering profession directly upon graduation.
- Provide an academically rigorous, professionally accredited, course of study that prepares students for wider graduate employment and equips them for life long learning.

7. Course outcomes

Course outcomes describe what you should know and be able to do by the end of your course if you take advantage of the opportunities for learning that we provide.

Knowledge and understanding

By the end of the course you should be able to:

- Demonstrate knowledge and understanding of the key engineering principles and processes that underpin civil engineering (B)
- Apply mathematics and science to the application of engineering principles within existing technology (B)
- Monitor, interpret and use the results of analysis to solve civil engineering problems, apply technology and implement engineering processes (B)
- Relate civil engineering to the wider global context considering social, environmental and ethical issues with an awareness of the legal framework (B)
- Recognise the importance civil engineering has in the commercial and

- economic market place (B)
- Demonstrate the requirement for civil engineering activities to promote sustainable development (B)
- Convey a comprehensive awareness of the realm and context of design within the built environment and of the different customs and practices within the interrelated disciplines.

(B) = indicates those outcomes having specific reference to the <u>QAA Engineering (2010)</u>

Benchmark Statement

Skills, qualities and attributes

By the end of the course you should be able to:

- Use creativity to solve engineering problems (B)
- Design and adapt solutions according to customer and user needs ensuring fitness for purpose (B)
- Identify environmental, sustainability, health and safety and risk issues in civil engineering and propose solutions (B)
- Demonstrate a proficiency in the use of key technology, software, materials, standards and codes of practice related to the civil engineering industry (B)
- Adapt to changing technology and new techniques (B)
- Work effectively, and with intellectual curiosity, both independently and within teams (B)
- Prepare and give technical reports and presentations proficiently in both the oral and written form
- Demonstrate a range of transferable skills that will be of value in the world of work
- Communicate clearly and effectively at different levels and with different parties involved in the design process within the built environment.

(B) = indicates those outcomes having specific reference to the benchmark statement for engineering

8. Teaching and Learning Methods

A range of teaching and learning methods are used across the course and the particular method used for each module will depend upon the key learning outcomes of that module and the type of subject material being dealt with.

Staff/student contact will include: individual and group seminars/tutorials, lectures, laboratory/practical sessions, interdisciplinary design projects, cross-year and cross-subject projects, site visits, individual research and research supported by staff in other Schools/disciplines.

The majority of modules on the course that are designed to convey the core subject discipline material are lecture/seminar focussed and supported by laboratory and field practical sessions to integrate the theory and practice elements. This mix of learning and teaching styles leads to a more thorough understanding of the subject and the development of associated practical skills.

Team work is fundamental to civil engineering. Modules in all years contain teamwork elements and the final year group design project requires extensive collaborative team activity. Analysis and problem solving skills are developed throughout the course.

The development of your independent learning skills will culminate in the undertaking of the final year individual project. This involves you working on a topic that you choose in consultation with your project supervisor who will provide support and

guidance throughout the year, this project supervisor can be either work based or university based.

The university runs an online resource to support teaching and learning, called the NTU On-line Webspace or NOW. All modules are represented on the NOW and most use it to provide you with supporting material associated with the module. Our aim is to support your development into an autonomous independent learner.

9. **Assessment Methods**

A variety of assessment methods are used across the course depending upon the particular learning outcomes being assessed; these range from assignments where practical skills have to be demonstrated through to formal reports, essays, examinations or a combination of these styles that assess the core subject material.

Projects assess an important range of skills relevant to the world of work, including technical and numerical skills, command of relevant software, technical skills presentations skills, team working, leadership and time and resource management. This is especially true of the final year group design project and individual project.

As well as formal assessments, the course incorporates formative and diagnostic assessments – through these staff will provide you with more informal feedback on your progress and development.

10. Course structure and curriculum

The course is studied on a part-time day release basis over 4 years. The first two years of the course cover the equivalent of Year 2 (NQF 5) on the FT/SW route and years three and four the equivalent of the Final Year (NQF 6) of the FT/SW route. The possibility for entry with advanced standing directly into NQF 6 for students holding a professionally accredited HND civil engineering award also exist – this results in a 2 year course.

The course is designed around the core themes of the professional accrediting bodies and the modules you study are designed to develop both your general understanding of civil engineering in its broadest context as well as focusing on the application and management of current technologies. The course also aims to develop your key skills and to produce highly attractive competent young graduate engineers.

NQF 5 builds upon the foundations of your entry qualifications and focuses on the traditional civil engineering disciplines, covering ground engineering, construction technology and structural engineering whilst also developing key skills in the Engineering Skills module.

NQF 6 explores issues such people management, finance, law together with the professional morals and ethics side of the construction industry. You have the opportunity to develop an area of personal civil engineering interest through your Individual Project. Further aspects of structural engineering in terms of the Eurocodes for structural design will be introduced, as well as the environment and sustainability themes being developed.

Modules studied (Note Level 2 (NQF 5) modules are offered on an alternate year basis)

Year 1/2 (NQF 5)

Engineering Skills	20cps
Introduction to Structural Engineering	20 cps
Structural Engineering	20 cps

Year 2/1 (NQF 5)

Building Technology applied to Civil Engineering 20 cps Further Engineering Mathematics 20 cps Ground Engineering 20 cps

Year 3 (NQF 6)

Management & Transportation Studies 20 cp Further Structural Engineering 20 cps Ground Engineering, Water Resources & The Environment 20 cps

Year 4 (NQF 6)

Individual with Group Project 40 cps

Professional Responsibilities & Development

in Civil Engineering 20 cps

11. Admission to the course

For current information regarding all entry requirements for this course, please see the `Applying' tab on the course information web page.

12. Support for Learning

The Course Team appreciate that there is vast difference between studying on a Full-time and a Part-time basis in terms of balancing the requirements of university study with full-time employment and maybe a full home life as well. As a part-time student you will be allocated a Part-time study support tutor who will maintain contact with you throughout the duration of the course to monitor and assist where possible in your adaptation to university level part-time study. There is an induction course (including IT and library use) and you will receive a course handbook that provides all the essential information about the course and the support we provide for your learning. Induction information is updated to all returning students on an annual basis.

The course leader together with the Part-time study support tutor oversees all students enrolled on the course and they will monitor your progress on an individual basis. All staff, both academic and support, operate an 'open door' policy and you are always welcome to call in for help and advice.

The university teaching day will potentially run from 9 am up to 9 pm, although the course team will endeavour not to timetable modules for this full 12 hour period. You will be timetabled for some classes with the full-time students so that you can integrate more into the civil engineering student community and also to allow you to share your professional experiences with this student group. Time will be allocated in the timetable for tutorial support together with appropriate breaks for meals and access to other University learning resources such as the library.

The academic staff teaching on the course are active within their professional fields and are supported by external practising engineers who provide guest lectures and project support.

The library and other learning resources (equipment/plant/IT/laboratory provision) are continually updated to ensure they are fit for purpose.

The University central Student Support Services offers a range of general, specialist

and professional support services for all students, whether they be full or part-time.

13. Graduate destinations / employability

Normally students who enter the part-time course are already working within the civil engineering industry but after graduating your career prospects will be greatly enhanced in terms of both promotion and in opening up other career opportunities. Gaining this degree will open up the wide range of career opportunities available in civil engineering and related industries both within the UK and internationally.

The civil engineering courses at Nottingham Trent University have an enviable graduate recruitment record with graduates working for many of the major UK contractors and consultants. If you chose to work in the areas related to the subject disciplines studied, we have a near 100% graduate employment record.

Some graduates choose to venture into other sectors and are equally successful in gaining employment because of the transferable skills gained on their course. Other graduates continue in academia and go on to study for higher degrees.

The University's Careers Service is available to all students, offering individual consultation.

14. Course standards and quality

- A course committee monitors student feedback on module delivery.
- You will be given detailed feedback on all assessed work.
- The course is overseen by an External Examiner, who submits an annual report on the standards and quality of the course.
- The Joint Board of Moderators of the Institution of Civil Engineers (ICE) and Institution of Structural Engineers (IStructE) accredit the course: Further details are here: www.jbm.org.uk.
- The Engineering subject benchmarks of the Quality Assurance Agency & UK-SPEC have been incorporated into the course's learning outcomes.

15. Assessment regulations

This course is subject to the University's Common Assessment Regulations (located in its <u>Academic Standards and Quality Handbook</u>). Any course specific assessment features are described below:

There are no course specific exceptions from the University Common Assessment Regulations.

To be considered for an honours award you need to obtain a total of 360 cp (credit points). As you will enter the course with advanced standing at either Level 2 (NQF 5) or Level 3 (NQF 6) you will be granted 120 cp at Level 1 (NQF 4) for Level 2 (NQF 5) entry or 120 cp at both Levels 1 and 2 (NQF 4 and 5) for Level 3 (NQF 6) entry based upon Accredited Prior Learning. You will then study 60cp per year, to gain the 360 cp total required.

Your final degree classification will be based on your combined year one and two mark (NQF 5) (20%) and your combined year three and four mark (NQF 6) (80%) if entering at NQF 5. Where the year three / four mark is greater (NQF 6), or in the case of entry directly into NQF 6 the final classification will be based solely on the NQF 6 study undertaken at NTU.

16. Additional Information

Collaborative partner(s):

Course referenced to national QAA

Benchmark Statements: Course recognised by:

burse recognised by: ICE, IStructE, IHE & CIHT

Date implemented: 1 September 2006; revised March 2012, Implemented September 2012

Engineering

Any additional information: