Course Specification
BEng (Hons) Civil Engineering

Course Code: BECIV

2019/20

leedsbeckett.ac.uk
BEng (Hons) Civil Engineering

Material Information Summary for 2019/20 Entrants

Confirmed at 8th October 2018

General Information

Award
Bachelor of Engineering (with honours) Civil Engineering

Contained Awards
Bachelor of Engineering Civil Engineering
Diploma of Higher Education Civil Engineering
Certification of Higher Education Civil Engineering

Awarding Body
Leeds Beckett University

Level of Qualification & Credits
Level 6 of the Framework for Higher Education Qualifications, with 120 credit points at each of Levels 4, 5 and 6 of the UK Credit Framework for Higher Education (360 credits in total)

Course Lengths & Standard Timescales

The standard start date for Leeds Beckett University induction week is reproduced below and relates to the majority of students starting a course in September 2019. A proportion of courses have alternate start dates which are displayed on the online prospectus and additionally will be notified to the students concerned via the offer letter. Non-September starters will also have their start dates confirmed in their offer letters.

- 3 years (full time, campus based)
  Starts 23rd September 2019 / Ends June 2022
- 4 years (full time, campus based with a one year work placement)
  Starts 23rd September 2019 / Ends June 2023

Location(s) of Delivery
City Campus, Leeds (plus location of work placement, if applicable)

Entry Requirements
Admissions criteria are confirmed in your offer letter. Details of how the University recognises prior learning and supports credit transfer are located here: http://www.leedsbeckett.ac.uk/studenthub/recognition-of-prior-learning/

Course Fees
Course fees and additional course costs are confirmed in your offer letter

Timetable Information

Timetables will be made available to students during induction week via:

i) The Student Outlook Calendar
ii) The Student Portal
iii) The Leeds Beckett app

Any difficulties relating to timetabled sessions can be discussed with your Course Administrator.
Policies, Standards and Regulations  
http://www.leedsbeckett.ac.uk/public-information/

There are no additional or non-standard regulations which relate to your course.

Key Contacts

Your Course Director  
Tom Craven

Your Academic Advisor  
Each Student will be allocated an Academic Advisor once they commence their studies at the University. The Academic Advisor will be a member of the Civil Engineering Academic Staff.

Your Course Administrator  
Melissa Argyle

Placement Information

Summary  
Leeds Beckett is dedicated to improving the employability of our students and one of the ways in which we do this is to support our students to gain valuable work experience through work-based placements. Our placement teams have developed strong links with companies, many of whom repeatedly recruit our students into excellent placement roles and the teams are dedicated to supporting students through every stage of the placement process. More information about the many benefits of undertaking a work placement, along with details about how to contact our placement teams can be found here:  
http://www.leedsbeckett.ac.uk/studenthub/placement-information/

Length  
Placements should be 44 weeks and undertaken during the third year of full time student, upon successful completion of level 5/year 2.

Location  
Students will obtain their own placement and therefore the location will be the location of the company with whom they undertake their placement.

Professional Accreditation or Recognition Associated with the Course

Professional Body  
Accreditation with the Joint Board of Moderators (JBM) on behalf of the Institution of Civil Engineers (ICE), the Institution of Structural Engineers (ISTRUCTE), the Chartered Institution of Highways and Transportation (CIHT), and the Institute of Highway Engineers (IHE) will be sought in 2020.

How is Accreditation/ Recognition Achieved?

This degree is designed to fully satisfy the educational base for an Incorporated Engineer (IEng); and partially satisfying the educational base Chartered Engineer (CEng). N.B. as normal with qualifications of this type, a programme of accredited further learning would be required to complete the educational base for CEng. See www.jbm.org.uk for further information.
Course Overview
The course seeks to reflect the learning outcomes for the programme, designed to develop the key areas of civil systems design, management of complex civil projects and low-carbon renewable energy strategies as they relate to the built environment.

The course has therefore taken account of the expectations required by professionals employed in the field of civil engineering and the wider built environment. This is also intended to satisfy the requirements of the Chartered Institution of Civil Engineers (ICE), whilst aiming to bridge the disciplines of engineering design, management and the built environment. There is a clear statement that the course learning outcomes lead to the following performance criteria:

- Raising awareness of the general principles of low-carbon and energy-efficient design
- The development of skills to effectively manage projects, people and systems
- The development of reflective practice with an emphasis on the critical evaluation of their own work
- The development of skills to effectively present options to target audiences as part of a wider team

The structure of the programme also reflects the work-base and experiential learning of the expected students where their skills and work practice can be integrated into the learning process.

The course provides a broad-based education enabling successful students to enter careers in design, construction or operations within the civil engineering industry. The course aims to provide a broad-based technical educational experience, enabling successful students to enter careers in the civil engineering and allied sector. At present, there is a significant shortfall in the number of graduate civil engineers in the UK and, in a global context, particularly within the emerging economies. In the future, students who have studied STEM subject disciplines are going to be in great demand. The target group for the BEng (Hons) Civil Engineering programme is therefore students seeking to become engineering practitioners employed in the civil engineering and related disciplines, i.e. design consultancy, site based contractors, project management, government agencies and local authorities, modelling and a variety of specialist design areas. This programme is seen as a stepping stone for students who enjoy problem-solving and would like to be involved in a diverse and interesting career and the opportunity to work on such projects as designing large structures and a variety of infrastructure including roads, water supply and drainage, bridges, airports, tunnels, sea and flood defences and structures supporting energy supply and transmission.

The course aims to:

- Provide the knowledge and understanding of the scientific and mathematical principles and methodologies that underpin Civil Engineering
- Develop the skills necessary to allow students to be creative and produce innovative solutions to engineering problems
- Facilitate access to a range of practical skills through IT applications, laboratory investigations, surveying and through project work
- Develop a range of graduate skills relevant to a career in the modern civil engineering industry including all forms of communication, problem-solving, individual motivation and team working.
- To establish an appropriate foundation for a lifetime of continuing professional development.
- To enable students to undertake independent critical analysis, enhancing their intellectual development and developing their ability to produce optimal solutions to complex engineering problems

These aims have been written to take account of the UK-SPEC General Learning Outcomes and Engineering Benchmark statements.
Course Learning Outcomes

1. Demonstrate a knowledge of the mathematical and scientific principles and methodologies, which underpin civil engineering and apply them to solve real-world problems.

2. Develop and critically evaluate solutions to engineering situations in diverse global contexts and demonstrate reflective learning.

3. Utilise a range of appropriate traditional and contemporary methods and tools to optimise solutions to civil engineering problems.

4. Demonstrate the skills necessary to investigate, evaluate and produce solutions to real design-related engineering problems (including the requirement to work with technical uncertainty) whilst utilising technical literature and the appropriate codes of practice and/or industry standard.

5. Develop a knowledge of, and technical proficiency with, health and safety, and sustainable, environmental and economic development and the frameworks in which they operate.

6. To apply the mechanical and physical characteristics of civil engineering materials to Design Scenarios through practical laboratory work.

Your Modules

(Correct for students progressing through the programme within standard timescales. Students who are required to undertake repeat study may be taught alternate modules which meet the overall course learning outcomes. Details of module delivery will be provided in your timetable).

Level 4 Core Modules (2019/20 for FT students and 2019/20 and 2020/21 for standard PT students)

- Advanced Mathematics
- Applied Mechanics
- Civil Engineering Management A
- Engineering Materials Science
- Engineering Mechanics
- Surveying A and Computer Aided Design

Level 5 Core Modules (2020/21 for FT students and 2021/22 and 2022/23 for standard PT students)

- Civil Engineering Management B
- Engineering Materials Chemistry
- Geotechnical Engineering: Application and Theory
- Structural Analysis Techniques
Structural Design

Fluid Mechanics I

**Level 6 Core Modules (2021/22 for FT students, 2022/23 for sandwich placement students and 2023/24 and 2024/25 for standard PT students)**

Structural Engineering Techniques

Geotechnical Engineering: Design and Theory

Numerical Management Techniques

Fluid Mechanics II

Infrastructure Engineering

Independent Project

**Assessment Balance and Scheduled Learning and Teaching Activities by Level**

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<tr>
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<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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<tbody>
<tr>
<td>Examination</td>
<td>60%</td>
<td>65%</td>
<td>40%</td>
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<tr>
<td>Coursework*</td>
<td>40%</td>
<td>35%</td>
<td>60%</td>
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*Some of which is practical laboratory based, see module specifications for details.

Whilst overall workload will be informed by the core module specifications, where applicable, at each level, the following information provides an indication of the time required (hours per 20 credits) for different activities on your course:

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<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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<tr>
<td>Teaching, Learning and Assessment</td>
<td>50-60</td>
<td>50</td>
<td>40-50</td>
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<tr>
<td>Independent Study</td>
<td>140-150</td>
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A standard module equates to 200 notional learning hours, which may be comprised of teaching, learning and assessment, placement activities and independent study. Sandwich placement years spent out of the University are not included in the calculation unless they are credit bearing and attributed to a level of the course. Modules may have more than 1 component of assessment.

**Learning Support**

If you have a question or a problem relating to your course, your Course Administrator is there to help you. Course Administrators works closely with academic staff and can make referrals to teaching staff or to specialist professional services as appropriate. They can give you a confirmation of attendance letter, and a transcript. You may also like to contact your Course Rep or the Students’ Union Advice team for additional support with course-related questions.

If you have any questions about life at our University in general, call into or contact the Student Hub on either campus to speak to our Student Experience Team. This team, consisting of recent graduates and permanent staff, are available to support you throughout your time here. They will make sure you have access to and are aware of the support, specialist services, and opportunities our University provides. There is a Student Hub on the ground floor of the Rose Bowl at City Campus and one in Campus Central at Headingley. You can also find the team in the Gateway in the Leslie Silver Building at City Campus. The telephone number is 0113 812 3000, and the e-mail address is StudentHub@leedsbeckett.ac.uk.
Within MyBeckett you will see two tabs (Support and Opportunities) where you can find online information and resources for yourselves. The **Support** tab gives you access to details of services available to give you academic and personal support. These include Library Services, the Students’ Union, Money advice, Disability advice and support, Wellbeing, International Student Services and Accommodation. There is also an A-Z of Support Services, and access to online appointments/registration.

The **Opportunities** tab is the place to explore the options you have for jobs, work placements, volunteering, and a wide range of other opportunities. For example, you can find out here how to get help with your CV, prepare for an interview, get a part-time job or voluntary role, take part in an international project, or join societies closer to home.
### Record of Enhancement

<table>
<thead>
<tr>
<th>No.</th>
<th>Detail of modification</th>
<th>Date Effective</th>
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<tr>
<td></td>
<td>(Provide a brief description of the modification and where the Course Specification has been updated)</td>
<td>(Indicate the academic year of entry and course level(s) to which the modification will apply)</td>
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