



LEEDS  
BECKETT  
UNIVERSITY

# Course Specification

## BSc (Hons) Civil Engineering

Course Code: CIVIL

2024/25

# BSc (Hons) Civil Engineering (CIVIL)

## Applicant Facing Course Specification for 2024/25 Undergraduate Entrants

Confirmed at 11/2023

### General Information

<b>Award</b>	Bachelor of Science with Honours Civil Engineering
<b>Contained Awards</b>	Bachelor of Science Civil Engineering (Level 6) Diploma of Higher Education Civil Engineering (Level 5) Certificate of Higher Education Civil Engineering (Level 4)
<b>Awarding Body</b>	Leeds Beckett University
<b>Level of Qualification and Credits</b>	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).
<b>Course Lengths and Standard Timescales</b>	Start dates will be notified to students via their offer letter. The length and mode of delivery of the course is confirmed below: <ul style="list-style-type: none"><li>• 3 years (full time, campus based)</li><li>• 4 years (full time, sandwich, campus based)</li><li>• 5 years (part time, campus based)</li></ul>
<b>Part Time Study</b>	PT delivery is usually at half the intensity of the FT equivalent course, although there may be flexibility to increase your pace of study to shorten the overall course duration. Some modules may be delivered in a different sequence to that defined within this information set but the modules offered within each level are consistent. Please note that the work placement option is not generally available to PT students.
<b>Location(s) of Delivery</b>	The majority of teaching will be at City campus but on occasion may be at Headingley campus.  Students are responsible for obtaining their own placement, with assistance from the University. The locations will vary, dependant on the opportunity.
<b>Entry Requirements</b>	Admissions criteria are confirmed in your offer letter. Details of how the University recognises prior learning and supports credit transfer

are located here: <https://www.leedsbeckett.ac.uk/student-information/course-information/recognition-of-prior-learning/>

Admissions enquiries may be directed to: [AdmissionsEnquiries@leedsbeckett.ac.uk](mailto:AdmissionsEnquiries@leedsbeckett.ac.uk).

### **Course Fees**

Course fees and any additional course costs are confirmed in your offer letter. Fees enquiries may be directed to [Fees@leedsbeckett.ac.uk](mailto:Fees@leedsbeckett.ac.uk).

### **Timetable Information**

Timetables for Semester 1 will be made available to students during induction week via:

- i) The Student Portal (MyBeckett)
- ii) The Leeds Beckett app

Any difficulties relating to timetabled sessions may be discussed with your Course Administrator.

### **Policies, Standards and Regulations ([www.leedsbeckett.ac.uk/academicregulations](http://www.leedsbeckett.ac.uk/academicregulations))**

In line with a recent Engineering Council directive, a Regulation Exemption has been approved by the University which states that:

*“Students must pass all modules which are mapped to Accreditation of Higher Education Programme (AHEP) learning outcomes with an overall mark of not less than 40% in the combined assessments, with a submission in each component for each module.*

*If students do not achieve these marks at the first attempt they will have the chance to undergo a re-sit in that particular area; if they still fail to achieve the marks at this attempt they will not be allowed to progress onto the following year until they have completed the module again and achieved the above mark.*

*Failure at the second attempt at a module will result in a student’s withdrawal from the 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 Engineering Academic Staff.

#### **Your Course Administrator**

Phil Eastment - [P.D.Eastment@leedsbeckett.ac.uk](mailto:P.D.Eastment@leedsbeckett.ac.uk)

## **Sandwich or Other 'In Year' Work 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**

44 weeks, undertaken between year 2 and year 3 (level 5 and level 6)

### **Location**

Students are responsible for obtaining their own placement, with assistance from the University. The locations will vary, dependant on the opportunity.

## **Professional Accreditation or Recognition Associated with the Course**

### **Professional Body**

Joint Board of Moderators (JBM) on behalf of:

The Institution of Structural Engineers

The Institute of Highway Engineers

The Institution of Civil Engineers

The Chartered Institution of Highway & Transportation

### **Accreditation/ Recognition Summary**

This degree is accredited as fully satisfying the educational base for an Incorporated Engineer (IEng). See [www.jbm.org.uk](http://www.jbm.org.uk) for further information.

Successful completion of this accredited programme provides eligibility to apply for registration with the ICE as an Incorporated Engineer (IEng) with appropriate work based learning (normally around 3-5 years after graduation). This is sat via professional review and examination.

## Course Overview

### Aims

The aims of the programme are to:

- To provide the knowledge and understanding of the scientific, mathematical and engineering principles and methodologies that underpin Civil Engineering
- To enable students to undertake independent critical analysis, enhancing their intellectual development and developing their ability to produce optimal solutions to complex engineering problems
- To develop a range of graduate skills relevant to a career in the modern civil engineering industry including all forms of digital and multi-media communication, problem-solving, individual motivation and team working.
- To ensure that successful graduates will have the potential to contribute to advances in engineering and be capable of accepting extensive managerial responsibilities
- To establish an appropriate foundation for a lifetime of continuing professional development
- The programme also aims to provide the educational requirements for graduate membership of ICE and engineering council accreditation for IEng status

### Course Learning Outcomes

At the end of the course, students will be able to:

1	Demonstrate knowledge and understanding of mathematics, science, and engineering principles across a range of civil engineering subjects, notably structural engineering, geotechnical and highway engineering, civil engineering materials, hydraulics, surveying and civil engineering management.
2	Identify design requirements and use analytical techniques and design practice to produce practical solutions relevant to the role of an Incorporated Engineer.
3	Understand the iterative analytical nature of engineering problems in determining cost effective, sustainable and robust solutions utilising contemporary digital technologies, advanced computing techniques, and traditional manual methods.
4	Use contemporary Codes of Practice and be aware of the regulatory framework in which design is practiced. Demonstrate an appreciation of the role of the designer in achieving whole-life performance especially with regard to health and safety and sustainable development.
5	Recognise the importance of leadership, teamwork and communication applicable to the role of an incorporated engineer and demonstrate relevant aspects, utilising appropriate interpersonal skills, whilst working both as a team member and individually.
6	Demonstrate knowledge of the context in which civil engineering projects are delivered and managed through procurement, contract administration, planning and performance. Apply contemporary legislative requirements with regards to health and safety and environmental impact to contextualise entry level knowledge in civil engineering.

## Teaching and Learning Activities

### Summary

All modules on the course are designed for formal lecture-based delivery, accompanied by tutorial, laboratory practical and fieldwork sessions to consolidate student learning and enhance the student experience.

Student support and pastoral care is provided by the course team via a dedicated course administrator as well as subject specialist tutors, personal tutors, module leaders, level tutors and the course leader. In addition, the team operate an open access policy which gives students easy access to academics outside of taught sessions.

Emphasis is placed on the application of engineering principles to the practical solution of increasingly complex engineering problems. Aspects of the course which are particularly relevant to professional and transferable skills development and employability are:

- A broad range of study covering both technical and management-based subjects which build knowledge, understanding and application across levels.
- Design solutions to practical problems. Initially simple problems with tutor lead design solutions. The problems presented become increasingly complex, necessitating imagination and judgement in developing a practical solution. At all levels, the design problems are case study based and relevant to current industry practice.
- Hands-on experience in IT, Surveying and laboratory testing. Again, at Level 4, these exercises are basic and tutor led. As the course progresses, students work to less detailed briefs and are expected to develop innovative solutions based on experience.
- The PSRB requires that threads (Design, Health Safety and Risk Management, Sustainability) permeate the curriculum both horizontally and vertically and this is embedded in the modular content.

This course will mainly feature in-person learning for any taught sessions.\*

\*Where appropriate for learning, some IT sessions may be delivered by recorded video with tutor support.

### Your Modules

This information is correct for students progressing through the programme within standard timescales. Option modules listed are indicative of a typical year. There may be some variance in the availability of option modules. 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.

### Full Time Study

Level 4			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)

Level 4			
Civil Engineering Management A (20 credits)	Y	Engineering Mechanics (20 credits)	Y
Civil Engineering Mathematics (20 credits)	Y	Engineering Materials Science (20 credits)	Y
Civil Engineering Project (20 credits)	Y	Civil Engineering Project (20 credits)	Y
Surveying A and CAD (20 credits)	Y	Surveying A and CAD (20 credits)	Y

Level 5			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Civil Engineering Management B (20 credits)	Y	Engineering Materials Technology (20 credits)	Y
Geotechnical Engineering A (20 credits)	Y	Highway Engineering A (20 credits)	Y
Structural Design (20 credits)	Y	Civil Engineering Design Project (20 credits) <b>Or</b> Civil Engineering Design Project (EWB)* (20 credits) <b>Or</b> Structural Analysis** (20 credits)	N

Level 6			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Civil Engineering Major Project*** (40 credits)	Y	Civil Engineering Major Project (40 credits)	Y
Civil Engineering Dissertation*** (40 credits)		Civil Engineering Dissertation (40 credits)	
Structural Engineering (20 credits) <b>Or</b> Highway Engineering B (20 credits)	N	Geotechnical Engineering B (20 credits) <b>Or</b> Infrastructure Asset Management (20 credits)	N

Level 6			
Quantitative Methods for Decision Making (20 credits)	Y	Quantitative Methods for Decision Making (20 credits)	Y
Hydraulics and Water Engineering (20 credits)	Y	Hydraulics and Water Engineering (20 credits)	Y

\* Indicative

\*\* A prerequisite of performance in Level 4 module Engineering Mechanics is in place on this elective module to ensure reasonable chance of success.

\*\*\* Note that Civil Engineering Dissertation is an option of high achieving students instead of Civil Engineering Major Project. See module specification for details.

### Part Time Study

Level 4 (Year 1)			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Civil Engineering Technology Project (20 credits)	Y	Site Surveying and CAD (20 credits)	Y
Engineering Mechanics (20 credits)	Y	Engineering Materials Science (20 credits)	Y

Level 4/5 (Year 2)			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Civil Engineering Technology Project (20 credits)	Y	Civil Engineering Management B (20 credits)	Y
Engineering Mechanics (20 credits)	Y	Engineering Materials Technology (20 credits)	Y

Level 5 (Year 3)			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Geotechnical Engineering A (20 credits)	Y	Highway Engineering A (20 credits)	Y
Structural Design (20 credits)	Y	Civil Engineering Design Project (20 credits) <b>Or</b>	N



Level 5 (Year 3)			
		Civil Engineering Design Project (EWB)* (20 credits) <b>Or</b> Structural Analysis** (20 credits)	

Level 6 (Year 4)			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Hydraulics and Water Engineering (20 credits)	Y	Hydraulics and Water Engineering (20 credits)	Y
Structural Engineering (20 credits) <b>Or</b> Highway Engineering B (20 credits)	N	Geotechnical Engineering B (20 credits) <b>Or</b> Infrastructure Asset Management (20 credits)	N

Level 6 (Year 4)			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Civil Engineering Major Project*** (40 credits)	Y	Civil Engineering Major Project*** (40 credits)	Y
Quantitative Methods for Decision Making*** (20 credits)	Y	Quantitative Methods for Decision Making*** (20 credits)	Y

\* Indicative

\*\* A prerequisite of performance in Level 4 module Engineering Mechanics is in place on this elective module to ensure reasonable chance of success.

\*\*\* Note that Civil Engineering Dissertation is an option of high achieving students instead of Civil Engineering Major Project. See module specification for details.

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

The assessment balance and overall workload associated with this course are calculated from core modules and typical option module choices undertaken by students on the course. They have been reviewed and confirmed as representative by the Course Director but applicants should note that the specific option choices students make may influence both assessment and workload balance.

A standard module equates to 200 notional learning hours, which may be comprised of teaching, learning and assessment, any embedded placement activities and independent study. Modules may have more than one component of assessment.

### Assessment

Level 4 is assessed by examinations predominantly, with some coursework

Level 5 is assessed by examinations predominantly, with some coursework

Level 6 is assessed by coursework predominantly, with some examinations

### Workload

*(per 20 credit module)*

Overall Workload	Level 4	Level 5	Level 6
Teaching, Learning and Assessment	50-60 hours	50 hours	40-50 hours
Independent Study	140-150 hours	150 hours	150-160 hours
Placement (optional)		44 weeks	

### Learning Support

If you have a question or a problem relating to your course, your Course Administrator is there to help you. Course Administrators work 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.

### Student Services

If you have any questions about life at University, call into our Student Services Centre at either campus or contact Student Advice directly. This team, consisting of trained officers and advisers 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. They also work on a wide range of projects throughout the year all designed to enhance your student experience and ensure you make the most of your time with us. Student Advice are located in the Student Services Centre in the Leslie Silver Building at City Campus and on the ground floor of the Priestley Building at Headingley Campus. The team can also be contacted via email at [studentadvice@leedsbeckett.ac.uk](mailto:studentadvice@leedsbeckett.ac.uk), telephone on 0113 812 3000, or by accessing our online chat link, available on the student homepage.

### Support and opportunities

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.