LEEDS BECKETT UNIVERSITY

Course Specification

BEng (Hons) Building Services Engineering

Course Code: BEBSE

2026/27

leedsbeckett.ac.uk

BEng (Hons) Building Services Engineering (BEBSE)

Applicant Facing Course Specification for 2026/27 Undergraduate Entrants

Confirmed at

General Information

Award	Bachelor of Engineering with Honours Building Services Engineering
Contained Awards	Bachelor of Engineering Building Services Engineering (Level 6) Diploma of Higher Education Building Services Engineering (Level 5) Certificate of Higher Education Building Services Engineering (Level 4)
Awarding Body	Leeds Beckett University
Level of Qualification and 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 and Standard Timescales	Start dates will be notified to students via their offer letter. The length and mode of delivery of the course is confirmed below: • 3 years (full time, campus based) • 4 years (full time, sandwich, campus based) • 5 years (part time, campus based)
Part Time Study	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.
Location(s) of Delivery	The majority of teaching will be at Headingley campus but on occasion may be at City campus. Students are responsible for obtaining their own placement, with assistance from the University. The locations will vary, dependant on the opportunity.
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: https://www.leedsbeckett.ac.uk/student-information/course-information/recognition-of-prior-learning/ Admissions enquiries may be directed to: AdmissionsEnquiries@leedsbeckett.ac.uk.
Course Fees	Course fees are confirmed in your offer letter. A breakdown of any additional costs is included on the online prospectus entry for this course. Fees enquiries may be directed to Fees@leedsbeckett.ac.uk.

Policies, Standards and Regulations (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."

The Engineering Council defines compensation as: "*The practice of allowing marginal failure (i.e. not more than 10% below the nominal passmark) of one or more modules and awarding credit for them, often on the basis of good overall academic performance*", and condonement as: "*The practice of allowing students to fail and not receive credit for one or more modules within a degree programme, yet still qualify for the award of the degree*".

In line with these definitions, and for the listed awards

a. No module mark may be condoned, and a pass award made for any module in the stated degree programmes
b. A student who is enrolled on one of the stated degrees can be compensated for a maximum of **one** module of a maximum of 20 credits
c. The individual and group project modules within the awards cannot considered for compensation under (b)
d. The minimum mark for which compensation is allowed is 30%, given a normal pass mark of 40%

For instance, a student entering at Level 4 and leaving at Level 6 on an award of 360 credits could only be compensated in *one* 20 credit module, no matter how many modules are taken between the entry point at Level 4 and graduation at Level 6. Likewise, students on an Integrated Masters of 480 credits similarly can only be compensated in *one* 20 credit module within those 480 credits.

Students who fail to stay within the compensation limits above **must** be transferred to a suitable non-accredited award or withdrawn from the course at the students option.

Professional Accreditation or Recognition Associated with the Course

Professional Body

Chartered Institution of Building Services Engineers (CIBSE)

Accreditation/ Recognition Summary

On successful completion of the course and appropriate industrial experience students will be eligible to make application for Associate Member of CIBSE and incorporated Engineer Status with the Engineering Council. It should also be noted that the programme is also accredited for partial Chartered Engineer (CEng) which if suitable accredited further study is undertaken at Masters level (MSc, MEng) and significant work experience is obtained via employment would allow application for full membership with CIBSE i.e. MCIBSE and Chartered Engineer Status (CEng) with the Engineering Council UK.

'In Year' Work Placement Information

Summary

The course contains a placement year.

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

Placement Delivery

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.

Location

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

Approval

Whilst students source their own placements, they will need to meet requirements which will be outlined before module enrolment.

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.

Key Contacts

Your Course Director	Mike White
Your Course Administrator	Vanessa Melara – V.Melara@leedsbeckett.ac.uk

Course Overview

Aims

The aims of the programme are to:

- Provide the knowledge and understanding of the scientific, mathematical and engineering principles and methodologies that underpin Building Services 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
- Develop a range of graduate skills relevant to a career in the modern building services 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 CIBSE and engineering council accreditation for IEng status

Course Learning Outcomes

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

1	Demonstrate the underlying concepts of engineering design and principles, showing ability in the analysis of building energy performance, the application and appraisal of appropriate concept design and its communication to stakeholders from a local, national and global perspective whilst taking into consideration the complex needs of a diverse client base and unfamiliar environments.
2	Demonstrate the competent use and application of industry standard building services engineering software, thus illustrating the student's digital literacy in the resolution of building services design problems.
3	Demonstrate the understanding and use of, commercial and financial judgement and managerial skills in the planning organisation, control and successful delivery of building services projects and enterprises whilst being aware of the impact these techniques can have in a global context.

4	Demonstrate knowledge, understanding, critical thinking and analysis of fundamental issues relating to a Building Services Engineering practitioner operating in diverse social and cultural contexts.
5	Identify and analyse broadly defined problems, evaluate optional strategies and optimise appropriate solutions to building services projects and be able to communicate these solutions to a diverse client base and promote low carbon solutions and sustainability in unfamiliar environments.
6	Use a range of skills appropriate to the working environment, including working effectively with diverse construction professionals, using appropriate digital technologies, and communicating effectively with all stakeholders, locally and internationally.

Teaching and Learning Activities

Summary

Formal lectures, tutorials, design project workshops and building case studies will be embedded in the delivery to help to reinforce the learning process. The feedback and progress reviews, extracurricular seminars, field trips and the involvement of industry experts as guest speakers will be used to enrich the learning experience and students' knowledge of current issues within the building services engineering environment.

This course will feature a mix of blended learning, both online and in person. Lectures and seminars will be live.

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 Delivery

Level 4

Compulsory modules

Module title	**Credits**	**Semester/ teaching period**
Management Principles and Applications	20	1
Maths for Electronics and Electrical Engineering	20	1
Electrical and Electronics Principles	20	1
Thermo Fluids	20	2
Building Services Science	20	2
Mechanical Services	20	2

Number of credits of compulsory modules	120	

Level 5

Compulsory modules

Module title	**Credits**	**Semester/ teaching period**
Engineering Mathematics	20	1
Digital Construction Technology and Applications	20	1
Airconditioning and Refrigeration Systems	20	1
BMS and Control Systems	20	2
Electrical Services and Lighting Systems	20	2
Group Design Project	20	2
Number of credits of compulsory modules	120	

Level 6

Compulsory modules

Module title	**Credits**	**Semester/ teaching period**
Low-Carbon Systems Design	20	1
Facilities Management and Maintenance	20	1
Intelligent Building Technologies	20	2
Building Physics (Modelling and Analysis)	20	2
Dissertation	40	1 & 2
Number of credits of compulsory modules	120	

Part Time Delivery

Level 4

Compulsory modules

Module title	**Credits**	**Semester/ teaching period**
Management Principles and Applications	20	S1 / Year 1
Maths for Electronics and Electrical Engineering	20	S1 / Year 1
Thermo Fluids	20	S2 / Year 1
Building Services Science	20	S2 / Year 1
Electrical and Electronics Principles	20	S1 / Year 2
Mechanical Services	20	S1 / Year 2
Number of credits of compulsory modules	120	

Level 5

Compulsory modules

Module title	Credits	Semester/ teaching period
Engineering Mathematics	20	S1 / Year 2
Electrical Services and Lighting Systems	20	S1 / Year 2
BMS and Control Systems	20	S1 / Year 3
Group Design Project	20	S1 / Year 3
Airconditioning and Refrigeration Systems	20	S2 / Year 3
Digital Construction Technology and Applications	20	S2 / Year 3
Number of credits of compulsory modules	120	

Level 6

Compulsory modules

Module title	Credits	Semester/ teaching period
Low-Carbon Systems Design	20	S1 / Year 4
Facilities Management and Maintenance	20	S1 / Year 4
Intelligent Building Techniques	20	S1 / Year 4
Building Physics (Modelling and Analysis)	20	S1 / Year 4
Dissertation	40	S1 & S2 / Year 5
Number of credits of compulsory modules	120	

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 a mix of online time-controlled tests and coursework

Level 5 is assessed by examinations predominantly, with some coursework and practical assessments.

Level 6 is assessed by coursework predominantly, with some examinations.

Workload

Overall Workload	**Level 4**	**Level 5**	**Level 6**
Teaching, Learning and Assessment	228 hours	228 hours	184 hours
Independent Study	972 hours	972 hours	1016 hours
Placement (optional)		40 weeks	