Course Specification

BEng Engineering Management (Top-Up)

BENEM:

2020/21

Undergraduate Material Information
IMPORTANT INFORMATION FOR APPLICANTS/PROSPECTIVE STUDENTS

Version date: July 2020

<u>Undergraduate Material Course Information Summary</u>

Revised Course Structure and Delivery Information for Academic Year 2020/21 in Response to Coronavirus Covid-19 and Associated Public Health England Guidance as at 3 July 2020

PART 1 of 2: Important General Information about Course Delivery for Leeds Beckett University Awards in 2020/21 (Information Specific to Your Course is Provided in PART 2)

Introduction

This document contains important information about Leeds Beckett University's planned approach to course delivery and assessment in 2020/21. It provides an update to the information previously available in our online prospectus. You should read this document carefully so that you are aware of any changes that affect your course.

Information is provided in two parts:

The University is informed by Public Health England (PHE) Covid-19 advice and guidance for maintaining a Covid-secure learning and working environment. We have made arrangements to continue to provide a high-quality educational experience in a way that protects the safety and wellbeing of both students and staff. We are engaging closely with Leeds Beckett Students' Union to inform the arrangements and will also be informed by feedback provided by our individual students.

Public Health England guidance continues to evolve, so the arrangements for delivery of your course and use of the campus may need to change during the academic year to continue to protect students and staff.

The taught content advertised at each level of study, or its equivalent, will be delivered across the academic year 2020/21. We have identified an appropriate mix of blended learning – a mix of face-

to-face, on-campus, online and digital content and teaching and learning for each subject, reflecting what will maximise learning as well as supporting more vulnerable learners and enabling the university as a whole to minimise transmission risk.

Covid-19 social distancing measures will be implemented during 2020/21 for teaching, learning, assessment and student support.

In the event of further government lockdowns, either local or national, we will prioritise digital and online learning and support to enable students to continue with their studies.

If there is an easing of Covid-19 restrictions, we will continue to provide blended delivery for teaching block 1 or semester 1 in 2020/21. We will keep teaching blocks 2 and 3 or semester 2 under review, informed by Public Health England advice. We may revert to different proportions of on-campus learning and online learning delivery later in the academic calendar year or a later teaching block. Learning will remain accessible for students who are unable to attend on campus sessions.

How we will communicate with you

We have sent information to applicants who have accepted an offer by email on the plans for delivery of your course in 2020/21, the academic calendar (teaching block delivery or alternative) applicable for your course and on the options available to you as a prospective student, to enable you to make informed choices.

As the situation evolves, further information on local course delivery arrangements will be provided to you in emails from your School and via the School.

In addition to the course specific information set out in this document and the above communications, the University's Covid-19 microsite contains information for students and applicants, including information relating to University accommodation and University facilities and services. The Covid-19 microsite is regularly reviewed and updated as the situation, advice and planning evolve and is available at:

https://www.leedsbeckett.ac.uk/COVID19/#tabplaceholder2.

Key terms and conditions

Further important information for applicants and students is available on our web site: https://www.leedsbeckett.ac.uk/information-for-applicants-and-students/ . This includes information about the student contract, fees and funding, your rights of cancellation, the student protection plan and the University complaints process. It is essential that you read the information on this webpage carefully as it sets out the rights and obligations that will form the contract between you and the University upon accepting an offer and information about how to make a complaint.

Start dates

Our academic year will begin at the normal time. Start dates will be notified to direct applicants via their offer letter or for UCAS applicants, via UCAS Track. The length of the course is confirmed in the information about your course in Part 2 of this document below.

Location of delivery

In academic year 2020/21, it is planned that your course will be delivered via a blend of online and digital learning and on-campus teaching and learning, with the necessary Covid-19 social distancing and other measures in place on campus informed by Public Health England advice and guidance.

Information on how blended teaching and learning will be delivered and the location of any on-campus delivery is provided in a subsequent section of this document entitled '**Teaching and Learning Activities'**.

Information on the delivery of placements and other off-campus learning opportunities is provided in a subsequent section of this document entitled '**Placements and Other Off-Campus Learning Opportunities'**

Course Fees

Your course fee is stated in your offer letter. The course fee published for 2020/21 on the University's Online Prospectus and included in your offer letter has not changed. Other additional costs remain as published on our original Online Prospectus information in addition to the areas of costs outlined below.

The course will be delivered via a blended approach that includes online teaching and learning, digital learning and on campus sessions. If a further lockdown is necessary then delivery will be continued and supported via online and digital learning. Students are advised that they will need a personal digital device for this purpose. The University's wide range of student support services available for students also includes a laptop loans scheme. Students may wish to bring an existing personal device or purchase or lease a laptop or similar device for their personal use which would be an additional cost. The costs of this would vary depending on your individual requirements but can be in the region of £400-800 depending on the device.

The University's wide range of student support services available for students also includes a laptop loans scheme. The University is developing a means-tested Covid-19 Financial Assistance Package to support students to acquire a laptop should this be needed. Students may also apply for a living expenses fund for unexpected personal hardship as a result of the Covid-19 Crisis.

Students will need to follow the Public Health England advice and any specific national requirements for maintaining personal safety and hygiene to protect themselves and others from the Covid-19 risks. These personal safety measures such as the wearing of face coverings will be an additional cost that students need to consider.

Timetable Information

This course will be scheduled using a teaching block/semester-based delivery and will be

specified in timetable information.

The 2020/21 academic calendar and term dates are available on our web site at:
https://www.leedsbeckett.ac.uk/-/media/files/academic-calendars/2021-student-calendar-sept.pdf?la=en

The academic year 2020/21 will start on the dates notified to you.

Taught sessions will normally be scheduled and included in your timetable. This will include on-campus sessions that you should attend. In 2020/21, depending on your course, this may also include scheduled online teaching and learning sessions where student engagement is required at a specified time and tutor pre-recorded lectures and scheduled discussion sessions. Module information will be made available online by the school for enrolled students.

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

1. The Student Portal (MyBeckett)
2. The Leeds Beckett app

You should discuss any difficulties relating to your engagement with timetabled sessions with your Course Administrator.

Policies, Standards and Regulations (www.leedsbeckett.ac.uk/public-information)

Covid-19 social distancing measures will be in place for teaching, learning, assessment and student support in 2020/21. This means that there will be operational requirements and protocols in place for the way in which your course is delivered and the way in which University activities, facilities, and spaces operate which students and staff will need to follow.

In the event of further government lockdowns either local or national in response to Covid-19, we will prioritise digital and online learning and support to enable students to continue with their studies. We may need to implement approved emergency Covid-19 pandemic academic regulations to take account of the impact of Covid-19 general extenuating circumstances.

Professional Accreditation or Recognition Associated with the Course

We will prioritise face-to-face teaching and practical teaching to meet any requirements of relevant professional, statutory and regulatory bodies (PSRB) if your course includes these elements. This will ensure that your course retains its full professional status.

Specific information on applicable professional statutory or regulatory body recognition or requirements for your course is summarised below.

Teaching and Learning Activities

The way we will deliver this course and teaching, learning and assessment activities in 2020/21 will be informed by Public Health England advice and guidance on Covid-19 secure requirements and the need for social distancing for the protection of students and staff.

You will experience a blended approach to learning for 2020/21; this is a mix of face-to-face, on campus online, and digital content, teaching and learning.

We are working within the government 2 metre social distancing measures for Teaching Block 1 so we are not planning to deliver large-group teaching on campus throughout 2020/2021. This will ensure that maximum space will be available for small-group teaching.

In most cases, the taught content will also be available online so you can still access it if you are not able to attend campus due to the pandemic (for example, due to self-isolation, shielding or travel restrictions). There will be digital content and recorded lectures available online to support students who may be unable to travel to campus. In some circumstances, other formal taught sessions may also be recorded.

In the event of a further government lockdown in response to Covid-19, we will prioritise digital and online learning and support to enable students to continue with their studies and study towards achieving any specified professional statutory and regulatory body accreditation requirements where this applies.

If there is an easing of Covid-19 restrictions, we will continue to provide blended delivery for teaching block 1 or semester 1 in 2020/21. We will keep teaching blocks 2 and 3 or semester 2 under review, informed by Public Health England advice (see Introduction section above).

Further information on local course delivery arrangements will continue to be available from your School and via the School.

Students will be kept up to date with new information when this is available via this University web site.

Learning Support

Our approach to delivering student support in 2020/21

Given the planned social distancing measures in place on campus for 2020/21 to ensure safe delivery of services for students and staff, some of the arrangements for student support will be accessible online.

We are committed to ensuring you continue to have opportunities to access the learning and wellbeing support that you need over the forthcoming year. General learning spaces, including access to libraries, will be available to be booked online; and where specialist space is needed, this will either be provided: as normal; created in newly adapted spaces; or replicated as part of an enhanced suite of online resources.

We want to provide a safe environment for students and staff, so on-campus delivery of student support services will be limited. This may mean that campus-based school offices will operate within defined core office hours. However, full access to advice, learning support and specialist services will be delivered via telephone, email, video calls and online live chat. The Students' Union will also be implementing social distancing arrangements for student advice services.

Access to Library support in 2020/21

The Library offers access to thousands of resources via MyBeckett or the Library website (http://libguides.leedsbeckett.ac.uk/home) which also provides full details of all our services.

In response to Covid-19, and the need for social distancing for the protection of students and staff, the libraries will be available via a booking system in 2020/21 for students to study, access PCs and laptops, printer/ copiers, and other equipment, and to use the books and journals.

The Library and Student IT Advice Service is available by online chat, email or phone, and provides support on using the University's online and digital services, finding information, borrowing, Office 365, MyBeckett, online meetings, saving your work, passwords, etc.
- online (including 24/7 chat): http://libguides.leedsbeckett.ac.uk/contact_us
- by phone - 0113 812 1000 (24/7 IT support)

The Library Academic Support Team can help you develop your academic skills such as critical thinking, academic writing and analysing data, and research skills such as how to find, use and evaluate information for your studies. The team liaises with your lecturers to provide the information resources you need for your subject and to arrange academic skills sessions to support you in your studies. They also have a wide range of short tutorials available on the Library's YouTube channel: https://www.youtube.com/channel/UCFFd5u75zmy00EnkM9F2zPQ

Support from your School

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 university specialist support services as appropriate. They can also arrange for a confirmation of attendance letter, and a transcript on your behalf. You may also like to contact your Course Representative or the Students' Union Advice team for additional support with course related questions.

Student Advice and Support

If you have any questions about life at our University in general, you may contact the Student Advice Hub to speak to one of our Student Services Advisers. This team, consisting of recent graduates, are able 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. Our Student Advice Hub will be operating via live chat, video, telephone and email services. Telephone lines - 0113 812 3000 will open as usual 09.00-17.00 Mon-Fri. You can book an appointment via telephone or online video chat with an adviser via the link at: https://www.leedsbeckett.ac.uk/studenthub/student-experience-team/. This is where contact details for all specialist support services can also be found. You can also email the team at studentadvicehub@leedsbeckett.ac.uk.

Range of Support Services Available

There is a range of support for disabled or vulnerable students. Any student with a disability, who may or may not have declared this to the University and wishes to discuss their learning support for the year ahead or their status as a Covid-19 extremely vulnerable person, should contact their Disability Adviser for their School who is based in Student Services to discuss their support needs in

the first instance. The service contact details are disabilityadvice@leedsbeckett.ac.uk or telephone 0113 812 5831. Students who are classed at Covid-19 Extremely Vulnerable (i.e. you have received a Shielding Letter from the NHS) but who do not regard themselves as disabled, and have not registered with the Disability Team, should discuss any support arrangements they may need, directly with their Course Director and if resident in halls, their Residential Life Team.

Once enrolled, you will have access to our virtual learning environment, MyBeckett. Within this system 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.

You can also access details of all University student support teams at our web A-Z of Services. This can be found at https://www.leedsbeckett.ac.uk/studenthub/student-support/. Here you can obtain further information including service contact details, access self-help resources or book an appointment with a range of support services.

In order to provide you with information on student services support in 2020/21 in response to the changing Covid-19 position, updated information will be provided on our University Covid-19 microsite.

Part 2: Important Information Specific to Applicants/Prospective Students BEng Engineering Management (Top-Up) for 2020/21

Award	Bachelor of Engineering with Honours, Engineering Management (Top-Up)
Contained Awards	Bachelor of Science, Engineering Management (Top-Up)
Awarding Body	Leeds Beckett University
Level of Qualification & Credits	Level 6 of the Framework for Higher Education Qualifications, with 120 credit points at Level 6 of the UK Credit Framework for Higher Education (120 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 2020. 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.

- 1 year (full time, campus based)

Timetable Information

This course will be taught via teaching block delivery. Details of on campus and other scheduled sessions will be confirmed in your timetable.

Further information on learning and teaching activities and your modules is provided in a later section of this document.

Policies, Standards and Regulations (www.leedsbeckett.ac.uk/public-information)

Following review by a PSRB Visit Panel in September 2016, and following consultation with the PSRB Accreditation Team, the above *Exemption* was revised on 2019-12-04 to read in full

Applicants should have a HND, Foundation degree or equivalent Level 5 award in the cognate subject of Engineering. All offers to students on this course must be agreed with the Course Director, and the Course Director must be satisfied that the prior learning of the applicant is in accordance with the UK Engineering Council's standards for the Accreditation of Higher Education Programmes version 3 (AHEPv3) and maintain a mapping to this effect.

Note: The correct title for the Level 6 contained award of the ordinary degree is *BSc Engineering Management (Top-Up)*. This Level 6 contained award **does not** satisfy the PSRB requirements for an accredited degree programme as it does not fully meet the Engineering Council's guidance on the

assessed learning outcomes for IEng under the *Accreditation of Higher Educational Programmes* version 3.0. The change in the title of the award is therefore necessary to differentiate between the main award and the contained award.

Specifically, the title of any contained award **must** adhere to the Accreditation Policy R1, *Programme Title*, of the IET (Academic Accreditation Information Pack for Higher Education Institutions, Academic Accreditors and Professional Engineering Institution Staff. The Institution of Engineering and Technology, July 2018), which states

> *The title of the accredited degree programme must not be identical to an unaccredited programme awarded by the same Higher Education Institution.*

For the ordinary degree, you will not have met the Course Learning Outcomes of the honours award; but instead you will expected to have demonstrated the Course Learning Outcomes stated in Section 3 below.

Key Contacts

Your Course Director   Dr. David Love david.love@leedsbeckett.ac.uk

Your Academic Advisor   This will be confirmed at the Induction event

Your Course Administrator   ccteugadmin@leedsbeckett.ac.uk

Professional Accreditation or Recognition Associated with the Course

The Institution of Engineering and Technology (IET)

Currently this course is not accredited by any member of the UK Engineering Council. It has been designed to align to the UK *Standard for Professional Engineering Competence* (UK-SPEC) Third Edition, as laid out in the UK Engineering Council's *Accreditation of Higher Education Programmes* (AHEP) as being suitable for the academic component of registration as an Incorporated Engineer (IEng). The IEng standard is recognised internationally as showing your ability to use your theoretical knowledge to solve problems in developed technologies using well proven analytical techniques; your application of your knowledge to deliver engineering projects or services using established technologies and methods; your ability to be responsible for project and financial planning and management together with some responsibility for leading and developing other professional staff; your effective interpersonal skills in communicating technical matters and your commitment to professional engineering values.

Upon completion of the award, the practical requirements for Professional Registration would typically take between three to five years to achieve. This period may be significantly reduced by your previous experience and training, and students looking to follow Professional Registration upon graduation are encouraged to discuss routes to registration with the course team.

Course Overview:

As frequently reported in the IET Skills Survey[1], the skills possessed by employees of engineering companies of all sizes within the UK are in high demand. Companies therefore face the dual problem of retaining existing staff – whilst also finding and recruiting new engineering talent. For instance, in the 2017 IET Skills Survey, 75% of companies reported that offering a good career path was important to retaining existing talent (*Skills and Demand in Industry: 2017 Survey*. The IET, 2017. pg. 40); and more than half reported reported funding technical and job-specific training (*Skills and Demand in Industry: 2017 Survey*. The IET, 2016. pg. 39).

In addition to the retention of more experienced staff, an increasing number of companies are reported to be expanding their recruitment of school leavers and apprentices. Nonetheless, companies report a key concern with this demographic of school leavers and apprentices lies in their leadership and management skills; a concern that has increased every survey year since 2012 (*Skills and Demand in Industry: 2016 Survey*. The IET, 2016. pg. 20).

This course aims to help address this local and national need for management and leadership skills within an engineering context in both these two different cohorts

1. Mature students with significant technical experience, but who lack the academic background to develop management and leadership skills through a post-graduate qualification. This award may serve as a stepping stone onto a postgraduate programme (e.g. the Schools own *MSc Advanced Engineering Management*) or further study; however, it is principally aimed as a foundation at those seeking new roles and challenges within an established career.
2. Apprentices and other school leavers trained to the equivalent of an HND: or those with lower academic qualifications who nonetheless have significant technical and business skills to supplement their previous academic study.

For both cohorts outlined above, this course offers a solid grounding in current management theory and the practice of project management. Students also have the opportunity to develop their own expertise through the completion of a substantial individual project. Finally, the course also offers the choice of a number of more technical modules; which develops the students' skills, knowledge, and abilities in areas of existing interest or new ventures.

Aims

To meet the industry needs outlined above; this course is aimed at students who wish to undertake study that has a strong applied focus. Most of those students will also seek recognition after graduation as Professional Engineers, through the standards set by one or more of the Professional Engineering Institutes. Therefore, this award also aligns itself with the Engineering Council's *UK Standard for Professional Engineering Competence* (UK-SPEC), aiming to produce graduates who would qualify for registration as Incorporated Engineers (IEng). Broadly the UK-SPEC defines the

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[1] An annual review of issues facing UK employers of engineering and IT staff, undertaken by the Insitute of Engineering and Technology since 2006. An archive of the current and previous reports can be found at https://www.theiet.org/factfiles/education/skill-survey-page.cfm.

qualities of and role of Incorporated Engineers as being capable of maintaining, managing and applying current and developing technologies to engineering design, development, manufacturing, construction and operation. For candidates to qualify for professional registration as IEng, they must demonstrate (*UK-SPEC: UK Standard for Professional Engineering Competence*. Engineering Council, 2013. pg. 16)

- *The theoretical knowledge to solve problems in developed technologies using well proven analytical techniques*

- *Successful application of their knowledge to deliver engineering projects or services using established technologies and methods*

- *Responsibility for project and financial planning and management together with some responsibility for leading and developing other professional staff*

- *Effective interpersonal skills in communicating technical matters*

- *Commitment to professional engineering values.*

As with all engineering courses aiming to produce graduates capable of professional registration, an academic course can only satisfy part of the requirements for that registration. Therefore, this course aims to express its alignment with the UK-SPEC though adherence to version 3 of the Engineering Council's standard for the *Accreditation of Higher Education Programmes*, and to the subject and discipline learning outcomes defined by the Institution of Engineering and Technology (the sector recognised PSRB and PEI for electronics and electrical engineering). Together these learning outcomes for graduates of the award are reflected in the following course aims:

1. To facilitate the provision of a quality learning experience for each student that fosters engagement with their programme of study and promotes independent study and life-long learning.

2. To maintain a high quality, comprehensive and coherent curriculum which fosters knowledge of the underpinning theory, management, entrepreneurship, digital literacy and offer a global appeal which is informed by research, scholarly activity and practice which enhances each participant's career prospects.

3. To develop professionals with a sound understanding of both engineering and management concepts, in an holistic approach and understanding the key features that link the two subject areas.

4. To encourage the creative and appropriate application of technology to promote innovation and enterprise through the research project whilst enhancing students employability skills.

5. To promote ethical and eco business awareness and professionalism supported by a strong appreciation of industry focussed skills and practice.

Course Learning Outcomes

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

1. Develop solutions to support and serve the needs of organisations and communities in diverse contexts and demonstrate the ability to integrate technologies, products, and services from multiple sources to satisfy organisational needs in the global society.
2. Develop an ability to communicate effectively within an Engineering environment, deploy accurately established techniques of production management, analysis and design, digital emerging technologies, discreet event simulation etc. to deliver solution to users whilst understanding the sensitivity of the impact of technology solutions on individuals, organisations, and society.
3. Develop a wide breadth of understanding that enables students to devise and sustain arguments, and solve problems using innovative ideas and techniques, some of which are at the forefront of engineering management practice.
4. Develop the skills and understanding to undertake projects to a professional standard by the consistent application and review of development, management and evaluation methods and techniques.
5. Develop an ability to independently undertake research and critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution or identify a range of solutions to a problem.
6. Appreciate the impact of management decisions made on diverse cultural/linguistic backgrounds within an engineering design, production, or manufacturing process in the context of relevant social, legal, ethical and sustainability goals and constraints.

Teaching and Learning Activities and Your Modules

Where possible we will provide on-site contact sessions for each module, typically at a minimum of the equivalent of one hour per module per student per week. However, and especially later in the degree, some modules may be delivered mostly or entirely online.

In all cases, the overall teaching hours will be met via a mix of onsite and off-site learning, and all module teaching could use a combination of the following delivery methods:

- Live online Lectures via suitable VoIP software (e.g. MS Teams, Adobe Connect)
- Face-to-face support session in class (when safe and where possible)
- Cloud-based remote lab sessions
- Q&A sessions
- Recorded Lectures
- Live online Demos
- Online tutorials

In the event of a further government lock-down in response to COVID-19, we will prioritise remote delivery and support to enable students to continue with their studies and meet all expected learning outcomes though their assessment. The aim of the assessment process is not only to assess the level and depth of understanding achieved but also to reinforce the learning process through the application of their studies. Assessment may be both formative and summative and will assist both tutors and students in diagnosing learning needs and in monitoring progress.

The integrative nature of the subject area allows a number of modules to be part of one project and each element can then be assessed synoptically reducing the burden of assessment on students, while at the same time allowing deeper learning through the connection between each topic area.

The final *Production Project* will be assessed mainly through dissertation and presentation showing the research and development work required in order to arrive at the final solution. Other activities include reflection, evaluation and testing.

The School is aware of the dangers of plagiarism inherent in written assessments. Use will be made of plagiarism detecting software and the University reserves the right to viva any student to verify authorship of submitted work. Students are required to take all reasonable steps to conform to a request to participate in such a viva. Students are required to sign a declaration to the effect that their submitted work has not been the subject of plagiarism.

This information is 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.

NOTE: It is presumed that students on this award will undertake the *Engineering Simulation* option, and *Engineering Simulation* is the **only** option for students in the February intake. The other options are subject to consultation with the Course Director, who may refuse to allow a student to enrol on an option for which they have no suitable background at Level 5.

Level 6	
Teaching Block 1	**Core (Y/N)**
Engineering Cost and Management Accounting	Y
Production Project	Y
Teaching Block 2	**Core (Y/N)**
Advanced Manufacturing Technology	Y

Level 6	
Production Project	Y
Project Management	Y
Teaching Block 3	**Core (Y/N)**
Production Project	Y

Option: see note above
 	
    ■   Engineering Simulation
    ■   Industrial Networks
    ■   Power Electronics
	Y/N

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 a sample of option module choices undertaken by a typical student. They have been reviewed and confirmed as representative by the Course Director.

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 be 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.

Level 6 is assessed by coursework predominately, with some examinations and practical assessments.

Overall Workload	**Level 6**
Teaching, Learning and Assessment	228 hours
Independent Study	972 hours
Placement	0 hours

Learning Support Arrangements

Where possible, access to specialist software and facilities will be provided remotely. Licences for software which can be installed on your own personal devices will also be provided as part of the standard course fees; including access to Office 365 in addition to specialist engineering applications.

You are advised to consider purchasing or renting a laptop or other device to access the online provision of your course. If a further lockdown is necessary, then delivery will be also continued and

supported via online and digital learning; for which again a laptop or other device will be needed. Our recommended specifications for such a device are

- **Processor:** AMD Ryzen 5 or Intel Core i5
- **Memory:** 8GB minimum (16GB preferred)
- **Storage:** 256GB minimum (512GB preferred)
- **Screen Size:** 13" minimum (15" or larger preferred)
- **Operating System:** Windows 10 Home minimum (Windows 10 Professional with Linux access through Virtual Machines, WSL2 or dual-boot preferred)

Please Note: Although Microsoft Office 365 supports Apple OS X/11, most of the specialist engineering software which we use does not and will *only* run on Windows 10. Similarly, for machines running Linux, there is some specialist software which will only run on Windows 10. Therefore, some access to Windows 10 through dual-boot (Bootcamp) or a virtual machine is strongly recommended. You will need to ensure that you have an appropriate licence for Windows 10, as this is not part of the standard University license package.

The cost of a laptop meeting the minimum recommended specification is in the region of £400 to £500, with desktop machines usually at the lower end of that range. Most of the packages used for your course are memory intensive, however several modules do require the use of CAD packages for which a dedicated graphics card and stronger processor would be useful.