Subject Benchmark Statement

Land, Construction, Real Estate and Surveying

Version for Consultation

October 2023
About this Statement

This document is a QAA Subject Benchmark Statement for Land, Construction, Real Estate and Surveying that defines what can be expected of a graduate in the subject, in terms of what they might know, do and understand at the end of their studies. Subject Benchmark Statements are an established part of the quality assurance arrangements in UK higher education, but not a regulatory requirement. They are sector-owned reference points, developed and written by academics on behalf of their subject. Subject Benchmark Statements also describe the nature and characteristics of awards in a particular subject or area. Subject Benchmark Statements are published in QAA’s capacity as an expert quality body on behalf of the higher education sector. A summary of the Statement is also available on the QAA website.

Key changes from the previous Subject Benchmark Statement include:

- a revised structure for the Statement, which includes the introduction of cross-cutting themes of:
  - equality, diversity and inclusion
  - accessibility and the needs of disabled students
  - education for sustainable development
  - employability, entrepreneurship and enterprise education
- a comprehensive review updating the context and purposes, including course design and content in order to inform and underpin the revised benchmark standards.

How can I use this document?

Subject Benchmark Statements are not intended to prescribe any particular approaches to teaching, learning or assessment. Rather, they provide a framework, agreed by the subject community, that forms the basis on which those responsible for curriculum design, approval and update can reflect upon a course, and its component modules. This allows for flexibility and innovation in course design while providing a broadly accepted external reference point for that discipline.

They may also be used as a reference point by external examiners in considering whether the design of a course and the threshold standards of achievement are comparable with those of other higher education providers. They also support professional, statutory and regulatory bodies (PSRBs) with the academic standards expected of students.

You may want to read this document if you are:

- involved in the design, delivery and review of courses in Land, Construction, Real Estate and Surveying
- a prospective student thinking about undertaking a course in Land, Construction, Real Estate and Surveying
- an employer, to find out about the knowledge and skills generally expected of Land, Construction, Real Estate and Surveying graduates.

Relationship to legislation

The responsibility for academic standards lies with the higher education provider which awards the degree. Higher education providers are responsible for meeting the requirements of legislation and any other regulatory requirements placed upon them by their relevant
funding and regulatory bodies. This Statement does not interpret legislation, nor does it incorporate statutory or regulatory requirements.

The regulatory status of the Statement will differ depending on the educational jurisdictions of the UK. In England, Subject Benchmark Statements are not sector-recognised standards as set out under the Office for Students’ regulatory framework. However, they are specified as a key reference point, as appropriate, for academic standards in Wales under the Quality Assessment Framework for Wales and in Scotland as part of the Quality Enhancement Framework. Subject Benchmark Statements are part of the current quality arrangements in Northern Ireland. Because the Statement describes outcomes and attributes expected at the threshold standard of achievement in a UK-wide context, many higher education providers will use them as an enhancement tool for course design and approval, and for subsequent monitoring and review, in addition to helping demonstrate the security of academic standards.

**Additional sector reference points**

Higher education providers are likely to consider other reference points in addition to this Statement in designing, delivering and reviewing courses. These may include requirements set out by PSRBs and industry or employer expectations. QAA has also published Advice and Guidance to support the Quality Code for Higher Education, which will be helpful when using this Statement – for example, in course design, learning and teaching, external expertise and monitoring and evaluation.

Explanations of unfamiliar terms used in this Subject Benchmark Statement can be found in QAA’s Glossary. Sources of information about other requirements and examples of guidance and good practice are signposted within the Statement where appropriate.
1 **Context and purposes of a Land, Construction, Real Estate and Surveying degree**

1.1 Land, Construction, Real Estate and Surveying (LCRES) represent a group of subjects which collectively are often known as the 'built environment'. All courses covered by this Subject Benchmark Statement have connections to other subjects associated with the environment, its buildings and associated infrastructure, including architecture, landscape architecture, architectural technology, housing, town and country planning. It is acknowledged that professionals working in these disciplines need to interact and work with those in related subjects. As such, a key feature of the Statement is its interdisciplinary and multidisciplinary character. Most graduates of the subjects covered by this Statement work with individuals from academic backgrounds in the related professions, including lawyers, project managers, finance and investment, management consultants, accountants, engineers, environment, IT and digital professionals.

1.2 The criteria set out within this Statement are intended to provide a broad framework for course providers to develop purposeful and challenging education and learning, responsive to the needs of their students and to the changing nature of the subject of built environment.

1.3 Land, Construction, Real Estate and Surveying education has a strong vocational component which prepares graduates for a wide range of built environment and related careers. This Statement provides a context within which courses can be delivered with or without seeking professional accreditation, for example by the Royal Institution of Chartered Surveyors (RICS), Chartered Institute of Building (CIOB) and Chartered Association of Building Engineers (CABE).

1.4 The courses covered by this Statement can be described under the following indicative headings.

<table>
<thead>
<tr>
<th>Building Surveying</th>
<th>Courses connected to building surveying include building repair, maintenance and restoration.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity Surveying and Commercial Management</td>
<td>Courses connected to quantity surveying include cost planning, life cycle costing, value engineering, negotiating contracts and prices, assessing, evaluating, managing construction projects, procurement and tendering, contract administration and commercial management.</td>
</tr>
<tr>
<td>Construction Management</td>
<td>Courses connected to construction management include management of people, construction processes, construction technology, construction environment, health, safety and well-being, sustainability, and ethics and professionalism.</td>
</tr>
<tr>
<td>Building Control and Fire Engineering</td>
<td>Courses connected to building control have emphasis on equipping learners with knowledge of the Building Regulation and associated legislation, in relation to areas</td>
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</tbody>
</table>
such as structural, thermal, fire, acoustics, ventilation and inclusive design.

<table>
<thead>
<tr>
<th>Real Estate (including real estate, real estate finance and investment)</th>
<th>Courses connected with real estate are primarily concerned with the understanding and analysis of use, investment and development/redevelopment decisions related to land and property.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Land</td>
<td>Courses connected with rural surveying include rural resources management, rural land management and countryside management.</td>
</tr>
<tr>
<td>Planning and Development</td>
<td>Courses related to planning and development include property and planning, property development and planning, planning and real estate development and design management.</td>
</tr>
</tbody>
</table>

**Purposes and characteristics of a Land, Construction, Real Estate and Surveying degree**

1.5 This Subject Benchmark Statement recognises the academic, vocational and professional dimensions of a Land, Construction, Real Estate and Surveying (LCRES) degree. Undergraduate degrees and postgraduate courses, including apprenticeships, provide students with opportunities for research and informed scholarly learning, as well as vocational and professional development. Land, Construction, Real Estate and Surveying courses facilitate a combination of the pathways to enable students to optimise their learning experience, employment prospects and citizenship potential.

1.6 The Statement explicitly sets out the nature and academic standards of those bachelor’s degrees with honours and master’s degrees that carry LCRES as a significant part of their course content, linked to the subject community of built environment. The guidance establishes generic academic standards for LCRES and provides a point of reference for course development. The Statement will also be valuable for external examiners, and for internal and external academic reviewers in verifying and comparing academic standards.

1.7 The Statement has referred to some of the professional bodies and other awarding agencies who have interests in accrediting and reviewing LCRES courses. The content of the Statement is informed by requirements for professional accreditation. It has, however, evolved quite distinctly from professional specifications in order to capture the rich diversity of built environment courses informed by a thriving international research and scholarship, professional practice and wider global community.

**Equality, diversity, inclusion and accessibility**

1.8 The LCRES discipline has a track record of inclusivity, widening access and participation. Providers should aim to achieve academic cohorts from a broad range of backgrounds. In attracting learners from diverse groups, higher education providers have a duty to make the curriculum inclusive, thereby ensuring that students from all backgrounds may participate.
1.9 This statement on equality diversity, inclusivity (EDI) and accessibility (also discussed in paragraph 2.7) is aligned to the current Equality Act 2010 legislation and relevant professional statutory regulatory bodies (PSRBs) programme accreditation requirements. Allied to this, industry also refers to frameworks including the sector-specific Fairness, Inclusion and Respect (FIR) which aims to change the culture of construction as well as wider environmental, social and governance (ESG) standards to measure the sustainability and ethical impact of an organisation.

1.10 The Statement embeds EDI in the curriculum and allows students access at key stages of the academic journey. This will ensure consideration of EDI and accessibility when students enter higher education, during their subsequent studies, at the completion of their honours degree, and when entering employment.

1.11 During their studies, all students are provided with the support needed to progress and succeed, regardless of their background. Contemporary resources - such as digital online resources and videos - can be provided to students who may have barriers and/or disabilities that impact on conventional learning activities.

1.12 Course design, teaching and learning approaches, and assessment strategies are adapted to enhance inclusivity within programmes. This can be achieved using hardware and software technologies and/or use of simulated experiences, supporting students' equitable learning. It is important to identify the best available techniques within available resourcing in order to ensure an inclusive learning experience for all.

1.13 Graduates of LCRES courses are expected to apply standards of professional practice and knowledge required to embed EDI and accessibility during their employment, while addressing accountability in the industry and wider society. They should account for EDI in the life cycle of projects and the impact on the end-users across the range of potential experiences associated with diverse populations.

**Sustainability**

1.14 Sustainability is about how development challenges contemporary issues - such as climate change, global warming, environmental degradation, circular economy, net zero and environmental and social governance. Graduates should respond to these by behaving ethically, protecting and enhancing the quality of life, sustaining communities, prosperity, health and planetary well-being. The challenges raised by sustainable development are met by the actions of graduates balancing the environmental, economic as well as social needs and justices of current generations with those of the future. As such, graduates are expected to uphold these environmental, economic and social values as qualified practitioners.

1.15 In this search for intergenerational equity, graduates can explore how they can contribute towards the UN Sustainable Development Goals (SDGs) and HABITAT Agenda, along with the targets these international agencies set for development to be sustainable. Here consideration shall also be given to the UK statement on the SDGs, and those agendas relating to England, Wales, Scotland and Northern Ireland, including key stakeholders such as RICS and CIOB.

1.16 Higher education providers ensure a balanced and innovative pedagogical approach on theory and practice to the course curricula that incorporates assessment. Taught provision also aligns with the learning outcomes found in the Education for Sustainable Development Guidance produced by Advance HE and QAA (March 2021). Discipline-specific and transferable skills shall be evenly cultivated, recognising that interdisciplinary knowledge and understanding are key to growth as recent studies of sustainable development have highlighted. The curricula for all the courses listed in this Statement adopt
the UNESCO key competencies for sustainable development: systems thinking, anticipatory studies, normative analysis and interpretation, strategic alliances, collaboration, critical reflection, self-awareness and integrated problem-solving.

1.17 Education for sustainability follows an interdisciplinary and applied approach, including environmental, economic and social values. Offering graduates a programme of studies incorporating appropriate knowledge on areas such as sustainable planning; design; construction; occupation, use of land and buildings; green finance and investment equips them to benefit their future learning. Applying this knowledge in practice, combined with being able to communicate and collaborate with others, supports movement towards a more sustainable present and future.

1.18 Such opportunities should be designed to inculcate and embed ethical behaviour and environmental, social and governance (ESG) values aligned to the requirements of accrediting professional bodies and industry best practice. A key driver of sector employers is to enhance students’ awareness of corporate responsibility.

Employability, enterprise and entrepreneurship (EEE)

1.19 Land, Construction, Real Estate and Surveying are vocational subjects which offer learners transferable skills appropriate to a range of employment opportunities within the private, public and voluntary sectors in addition to starting their own business venture. They develop key employability attributes which embrace entrepreneurship in its widest sense, including innovation, creativity, enterprise and civic engagement.

1.20 Employability develops critical, independent thinking and the personal confidence and wider skillset required to build professional relationships that are core to a rewarding career. Learners apply technical skills and knowledge in ways that robustly contribute to business success and personal career development.

1.21 Courses will prepare students for evolving business environments, including rapid technological change. This includes embedding commercial and corporate awareness through providing impactful learning experiences in both real-world and simulated placements and activities that build links between academic institutions and external organisations. Beyond employment, entrepreneurship education provides competencies to help students lead a rewarding, self-determined, professional life; well placed to add social, cultural and economic value to society throughout their careers.

1.22 Land, Construction, Real Estate and Surveying degrees take graduates beyond the job role to help inspire and motivate critical thinking, collaboration skills and creativity that will serve them well as the professional development evolves throughout their careers. Course teams are encouraged to include this within the knowledge and skills curriculum to enable students to be the catalysts for change in the workplace. This includes global megatrends such as climate change, demographics, internationalisation and technology which are continuously reshaping their world of work through the creation of new opportunities for professionals in the subject areas covered in this Statement.

1.23 Knowledge, skills, attributes and behaviours relevant to employability, enterprise and entrepreneurship can be developed through working with, for example, higher education careers teams, subject-specific alumni associations and sector employers. Their application is demonstrated through activities including visiting lectures, master classes and simulated client briefs. Popular methods include teamworking, workshops and student placements, together with harnessing the experiences of employed learners. All these activities assist learners to understand markets and the role of the professional within them. ESG practices and the corporate responsibility ethos of business are key drivers of employer engagement.
1.24 Courses in this area have extensive links with both employers and professional bodies to ensure that the curriculum and its delivery align with professional, industry and employer needs. PSRBs’ resources are frequently embedded within and aligned to taught course content. This engagement is essential to ensure curriculum relevance and thus a seamless link from academia to professional practice.

1.25 Higher education providers can capitalise on the benefits of involving employers of different sizes and from different sectors through a variety of modes of engagement, including industrial advisory boards (IABs) and subgroups that work on specific employer-related issues; ensuring that evolving best practice within industry is swiftly reflected within curriculum content. In some institutions this role is complemented by alumni associations who also contribute to enhancing student employability through industry mentoring programmes, bespoke careers fairs and the provision of opportunities for internships and work placements.

**Information management**

1.26 Information is key in the Industry 4.0 / 5.0 revolutions of the future. Land, Construction, Real Estate and Surveying courses will use digital tools that enable the capture, manipulation, storage and dissemination of data.

1.27 Information management plays a significant part in the project management processes linked to the building lifecycle through the integration of technology and the new world of hybrid collaborative working and creating new communities of practice. Information management incorporates integrated processes using digital technologies and collaborative working to achieve optimal production, performance, environmental sustainability, economic efficiency and effectiveness, simulation, standardisation, and systemisation of data.

1.28 Graduates should be competent in current philosophies, processes, methodologies, and technologies for the modelling, communication and secure management of information. Such competence leads to applications in a collaborative working environment to support data-driven decision-making.

1.29 The competences to achieve this are split into three key areas:

**Information management structures and systems**

- demonstrate competence in the use of electronic information handling, and data processing and analysis software and applications using digital information systems
- use and interpret digital data and information to inform decision-making
- handle electronic information with guidance, applying appropriate standards (such as ISO19650), techniques, digital tools and applications
- understand general information management practices to digitally organise and manage information and records
- understand and appreciate the need for data protection, security and privacy (GDPR for example) to help maintain the accessibility, security, confidentiality, integrity, availability and accountability of information systems.

**Use of digital technologies**

- knowledge and application of relevant digital technologies
- employ the application of information technology and digital tools and techniques to support key subjects.
Digital literacies

- use of online platform which recognises its limitations as a means of communication and a source of information
- use a range of information and communication technologies (ICT) platforms (for example, desktop, server, tablet and mobile) and social media to communicate information to a range of audiences effectively
- demonstrate an awareness of legal, effective and safe use of digital technologies and social media
- have an awareness of the safe, ethical and legal use of digital technologies.
2 Distinctive features of Land, Construction, Real Estate and Surveying degrees

Design of courses

2.1 Everyone is impacted by and impacts on LCRES. The professionals covered by this Statement directly contribute to our economic, social and environmental sustainability through contributing to a built environment in which people live and work. Hence, the subject area reflects the needs and experiences of individuals, businesses and communities. This means that LCRES graduates have a unique opportunity to inclusively shape the way that people live their lives and influence a sustainable built and natural environment.

2.2 Professional bodies are integral to LCRES courses and its vocational relevance; they are among the main drivers for students choosing to study programmes. Consequently, a major strength in the design of LCRES programmes is focusing explicitly on meeting skills required for workplace needs through those that have been expressed by PSRBs and employers. The learning outcomes for degrees are driven by PSRB and industry requirements which helps inform the programme content. Other key reference points include the Institute for Apprenticeships and Technical Education (IfATE) construction and built environment occupational standards developed by employer-led trailblazer groups.

2.3 Even though the emphasis of LCRES vocational programmes is discipline specific, the programmes also incorporate grounding in general management, legal matters, economics, finance, team building, and health and safety. In other words, students learn both discipline-specific and generic skills (including 'soft' skills). Although the courses vary significantly in terms of their curricula, there are common threads that run through them and all courses are, to some extent, multidisciplinary. Employers are interested in the totality of what candidates have to offer, not just the content of their programme or qualification.

2.4 Land, Construction, Real Estate and Surveying courses are concerned with linking knowledge, skills and understanding with application in practice which could be seen as enabling competence as well as capability. The programmes are also designed to enable students to develop a wide range of communication skills, critical thinking, problem-solving, self-management, data and information management. The abilities to collaborate and work in teams to achieve practical solutions and to respect colleagues are fundamental attributes. This focus can be illustrated through the example of interdisciplinary learning around sustainability. These transferable skills are developed progressively and in parallel with the specific subject-related competencies studied.

2.5 All courses covered by this Statement will require students to gain an understanding of some or many aspects of what is often referred to as the land, construction and real estate life cycle. Courses in the subjects contained in this Statement can focus specifically on certain aspects of the cycle. Some will be concerned with the decisions leading to the conversion process (for example, planning and development surveying); some with the physical change process (for example, construction management and quantity surveying); and some engage in the physical stewardship of buildings (for example, building surveyors, conservation and heritage surveyors). Other courses are concerned with the management of the asset either from an investment viewpoint or from that of the economic and social use of the land or building (for example, rural or real estate management, valuation and property investment).

2.6 Land, Construction, Real Estate and Surveying encompasses the impact of changing social, political, economic, legal, cultural, environmental, technological, business and political frameworks on the built and natural environment. Collectively, the subjects present
opportunities to enter a wide range of employment fields related to LCRES, and many carry professional accreditation by one or more of the sector bodies. These opportunities exist in both the public and private sectors and with charitable or not-for-profit organisations. This Statement recognises further the global nature of the sector, acknowledging that many graduates will go on to work for organisations based in other countries or who have international activities.

**Accessibility**

2.7 All higher education providers have an obligation to ensure accessibility for those wishing to study. This is no different for Land, Construction, Real Estate and Surveying degree courses, and the expectations set out previously in the equality, diversity and inclusion section (see paragraphs 1.8-1.13) apply equally to all courses aligned with the topic.

2.8 As noted in section 1 of this statement, there is a strong association between LCRES degree courses and higher education providers with a strong record relating to access and widening participation.

2.9 The varied nature of key modules in LCRES courses requires students to engage with a number of different learning and assessment types. These should recognise and respect the diverse perspectives and learning styles found among students by clearly expressing the learning outcomes and how these will be assessed. Course teams should devise assessments that can be adjusted to meet the needs or circumstances of an individual student in a manner that is in keeping with institutional guidelines. A student benefitting from any reasonable adjustment to an assessment should also have access to appropriate support services in line with national frameworks and institutional service provision.

2.10 Land, Construction, Real Estate and Surveying as a sector and profession is often an early adopter of digital technologies and is well placed to take advantage of the acceleration of digital technologies; impacting, for example, on the delivery of education across all sectors. Embracing this acceleration of remote and blended learning, for instance, will allow for increased accessibility to and on LCRES courses, and for the progressive adjustment of attitudes and expectations as students graduate and inform the profession. Such considerations will always be mindful of the circumstances of individual students.

**Progression**

2.11 Over the course of a degree (FHEQ Level 6; FQHEIS Level 10 / FHEQ Level 7; FQHEIS Level 11) students of LCRES degree courses will progress from one level of study to the next, in line with the regulations and processes for each institution. However, it is expected that each level would see the attainment of certain knowledge, expertise and experience which builds towards the final achievement of meeting all threshold-level subject-specific and generic skills listed in this Statement.

2.12 In a standard three-year undergraduate degree course, students may exit earlier with an intermediate award and be eligible for a Certificate of Higher Education, a Diploma of Higher Education, or a degree depending upon the levels of study completed to a satisfactory standard. Scottish bachelor's degrees are typically designed to include four years of study, which relates to the structure of Scottish primary and secondary education. Upon graduation from an undergraduate degree, it would be expected that a student who had achieved a second-class degree or higher would be capable of, and equipped for, undertaking postgraduate study. Similarly, intermediate awards apply to postgraduate programmes where students may be eligible for a Postgraduate Certificate, a Postgraduate Diploma or master's degree.
**Flexibility**

2.13 Courses in LCRES may be delivered through a variety of means, including full-time, sandwich, part-time, online, multi-mode or blended, including apprenticeships, and distance learning programmes of varying duration. It is anticipated that LCRES courses will offer a range of teaching and learning methods, and the course content will vary according to the strengths, interests and expertise of the course delivery team and the higher education provider.

2.14 There are numerous different examples of industry engagement within higher education providers that undoubtedly enhance the quality of teaching delivered, especially in the areas of promoting future employability. Industry input may also take the form of guest lectures, 'live' projects, context materials such as case studies and scenarios as well as the opportunity to provide students with work placements. Within LCRES courses, there is an expectation that students will undertake a work-related project and/or a dissertation.

**Partnership**

2.15 Partnership working entails the strategic involvement of employers, employer organisations and business-led organisations. Employer engagement focuses on the practical issues of making contact with employers to raise awareness and to encourage them to offer jobs, work placements and other employment-related opportunities to students and graduates. While employer involvement and engagement can take place on a relatively informal basis, without putting any 'good practice' requirements on employers (beyond meeting legal obligations), some partnerships have sought to institute charters and other good practice principles relating to the recruitment, employment and development of people in the workforce.

2.16 There are many ways employers may be directly involved in strategic activities, such as through employer forums or subgroups, by providing strategic or operational advice, or through more arms-length involvement in guiding specific activities. Allied to this, partnerships can also be catalysed through alumni associations with similar benefits being generated. They include sharing ideas, best practice, work experience, mentoring and organising events that connect students and academics to wider employer professional networks that can leverage industry relationships. A single employer may be involved in more than one way and at different times. Employer involvement can be time-consuming - a particular issue for small employers, with the consequence of larger employers more likely to be involved.

2.17 These relationships help courses/programmes to strengthen work-based links and identify more companies and organisations that are prepared to offer support for learning and teaching in a variety of ways – such as case studies for 'live projects', video interviews and site visits. The key is to make the most of the variety of contact with industry that is already taking place within LCRES courses while ensuring that it has a positive influence on learning, teaching, research and the student experience. The different learning activities have further potential effects on developing skills that are needed in employment and careers.

**Monitoring and review**

2.18 A major feature of academic quality assurance and enhancement at a higher education institution is having in place monitoring and regular review processes for the courses it delivers. Higher education providers routinely collect and analyse information and undertake periodic course review according to their own requirements. They will draw on a range of external reference points, including this Statement, to ensure that their provision
aligns with sector norms. Monitoring and evaluation is a periodic assessment of a course, conducted internally or by external independent evaluators. Evaluation uses information from both current and historic monitoring, to develop an understanding of student achievement and inform future course planning.

2.19 Externality is an essential component of the quality assurance system in the UK. Higher education providers will use external reviewers as part of periodic review to gain an external perspective on any proposed changes and ensure threshold standards are achieved and content is appropriate for the subject.

2.20 External examination, currently in use across the UK higher education sector, also helps to ensure consistency in the way academic standards are secured by degree-awarding bodies. Typically, external examiners will be asked to comment on the types, principles and purposes of assessments being offered to students. They will consider the types of modules on offer to students, the outcomes of a cohort and how these compare to similar provision offered within the UK. External examiners produce a report each year and make recommendations for changes to modules and assessments (where appropriate). Subject Benchmark Statements, such as this one, can play an important role in supporting external examiners in advising on whether threshold standards are being met in a specific subject area.

2.21 Land, Construction, Real Estate and Surveying courses may be subject to professional accreditation and require assessment and evaluation for approval. This is usually done through a combination of site visits and desk-based reviews in accordance with professional body requirements. Additionally, regulatory compliance for apprenticeships includes assessing the quality of training provision through Ofsted.

**Apprenticeships**

2.22 All apprenticeships must fully align to the named IfATE occupational standards, with associated knowledge, skills and behaviours. Currently, there are two forms of apprenticeships relevant to a degree award:

- integrated degree apprenticeship
- non-integrated degree apprenticeship.

2.23 In developing and delivering a successful degree apprenticeship, providers must engage with employers and apprentices to plan and monitor their training over the duration of the apprenticeship. This includes consideration of 'on and off the job' training and how these interplay with the degree apprenticeship award. Trainers, coaches and mentors must communicate up-to-date vocational and technical subject knowledge that reflects expected industry practice and meets employers' needs.

2.24 With an integrated degree apprenticeship, the award of the degree must fully meet the requirements of the occupational standard and its end point assessment (EPA) plan for full achievement of the degree and apprenticeship award. At the end of the integrated degree apprenticeship, providers of the course must follow the full requirements of the EPA plan to ensure independent assessment of occupational competence, as defined by the relevant occupational standard, is carried out.

2.25 Providers will need to identify and train appropriately qualified and competent assessors to carry out independent EPAs; these may be industry professionals and practitioners. Only when the apprentice successfully completes the independent EPA element of an integrated degree apprenticeship can their degree certificate be awarded.
2.26 In the case of a non-integrated degree apprenticeship, providers must deliver the degree stated in the specific occupational standard and be aware that full completion of the degree award may be required as a prerequisite to EPA gateway. External EPA organisations are responsible for the independent assessment through final assessment of competence and full completion of the apprenticeship.
### 3 Content, structure and delivery

#### Content

3.1 Given the diversity of award titles and differences in emphasis among individual courses of study, it is not sensible to list all the subjects that might contribute to specific LCRES degree courses. Nor is it possible to specify a precise core subject knowledge that is common to all the subjects covered by the Statement. Nevertheless, courses in these subject categories share common features of structure, approach and pedagogic philosophy. This section describes the general characteristics of the courses under consideration, with the aim of facilitating and encouraging a diversity of provision across higher education. Each higher education provider can map its own provision within this general framework.

3.2 For individual degree courses, the content depends on whether the objective is to produce a graduate who is a general practitioner or a subject specialist; that is, a graduate who is skilled in a broad or a narrow range of subjects. The balance between breadth and depth of a graduate’s knowledge is similarly variable.

3.3 All graduates possess an appreciation of the interacting nature of a range of elements, which grows out of a more specialist understanding of some of them. Generally, students develop an ability to synthesise concepts and ideas across subjects and to take a holistic view appropriate to their specific course and area of study.

#### Subject-specific knowledge and understanding

3.4 Despite the diversity inherent to the different subject categories, all LCRES courses share several important features:

- the relevance and application of the subject
- the development of integrated, inclusive and collaborative multidisciplinary, interdisciplinary and inter-professional approaches
- integration of theory, experiment, investigation and fieldwork, and the development of principles into practice
- quantitative and qualitative approaches to information and an understanding of information structures and systems
- an understanding of the importance of entrepreneurship and innovation, including the role of intellection process
- the requirement for sustainable processes and outcomes
- consideration of rapid and continuing change and the development of resilience in the subjects and their context.

3.5 Each course addresses:

- the underlying foundations and principles of the subject category
- the relevant defining concepts, theories and methods of the subject category
- the current knowledge and development of the subject firmly grounded in technological, legal, socio-economic, environmental, political and business contexts
- identification of current gaps in knowledge or understanding and current issues of wider concern to society and the world
- the global, regional and local contexts of practice issues and challenges
- the location and quality of resources and their procurement, management, sustainable impact and pattern of use within socio-economic, public interest, equality and inclusion policy and legal frameworks
• award-specific and generic skills, including problem definition and resolution and a professional approach to study and lifelong learning
• an understanding of issues of sustainability, quality of life and environmental impact
• ethics in relation to both academic and professional practice.

Generic skills

3.6 Graduates of courses covered by this Statement are able to:

• demonstrate familiarity with a wide range of subject-specific facts and principles in combination with an awareness of the current limits of theory and applied knowledge
• understand the provisional nature of problem definition and associated information and allow for competing and alternative explanations within their subject
• exhibit understanding of the defining elements of the subject as a result of in-depth and/or cross-curricula study or research
• tackle problems by collecting, analysing and evaluating appropriate qualitative and quantitative information, and using it creatively and imaginatively to solve problems, introduce and develop innovations, and make decisions and follow them through
• plan and execute research or development work, evaluate the outcomes, draw valid conclusions and make recommendations
• display skills in evaluating and interpreting, in a balanced manner, new information provided by others from a range of fields of study
• display generic scholarly and award-specific professional skills and demonstrate the ability to acquire new competencies required for career progression
• assess the ethical, equality and inclusion consequences of human activities to optimise community and environmental sustainability.

3.7 The generic abilities and skills developed during the period of study is set out as standards in section 4 of this Statement, but for the purpose of delivery can be subdivided into:

• intellectual
• practical
• analytical and data interpretation
• communication
• digital literacy
• interpersonal and teamwork
• self-management and professional development skills.

3.8 These skills are generally developed in a subject-specific context but have wider applications for continuing personal development and in the world of work.

Intellectual skills

3.9 Graduates of courses covered by this Statement are able to:

• critically analyse, synthesise and summarise information from a variety of sources
• recognise and use appropriate theories, methodologies, concepts and principles from a range of subjects
• collect, analyse and integrate several lines of evidence to develop balanced arguments demonstrating critical thinking and synthesis
• plan and design an experiment, investigation, survey or other means to test a hypothesis or proposition
• apply knowledge and understanding to address multidisciplinary problems within a local and global context
• demonstrate creativity and innovation
• demonstrate awareness of the provisional nature of the facts and principles associated with a field of study with those based on opinion and not supported by sound evidence
• make well considered decisions in complex and unpredictable contexts
• understand the importance of academic and professional integrity.

Practical skills

3.10 Graduates of courses covered by this Statement are able to:

• plan, conduct and report on investigations, including those using secondary data
• collect, record and interpret diverse types of information generated by a wide range of methods and summarise it using appropriate qualitative and/or quantitative techniques
• devise, plan and undertake field, laboratory or other investigations in a responsible, sensitive and safe manner, paying due diligence to risk assessment, ethical and data protection issues, rights of access, and relevant health and safety issues
• take account of safety regulations, legal requirements, including those relating to equality and inclusion, and the impact of investigations on the environment
• appreciate and analyse financial and other management information and use it in decision-making
• acquire course-specific practical and professional competencies.

Analytical and data interpretation skills

3.11 Graduates of courses covered by this Statement are able to:

• appreciate issues of origin, sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field, in the laboratory or collated from secondary sources
• appreciate and reconcile or mitigate the difficulties of having incomplete information on which to base decisions
• understand the nature of risk
• prepare, process, interpret and present information and data, using appropriate qualitative and quantitative techniques and packages
• solve numerical problems using first principles and technological approaches.

Communication skills

3.12 Graduates of courses covered by this Statement are able to:

• observe attentively, record, evaluate and respond and/or communicate using a wide variety of information sources, for example electronic, textual, numerical, verbal, visual/graphical, digital and practical field (site and building) survey-based
• communicate accurately, clearly, concisely, confidently and appropriately to a variety of audiences using a range of formats and employing appropriate scientific and/or professional discipline-specific language
• contribute constructively to group discussions
• consider, appreciate, evaluate and respect the views of others.
Digital literacy

3.13 Graduates of courses covered by this Statement are able to:

- use online platforms in a context which recognises its limitations as a means of communication and a source of information
- use a range of ICT platforms (for example, desktop, server, tablet and mobile) and social media to communicate information to a range of audiences effectively
- demonstrate competence in the use of electronic information handling and data processing and analysis software and applications through the use of digital information systems
- demonstrate an awareness of the safe, ethical and legal use of digital technologies and social media.

Interpersonal and teamwork skills

3.14 Graduates of courses covered by this Statement are able to:

- organise teamwork and participate effectively in a team
- set realistic targets
- identify individual and collective goals and responsibilities
- plan, allocate and evaluate the work of self, individuals and teams
- perform in a manner appropriate to allocated roles and responsibilities
- recognise and respect the views and opinions of other team members
- show positive intent and a willingness to resolve conflict
- reflect on and evaluate their own performance as an individual or as a team member.

Self-management and professional development skills

3.15 Graduates of courses covered by this Statement are able to:

- develop the skills necessary for self-managed lifelong learning and engagement, including, for example, working independently, effective time management and organisational skills
- appreciate the need for professional codes of conduct where applicable
- recognise the moral, ethical, social and equality and inclusion issues related to the course
- assume responsibility for their own actions
- identify and work towards targets for personal, academic and career development
- develop an adaptable and flexible approach to study and work
- demonstrate the competence, behaviour and attitude required in academic and professional working life, including initiative, reflection, leadership, resilience and team skills
- behave in an ethical and responsible manner to ensure the rights of others and the wider environment are respected and protected
- understand the importance of academic, professional and research integrity.

Teaching, learning and assessment practices

3.16 The diversity of Land, Construction, Real Estate and Surveying courses has led to a rich variety of teaching, learning and assessment practices. All LCRES subject categories span theoretical, practical and professional activities which influence the subject-specific pedagogical approach. Fundamentally, teaching and learning practices will comprise a
Teaching and learning

3.17 Teaching and learning practices should be tailored to different learning environments, whether situated within the lecture theatre, a tutorial, online or in the workplace. The blended and type of delivery method should be appropriate to the subject matter. Teaching and learning practices, where appropriate, should embed the distinctive features of LCRES courses as set out in sections 1 and 2 of this Statement:

- inclusive practices
- sustainable development
- employability
- information management skills that are integral to the course.

3.18 Teaching and learning practices should develop the application of knowledge and skills stated in the programme learning outcomes and, in addition, enable students to make critical connections across modules and contextualise their learning within the LCRES sector. The ultimate goal of student learning is the considered application of knowledge and skills together with an appreciation of the integrative nature of the subject areas in an appropriate context. As such, teaching approaches that incorporate live projects, case studies, project simulations, role play, specialist external lectures and collaborative working are encouraged.

3.19 Teaching and learning practices should consider student cohorts' differing starting points and associated student journeys (as reflected in their chosen mode of study), and reflect this in the pedagogic approach. The use of practice-based scenarios is encouraged to support students whenever there is no opportunity of work-based learning.

3.20 Within the physical and digital learning environments, teaching and learning practices should recognise different learning styles and preferences and therefore offer a range of teaching approaches.

3.21 As well as practice-informed teaching, students learning experiences should be supported by research-informed teaching. This can a combination of research-led, research-oriented, research-tutored or research-based learning. The latter may include students undertaking independent research in the form of research projects or dissertations.

3.22 Teaching and learning practices should promote academic and professional integrity.

Assessment

3.23 Assessment and feedback strategies support learning and enable students to demonstrate their level of attainment and identify their progress. For each method of assessment, the aims, content requirements and marking criteria should be clearly defined. They can be aligned to reflect the diversity of knowledge and skills developed within the curriculum, the approaches to teaching and learning used, and the learning outcomes of the
course. Assessment should be accessible to students and, as discussed in paragraph 1.12, alternative assessments should be provided whenever and wherever appropriate.

3.24 Assessment practices should adopt the guiding principles outlined in the UK Quality Code for Higher Education, Advice and Guidance, Assessment. A wide range of assessment methods should be adopted to effectively measure the extent to which students have successfully achieved the intended learning outcomes. Summative and formative assessments should also embrace assessment ‘for, as and of learning’ as set out in Advance HE and QAA’s Education for Sustainable Development Guidance (Figure 1). Incorporating opportunities for self-assessment, peer assessment and practitioner assessment in order to promote self-learning, observation, teamwork skills and commercial awareness are also encouraged.

Figure 1: Assessment for, as and of Learning

3.25 Assessment design should be such that a student can identify its relevance and value beyond their higher education studies. Authentic assessments will provide a meaningful context in which students can use and apply their knowledge and skills. As such, the use of scenarios with tasks linked to the learning outcomes of the module are encouraged. Examples include using professional and work-based contexts and adopting specific professional roles, requiring students to demonstrate professional competence. Authentic assessments should also provide the opportunity to localise the tasks to support both the diversity of the sector and its global reach.
3.26 Assessment types will vary by course, but are likely to include:

- written reports, case studies and problem-based assessment prepared to a defined timetable to assess knowledge and understanding of a topic, and communication, analytical and presentation skills
- examination through unseen and seen papers under timed conditions and/or computer-based assessment with questions to assess knowledge base, understanding and analytical skills
- practical assessments (including surveying-based assessment) to assess subject-practical skills
- portfolios of work, such as reflective learning journals and activities relating to work-based activities
- assessments developing digital literacy - such as posters, wikis, articles
- individual and group presentations with outputs in oral and written formats to assess skills in collaboration and group problem-solving
- laboratory reports
- projects (individual and/or group)
- dissertations, and extended or capstone projects.

Independent assessment of degree apprenticeships

3.27 The great strength of independent assessment is a judgement of an apprentice's occupational competence made by assessors with no vested interest in the outcome of the assessment and who are experts in, and respected by, the occupation. Professional bodies acting as the independent support services provider will ensure that competency-based assessment is independent. This mitigates potential conflicts of interest relating to all assessments of an apprentice. The independent assessor must not have been involved in the training or employment of the apprentice. Specifically, they must not receive a personal benefit or detriment from the result of the assessment and must only deem an apprentice to be occupationally competent in accordance with the occupational standards marking schemes and grading descriptors.
4 Benchmark standards

Introduction

4.1 This Subject Benchmark Statement sets out the minimum threshold standards that a student will have demonstrated when they are awarded an honours degree in Land, Construction, Real Estate and Surveying. Demonstrating these standards over time will show that a student has achieved the range of knowledge, understanding and skills expected of graduates in LCRES degrees. The standards apply in full to those students whose degree courses contain a substantial component of LCRES as outlined in this Statement. They also inform courses where modules in the subject areas of LCRES form a component of the curriculum.

4.2 The vast majority of students will perform significantly better than the minimum threshold standards. Each higher education provider has its own method of determining what appropriate evidence of this achievement will be and should refer to Annex D: Outcome classification descriptions for FHEQ Level 6 and FQHEIS Level 10 degrees. This Annex sets out common descriptions of the four main degree outcome classifications for bachelor's degrees with honours: 1st, 2.1, 2.2 and 3rd.

4.3 Table 1 details the threshold standards for each of the subject categories within Land, Construction, Real Estate and Surveying listed in paragraph 1.4. These are:

- Building Surveying
- Quantity Surveying and Commercial Management
- Construction Management
- Building Control and Fire Engineering
- Real Estate (including real estate, real estate finance and investment)
- Rural Land
- Planning and Development.
## Threshold standards

### Subject-specific knowledge and skills

<table>
<thead>
<tr>
<th>Building Surveying</th>
<th>Graduates have some familiarity with the principles underpinning the design, creation and whole-life performance of buildings and facilities. They also appreciate the technical, economic and sociological factors affecting their development and use.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To meet the threshold, graduates will be able to:</td>
</tr>
</tbody>
</table>
|                     | • demonstrate an appreciation of the performance requirements of buildings and facilities  
|                     | • describe the technical factors affecting the design and construction of buildings  
|                     | • recognise that differing design options may be employed in the construction of buildings  
|                     | • evaluate the mainstream technology for constructing domestic, industrial and commercial buildings  
|                     | • appraise building components and materials together with the pathological processes resulting in their degradation and failure  
|                     | • judge approaches available to manage, repair and maintain buildings and facilities  
|                     | • demonstrate awareness of the legal and regulatory frameworks and systems impacting on the design, construction and occupancy of buildings and facilities  
|                     | • appraise the socio-economic factors influencing the development and the use of buildings and facilities  
|                     | • value the environmental impact of buildings and facilities  
|                     | • explain the nature of organisations that own and operate buildings  
|                     | • identify the professional roles and responsibilities of key players in the property development cycle  
|                     | • interpret the main costs associated with the construction and use of buildings and facilities  
|                     | • apply the professional and ethical frameworks associated with the development and use of buildings and facilities  
|                     | • appraise appropriate techniques for the adaptation of existing buildings to improve their performance  
<p>|                     | • apply the principles and processes that deliver an inclusive environment, recognising the diversity of user needs by putting people (of all ages and abilities) at the heart of the building surveying process. |</p>
<table>
<thead>
<tr>
<th>Quantity Surveying and Commercial Management</th>
</tr>
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<tbody>
<tr>
<td>Graduates have a basic understanding of the principles underpinning the management of finance, costs and value throughout the building and infrastructure life cycle from cradle to grave. In doing so they demonstrate regard for the physical, technological, legal, health and safety, economic, environmental, political and business decisions that affect cost and contractual advice.</td>
</tr>
<tr>
<td>To meet the threshold, graduates will be able to demonstrate:</td>
</tr>
<tr>
<td>- knowledge of mainstream and evolving technologies and resources required for new-build and refurbished/maintained built and infrastructure assets within both a local and international context</td>
</tr>
<tr>
<td>- knowledge of the environmental impact of development and the role of the quantity surveyor in influencing whole life net carbon, environmental, social and economic sustainability</td>
</tr>
<tr>
<td>- an understanding of the occupancy and demolition of buildings</td>
</tr>
<tr>
<td>- an understanding of time, cost, quality, risk, value and sustainability drivers affecting the feasibility, design, construction and demolition of buildings</td>
</tr>
<tr>
<td>- an ability to measure and quantify, and apply cost management techniques to support project feasibility, the design process, production of project information and the commercial management of projects</td>
</tr>
<tr>
<td>- knowledge of the legal and regulatory frameworks and systems impacting on the buildings lifecycle, and the principles of procurement, contract administration and practice</td>
</tr>
<tr>
<td>- knowledge and application of information management structures, systems and digital technologies that support design and construction processes with particular focus on the management of costs and value awareness of the roles and responsibilities of stakeholders associated with construction, property and surveying throughout a building's life cycle and the benefits of inclusive and collaborative practices</td>
</tr>
<tr>
<td>- knowledge of the importance of professional ethics, developing a moral compass, and the impact of these on the operation of the profession as well as their influence on society, communities and the stakeholders with whom graduates have contact.</td>
</tr>
</tbody>
</table>
Graduates have familiarity with themes inherent in construction management (that is, management of people and construction processes); construction technology; the construction environment; health, safety and well-being; sustainability; and ethics and professionalism.

To meet the threshold, graduates will be able to demonstrate:

- an understanding of the key concepts, theories and principles used in construction and the management of construction
- an ability to describe the context in which the process of construction operates, including the structure of the sector as well as political, economic, social, technological, legal, physical, environmental and global influences
- knowledge of the regulatory systems within which construction operates, including building and planning regulations, safety laws, and low carbon / decarbonisation requirements
- an appreciation of project appraisal strategies that include considerations of project value, risk and benefits, and the need for ensuring procurement strategies align with intended project delivery priorities
- an ability to interpret design information in a range of formats, including drawing and model-based design, and from written specifications and schedules
- knowledge of contemporary construction technologies (and enabling technologies), buildability, and the functional, performance and informational requirements of new-build and refurbished/maintained built assets, to ensure good lifecycle performance
- an understanding of the importance of health, safety and well-being, and sustainability, environmental and cultural issues in the construction sector
- understanding of the importance of project time, cost, quality, scope and resource (including human/people) planning and management and apply industry best practice techniques to these to aid project-delivery efforts
- the application of construction project management techniques to aid project-delivery efforts, support project control, and help achieve desired project outcomes. This also requires understanding the principles of lean construction, as well as being able to understand when traditional or agile delivery methodologies should be used
- business administration in a construction context, particularly appreciating the principles of contract administration and commercial management practices so formal contracts for the supply of products and services can be operationalised and integrated
- an ability to identify the appropriate stakeholders involved in the construction process and their relevant roles and responsibilities and appreciate the importance of managing these stakeholders to ensure mutual benefits are achieved through project outcomes
- recognition of the collaborative linkages and interdisciplinary relationships between construction management and the other disciplines of the built environment
- knowledge of general information management practices, specifically the management of digitally organised information and records
- an appreciation of the need for data security/privacy, as well as the need to manage and protect against risks related to the use, storage and transmission of data and information systems
- an appreciation of BIM as a methodology, and current philosophies, methodologies and technologies for the modelling, communication and secure management of information. Also be able to apply these in a collaborative working environment to support data-driven decision-making
- knowledge and application of relevant and appropriate digital technologies. Also have working appreciation of contemporary Construction 4.0 concepts such as the likes of BIM; common data environments (CDE); artificial intelligence; big data; cloud computing; digital twin; internet of things; digital ledger technologies and blockchain
- knowledge of the importance of professional ethics, developing a moral compass, and the impact of these on the operation of the profession as well as their influence on society, communities and the stakeholders with whom graduates have contact
- an understanding of the principles and processes that deliver an inclusive environment, recognising the diversity of user needs by putting people (of all ages and abilities) at the heart of the construction management process.
Building Control and Fire Engineering

Graduates have some familiarity with the principles underpinning building standards, fire safety, inclusive environments and energy conservation of buildings and facilities. They also appreciate the technical, economic and sociological factors affecting their development and use.

To meet the threshold, graduates will be able to:

- demonstrate knowledge of the Approved Documents and the Building Act.
- demonstrate knowledge of the fire safety British Standard BS9999 and BS9991.
- demonstrate knowledge of Approved Document B1 and B2 fire safety, as these documents underpin all consideration for fire safety in buildings
- show understanding of the code of conduct of registered building control approvers and inspectors
- demonstrate understanding of the difference between the requirement of the building regulations and the guidance, along with the understanding that the building regulations are the minimum standard and should not be considered the go-to standard
- show understanding of the Building Act and Approved Inspector regulations
- demonstrate understanding of the role of the Building Safety Regulator (BSR) under the Health and Safety Executive (HSE)
- show understanding of the BSR process and legislation framework, along with mapping of Gateway 1, 2 and 3
- recognise the Building inspector competence framework (BICoF) role of the private building control surveyor in controlling/promoting competence with the sector surveyors. Targeted continuing professional development (CPD) for development of education in competence areas
- recognise the role of formal education and charterships pathways for the sector to encourage competence and CPD, such as CABE and RICS
- recognise the role the fire service has in the built environment from design stages to occupation
- demonstrate understanding of the importance of the golden thread to buildings from conception to occupation along with the ethical consideration of value engineering fire safety design and equipment
- demonstrate understanding of case law and the requirement for insurance
- show awareness of the legal and regulatory frameworks and systems impacting on the design, construction and occupancy of buildings and facilities
- demonstrate understanding of the main British Standards (BS) required for fire safety BS 5839 fire alarms, BS 5266 emergency lighting and BS fire signage
- recognise that differing design options/technologies may be employed in the construction of buildings
- show overarching understanding of building pathology
- evaluate fire safety technology, including risk assessment, methods, techniques and current/developing theories and conceptual ideas
- appraise fire safety engineering science and applied mathematics
- identify current management techniques and theories, risk management, supplier relations and financial controls
- valuate the role that engineers play in creating a sustainable and ethical built environment
- identify the professional roles and responsibilities of key players in the property development cycle
- identify the role and requirement that new technologies will play in the now and the future of the Approved Inspector sector
- evaluate the concept of fee creation and issues to consider when developing fee quotations to reduce the race to the bottom. Items to consider include:
  - insurance premiums
  - wages, travel and expenses
  - company costs
  - inflation cost yearly
  - training and development of the surveyor
- demonstrate understanding that the role is expansive with communications skills as the surveyor can have contact with many different professional roles and on-site operatives from the client to the onsite labour
- recognise the structural engineering (Approved Document A: Structure) role within the building sector and importance to structural construct buildings that will not fail in the face of fire
- demonstrate how to create a structural beam design and theories around the structures that are commonly built, including:
  - domestic house theory
  - concrete framing
  - portal framing
  - basement creation
- demonstrate understanding of how all buildings can be assessed and used by people of all abilities (Part M) and have an understanding of the requirements and design/approval considerations that are required and limitations the document has around building usage, such as no building regulations requiring personal emergency evacuation plans.
<table>
<thead>
<tr>
<th><strong>Real Estate</strong></th>
<th>To meet the threshold, graduates are familiar with the principles underpinning the management of real estate. They also appreciate the physical, technical, legal, economic and environmental factors affecting their performance, both financial and from the user perspective. They:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• systematically apply core knowledge and skills relevant to the real estate discipline specifically related to its use/occupation, its valuation and investment appraisal, its market dynamics, its changing characteristics as an asset class and its management and development</td>
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<tr>
<td>• demonstrate understanding of how changes in both the global and domestic economy impact real estate activity and decision making</td>
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<tr>
<td>• demonstrate advanced knowledge and skills about specialised areas of real estate, including valuation, asset management, development, real estate finance and investment (including green finance and ESG investing), real estate securities (including both listed and non-listed real estate investment vehicles), real estate and urban economics, market analysis (including the analysis of markets in an international context) urban planning and regeneration, construction, real estate law, sustainability (including ESG), and rural assets</td>
<td></td>
</tr>
<tr>
<td>• apply a range of analytical techniques relevant to the real estate discipline, including a knowledge of how to use bespoke digital toolkits and data sets</td>
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<tr>
<td>• incorporate into decision making how global megatrends such as climate change, demographics, internationalisation and technology are continuously reshaping the real estate sector through the creation of new opportunities (for example, property technology (PropTech) and artificial intelligence (AI) applications, investment in alternative real estate sectors and the rise of global delivery platforms in real estate services and investment management)</td>
<td></td>
</tr>
<tr>
<td>• evaluate what it means to be a real estate professional in multiple settings, including relevant ethical practices, responsibilities to clients, the promotion of EDI (equality, diversity and inclusion) and the impact of their actions on economic and social development.</td>
<td></td>
</tr>
<tr>
<td>Real Estate Finance and Investment</td>
<td>To meet the threshold, graduates are familiar with the principles underpinning real estate finance and investment. They also appreciate the generic principles of finance and investment. They:</td>
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<tr>
<td>-----------------------------------</td>
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</tr>
<tr>
<td>- systematically apply core knowledge and skills relevant to real estate as an asset class, including its risk-return characteristics, pricing and its relationship to wider financial and investment markets</td>
<td></td>
</tr>
<tr>
<td>- apply relevant financial and economic theories to real estate investment decision making and practice</td>
<td></td>
</tr>
<tr>
<td>- demonstrate advanced knowledge and skills about specialised areas of real estate finance and investment, including real estate funding (sources of equity and debt - including green finance and the publicly traded debt markets - CMBS and RMBS), real estate securities (including both listed and non-listed real estate investment vehicles), quantitative methods and data analytics (including financial modelling), portfolio management, investment appraisal and investment strategy (including ESG investing)</td>
<td></td>
</tr>
<tr>
<td>- apply a range of analytical techniques relevant to the real estate finance and investment discipline, including a knowledge of how to use bespoke digital toolkits and data sets</td>
<td></td>
</tr>
<tr>
<td>- incorporate into decision making how global megatrends such as climate change, demographics, internationalisation and technology are continuously reshaping the real estate finance and investment sector through the creation of new opportunities (for example PropTech and AI applications, including tokenisation, investment in alternative real estate sectors and the rise of global delivery platforms in real estate services and investment management)</td>
<td></td>
</tr>
<tr>
<td>- evaluate what it means to be a real estate finance and investment professional in multiple settings, including relevant ethical practices, responsibilities to clients, the promotion of EDI and accessibility and the impact of actions on economic and social development.</td>
<td></td>
</tr>
</tbody>
</table>
Graduates have a basic understanding and familiarity with the principles underpinning the sale, letting management, development and sustainable use of rural land and real estate. They also appreciate the physical, technical, legal, economic and environmental factors affecting its use, development and conservation.

To meet the threshold, graduates will be able to demonstrate knowledge and understanding relating to:

- the place, role and institutional framework of the countryside and rural economy and its relationships with wider urban communities
- surveying, measuring, analysing and evaluating rural land and property from both a market and non-market viewpoint
- the principles, characteristics, organisation and sustainability of agriculture according to different geographical, soil and climatic conditions
- the principles and systems of farming methods, costs, outputs, yields, current market prices and the use and costs of farm buildings and farm waste management
- the range of rural-based businesses, for example energy production, tourism and leisure and their associated management and development
- rural land use diversification in relation to location and particular markets
- how the rural property market and fiscal policy and taxation affect the value of land and real estate
- how the application of valuation methods and techniques and the analysis of market evidence help underpin and determine market value
- the importance and role of nature conservation, environmental management biodiversity and the landscape and related ecosystem services in land, real estate, general business and community development
- forestry and woodland management practice, policies and grant regimes and its contribution to the economy and sustainability
- how to manage rural land and real estate as property assets and in doing so recognising the importance of the law and management of client and stakeholder relationships
- the law and regulations relating to property agency
- the investment appraisal techniques available to calculate the rates of return that rural land and property command as a class of assets within capital markets
- the impact that farming and other rural land uses have on the environment and initiatives to sustain development by way of, for example, flood mitigation, energy production and savings and through carbon-reduction measures designed to reduce global warming and adaptation to climate change
- compulsory purchase and the delivery of infrastructure working with land-based professional experts and stakeholders in the management and development of rural land and property while mitigating negative impacts on the environment
- the ownership and occupation of land, residential and commercial property
- the legal, professional and ethical responsibilities rural land and property experts have to clients, rural communities and the wider urban public
- the principles and processes that deliver an inclusive environment, recognising diversity by putting people at the heart of the rural land and real estate process, the role of planning policy and practice in the development of rural land and real estate.
<table>
<thead>
<tr>
<th>Planning and Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses related to planning and development include property and planning, property development and planning, planning and real estate development and design management. The curricula for these courses provide graduates with a basic understanding of the principles underpinning planning and development, land acquisition, design, financing, construction, marketing and occupation and use of real estate. The course curricula shall have regard to the physical, technical, legal, market, social, economic and environmental factors affecting the development of sites, conversion of land, design, construction, occupation and use of buildings.</td>
</tr>
</tbody>
</table>

To meet the threshold, graduates will be able to demonstrate knowledge, understanding, skills and competencies that:

- survey, measure and analyse land and the potential it holds as a development site
- convert land into buildings
- secure the planning consents land requires for development to be compliant and buildings to operate within the rule of law
- evaluate the character, history, geography and dynamics of the development site's built and natural heritage and the degree planning documents support the conversion of land
- assess how the real estate market sets the value of a development site, what valuation methods and techniques of analysis are available to undertake such an appraisal and conduct a sensitivity analysis reflecting the risk of conversion
- account for the effect the imposition of planning obligations and requirement to conduct environmental impact assessments have on the value of the site and feasibility of the development
- manage the conversion of land, design and construction of the buildings
- appreciate how national planning frameworks, place-making strategies, master plans and design codes set the agenda for development, and shape the form of the conversion process in terms of how the land is used and what is built
- be aware of contemporary planning and development challenges; for example, urban regeneration, town centre renewal, the planning of business improvement districts, the development of 15-minute cities, 20-minute neighbourhoods and role of green buildings in the transition to net zero
- conduct post-occupancy evaluations of how the buildings perform against given environmental, economic and social criteria.
Master's level

4.3 Master's level degrees in Land, Construction, Real Estate and Surveying are awarded to students who demonstrate understanding of material, much of which is at the forefront of knowledge and professional practice, in one of the subject areas outlined in the undergraduate threshold. Study at master's level requires additional critical and conceptual understanding that enables students to:

- evaluate current research and advanced scholarship
- understand how knowledge is advanced through research
- identify the boundaries of knowledge
- create new insights in the field of study.

4.4 Higher level skills are developed and enhanced through self-directed academic and professional development, with master's level students expected to achieve according to the descriptor for a higher education qualification at Level 7 on the FHEQ and SCQF Level 11 on the FQHEIS.
5 List of references and further resources

Disabled Students Commission
www.advance-he.ac.uk/equality-diversity-inclusion/disability-equality-higher-education/disabled-students-commission

www.qaa.ac.uk/the-quality-code/enterprise-and-entrepreneurship-education

QAA (2019) Annex D: Outcome classification descriptions for FHEQ Level 6 and FQHEIS Level 10 degrees
www.qaa.ac.uk/the-quality-code/qualifications-frameworks

QAA and Advance HE (2021) Education for Sustainable Development Guidance
www.qaa.ac.uk/the-quality-code/education-for-sustainable-development

www.qaa.ac.uk/the-quality-code/enterprise-and-entrepreneurship-education

QAA (2022) Glossary
www.qaa.ac.uk/glossary

QAA, Quality Enhancement Framework (Scotland)
www.qaa.ac.uk/scotland/quality-enhancement-framework

QAA (2021) Quality Enhancement Review (Wales)
www.qaa.ac.uk/reviewing-higher-education/types-of-review/quality-enhancement-review

www.qaa.ac.uk/the-quality-code

QAA (2018) Quality Code Advice and Guidance
www.qaa.ac.uk/the-quality-code/advice-and-guidance

UNESCO (2020) Education for Sustainability: A Roadmap
https://unesdoc.unesco.org/ark:/48223/pf0000374802

United Nations, Sustainable Development Goals
https://sdgs.un.org/goals
6 Membership of the Advisory Group

Membership of the Advisory Group for the Subject Benchmark Statement for Land, Construction, Real Estate and Surveying 2023

Dr Joanna Poon (Chair) University of Derby
Catherine Higgs (Deputy Chair) University College of Estate Management
Aled Williams (Deputy Chair) Council of the Heads of Built Environment, Construction Industry Council
Tony Cheetham Sheffield Hallam University
Steve Conopo Chartered Institute of Building (CIOB)
Gervase Cunningham Ulster University
Professor Eamonn D'Arcy University of Reading
Professor Mark Deakin Edinburgh Napier University
Dr Barry Gledson Northumbria University
Dr Deborah Hughes University of Wales Trinity Saint David
Paul Le Mare Assent Building Control, Chartered Association of Building Engineers (CABE)
William Leschallas Royal Agricultural University
Georgina Shaw Royal Institution of Chartered Surveyors (RICS)
Dr Mark Shelbourn Global Banking School
Dr Mark Simcock Harper Adams University
Christopher Welch Gardner & Theobald LLP, Chair of Chartered Surveyor (Degree) Apprenticeship Trailblazer Group
Derek Spalton University of Derby
Professor Danny Saunders QAA Officer
Laura Sperry QAA Coordinator

Membership of the Advisory Group for the Subject Benchmark Statement for Land, Construction, Real Estate and Surveying 2019

The fourth edition, published in 2019, was revised by QAA to align the content with the revised UK Quality Code for Higher Education, published in 2018. Proposed revisions were checked and verified by the Chair of the Subject Benchmark Statement for Land, Construction, Real Estate and Surveying review group from 2016.

Professor David Proverbs Birmingham City University and Council of Heads of Built Environment
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Membership of the Advisory Group for the Subject Benchmark Statement for Subject Benchmark Statement for Land, Construction, Real Estate and Surveying 2016

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