



# Subject Benchmark Statement

Land, Construction,  
Real Estate and Surveying

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## 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
  - information management
- 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 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 and 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 holistic, 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, information and communication technology (ICT) 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 LCRES 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), Chartered Institution of Civil Engineering Surveyors (CICES) and Chartered Association of Building Engineers (CABE).

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

Building Surveying	Courses connected to building surveying include building repair, maintenance and restoration.
Quantity Surveying and Commercial Management	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.
Construction Management	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.

Building Control and Fire Engineering	Courses connected to building control have emphasis on equipping learners with knowledge of the Building Regulation and associated legislation, in relation to areas such as structural, thermal, fire, acoustics, ventilation and inclusive design.
Real Estate (including real estate, real estate finance and investment)	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.
Rural Land	Courses connected with rural surveying include rural resources management, rural land management and countryside management.
Planning and Development	Courses related to planning and development include property and planning, property development and planning, planning and real estate development and design management.
Geospatial Surveying	Courses connected to geospatial surveying include geospatial data collection and management in land and marine environments, geospatial surveying and mapping sciences.

## 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 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. LCRES courses facilitate a combination of these 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 takes account of 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's position on equality, diversity, inclusivity (EDI) and accessibility (also discussed in paragraph 2.7) is aligned to the current [Equality Act 2010](#) legislation and relevant PSRBs' programme accreditation requirements. Allied to this, the 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 encourages providers to embed EDI in the curriculum in a way that allows all students to access 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 should be 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 and most cost-effective techniques in order to ensure an inclusive learning experience for all.

1.13 Graduates of LCRES courses are expected to apply the 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 avoids exacerbating contemporary issues - such as climate change and environmental degradation, while promoting positive processes such as the circular economy, the move to net zero and good 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 the 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 should 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 should ensure a balanced and innovative pedagogical approach on the theory and practice of sustainability in 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 can 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 a programme of studies incorporating areas such as sustainable planning, design, construction, occupation and use of land and buildings, and green finance and investment equips graduates for their future practice. 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 LCRES incorporates several vocational subjects (see paragraph 1.4) 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 LCRES degrees inspire and motivate critical thinking, collaboration and communication skills and creativity that will serve their professional development throughout their careers. Course teams are encouraged to embed this within the knowledge and skills curriculum to enable students to act as catalysts for change in the workplace. This might include exposing students to global megatrends such as climate change, demographics, internationalisation and technology which are continuously reshaping their future 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 higher education careers teams, subject-specific alumni associations and/or sector employers. Their application can be demonstrated through activities such as visiting lectures, master classes and simulated client briefs. Popular developmental 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. Environmental and social governance practices and the ethos of corporate responsibility in business are key drivers of employer engagement.

1.24 LCRES courses have developed 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 ensuring curriculum relevance and thus a seamless link from academic study 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. This helps to ensure that the best practice that is evolving 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. LCRES courses will use digital tools such as building information modelling (BIM) and artificial intelligence (AI) that enable the capture, manipulation, storage and dissemination of data.

1.27 Information management plays a significant part in project management processes linked to the project life cycle 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, such as BIM and AI, 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 that support data-driven decision-making. The competences to achieve this are split into three key areas: information management structures and systems, use of digital technologies, and digital literacies.

- **Information management structures and systems.** In this area graduates should demonstrate competence in the use of electronic information handling and data processing using appropriate analysis software and applications using digital information systems. They should be competent in the use and interpretation of digital data and information to inform decision-making. This will involve handling electronic information with guidance, and application of appropriate standards (such as ISO19650), techniques, digital tools (BIM, for example) and applications. They should understand general information management practices to digitally organise and manage information and records. An understanding and appreciation of 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 are key competencies of graduates.

- **Use of digital technologies.** In this area graduates will have the knowledge and be able to apply the use of relevant digital technologies (BIM, for example) in their field. They will employ the application of information technology and digital tools and techniques to support key subjects. Graduates should have an understanding of how AI can promote efficiency in the project life cycle by decreasing errors and undertaking repetitive tasks. Further advancements in analysing and optimising the design, construction and use of facilities is a must for graduates.
- **Digital literacies.** In this area graduates should recognise the use of online platforms, being aware of the limitations as a means of communication and a source of information. Graduates need to use a range of information and communication technology (ICT) platforms (for example, desktop, server, tablet and mobile) and social media to communicate information to a range of audiences effectively. Graduates should demonstrate an awareness of the legal, effective and safe use of digital technologies and social media, alongside a heightened 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 Land, Construction, Real Estate and Surveying (LCRES). The graduates covered by this Statement directly benefit 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 shape the way that people live their lives and influence an inclusive and sustainable built and natural environment that takes account of diverse needs. Professional body accreditation is integral to LCRES courses and their vocational relevance and a key driver of student choice. Consequently, a major strength in the design of LCRES courses is the focus on explicitly developing skills required to meet workplace needs articulated 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 vocational component of LCRES courses is discipline specific, they also incorporate a 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 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 course or qualification.

2.4 LCRES courses are concerned with linking knowledge, skills and understanding with application in practice which could be seen as enabling competence as well as capability. Courses should be designed to enable students to develop a wide range of communication skills, critical thinking, problem-solving, self-management, data and information management. The ability to collaborate and work in teams, achieve practical solutions and respect colleagues are fundamental attributes. This focus is illustrated by 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 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 LCRES 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 in LCRES courses, and the expectations set out previously around EDI (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 LCRES 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 are 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 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 The external examiner system 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 LCRES 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 In developing and delivering a successful degree apprenticeship providers across the UK 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.

2.23 In England, , the award of an integrated degree apprenticeship 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's end-point assessment plan, is carried out.

2.24 Providers in England 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.

2.25 In the case of a non-integrated degree apprenticeship, providers in England 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 develop 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
- recognise the limitation of their knowledge and skills and demonstrate an understanding of when, how and where to seek authoritative advice
- 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.



## Learning, teaching and assessment practices

3.9 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, learning and teaching practices comprise a pedagogy that embraces the practical application of theory and will support the development of professional competencies. A constructive alignment model is favoured, in which both teaching methods and assessment activities are aligned with module learning outcomes. This will be reflected in assessment practices that both measure the learning outcomes of the programme and support student's learning. Learning, teaching and assessment practices should facilitate conceptual understanding, the application of knowledge and reflection on performance. Learning and teaching practices should develop student resilience and promote lifelong learning.

### Learning and teaching

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

- [inclusive practices](#)
- [sustainable development](#)
- [employability](#)
- information management skills that are integral to the course.

3.11 Learning and teaching 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.

3.12 Learning and teaching 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.

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

3.14 As well as practice-informed teaching, students learning experiences should be supported by research-informed teaching. This can be 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.

3.15 Learning and teaching practices should promote academic and professional integrity.

3.16 Learning and Teaching practices should consider the appropriate use of generative Artificial Intelligence (AI) in authentic learning to reflect the evolving use of AI in the workplace. When using AI to support learning, consideration should be given to developing deep learning and critical thinking skills. Practices should also consider the ethical use of AI, such as robustness of data, sustainability, integrity, inclusivity and wider societal issues.

## Assessment

3.17 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.

3.18 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.

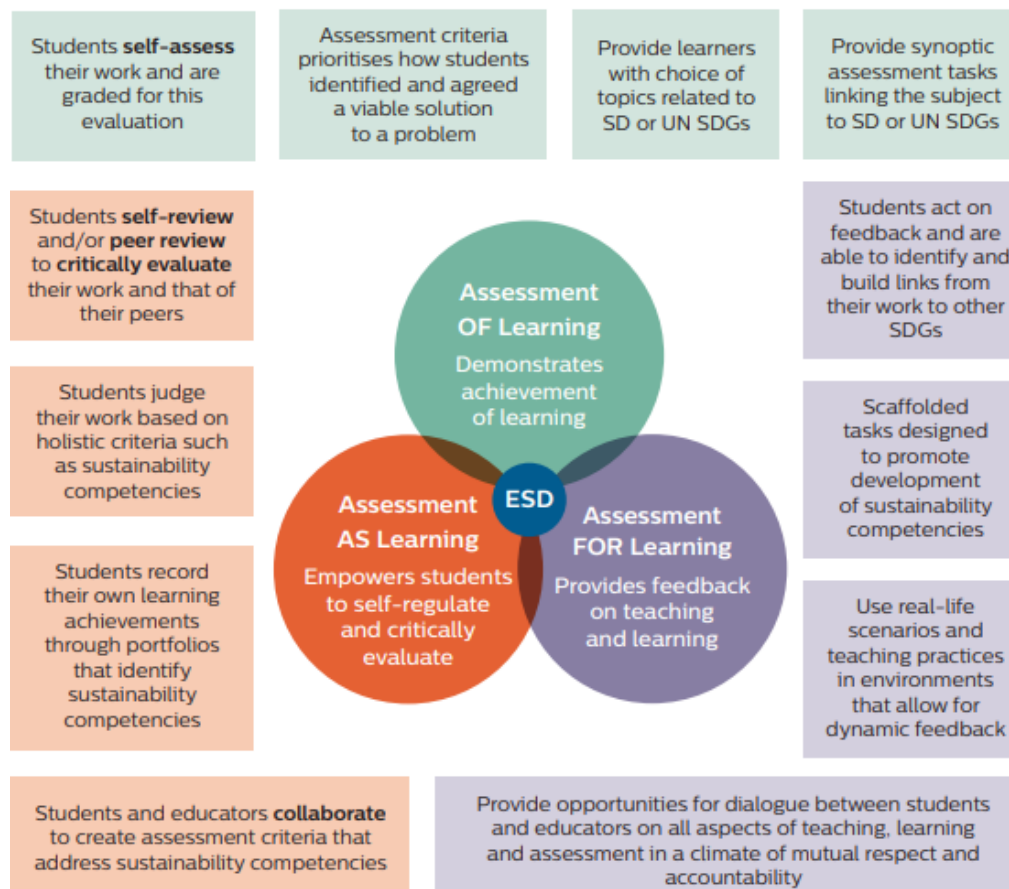


Figure 1: Assessment for, as and of Learning

3.19 Assessment design should be such that a student can identify its relevance and value beyond their higher education studies. Authentic assessments 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.

3.20 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 and articles
- assessments that involve the creation of authentic digital artifacts using specialist packages such as programmes and modelling
- individual and group presentations with outputs in verbal and non-verbal 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**

3.21 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, in England, 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 - the details of which are stated in the end-point assessment plan linked specifically to each occupational standard.

## 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 (LCRES). 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 in The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies](#). 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
- Geospatial Surveying

## Threshold standards

<b>Generic skills</b>	
<b>Intellectual skills</b>	<p>Graduates of courses covered by this Statement are able to:</p> <ul style="list-style-type: none"> <li>• critically analyse, synthesise and summarise information from a variety of sources</li> <li>• recognise and use appropriate theories, methodologies, concepts and principles from a range of subjects</li> <li>• collect, analyse and integrate several lines of evidence to develop balanced arguments demonstrating critical thinking and synthesis</li> <li>• plan and design an experiment, investigation, survey or other means to test a hypothesis or proposition</li> <li>• apply knowledge and understanding to address multidisciplinary problems within a local and global context</li> <li>• demonstrate creativity and innovation</li> <li>• 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</li> <li>• make well-considered decisions in complex and unpredictable contexts</li> <li>• understand the importance of academic and professional integrity.</li> </ul>
<b>Practical skills</b>	<p>Graduates of courses covered by this Statement are able to:</p> <ul style="list-style-type: none"> <li>• plan, conduct and report on investigations, including those using secondary data</li> <li>• 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</li> <li>• 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</li> <li>• take account of safety regulations, legal requirements, including those relating to equality and inclusion, and the impact of investigations on the environment</li> <li>• appreciate and analyse financial and other management information and use it in decision-making</li> <li>• acquire course-specific practical and professional competencies.</li> </ul>

<b>Analytical and data interpretation skills</b>	<p>Graduates of courses covered by this Statement are able to:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• appreciate and reconcile or mitigate the difficulties of having incomplete information on which to base decisions</li> <li>• understand the nature of risk</li> <li>• prepare, process, interpret and present information and data, using appropriate qualitative and quantitative techniques and packages</li> <li>• solve numerical problems using first principles and technological approaches.</li> </ul>
<b>Communication skills</b>	<p>Graduates of courses covered by this Statement are able to:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• 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</li> <li>• contribute constructively to group discussions</li> <li>• consider, appreciate, evaluate and respect the views of others.</li> </ul>
<b>Digital literacy</b>	<p>Graduates of courses covered by this Statement are able to:</p> <ul style="list-style-type: none"> <li>• use online platforms in a context which recognises its limitations as a means of communication and a source of information</li> <li>• 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</li> <li>• demonstrate competence in the use of electronic information handling and data processing and analysis software and applications through the use of digital information systems</li> <li>• demonstrate an awareness of the safe, ethical and legal use of generative artificial intelligence, and other digital technologies and social media.</li> </ul>
<b>Interpersonal and teamwork skills</b>	<p>Graduates of courses covered by this Statement are able to:</p> <ul style="list-style-type: none"> <li>• organise teamwork and participate effectively in a team</li> <li>• set realistic targets</li> <li>• identify individual and collective goals and responsibilities</li> </ul>

	<ul style="list-style-type: none"> <li>• plan, allocate and evaluate the work of self, individuals and teams</li> <li>• perform in a manner appropriate to allocated roles and responsibilities</li> <li>• recognise and respect the views and opinions of other team members</li> <li>• show positive intent and a willingness to resolve conflict</li> <li>• reflect on and evaluate their own performance as an individual or as a team member.</li> </ul>
<p><b>Self-management and professional development skills</b></p>	<p>Graduates of courses covered by this Statement are able to:</p> <ul style="list-style-type: none"> <li>• develop the skills necessary for self-managed lifelong learning and engagement, including, for example, working independently, effective time management and organisational skills</li> <li>• appreciate the need for professional codes of conduct where applicable</li> <li>• recognise the moral, ethical, social and equality and inclusion issues related to the course</li> <li>• assume responsibility for their own actions</li> <li>• identify and work towards targets for personal, academic and career development</li> <li>• develop an adaptable and flexible approach to study and work</li> <li>• demonstrate the competence, behaviour and attitude required in academic and professional working life, including initiative, reflection, leadership, resilience and team skills</li> <li>• behave in an ethical and responsible manner to ensure the rights of others and the wider environment are respected and protected</li> <li>• understand the importance of academic, professional and research integrity.</li> </ul>

## Subject-specific knowledge and skills

### Building Surveying

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.

To meet the threshold, graduates will be able to:

- 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 and the principles of procurement, contract administration and practice
- 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
- 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><b>Quantity Surveying and Commercial Management</b></p>	<p>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.</p> <p>To meet the threshold, graduates will be able to demonstrate:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• 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</li> <li>• an understanding of the occupancy and demolition of buildings</li> <li>• an understanding of time, cost, quality, risk, value and sustainability drivers affecting the feasibility, design, construction and demolition of buildings</li> <li>• 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</li> <li>• knowledge of the legal and regulatory frameworks and systems impacting on a building's life cycle, and the principles of procurement, contract administration and practice</li> <li>• 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</li> <li>• 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</li> <li>• 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.</li> </ul>
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<p><b>Construction Management</b></p>	<p>Graduates have familiarity with themes inherent in construction management (that is, management of people and construction processes); construction technology; the construction environment; health, safety, well-being and sustainability.</p> <p>To meet the threshold, graduates will be able to demonstrate:</p> <ul style="list-style-type: none"> <li>• understanding of the key concepts, theories and principles in construction and in construction management</li> <li>• ability to describe the construction process context, including sector structure and influences such as political, economic, social, technological, legal, physical, environmental and global</li> <li>• knowledge of the regulatory systems in construction, encompassing building and planning regulations, safety laws, and low carbon/decarbonisation requirements</li> <li>• appreciation of project appraisal strategies across the full project life cycle, including project value, risk and benefits, aligning procurement with project delivery priorities</li> <li>• interpretation of design information in various formats, including drawing and model-based designs and from written specifications and schedules</li> <li>• knowledge of contemporary construction technologies, buildability, and the functional, performance, and informational requirements of new-build and refurbished/maintained built assets, to ensure good lifecycle performance</li> <li>• knowledge of health, safety, well-being, sustainability, cultural and environmental considerations in construction</li> <li>• application of best practice project time, cost, quality, scope and resource (including human/people) planning and management techniques</li> <li>• application of construction project management techniques, including lean and agile methodologies for project control, and to help achieve desired project outcomes</li> <li>• knowledge of business administration in construction, emphasising contract administration and commercial management</li> <li>• identification and management of stakeholders, recognising collaborative linkages in construction</li> <li>• knowledge of information management practices, specifically digital organisation and data security/privacy</li> <li>• application of relevant and appropriate construction digital technologies. Also, have appreciation of contemporary Construction 4.0 key concepts (such as BIM; common data environments; AI; big data; cloud computing; digital twin; internet of things; digital ledger technologies; and blockchain)</li> <li>• understanding of professional ethics and inclusivity principles in construction management.</li> </ul>
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**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 all the relevant Approved Documents, the Building Act and British Standards impacting on the design, construction and occupancy of buildings and facilities
- 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, alongside an understanding that the building regulations are the minimum standard and should not be considered the go-to standard
- 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
- evaluate fire safety technology, including risk assessment, methods, techniques and current/developing theories and conceptual ideas
- identify current management techniques and theories, risk management, supplier relations and financial controls
- evaluate the roles that building control and fire engineering play in creating a sustainable and ethical built environment
- identify the role and requirement that new (digital) technologies will play in the now and the future of the building control and fire engineering sectors
- 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

	<ul style="list-style-type: none"><li>- wages, travel and expenses</li><li>- company costs</li><li>- inflation cost yearly</li><li>- training and development of the surveyor</li></ul> <ul style="list-style-type: none"><li>• recognise the structural engineering (<a href="#">Approved Document A: Structure</a>) role within the building sector and importance to structural construct buildings that will not fail in the face of fire</li><li>• 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.</li></ul>
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<p><b>Real Estate</b></p>	<p>Graduates are familiar with the principles underpinning the management of real estate involvements. They also appreciate the physical, technical, legal, economic and environmental factors affecting such involvements from both an investor and user perspective.</p> <p>To meet the threshold, graduates will be able to:</p> <ul style="list-style-type: none"> <li>• systematically apply core knowledge and skills relevant to the real estate discipline specifically related to its purchase and sale, use and occupation, its valuation and investment appraisal, its market dynamics, its changing characteristics as an asset class and its management and development</li> <li>• demonstrate understanding of how changes in both the global and domestic economy impact real estate activity and decision making</li> <li>• 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 economics, market analysis (including the analysis of markets in an international context) data analytics, planning and regeneration, construction, real estate law, sustainability (including ESG), and rural assets</li> <li>• 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</li> <li>• 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 AI applications, investment in alternative real estate sectors and the rise of global delivery platforms in real estate services and investment management)</li> <li>• evaluate what it means to be a real estate professional in multiple settings, including relevant ethical practices, responsibilities to clients, the promotion of EDI and the impact of their actions on economic and social development.</li> </ul>
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<p><b>Real Estate Finance and Investment</b></p>	<p>Graduates are familiar with the principles underpinning real estate finance and investment. They also appreciate the generic principles of finance and investment.</p> <p>To meet the threshold, graduates will be able to:</p> <ul style="list-style-type: none"> <li>• systematically apply core knowledge and skills relevant to real estate as an asset class, including its valuation and investment appraisal, its risk-return characteristics, pricing and its relationship to wider financial and investment markets</li> <li>• apply relevant financial and economic theories to real estate investment decision-making and practice</li> <li>• 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)</li> <li>• 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 datasets</li> <li>• 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)</li> <li>• 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 their actions on economic and social development.</li> </ul>
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<p><b>Rural Land</b></p>	<p>Graduates are familiar 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.</p> <p>To meet the threshold, graduates will be able to demonstrate knowledge and understanding relating to:</p> <ul style="list-style-type: none"> <li>• the place, role and institutional framework of the countryside and rural economy and its relationships with wider urban communities</li> <li>• surveying, measuring, analysing and the valuation of rural land and property from both a market and non-market viewpoint</li> <li>• the principles, characteristics, organisation and sustainability of agriculture according to different geographical, soil and climatic conditions</li> <li>• 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</li> <li>• the range of rural-based businesses, for example energy production, tourism and leisure and their associated management and development</li> <li>• rural land use diversification in relation to location and particular markets</li> <li>• how the rural property market and fiscal policy and taxation affect the value of land and real estate</li> <li>• how the application of valuation methods and techniques and the analysis of market evidence help underpin and determine market value</li> <li>• the importance and role of nature conservation, environmental and water management, biodiversity and the landscape and related ecosystem services in land, real estate, general business and community development</li> <li>• forestry and woodland management practice, policies and grant regimes and its contribution to the economy and sustainability</li> <li>• how to manage rural land and real estate as property assets and in doing so recognising the importance of the law, governance, management and administration of client and stakeholder relationships</li> <li>• the law and regulations relating to property agency</li> <li>• 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</li> <li>• 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</li> <li>• compulsory purchase and the delivery of infrastructure working with land-based professional experts and stakeholders in the management</li> </ul>
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	<p>and development of rural land and property while mitigating negative impacts on the environment</p> <ul style="list-style-type: none"><li>• the ownership and occupation of land, and residential and commercial property</li><li>• the legal, professional and ethical responsibilities rural land and property experts have to clients, rural communities and the wider urban public</li><li>• 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</li><li>• the role of planning policy and practice in the development of rural land and real estate.</li></ul>
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**Planning and Development**

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, and the design, construction, occupation and use of buildings.

To meet the threshold, graduates will be able to:

- 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
- understand professional ethics and inclusivity principles in planning and development.

<p><b>Geospatial Surveying</b></p>	<p>To meet the threshold, graduates have a basic understanding of the principles and practice underpinning geospatial data collection, analysis and presentation within land and/or hydrographic surveying. They appreciate the scientific and mathematical principles involved as well as the physical, technological, legal, health and safety, environmental and contractual issues relating to the mapping and representation of geospatial data and its use in a variety of contexts.</p> <p>Graduates will be able to demonstrate knowledge, understanding, skills and competencies in:</p> <ul style="list-style-type: none"> <li>• the measurement and collection of geospatial data using a range of land, marine, aerial and satellite-based systems and techniques, for example field survey instruments, terrestrial and/or aerial photography / lidar, global navigation satellite systems (GNSS) and drone</li> <li>• the processing and storage of geospatial datasets, including meta-data within, for example, geographic information systems (GIS)</li> <li>• the creation of 2D drawings, maps and 3D models</li> <li>• technologies underpinning problem-solving for a wide range of spatial problems</li> <li>• the scientific and mathematical principles underlying surveying and mapping techniques</li> <li>• surveying practice for applications which will include some, or all, of cadastral, topographic, hydrographic, measured building, underground utility and engineering surveys, including the use of relevant equipment</li> <li>• BIM, digital twins, big data, and so on, as relevant to geospatial surveying</li> <li>• law and regulation relating to health, safety and the environment</li> <li>• law and regulation relating to planning, land tenure and land registration</li> <li>• the importance of sustainability within the context of the natural environment</li> <li>• the importance of professional ethics, their impact on the operation of the profession and their influence on the society, communities and the stakeholders with whom they have contact</li> <li>• working with and the contribution of other professionals, experts and stakeholders while mitigating negative impacts on the environment</li> <li>• the principles and processes that deliver an inclusive environment, recognising the diversity of user needs and the requirement to put people (of all ages and abilities) at the heart of the surveying and mapping science process</li> <li>• use of information on datum and coordinate systems to have more precision and accuracy of data</li> </ul>
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## Master's level

4.4 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.

4.5 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 descriptors 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](http://www.advance-he.ac.uk/equality-diversity-inclusion/disability-equality-higher-education/disabled-students-commission)

QAA The UK Quality Code for Higher Education

[www.qaa.ac.uk/the-quality-code](http://www.qaa.ac.uk/the-quality-code)

QAA, Quality Enhancement Framework (Scotland)

[www.qaa.ac.uk/scotland/quality-enhancement-framework](http://www.qaa.ac.uk/scotland/quality-enhancement-framework)

QAA (2022) Glossary

[www.qaa.ac.uk/glossary](http://www.qaa.ac.uk/glossary)

QAA and Advance HE (2021) Education for Sustainable Development Guidance

[www.qaa.ac.uk/the-quality-code/education-for-sustainable-development](http://www.qaa.ac.uk/the-quality-code/education-for-sustainable-development)

QAA (2021) Quality Enhancement Review (Wales)

[www.qaa.ac.uk/reviewing-higher-education/types-of-review/quality-enhancement-review](http://www.qaa.ac.uk/reviewing-higher-education/types-of-review/quality-enhancement-review)

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](http://www.qaa.ac.uk/the-quality-code/qualifications-frameworks)

QAA (2018) Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers

[www.qaa.ac.uk/the-quality-code/enterprise-and-entrepreneurship-education](http://www.qaa.ac.uk/the-quality-code/enterprise-and-entrepreneurship-education)

QAA (2018) Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers

[www.qaa.ac.uk/the-quality-code/enterprise-and-entrepreneurship-education](http://www.qaa.ac.uk/the-quality-code/enterprise-and-entrepreneurship-education)

QAA (2018) Quality Code Advice and Guidance

[www.qaa.ac.uk/the-quality-code/advice-and-guidance](http://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>

### Further resources

#### Apprenticeships

##### England:

- IfATE Guidance:
  - Occupational Standards: [Developing an occupational standard / Developing new apprenticeships / Institute for Apprenticeships and Technical Education](#)
  - Degree Apprenticeships: [Degree apprenticeships / Institute for Apprenticeships and Technical Education](#)

- Training Plan Guidance: [Developing a specimen training plan / Institute for Apprenticeships and Technical Education](#)
- End-Point Assessment Guidance: [Developing an end-point assessment plan / Institute for Apprenticeships and Technical Education](#)
- External Quality Assurance of Apprenticeships: [External quality assurance of apprenticeships / Institute for Apprenticeships and Technical Education](#)
- Delivering Training
  - Government guidance on delivering high-quality apprenticeships: [Provider guide to delivering high-quality apprenticeships - GOV.UK](#)
- Office for Students External Quality Assurance of Integrated Degree Apprenticeships Guidance for Providers: [External quality assurance of apprenticeship end-point assessment for integrated higher and degree apprenticeships - Office for Students](#)
- ESFA Information:
  - Funding Rules: [Apprenticeship funding rules - GOV.UK \(www.gov.uk\)](#)
  - Off-the-job Training Guidance: [Apprenticeships: off-the-job training - GOV.UK \(www.gov.uk\)](#)
- Ofsted Inspection Guidance for Providers: [Inspecting further education and skills: guide for providers - GOV.UK \(www.gov.uk\)](#)
- Accountability Framework: [Apprenticeship accountability statement - GOV.UK \(www.gov.uk\)](#)
- Government Guidance on the Qualification Achievement Rates (QAR): [Introduction to Qualification Achievement Rates \(QARs\) - GOV.UK \(www.gov.uk\)](#)
- Royal Institution of Chartered Surveyors (RICS) EPA information, advice and guidance:
  - [Employ an apprentice \(rics.org\)](#)
  - [Assessment of Professional Competence \(APC\) \(rics.org\)](#)
  - [Assessment dates - UK \(rics.org\)](#)
- Chartered Institution of Building (CIOB) EPA information, advice and guidance:
  - [Apprenticeships | CIOB](#)
  - [End-Point Assessments | CIOB](#)
- Institute of Fire Engineers (IFE)
  - [Recognition of Training: IFE Recognition](#)
  - Fire Qualifications: [Fire qualifications and exams \(ife.org.uk\)](#)
- Chartered Institution of Civil Engineering Surveyors (CICES):
  - Accredited courses: [CICES Accredited Courses || CICES](#)

**Wales:**

- [Apprenticeship Frameworks](#)

**Northern Ireland:**

- [Higher Level Apprenticeships](#)

**Scotland:**

- [Apprenticeships Approval Groups](#)
- [Apprenticeship Frameworks](#)
- [Technical Expert Groups](#)

## 6 Membership of the Advisory Group

### Membership of the Advisory Group for the Subject Benchmark Statement for Land, Construction, Real Estate and Surveying 2024

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
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Gervase Cunningham	Ulster University
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Professor Mark Deakin	Edinburgh Napier University
Dr Barry Gledson	Northumbria University
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Paul Le Mare	Assent Building Control, Chartered Association of Building Engineers (CABE)
William Leschallas	Royal Agricultural University
Professor Danny Saunders	QAA Officer
Georgina Shaw	Royal Institution of Chartered Surveyors (RICS)
Dr Mark Shelbourn	Global Banking School
Dr Mark Simcock	Harper Adams University
Derek Spalton	University of Derby
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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Clare Mahon	University of Ulster
Dr Andrew Platten	Leeds Beckett University
Professor David Proverbs (Chair)	Birmingham City University and Council of Heads of Built Environment
Professor Mike Riley	Liverpool John Moores University and

Professor Sarah Sayce	Council of Heads of Built Environment Royal Agricultural University and Council of Heads of Built Environment
Aled Williams	University College of Estate Management
Paul Senior (Employer Representative)	Keepmoat
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### **Membership of the Advisory Group for the Subject Benchmark Statement for Land, Construction, Real Estate and Surveying 2008**

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Paul Williamson	Chartered Institute of Building

### **Membership of the Advisory Group for the Subject Benchmark Statement for Building and Surveying (2002)**

Details below are as published in the original Subject Benchmark Statement for Building and Surveying (2002).<sup>1</sup>

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Professor Cliff Hardcastle	Glasgow Caledonian University
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Professor Rodney Howes (Chair)	London Southbank University
Peter Lyons	The Nottingham Trent University
Professor David Mackimin	Sheffield Hallam University
Rita Newton	University of Salford
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Dr Aileen Stockdale	University of Aberdeen
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<sup>1</sup> Originally published as Building and surveying (2002)