Subject Benchmark Statement

Architecture

February 2020

Contents

How can I use this document?

This is the Subject Benchmark Statement for Architecture. It defines the academic standards that can be expected of a graduate, in terms of what they might know, do and understand at the end of their studies, and describes the nature of the subject.

The UK Quality Code for Higher Education (Quality Code) sets out the Expectations and Core Practices that all providers of UK higher education are required to meet. Providers in Scotland, Wales and Northern Ireland must also meet the Common Practices in the Quality Code.

The Quality Assurance Agency for UK Higher Education (QAA) has also published a set of Advice and Guidance, divided into 12 themes, and a number of other resources that support the mandatory part of the Quality Code. Subject Benchmark Statements sit alongside these resources to help providers develop courses and refine curricula but are not part of the regulated requirements for HE providers in the UK.

This Statement is intended to support you if you are:

- involved in the design, delivery and review of courses of study in architecture or related subjects
- a prospective student thinking about studying this subject, or a current student of the subject, to find out what may be involved
- an employer, to find out about the knowledge and skills generally expected of a graduate in this subject.

Subject Benchmark Statements provide general guidance for articulating the learning outcomes associated with the course but are not intended to represent a national curriculum in a subject or to prescribe set approaches to teaching, learning or assessment. Instead, they allow for flexibility and innovation in course design within a framework agreed by the subject community.

It may be helpful to refer to relevant Advice and Guidance when using this Statement.

Explanations of unfamiliar terms used in this Subject Benchmark Statement can be found in QAA's Glossary.

About this Statement

This Subject Benchmark Statement refers to bachelor's degrees with honours and master's degrees in architecture.[1]

It has been produced by a group of subject specialists drawn from, and acting on behalf of, the subject community. The process is facilitated by QAA, as is the full consultation with the wider academic community and stakeholder groups which each Statement goes through.

In order to ensure the continuing currency of Subject Benchmark Statements, QAA initiates regular reviews of their content, five years after first publication, and every seven years subsequently, or in response to significant changes in the discipline.

Context the Statement operates within

While the Statement is intended to guide lecturers and course leaders in the design of academic courses leading to qualifications in architecture, it will also be useful to those developing other related courses.

Higher education providers may need to consider other reference points in addition to this Statement in designing, delivering and reviewing courses. These may include requirements set out by the Architects Registration Board (ARB), the Royal Institute of British Architects (RIBA) and the Institute for Apprenticeships and Technical Education (IfATE). Providers may also need to consider industry or employer expectations. Individual higher education providers will decide how they use this information.

The broad subject of architecture is both academic and vocational. The bachelor's award for architecture is the first stage of the typical education of an architect. This is typically either a BSc or a BA degree. The second stage of academic qualification is a master's level degree, typically in the form of a two-year MArch, which is defined as an undergraduate master's award.

Architecture qualifications typically require a total of 360 (Credit Accumulation and Transfer Scheme, or CATS) credits at bachelor's level and 240 (CATS) credits

---

[1]**Bachelor's degrees are at level 6 (master's at level 7) in *The Framework for Higher Education Qualifications in England, Wales and Northern Ireland* and level 10 (master's at level 11) in *The Framework for Qualifications of Higher Education Institutions in Scotland*, as published in The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies**

within a master's level degree. While this may equate to five years of 120 (CATS) credits each, higher education providers may construct alternatives to enable flexibility in student learning.

This Statement seeks to encapsulate the nature of a rich and diverse academic discipline. It is not intended to prescribe a curriculum, but rather describes the broad intellectual territory within which individual higher education providers will locate their courses of study in architecture.

Relationship to legislation and regulation

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

The subject of architecture is global - buildings are designed and constructed or repurposed throughout the world and there are common key principles, knowledge and skills essential to its practice that apply regardless of location. However, the ability to achieve competent and effective outcomes also require in-depth local knowledge, for example of materials, building practices, and local environment, whether national, regional or local. While there is increasing recognition of the cultural, environmental and economic benefits of the mutual connections between architecture communities and education institutions across the world and the removal of barriers to international mobility, it is important that the value of this requirement is not underestimated if architects decide to work in new places.

The member states that make up the European Economic Area have adopted a legal system of mutual recognition of professional qualifications, including architecture, which is set out in the EU Professional Qualifications Directive 2005 (Directive 2005/36/EC of the European Parliament and of the Council on the Recognition of Professional Qualifications), hereafter referred to as the Directive. The *Architects Act 1997* has been amended to take into account the requirements of the Directive in the UK. Under this Act the ARB is the UK's Competent Authority for architects for the purposes of implementing and administering the Directive. The ARB administers admissions onto the UK Register for those applicants who hold qualifications awarded in other European states which are listed under the Directive. This is referred to as the 'EU-route' onto the UK register.

The common standard of competency required of all qualified architects within the EU is specified in the Directive (Article 46, 1a-k). These requirements are incorporated within the criteria specified by the ARB and RIBA. They have also been adopted by IfATE as the basis or the competencies specified as knowledge, skills and behaviours (KSBs) within the Standards for Architectural Apprenticeships.

The ARB is required by the *Architects Act 1997* to maintain the UK Register of Architects and to prescribe UK qualifications and training for entry to the Register. In doing so, the ARB ensures that such qualifications meet the requirements of the Directive, ensuring UK- registered architects can gain professional recognition in other European states.

Qualifications in architecture: validation, prescription and quality assurance

The ARB's process of approving qualifications for the purpose of professional registration in the UK is referred to as prescription, whereas RIBA's process of approving qualifications for the purpose of obtaining chartered status as an architect is known as validation.

The ARB and RIBA currently hold shared criteria for prescribed and validated qualifications in architecture. Each organisation prescribes or validates qualifications under their own processes and procedures. The ARB and RIBA refer to the various stages of architecture education as Parts 1, 2 and 3. Typically, bachelor's qualifications in architecture may be prescribed and validated at Part 1 and master's level qualifications may be prescribed and validated at Part 2. Students may study on a full-time basis, a part-time basis, or through an apprenticeship course.

Typically, full-time students complete a year of professional experience between their bachelor's and master's degrees, which is commonly referred to as 'the year out'. Typically, students undertake a minimum of a year's professional experience after the award of their master's degree prior to sitting a final professional examination. This final examination may be delivered in various forms and is also subject to prescription and validation in order to qualify as a Part 3 award. The Part 3 awards are not included within the scope of this Statement but are subject to specific criteria published by the ARB and RIBA.

Providers may offer solely bachelor's degrees in architecture or they may offer solely master's degrees.

The ARB's policy is to typically prescribe qualifications which are awarded by UK education providers and which are delivered mainly in the UK. A more detailed account of ARB's prescription requirements can be found on ARB's website. Individuals educated in the UK are required to hold prescribed qualifications at Parts 1, 2 and 3 to join the UK's Register of Architects under what is commonly referred to as the 'UK route'. The ARB will always require that its Criteria and Procedures are fulfilled when prescribing qualifications for the purposes of entry to the UK's Register of Architects.

RIBA validates qualifications throughout the world at Parts 1, 2 and 3 and generally requires individuals to hold validated qualifications at Parts 1, 2 and 3 to qualify for full RIBA membership. A detailed account of RIBA procedures for course validation may be found in their Validation procedures and criteria.

The Architectural Assistant Apprenticeship allows an apprentice to gain a bachelor's degree, typically requiring a period of 48 months of work-based learning, which must be prescribed as a Part 1 qualification by the ARB. The Architect Apprenticeship allows an apprentice who has already gained an ARB-prescribed Part 1 to gain a master's level degree and complete a professional examination in architecture and these awards must be prescribed at Parts 2 and 3 by the ARB. The Architect Apprenticeship typically requires 48 months of work-based learning. IfATE stipulates the quality assurance framework applicable to apprenticeships. As of September 2019, the Architectural Apprenticeships apply to England with restrictions applying elsewhere.

Although the majority of degrees in architecture are both prescribed and validated, this Statement may also cover degrees in architecture that fall outside the remit of the ARB, or which may not be prescribed for other reasons. Non-prescribed qualifications will not lead directly to registration. Similarly, this Statement also covers degrees in architecture which are not validated by RIBA.

The academic qualifications that form part of architecture education and training are designed, delivered and quality assured by higher education providers working within a national framework of qualification levels that applies to all subjects, including architecture (the *Framework for Higher Education Qualifications of Degree-Awarding Bodies in England, Wales and Northern Ireland* and the *Framework for Qualifications of Higher Education Institutions in Scotland*, published within the Frameworks for Higher Education Qualifications of UK

Degree Awarding Bodies 2014). Higher education providers produce course specifications which describe the content of a particular course, specifying the intended learning outcomes and how they may be achieved and demonstrated. In working with this Statement, higher education providers may wish to map the learning outcomes of their course onto the benchmark standards set out in this document.

Summary of changes from the previous Subject Benchmark Statement (2010)

This version of the statement forms its third edition, following initial publication in 2000, and major reviews in 2010 and 2019.

The following changes have been made to this version:

- the inclusion of references to architectural apprenticeships
- revisions to the benchmark standards with signposting to regulatory/professional bodies
- inclusion of qualification descriptors for bachelor's and master's degrees within the subject benchmark statement
- clarification of the role of the ARB's prescribed qualifications
- recognition of the application of the QAA Subject Benchmark Statement to qualifications neither prescribed by the ARB nor validated by RIBA
- UK-wide application of the statement

This Statement applies UK-wide, which also reflects the UK-wide nature of the architects' profession and regulatory framework.

1 Nature and extent of architecture

1.1 The study of architecture draws on knowledge and skills from the natural and social sciences, mathematics, humanities and the creative arts. The discipline is concerned with the accommodation of human activity, alongside the activity and needs of the natural environment and wildlife, in the full range of natural, historical and social environments. The creative practice of design is the defining central focus of architecture education. The varied and complex intellectual skills of design are fundamental to the conception, elaboration and production of the spaces, buildings, cities and landscapes that make up a sustainable, accessible built environment. Design in the built environment is often a collaborative activity, requiring the application of interpersonal skills in a variety of contexts.

1.2 Architecture education is, therefore, rich, varied and, by definition, interdisciplinary, involving intellectual and practical complexity. Architecture education addresses the art science, technology and engineering of building design and the constraints of practice, together with the historical and cultural dimensions of the discipline. Architecture is also constantly adapting to changing social, economic, political and global and local environmental contexts, exemplified by climate change, globalisation, cultural diversity, inequality, information exchange and new social relationships. As a consequence, the role of the architect in society and the nature of architectural practice are constantly evolving and architecture education seeks to prepare students for this ever-changing landscape.

1.3 The creative activity of design that lies at the core of architecture education is characterised by diversity of method, theoretical underpinning and aesthetic expression. The contested nature of design gives rise, through debate, to the advancement of the subject. Design is a complex process that brings together creativity and pragmatism and is closely related to other important aspects of architectural study: technical and environmental studies; cultural context; human health and wellbeing; management, practice and law; communication and community collaboration. It is, therefore, the interaction of ideas, intentions and operations that gives architecture its distinctive character and allows for the variety of academic courses.

1.4 Students entering architecture courses may have little experience of design or other subjects that contribute to architectural study at higher education institutions. Students come to architecture education from a wide range of backgrounds, bringing with them the very diversity of disciplines and modes of

inquiry that an architecture course requires. Many of those studying architecture do so with the intention of becoming a professional architect, or of pursuing a related career. However, the knowledge, understanding and skills that an architecture education imparts are applicable in many careers and students often go on to work in different fields.

1.5 There is a diverse range of students who wish to study Architecture, but that not all students have equity of access. Providers of Architecture degrees and course teams therefore have a responsibility to welcome, encourage, and facilitate the attendance and success of diverse cohorts by widening access to students with alternative qualifications and skills, and providing equitable support to all students once on the course. They also have a responsibility to challenge, debate and advocate for participation in the dismantling of visible and invisible barriers to engagement and participation across the disciplines promoting inclusivity and ensuring representation. This again includes strong engagement with widening access and widening participation initiatives.

Equality, Diversity and Inclusion

1.6 Higher education providers aim to ensure the equitable inclusion of ethnic minorities, students from less affluent backgrounds and otherwise disadvantaged students, including students with caring responsibilities and disabled students. Providers have a duty to make their curriculum inclusive and to embed diverse and positive representation throughout it, in order to ensure the diverse nature of society and inclusivity are explicit at all levels.

1.7 To ensure Architecture remains an inclusive, welcoming subject for underrepresented and minoritised communities, entry requirements should be flexible and account for non-standard qualifications and non-academic or career-based experience. This facilitates students from more diverse educational backgrounds, in which students from ethnic minorities and lower socioeconomic backgrounds are typically overrepresented, who still hold the prerequisite knowledge and skills to join the course.

1.8 Degree providers should also highlight role models within the discipline from diverse and minoritised backgrounds to encourage young people from similar backgrounds that they can succeed in architecture. This may include efforts such as inviting diverse guest lecturers, calling attention to notable architectural technologists, past and present, from diverse backgrounds, attracting and hiring diverse teaching and technical staff members, and retaining

these staff members by ensuring the course and institution is welcoming, accommodating and supportive towards them as well as its diverse student population.

1.9 Course design should ensure that all students are safe and equally included in all locations (partner HEIs and employers, trips to countries or regions with different social norms) involved in the delivery of the degree regardless of their sexuality, gender, religion, disability, pregnancy status or other protected characteristics.

1.10 As a domain so heavily influenced by culture and geography, the rich diversity of architecture reflects that of the global human populations. Historically however, many successful styles and practices have been ignored, hidden, forbidden and ridiculed by colonising powers as a way to suppress Indigenous cultures and exert power over colonies. Similarly, the work and contributions of people from colonised or otherwise minoritised backgrounds has been hidden or attributed to colonisers to give the impression of the colonisers' prowess over other cultures, races and ethnicities. Decolonisation of the curriculum is an imperative aspect of architectural education today in working to correct these misrepresentations and injustices against minoritised communities.

Accessibility

1.11 Accessibility measures should be embedded into all aspects of architecture courses rather than included through reasonable adjustments for particular students. Though all students benefit from embedded accessibility, regularly disadvantaged groups of students, such as disabled students, those with caring responsibilities, those working part-time, those with undiagnosed or unknown conditions, and those experiencing acute mental distress benefit further. Reasonable adjustments respond to both the individual and the discipline where activities cannot be made inherently accessible and providers may need to work with internal or external specialist disability advisory services to provide them.

1.12 Providers should aim to provide well curated courses which benefit all students by promoting good mental health and well-being and reduce the administrative burden and cognitive load on disabled students by removing or reducing the steps required to receive accessible resources and teaching.

1.13 To ensure Architecture courses widen their participation pools, institutions are expected to:

- offer screening and diagnostic assessments to students who may have specific learning differences (SpLDs)
- provide specialist support, one-to-one tutoring, or scribes, among other methods of support by staff familiar with the discipline where necessary
- make available mentors, including peer mentors
- ensure any reasonable adjustments required by students are made to curricula, tuition, exam arrangements and assessment types and timeframes
- assist with making claims for appropriate external support, including benefits
- ensure their curricula and additional study/career-focused opportunities are accessible for disabled students and students with additional considerations

1.14 To ensure a truly accessible course experience, providers should go beyond these basic services by anticipating their learners' needs and proactively ensuring these are met. Course teams should provide Architecture staff with general and discipline-specific-accessibility training for teaching staff to help them dismantle barriers to accessibility within their teaching. Students should be provided with clear, non-judgemental guidance on how to access support early and often during their course, whether related to teaching, assessment, technology, study skills or otherwise.

1.15 To facilitate effective, equitable blended learning, associated enabling technology is required to capture the live display of extended written material and ensure accurate captions. When learning is delivered within a physical venue, consideration of space for mobility aids including wheelchairs and crutches, support workers, the visibility of boards and other display equipment and audibility of session leaders and presentation material is essential.

1.16 All learning and assessment should be flexible and designed with accessibility embedded, ensuring the activities are reasonably achievable for all students with the expected knowledge and skills for their position on the course, regardless of disability, injury, religious, caring or working status. Reasonable adjustments should be proactively discussed with the relevant students and staff, prepared and implemented for any activity which cannot be made fully accessible or substituted with an alternative.

1.17 Specific adjustments for the types of assessments associated with these courses should sit alongside the expectations for adjustments to exams and

assessments detailed above at any education establishment. With regard to a design module, for example, to create a convincing studio or client engagement scenario, students are expected to present their design and technology solutions verbally and visually to the assessment tasks they are set. For students with learning differences or conditions such as anxiety, adjustments can be made to the nature of these presentations, and can, for instance, include a progression across an academic year from one-on-one sessions to a growing number of peers being present at each subsequent presentation to boost confidence.

1.18 To support the capacity to make adjustments to serve the diverse populations courses hope to attract, clearly expressed expectations for assessments are necessary, written with an appreciation of the differing capabilities of students, respectful, not only of learning styles and perspectives, but also of circumstances.

1.19 As digital technologies become more widely used and necessary to participate in the discipline, Architecture courses should be mindful of the circumstances of individual students, with progressive higher education providers making use of funding support for those experiencing forms of digital poverty, including access to suitable equipment, adaptive technology where useful, and data and bandwidth provision.

Sustainability

1.20 The core skills provided by all Architecture courses align with the learning outcomes suggested by the Education for Sustainable Development Guidance produced by Advance HE and QAA (March 2021). These include critical thinking, self-awareness, collaborative competencies, and anticipatory and strategic thinking.

1.21 The architecture discipline plays a key role in implementing sustainability within the built environment and society as a whole. If the discipline can truly develop and embed sustainability within the design, construction and use of the built environment, efforts towards achieving sustainability goals will be enhanced greatly. In terms of education, a broad knowledge set and ability to apply aspects from the three pillars of sustainability (environment, economy, society) are essential early in an Architect's career. The major role of the education sector is to develop and build capacity for this action.

1.22 The eight UNESCO key competencies for sustainability - systems thinking, anticipatory (futures thinking), critical thinking, strategic, collaboration,

integrated problem-solving, self-awareness and normative competencies - should be aligned with appropriate learning outcomes within the curriculum. This will help transform how staff and students appreciate issues related to sustainable development and apply this to their ways of thinking, practising and being.

1.23 The vision is that all Architecture courses contain a fully balanced, integrated and interdisciplinary approach to sustainability themes. These will produce graduates who are aware of the sustainability goals that they can contribute towards, and achieve them in a confident, efficient manner. Learners should be engaged in real-life case studies to support and develop critical evaluation of available and innovative solutions, and reflection as learning approaches. New updated curricula may increase the awareness of social, economic and environmental problems and equip students with the skills to solve them.

Benchmark standards

1.24 The benchmark standards apply to courses in architecture provided by UK higher education institutions. All awards which contribute to registration as an architect through the UK route must also meet the ARB criteria in full. The ARB's criteria are available in the Prescription of Qualifications: ARB Criteria at Parts 1, 2 and 3.

1.25 All awards which contribute to qualification as a RIBA Chartered Architect in the UK must also meet the RIBA criteria in full. RIBA's criteria are available in the RIBA procedures for validation and validation criteria for UK and International courses and examinations in architecture.

1.26 All awards which are delivered within the apprenticeship framework for Architectural Assistants and Architects must also meet the competencies specified within the apprenticeship standards regulated by IfATE.

1.27 Benchmark standards are identified for both the bachelor's level and master's level awards. Higher education providers will not necessarily offer both and should consult the appropriate section below when designing or reviewing their courses.

1.28 The benchmark standards include the 11 clauses contained in the EU Professional Qualifications Directive 2005 (Directive 2005/36/EC of the European Parliament and of the Council on the Recognition of Professional Qualifications, Article 46 1a-k). These 11 requirements are referred to as the General Criteria.

1.29 For bachelor's degrees, the General Criteria should be read in the context of the relevant qualification descriptors. The relevant qualification descriptor will depend on whether the awarding institution is based in Scotland or elsewhere in the UK. At master's level the General Criteria should be read in the context of the qualification descriptors for master's degrees, which apply to the whole of the UK.

1.30 Graduates of the bachelor's award in England, Wales and Northern Ireland should be able to demonstrate the General Criteria in the context of the descriptors at Level 6 in the *Framework for Higher Education Qualifications of Degree-Awarding Bodies in England, Wales and Northern Ireland* (published within the Frameworks for Higher Education Qualifications of UK Degree Awarding Bodies 2014).

1.31 Graduates of the bachelor's award in Scotland should be able to demonstrate the General Criteria in the context of the descriptors at Level 9 or 10 (that is, without honours or with honours respectively) in the Scottish Credit and Qualifications Framework (published within the Frameworks for Higher Education Qualifications of UK Degree Awarding Bodies 2014).

1.32 Graduates of the master's level award throughout the UK should be able to demonstrate the General Criteria in the context of the jointly held descriptor at Level 7 in the Framework for Higher Education Qualifications of Degree-Awarding Bodies in England, Wales and Northern Ireland (FHEQ) and Level 11 in the Scottish Credit and Qualifications Framework (SCQF), published within the Frameworks for Higher Education Qualifications of UK Degree Awarding Bodies 2014.

1.33 The benchmark standards include five elements as follows:

- the General Criteria for bachelor's and master's levels
- the qualification descriptors for bachelor's level applicable in England, Wales and Northern Ireland
- the qualification descriptors for bachelor's degree awarded without honours in Scotland
- the qualification descriptors for bachelor's degree awarded with honours in Scotland
- the qualification descriptors for master's degrees awarded in the UK

The General Criteria

GC1 Ability to create architectural designs that satisfy both aesthetic, technical and sustainable development requirements

GC2 Adequate knowledge of the histories and theories of architecture and the related arts, cultures, technologies and human sciences

GC3 Knowledge of the fine arts as an influence on the quality of architectural design

GC4 Adequate knowledge of urban design, planning and the skills involved in the planning process

GC5 Understanding of the relationship between people and buildings, and between buildings and their environment, and the need to relate buildings and the spaces between them to human needs and scale

GC6 Understanding of the relationship between the natural environment, both locally and globally, and buildings, and the need to relate buildings and the spaces between them, and the impact they have on each other, to the need and scale of the natural environment and all of its components

GC7 Understanding of the relationship between the built environment and inequalities, insecurities and social injustice

GC8 Understanding of the profession of architecture and the role of the architect in society, in particular in preparing briefs that take account of social and environmental factors

GC9 Understanding of the methods of investigation and preparation of the brief for a design project

GC10 Understanding of the structural design, constructional and engineering problems associated with building design and the need to work with allied disciplines for a holistic, collaborative approach to design solutions

GC11 Adequate knowledge of physical problems and technologies and the function of healthy buildings (i.e. in terms of internal air quality) so as to provide them with internal conditions of comfort and protection against the climate both now and in the context of increasing climate change

GC12 The necessary design skills to meet building users' requirements, provide buildings in line with the values of sustainable development (i.e. by

meeting the Net Zero Carbon Buildings Standard) and integrate accessibility measures for all potential users within the constraints imposed by cost factors and building regulations

GC13 Adequate knowledge of the industries, organisations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning

GC14 Understanding of the impact climate change may have on the discipline of architecture, including the need to understand climate related risks to the built environment and make buildings climate resilient

Qualification descriptors for bachelor's and master's level qualifications

1.34 The following descriptors indicate the typical standards that graduates are expected to have met in order to be awarded qualifications at bachelor's and master's Levels. These map onto the level descriptors found in the FHEQ and indicate how such levels are typically articulated in architecture courses.

Qualification descriptor applicable in England, Wales and Northern Ireland for a higher education qualification at level 6 on the FHEQ: bachelor's degree with honours

1.35 The descriptor provided for this level of the FHEQ is for any bachelor's degree with honours which should meet the descriptor in full. This qualification descriptor should also be used as a reference point for other qualifications at level 6 of the FHEQ, including bachelor's degrees and graduate diplomas.

1.36 Bachelor's degrees with honours are awarded to students who have demonstrated:

QD1.1 a systematic understanding of key aspects of architecture as a whole and its links to related academic, practical and social subjects, including acquisition of coherent and detailed knowledge, at least some of which is at, or informed by, the forefront of the discipline

QD1.2 an ability to deploy accurately established techniques of analysis and enquiry within architecture

And, conceptual understanding that enables the student:

QD1.3 to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of the discipline

QD1.4 to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in architecture

QD1.5 an appreciation of the uncertainty, ambiguity and limits of knowledge as well as the value of current research

QD1.6 an understanding of how to undertake or contribute to well founded, discipline leading research

QD1.7 the ability to manage their own learning, and to make use of scholarly reviews and primary sources (for example, refereed research articles and/or original materials appropriate to architecture)

Typically, holders of the qualification will be able to:

QD1.8 apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects

QD1.9 critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a sustainable, equitable solution - or identify a range of solutions - to a problem

QD1.10 communicate information, ideas, problems and solutions using a variety of formats including oral presentation, virtual webinar, written paper/research, poster or infographic, or social media, to both specialist and non-specialist audiences

QD1.11 understand how the built environment and the role of an architect fits in with broader societal, social and environmental challenges

QD1.12 understand the concept of climate resilience and how it necessarily applies to practice

QD1.13 understand the importance of preventing the social and financial costs that come with failing to consider the impacts of architectural practices

on nature and the climate, for example by following IFRS S2 Climate-related Disclosures guidance, Task Force on Nature related Financial Disclosures guidance and considering Taskforce on Inequality and Social-related Financial Disclosures guidance when released (2026)

QD1.14 collaborate with other disciplines to produce an integrated design

And holders will have:

QD1.15 the qualities and transferable skills necessary for employment requiring:

- the exercise of initiative and personal responsibility
- professional, amicable communication and teamwork
- adaptation to new technologies, methodologies, briefs, and legal, company, safety and environmental requirements
- decision-making in complex and unpredictable contexts
- the learning ability needed to undertake appropriate further training of a professional or equivalent nature

Qualification descriptor applicable in Scotland for a higher education qualification at SCQF level 9 on the FQHEIS: bachelor's (non-honours) degree

1.37 The bachelor's (non-honours) degree in Scotland is typically achieved after the equivalent of three years of full-time higher education. In the main, and depending on the subjects or professional area(s) studied, it is awarded as either a Bachelor of Science (BSc), or a Bachelor of Arts (BA). Although all degrees will exhibit a balance of breadth and depth, some degrees will be highly focused while others will develop greater breadth of outcomes. The particular characteristics of each degree will be articulated in the definitive record for the course. Many degrees that have a specific vocational focus carry recognition by the appropriate professional or statutory body. In a small number of universities, in some faculties, this qualification is titled 'MA'. The bachelor's (non-honours) degree in Scotland is a recognised entry requirement to a number of professions across the UK.

1.38 Bachelor's degrees are awarded to students who have demonstrated the following:

QD2.1 A broad and comparative knowledge of the general scope of architecture, its different areas and applications, and its interactions

with related academic, practical and social subjects. A detailed knowledge of architecture. Specialised study will be informed by current developments in architecture

QD2.2 A critical understanding of the essential theories, principles and concepts of architecture and of the ways in which these are developed through the main methods of enquiry in the subject. An awareness of the provisional nature of knowledge

QD2.3 Familiarity and competence in the use of routine materials, practices and skills and of a few that are more specialised, advanced and complex

QD2.4 Well developed skills for the gathering, evaluation, analysis and presentation of information, ideas, concepts and quantitative and/or qualitative data, drawing on a wide range of current sources. This will include the use of ICT as appropriate to architecture

Typically, holders of the qualification will be able to:

QD2.5 use their knowledge, understanding and skills, in both identifying and analysing problems and issues and in formulating, evaluating and applying equitable, sustainable evidence-based solutions and arguments

QD2.6 communicate the results of their studies and other work accurately and reliably in a range of different contexts, mediums and audiences using the main specialist concepts, constructs and techniques of architecture

QD2.7 identify and address their own learning needs, including being able to draw on a range of current research, development and professional materials

QD2.8 apply their architectural and transferable skills to contexts where criteria for decisions and the scope of the task may be well defined but where personal responsibility, initiative and decision-making is also required

QD2.9 understand how the built environment and the role of an architect fits in with broader societal, social and environmental challenges

QD2.10 understand the concept of climate resilience and how it necessarily applies to practice

QD2.11 understand the concept of regenerative design

Qualification descriptor applicable in Scotland for a higher education qualification at SCQF level 10 on the FQHEIS: bachelor's degree with honours

General

1.39 The bachelor's degree with honours in Scotland is typically offered through the equivalent of four years of full-time higher education. It is awarded mainly as either a Bachelor of Science (BSc Hons), or a Bachelor of Arts (BA Hons). All honours degrees will exhibit a balance of breadth and depth as will be clear from the definitive records for individual courses. Many honours degrees will have a specific vocational focus, and in some cases will carry recognition by the appropriate professional or statutory body. In a small number of universities, in some faculties, this qualification is titled 'MA (Hons)'. The honours degree is the recognised 'normal' entry requirement to postgraduate study and to many professions across the UK.

1.40 Honours degrees are awarded to students who have demonstrated the following:

QD3.1 A systematic, extensive and comparative knowledge and understanding of architecture as a whole and its links to related academic, practical and social subjects. A detailed knowledge of a few specialisms and developments, some of which are at, or informed by, the forefront of architecture

QD3.2 A critical understanding of the established theories, principles and concepts, and of a number of advanced and emerging issues at the forefront of architecture including but not limited to sustainable development, accessibility, global and local inequality and digitalisation

QD3.3 A critical understanding of the uncertainty and limits of knowledge and how it is developed, and an ability to deploy established techniques of analysis and enquiry within architecture

QD3.4 A comprehensive knowledge and familiarity with essential and advanced materials, techniques and skills, including some at the forefront of architecture

QD3.5 Skills in identifying information needs, and in the systematic gathering, analysis and interpretation of ideas, concepts and qualitative and quantitative data and information from a range of evaluated sources, including current research, scholarly, and/or professional literature

Typically, holders of the degree will be able to:

QD3.6 use their knowledge, understanding and skills in the systematic and critical assessment of a wide range of concepts, ideas, and data (that may be incomplete), and in both identifying and analysing complex problems and issues, demonstrating some originality and creativity in formulating, evaluating and applying evidence-based solutions and arguments

QD3.7 communicate the results of their study and other work accurately and reliably for a range of audiences, using a variety of mediums and the full repertoire of the principal concepts and constructs of architecture

QD3.8 systematically identify and address their own learning needs both in current and in new areas, making use of research, development and professional materials as appropriate, including those related to the forefront of developments

QD3.9 apply their subject-related and transferable skills in contexts of a professional or equivalent nature where there is a requirement for:

- the exercise of personal responsibility and initiative decision-making in complex and unpredictable contexts
- professional, amicable communication and teamwork
- adaptation to new technologies, methodologies, briefs, and legal, company, safety and environmental requirements
- the ability to undertake further developments of a professional or equivalent nature

QD3.10 understand how the built environment and the role of an architect fits in with broader societal, social and environmental challenges

QD3.11 understand the concept of climate resilience and how it necessarily applies to practice

QD3.12 understand the concept of regenerative design

Qualification descriptor at level 7 on the FHEQ and SCQF level 11 on the FQHEIS: master's degree applicable in England, Scotland, Wales and Norther Ireland

1.41 The descriptor provided for this level of the frameworks is for any master's degree which should meet the descriptor in full. This qualification descriptor should also be used as a reference point for other qualifications at level 7/ SCQF level 11 on the Framework for Qualifications of Higher Education Institutions in Scotland (FQHEIS), including postgraduate certificates and postgraduate diplomas.

Master's degrees are awarded to students who have demonstrated:

QD4.1 a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of architectural practice or links to related academic, practical or social subjects

QD4.2 a comprehensive understanding of sustainable and historical techniques applicable to their own research or advanced scholarship

QD4.3 originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline

QD4.4 proficiency in applying their learning to professional practise and adapting learned theory and practice to reflect the complex realities of practicing architecture in real-world scenarios

And, conceptual understanding that enables the student to:

QD4.5 evaluate critically current research and advanced scholarship in architecture

QD4.6 evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses

Typically, holders of the qualification will be able to:

QD4.7 deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate

their conclusions clearly through a range of mediums to specialist and non-specialist audiences

QD4.8 demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level

QD4.9 continue to advance their knowledge and understanding, and to develop new skills to a high level

QD4.10 understand how the built environment and the role of an architect fits in with broader societal, social and environmental challenges

QD4.11 understand the concept of climate resilience and how it necessarily applies to practice

QD4.12 the qualities and transferable skills necessary for employment requiring:

- the exercise of initiative and personal responsibility
- decision-making in complex and unpredictable situations
- professional, amicable communication and teamwork
- adaptation to new technologies, methodologies, briefs, and legal, company, safety and environmental requirements
- the independent learning ability required for continuing professional development

2 Learning and teaching

Course design and operation

2.1 Architects have a unique conceptual and integrative role in the making of buildings and places, working in cooperation with communities, clients and others within the construction industry and professional services sectors. The defining skill of the architect is design - the ability to conceive of, and elaborate on, physical artefacts that respond to diverse human needs and values and the needs of the local natural environment, evokes aesthetic and intellectual responses and considers the impact on and needs of the global human population and environment. The extensive body of technical and cultural knowledge that is required to enable the architect to meet the pragmatic requirements of practice, and to give designs cultural resonance, complements this core skill.

2.2 Just as the practice of designing buildings revolves around the idea of the project, architecture education is typically based upon a sequence of design projects in which students integrate and apply knowledge to satisfy particular requirements in a particular place. It is an established requirement that at least half of the assessed work in a course leading to prescribed and validated qualifications should be devoted to design, and this is typically interpreted as being design project work. While many aspects of the body of theoretical, historical, technical and professional knowledge required for effective practice may be learned in the context of the design project, most courses include a variety of subject-based courses that enable students to gain an understanding of the coherent nature of particular bodies of knowledge. Such courses may beneficially be shared by students of other professional and associated disciplines.

2.3 The early stages of an architecture education are concerned with the development of new intellectual frameworks and skills. Project work at this stage is commonly divided into small elements with regular assessment and feedback. As the student progresses, the level of complexity of each element of study increases.

2.4 Engagement with practice is essential to the education of the architect. Many teachers of architecture are also active in practice, and the contribution of visiting tutors and critics is an important component of an architecture course. Monitored professional experience is a prerequisite for ARB registration and RIBA

membership. It offers students the opportunity to apply their skills and knowledge and to develop their understanding of practice, and the roles and responsibilities of architects and other professionals.

2.5 Students have the opportunity to learn from professionals with a range of social and cultural backgrounds to further widen their scope of architectural, historical, and societal knowledge. They learn to understand the needs of diverse building and architectural spaces users by working with marginalised communities who have been historically left out of decision making.

2.6 Decolonisation of the curriculum can be sensitive and generate challenging conversations, but it is vital to engendering a more inclusive and culturally sensitive approach to architecture which acknowledges how beliefs and methods have oppressed groups within society, acknowledges historically oppressed communities and begins to represent and include them in the design and use of buildings and spaces.

2.7 A period of professional experience may be a compulsory element of an academic course, or it may be a requirement for admission to a master's level course. Architecture courses may be designed as part-time degrees, with students continuing to work in practice, or as apprenticeships where work-based learning is integral to the course.

2.8 In addition to the requirements for students to engage in personal development planning during periods of professional experience, architecture education promotes reflective practice through studio, tutorial and assessment processes. Students are encouraged to produce sketchbooks, learning journals or reflective diaries related to their work. The progressive assembly of an academic portfolio (comprising design project work, written and other assignments) represents an important aspect of personal development planning.

Design projects

2.9 Through a process of project-based learning and teaching, students develop the skills required to produce architectural designs, gain an understanding of the application of technical knowledge to design situations, and explore how theory and action inform each other.

2.10 The scale and subject matter of design projects is varied, but the general pattern is constant. Students respond individually, or in groups, to a brief or proposition. Ideas are developed using a variety of drawing, making and

computer-based methods supported by discussions with tutors, fellow students and others. Proposals are presented using drawings, sketchbooks, physical models and artefacts, computer models and digital images, often accompanied by explanatory text.

2.11 An important element of this method of learning and teaching is the regular participation of practicing professionals from architecture and cognate professions, bringing their experience and expertise into the academic setting. The interaction of a cohort of student peers together with academics, professionals, live project clients, project stakeholders and consultants, as a community of practice in the learning and teaching setting, allows a dialogue - incidental, structured, and iterative - which is important to this educative process. As part-time tutors, visiting lecturers and critics they play a key role in the verbal presentation and critique of students' work in a variety of settings ranging from formal and informal public reviews and critiques to individual and group tutorials. Experienced practitioners contribute to learning and teaching through mentoring the next generation of graduates in professional practice while benefitting from the skills and knowledge the students bring to the practice setting. Experienced practitioners also fulfil an essential role as part of the external examining team.

2.12 While academic studio projects share some general characteristics with professional project work, they vary widely in length, focus and subject matter. Each project is designed to fit into a coherent sequence that runs throughout a course of study. Sometimes a project seeks comprehensive responses, at other times a project may address particular aspects of the design.

2.13 There is never a single correct answer in design. Students' responses are likely to be diverse, drawing on a combination of interpretation, intuition, logical process and established practice, this diversity of design, mindset, thought process and inspiration should be encouraged and nurtured.

2.14 In formulating their proposals, students will be engaged in an iterative process of research, interpretation, proposition, reflection, critical analysis and synthesis that typically considers site and cultural context, user needs and values, global and local sustainability, equity of access and inclusion, economics and technical resolution. The inherent complexity and open-ended nature of design requires students to make a considerable investment in the time devoted to project work and it is not uncommon for students to devote considerably more time to their project work than the credit weighting would suggest. Those designing and delivering architectural courses should be mindful of this

characteristic of project work and seek to ensure that all coursework requirements are reasonable and achievable within the allocated study hours for all students regardless of their circumstances. Where total inclusivity and accessibility is not possible, reasonable adjustments should be made to accommodate individual students.

Other methods

2.15 While the design project is central to learning in architecture (as in other creative disciplines), other pedagogical methods are essential to the development of the knowledge and skills required in the practice of architecture.

2.16 Some aspects of architectural knowledge may be learned through coherent linear or block courses based on structured reading, lectures, visits, observational drawing and seminars. These aspects include history; theory; human health and wellbeing; understanding local societies or communities, their needs and values; management, practice and law; and principles of structure, environmental science and construction. Alternatively, these aspects may be integrated, in whole or in part, within design projects.

2.17 Research and writing skills are essential to professional practice, and courses should include elements aimed at developing students' abilities in these areas, including essay and report-writing assignments. Typically, students undertake a specialist research study or other analytical and structured piece of writing, which may be called a dissertation.

2.18 Interactive computer-based study is increasingly available to support the development of skills and knowledge. Collaborative group work, which can include cross-disciplinary work, is an important means of developing team-working skills that are essential in practice. Live project work that gives students practical experience of working closely with diverse communities, clients and users while developing collaborative and team-working skills is also an important aspect of some architectural courses.

2.19 Study visits in the UK, elsewhere in Europe and further afield offer students an invaluable opportunity to experience a wide range of architecture and contrasting cultural contexts, as well as buildings-in-progress on construction sites. While highly recommended, study visits requiring additional financial contributions by students typically do not form a mandatory element of the learning experience. All mandatory visits should be completely accessible to all students taking the course, regardless of socio-economic, disability, or other

protected characteristic, by way of accessibility integration. Every effort should be made to ensure optional visits are made accessible either through integration or provision of reasonable adjustments. Environmental sustainability of visits should also be a priority, reducing carbon emissions and impact on the natural environment wherever possible, utilising technology for virtual rather than in-person visits where possible and conducive to learning.

2.20 All students should participate in at least one project with two other disciplines, not necessarily from the built environment.

Environment and resources

2.21 Design project work is considered by teachers and practitioners to be essential in learning the skills of architectural design. Closely associated with the recognition of the design project as the core learning experience is the use of studio-based teaching and learning as an essential component of architecture education. Artists and architects have often chosen to work in large well-lit rooms with large tables for drawing and space for making, and this prototype was consequently adopted as the predominant learning and teaching environment in architecture.

2.22 The word 'studio' means much more in architecture education than a convenient workroom. It is also a form of socialised learning which promotes discourse, the exchange of ideas and the expansion of students' cultural knowledge and respect. It encompasses creative cooperative working in which the outcomes, the architectural design and the educational benefit in terms of skill development, are greatly superior to that which could be achieved by the individual student working alone.

2.23 Implicit in this view of studio teaching is the very direct relationship between students, and between student and tutor, involving frequent one-to-one and small group tutorials. It is resource-intensive in terms of physical space as well as staff time. Ideally, studios should fully accommodate the needs of diverse architecture students and other users, regardless of disability status (including those with mobility or sensory disabilities), be designed with sustainable materials and principles, with good natural lighting and adjustable artificial, large floor areas to accommodate appropriate furniture for studio working, movement of able-bodied and disabled studio-users and adequately equipped space for either the presentation of digital work, or the presentation of physical drawings and models, or combination of the two including a consideration of acoustics for

presentations to larger groups. To be fully effective, studio space should be dedicated to architectural teaching and students should have access to it for long periods of intense, uninterrupted, cooperative activity and peer learning. There is a strong correlation between consistent participation in the life of the studio and the quality of designs produced by students and the acquisition of design skills.

2.24 Within the conventional educational environment the studio is the setting for the creation, display and discussion of design work in individual and group tutorials as well as in more public reviews. In addition, the studio is increasingly used as a setting for the learning and teaching of theoretical, historical, professional and technical aspects of architecture. It is generally recognised that the existence of convenient, secure and accessible studio space makes a decisive contribution to the specific and intensive qualities of architecture education and professional culture, and that the studio is essential to the maintenance of the integrity and strength of the discipline of architecture.

2.25 Studios should provide all students with adequate access to power and data, secure storage and storage for materials, models and work in progress. Studios should have easy access to printing and plotting facilities and ideally access to kitchen facilities. Studio spaces should be supported by adequate space for the display of student work either as part of exhibitions or as part of periodic open critiques or reviews of student project work. Ideally, each student should be provided with a dedicated space sufficient to allow them to work within the studio environment for the duration of design projects.

2.26 Although traditional drawing skills remain important in the development of design abilities, digital technologies offer essential tools in the development and presentation of design work. The rapid development of information and computer technology in architectural and construction practice presents a challenge to higher education providers, which need to be able to offer facilities comparable to those that students will work with in practice. They need sufficient access to up-to-date software, to the high specification hardware needed to run complex graphic and analytical courses, and to high quality, large format printers, plotters, 3-D output devices and sufficient adaptive technology to support students and users with disabilities or additional needs.

2.27 Well-equipped workshops that allow the construction of artefacts, physical models and full-size mock-ups are an important resource for architecture education. The availability of well-qualified technical support staff is essential for the efficient and productive use of computer facilities and workshops.

2.28 Architecture students require access to a comprehensive collection of technical literature, statutory instruments and standards as well as an up-to-date library of books and Journals.

2.29 Studios should be designed with due regard for sustainability and waste minimisation.

3 Assessment

Assessment of design work

3.1 The regular formative review of students' design project work is an important part of the learning process. At the end of a project, and sometimes at intermediate stages, each student presents their work to an audience of fellow students, tutors and visiting critics. Feedback may be given to students in a variety of forms. These events are commonly referred to as crits or reviews.

3.2 In many cases, students actively participate in the discussion and feedback. The regular review of student work in a public arena is important in the development of critical self-reflection, a key skill in the acquisition and application of all architectural knowledge.

3.3 The summative assessment of design work can be carried out by multiple assessors at project reviews, or at a separate portfolio review, or through the submission of project reports. Assessments may rely on hard copies being provided, or on various forms of digital submission. The supporting IT infrastructure should allow for the particular nature of architectural project submissions. While summative assessment should be based on clear and explicit criteria, the marking process relies heavily on the expert judgements of discerning markers and examiners.

Assessment of other work

3.4 Other elements of the course are assessed using methods of formative and summative assessment appropriate to higher education. Courses are expected to include substantial requirements for written texts at all levels, ranging from notation on drawings to report writing and scholarly essays. In some cases, supporting subjects are assessed synoptically alongside design project work.

3.5 Besides a range of practical and academic skills, architecture graduates are expected to display commitment, artistry, personal expression, imagination and creativity. Graduates are expected to possess an understanding of professional ethics and professional behaviours.

Appendix 1: Membership of the Review Group for the Subject Benchmark Statement for Architecture

Membership of the review group for the Subject Benchmark Statement for Architecture (2020)

Mr Peter Garstecki	Architectural Apprenticeship Trailblazer Group
Professor David Gloster	Royal Institute of British Architects (RIBA)
Ms Olivia Marshall	Architecture Student Network (ASN)
Ms Emma Matthews	Architects Registration Board (ARB)
Professor David McClean	Robert Gordon University
Dr Andy Roberts	Cardiff University
Ms Hannah Vowles	Birmingham City University
Professor Peter Walker	University of Salford
Professor Alexander Wright (Chair)	University of Bath
Mr Simon Bullock	QAA

Membership of the review group for the Subject Benchmark Statement for Architecture (2010)

Details provided below are as published in the second edition of the Subject Benchmark Statement.

Ian Borden	University College London
Cain Crawford	ARCHAOS (National Student Architectural Society)
Judi Farren-Bradley	Kingston University
Katherine Heron (Chair)	University of Westminster
Jim Low	Birmingham City University
Richard Parnaby	University of the West of England, Bristol
David Porter	Glasgow School of Art
Andy Roberts	The Higher Education Academy Subject Centre for Education in the Build Environment (CEBE)
Richard Saxon	Building Design Partnership and Royal Institute of British Architects (RIBA)

In attendance

Laura Bellingham	Quality Assurance Agency for Higher Education (QAA)
Chris Cross	Standing Conference of Heads of Schools of Architecture (SCHOSA)
Chris Ellis	SCHOSA
Emma Matthews	Architects Registration Board (ARB)
David Gloster	RIBA
Sarah Lupton	ARB
Mike Starling	ARB

Membership of the original benchmarking group for architecture (2000)

Details below appear as published in the original Subject Benchmark Statement for Architecture, Architectural Technology and Landscape Architecture (2000).

Mrs A Boddington	University of Brighton
Mr D Clews	University of North London
Professor D Dunster (Chair)	University of Liverpool
Dr M Fraser	Oxford Brookes University
Professor J Low	University of Central England in Birmingham
Professor S Spier	University of Strathclyde

Third edition – May 2020
QAA2469

Southgate House, Southgate Street, Gloucester GL1 1UB
Registered charity numbers 1062746 and SC037786

Tel: 01452 557000
Website: http://www.qaa.ac.uk