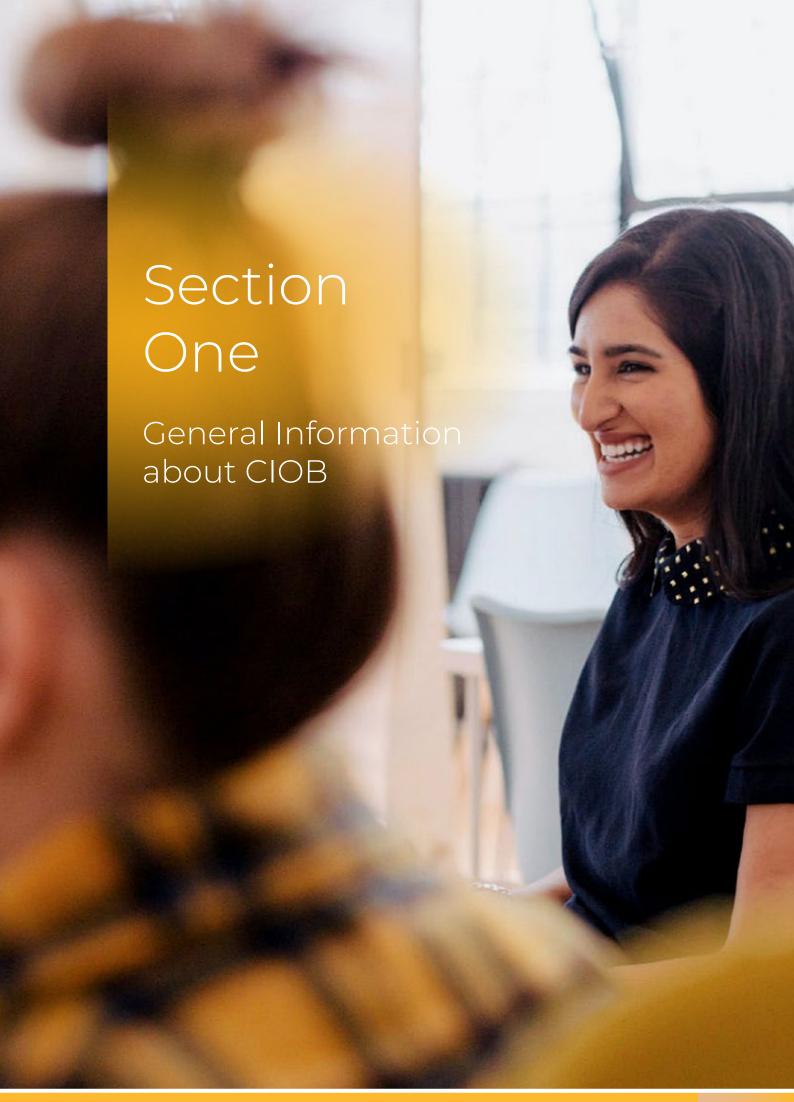




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1.1 About CIOB

The Chartered Institute of Building (CIOB) represents the most diverse set of professionals in the construction industry on behalf of the public. Having a wide and inclusive view of the construction management discipline, CIOB sets the pace globally for high standards of professionalism in the built environment. This is accomplished through the sponsorship of leading research and through the accreditation of academic awards, demonstrating the highest academic and vocational standards.

1.2 About the education framework

The education framework sets out CIOB published standards for higher education awards in construction management in the UK and across the world. The framework is for teaching institutions when reviewing existing programme content for CIOB accreditation purposes, or as a reference document when designing a new programme. The education framework is based on external references such as the frameworks for Higher Education, Qualifications of UK Degree-Awarding Bodies, UK Quality Assurance Agency benchmarks and National Occupational Standards. QAA benchmarks can be accessed at www.qaa.ac.uk.

1.3 About CIOB accreditation

CIOB Accreditation is a seal of approval for the teaching institute and for the programme, signifying that the highest standards of quality are met in the teaching institute and the learning outcomes of the programme. CIOB accredits a wide range of courses from subdegree programmes, to degree and postgraduate awards in the built environment in the UK and across the world. For further information on the accreditation process, please contact the Accreditation Manager at educationadmin@ciob.org.uk or visit our web page at: Accreditation Framework CIOB

1.4 CIOB routes to membership

Graduates of accredited master's degree programmes may proceed to Chartered Membership through the Professional Development Programme or by demonstrating competence through their work experience. All candidates for Chartered Membership are required to pass the Professional Review. For further information on the Professional Development Programme please visit our website link here: https://www.ciob.org/membership/becoming-chartered-member/pdp



2.1 Master's degree programmes

CIOB embraces a range of master's degree programmes from those which have a broad coverage to those with a specific focus on masters in construction management. For all master's degree programmes in the built environment, the typical generic learning outcomes are shown in Section 3.1, the skills are shown in Section 3.2 and the requirements of the dissertation/work-based project are shown in Section 3.3. CIOB does not see these requirements as prescriptive and welcomes the opportunity to accredit programmes with their own structure and content.

2.2 Other master's degree pathways

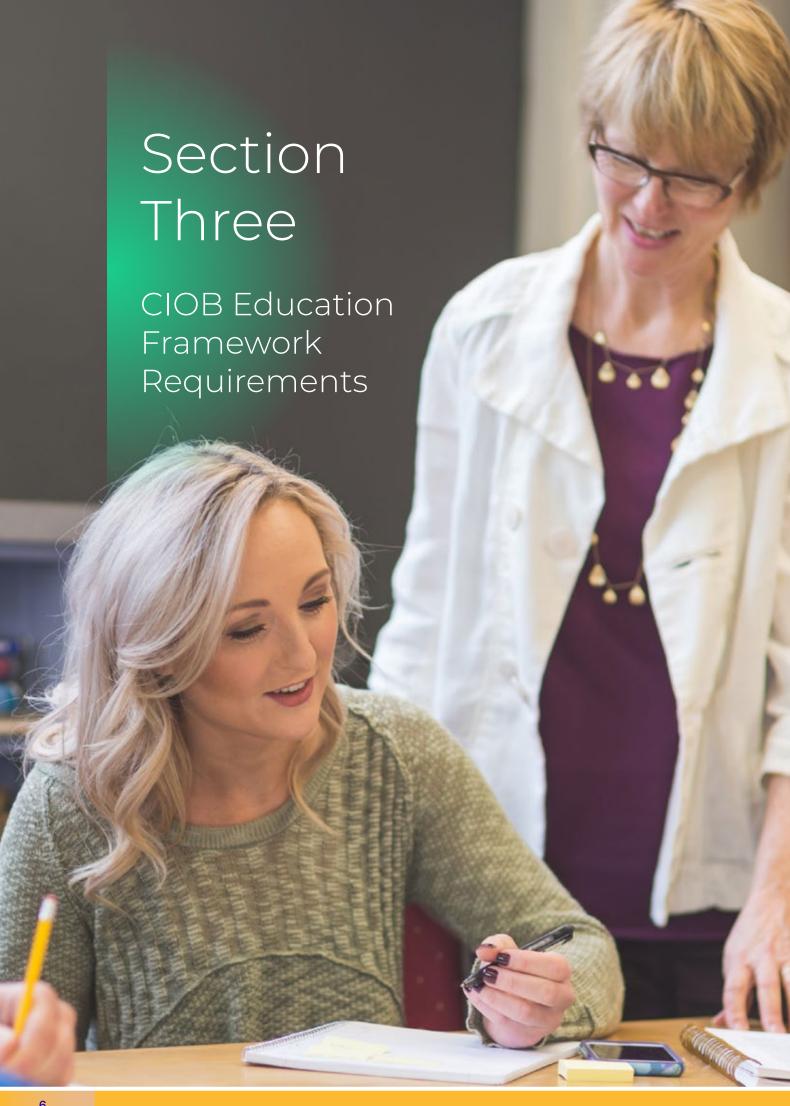
The wide range of activities undertaken by construction professionals means that CIOB accreditation process must accommodate pathways designed to address this wide range of activities. It is inappropriate to define all these professional activities within the education framework, but for guidance, a range of additional learning outcomes for a corporate and commercial management programme is shown in Section 4.1 Quantity Surveying and Commercial Management, 4.2 Project Management, 4.3 Design Management /Architectural Technology/ Architectural Engineering, 4.4 Building Surveying. CIOB welcomes the opportunity to accredit other pathways within construction.

2.3 Entry to master's degree programmes

It is recognised that master's degree programmes can have a range of entry requirements, including those appropriate for entrants without a first/bachelor honours degree in a cognate subject. For these entrants, a range of learning outcomes may be appropriate and for general guidance, these are shown in Section 3.4.

2.4 International programmes

It is recognised that international programmes would be expected to contextualise their approach from their home country in line with their own rules and regulations.



3.1 Core learning outcomes

The generic learning outcomes apply to all master's degree programmes in the built environment. Refer to the relevant regulatory framework in your own country. In the UK, for example, Quality Assurance Agency benchmarks and National Occupational Standards are implicit in the outcomes. The UK Quality Assurance Framework for Higher Education can be accessed at: https://www.qaa.ac.uk/quality-code/qualifications-and-credit-frameworks#

Learning outcome	Indicative range of subjects
To be able to examine the nature of the built environment and the construction industry and appraise the collaboration of professional disciplines in a national and international environment.	The built environment as a response to social and economic need and its relationship to the climate and the natural environment. The evolving structure of the construction and the property industries. Composition of the national and international markets.
To be able to critically analyse the effective management of the construction process and the environmental, economic and social impacts within a global context.	Current project life cycle considerations and the role of the construction manager at each stage. The impact that best practice construction management can have on the environment, economy and corporate social responsibility as well as the UN Sustainable Development Goals.
To be able to examine and have an awareness of the legal (local, national and global) context of the construction and property industries.	Professional responsibilities. Legal regulation of development. Statutory controls, contracts and torts including building safety, health, safety and environmental, data protection, GDPR and other areas of regulation.
To be able to appraise construction and property organisations and the roles and responsibilities within and between them.	Project life cycle/role definition, team selection, target setting. Operational/production control, feedback, and analysis.
To be able to analyse organisational and management processes.	Management and organisational theory, human resource management, Equity, Diversity and Inclusion (EDI). Creating a belonging environment. Finance, economics, marketing, strategic development, execution and change management, information management.
To be able to analyse, critically appraise and perform complex project decision-making and associated risk management in construction management.	Evaluating and managing risk - the use of models/digital tools. Conceptual frameworks for rational decision-making in the construction/property industry. Integrating risk analysis and mitigation into the decision-making process.
To be able to justify the relevance of construction management in the achievement of sustainable construction and a low/zero carbon built environment.	Origins, concepts, definitions, and developments of sustainability at national and international levels as it relates to the built environment. Principles of sustainable construction, such as sustainable design, durability, circular economy, whole-life carbon, sustainable materials, nature-positive solutions, and water conservation. Functions, operation and critical evaluation of environmental assessment methodologies and tools – such as BREEAM, LEED, Green Star, Estidama, SKA rating, Whole Life Carbon Assessment.

To be able to demonstrate and appraise professional ethics and corporate social values and apply these to situations and choices.	The nature of professionalism and evaluation of issues confronting practising professionals. Professional integrity and the interaction of personal and corporate responsibility/values. Commercialism, liability, change, risk. Application of skills to understand, analyse, interpret, evaluate and disseminate ethical, professional and corporate social responsibility issues such as compliance, professional competence and conduct, modern slavery, corruption and fraud, responsible procurement, EDI and social value.
To be able to demonstrate the application of key national and international legislations relevant to the built environment.	For example: Construction Design Management Regulation, Building Safety Acts, health, safety and wellbeing and environmental sustainability.
To be able to examine critical and current issues in construction management as informed by research and practice and their application to new situations.	Informed by epistemological issues and leading-edge research and practice across all aspects of construction management, including building safety, health and safety, innovation, quality, EDI, and sustainability.

3.2 Skills outcomes

The skills outcomes apply to all master's degree programmes in the built environment.

Skills outcome	Indicative range of subjects
To exhibit critical thinking and creativity.	Managing creative processes in self and others, organising thoughts, analysis, synthesis and critical appraisal. Capability to identify assumptions, evaluate statements in terms of evidence, detect false logic or reasoning, identify implicit value, define terms adequately and generalise appropriately.
To demonstrate complex problem solving and decision-making.	Establishing criteria using appropriate decision techniques. Identifying, formulating and solving strategic problems, ability to create, identify and evaluate options, ability to implement and review decisions. Capability to use systems thinking to understand complex issues holistically.
To demonstrate effective communication skills.	Oral, written, visual and presentation skills, including the use of different media.
To demonstrate competency in the secure use of digital applications.	Information Management, e-business, e-communication methods, data management, project /asset management systems and collaborative working platforms. The role of emerging technologies and their impact such as digital twinning, Al and other industry relevant technologies.
To demonstrate leadership and performance management skills including those within a multidisciplinary, multi-cultural and inclusive environment.	Leadership, develop effective strategies, delegation, teamwork, negotiation, decision-making, problem solving, foster and promote working relationships, build effective and inclusive, teams, develop methods of conflict avoidance and resolution. The analytical approach to both reactive and proactive planning, application of judgement to provide solutions, integrated teamwork and benefits. Understanding the importance of leading/managing safely; sustainable and inclusive leadership.

3.3 Dissertation/work-based project

The skills outcomes apply to master's degree programmes in the built environment that include a dissertation/project element.

Skills outcome	Indicative range of subjects
To demonstrate advanced research skills within contemporary construction management issues.	Definition of research question(s) from critical literature review and the application of research methods to produce a coherent argument in support of a hypothesis/question. The appropriate and ethical use of AI/Gen AI in the research process. To prepare and present a research project.
To demonstrate the ability to select and apply appropriate ethical research methodologies.	Informed by epistemological and ontological issues and leading-edge research and practice Review, assess and justify appropriate methodology for the study. Review of research methods, selection criteria, and ethical approval including the responsible use of Al/ Gen Al, application and analysis techniques.
To analyse, synthesise and evaluate key issues affecting the built environment and develop innovative solutions.	Provide appropriate analyses, synthesis and evaluation of the key issues and research instruments to develop sustainable and innovative solutions.
To acquire and analyse construction management data and information.	Application of skills to obtain, analyse, interpret, evaluate and disseminate construction management data and information linked to a question/hypothesis and formulate conclusions.
To demonstrate numeracy and quantitative skills.	Application of mathematical and statistical skills, interpretation, presentation, dissemination and evaluation.

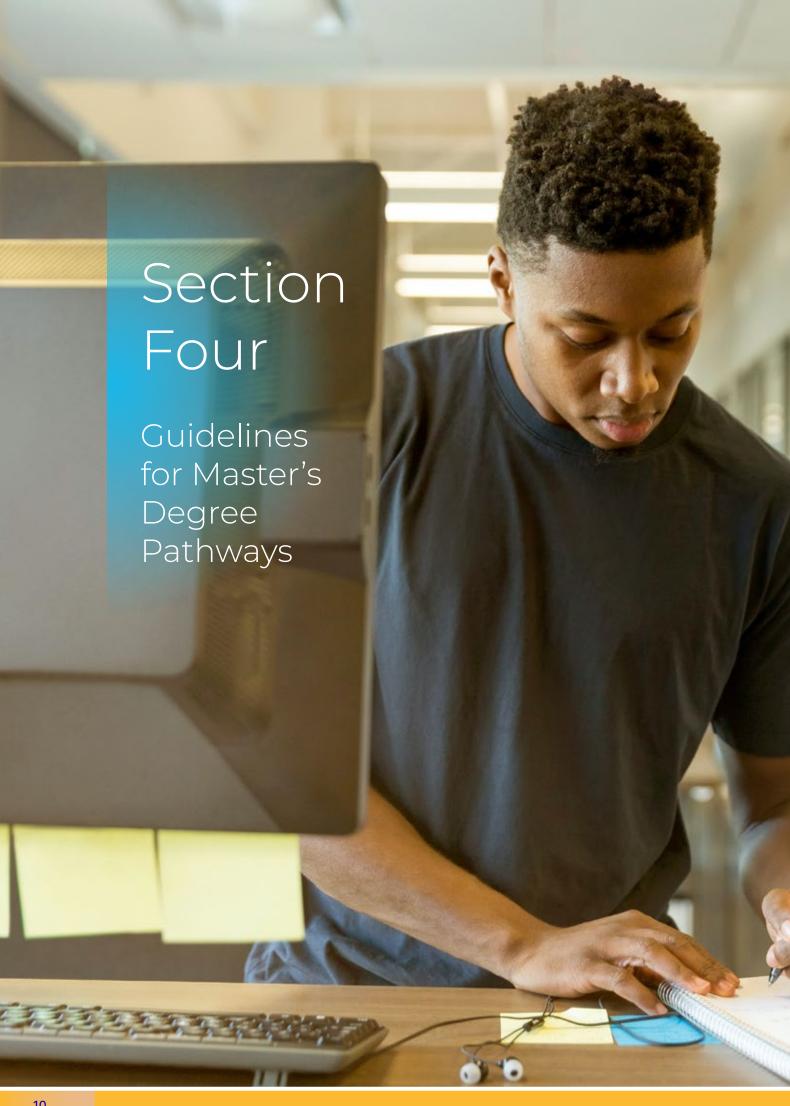
3.3.1 For work-based projects – skills

Skills outcome	Indicative range of subjects
To demonstrate the ability to analyse industry practice.	Through the selection and application of appropriate ethical research methodologies, and through a process of critical reflection, analyse the selected practice problem.
To reflect on learning experience related to industry practice.	To cover the topics contained within the indicative core learning outcomes.

3.4 Non-cognate entrants (learning outcomes)

Please note: the CIOB defines non-cognate as a qualification with no relevance to any aspect of the built environment discipline. The generic learning outcomes in 3.1, 3.2 and 3.3 apply to all master's degree programmes in the built environment.

In the Part B master's application, you will be required to demonstrate the additional support provided for non-cognate entrants with regards to this technical and contextual knowledge to underpin study at this level, for example, pre-sessional reading or a foundation (bridging) module(s) that covers key subject areas such as construction technology, innovation and construction management.



The pathways focused learning programmes below are for guidance only and can be used in programme design and competency mapping. The CIOB accreditation panel will consider for accreditation further pathways that may differ from the suggested learning outcomes in this section of the education framework e.g. Real Estate Development, BIM and Digital Construction and Sustainable Construction Management.

4.1 Guidelines for master's degrees in quantity surveying and commercial management

Learning outcome	Indicative range of subjects
To be able to critically assess the technical aspects of corporate and commercial management.	Complex issues of legal and financial management both for an organisation and a project. Financial planning, objective setting, business growth, bidding strategy, commercial intelligence, strategic development and management of change. Preparing and evaluating bidding documents, setting, and managing a project budget. Forensic examination of cost and value, and contractual entitlement.
To be able to appraise and apply the legal aspects of corporate, governance, contractual and commercial procedures within a complex global construction context.	Company and partnership law in joint ventures, Public Private Partnership (PPP) and other special purpose vehicles, for example, Private Finance Initiative (PFI) Critical appraisal of contract, tort and client relationships. Contract set-up, governance, operation, completion, determination, settlement of accounts, claims, dispute resolution and case law.
To be able to design and evaluate a property development strategy.	Owner, user, social, environmental sustainability considerations. Development, acquisition, disposal, the capital and property asset market; design evaluation, value engineering, risk management, planning gain, sources of finance, property life cycle.
To be able to perform advanced strategic corporate management skills.	This outcome could be achieved in the context of a real or simulated project, based on a case study of an organisation. It could include the technical and financial aspects of corporate strategy. Commercial intelligence, resource and business planning, strategic procurement decisions, feedback and analysis. Contingency planning and corporate sustainability.
To be able to perform advanced commercial management skills.	This outcome could be achieved in the context of a real or simulated project, based on a case study of a development. It could include critical appraisal of procurement options and contract strategies, project financial management, cost planning, tendering and estimating strategies, and cost value reconciliation. Application of quantification and costing - measurement standards and the use of digital tools therein. Cost management to inform stakeholder negotiations, time, cost, value, plan, programme, resource, production, building safety, health and safety, quality, human resources, environment and sustainability. Understanding of the importance of integrating whole life carbon and cost reduction strategies in building design and the impact of value engineering on the delivery of environmental objectives.

4.2 Learning outcomes for master's degrees in project management

The role of the project manager has been defined in the CIOB Code of Practice for Project management for Construction and Development, 6th edition, Wiley-Blackwell 2024. The principles of the CIOB Code of Practice for Project Management are implicit in the education framework outcomes below.

Learning outcome	Indicative range of subjects
To be able to critically assess the technical aspects of project management.	Complex issues of project management both for an organisation and a project in a project programme and portfolio context. Complex issues of operational management, human resources management and time/cost optimisation. Whole-life considerations include carbon and sustainability, building commissioning, handover, building in use, repurpose and end of life management.
To be able to appraise and apply the legal aspects of project management procedures within a complex built environment context.	Critical appraisal of contract and client relationships, considering Building Safety, H&S, EDI and environment/sustainability. Contract set-up, operation, completion, determination, settlement of accounts, claims, dispute resolution and case law.
To be able to perform advanced project management skills.	This outcome could be achieved in the context of a real or simulated project, based on a case study of a development. It could include project role definition, feasibility studies and appraisals, strategic sustainable procurement, risk management, information management and collaborative working decisions, team selection, target setting, operational/production control, decision-making, problemsolving, feedback, analysis, subsequent action. Project management to inform stakeholder engagement, time/cost value, plan/programme, resource, production, health, welfare and safety, quality, human resources, environment and sustainability. Demonstrate the role of the Project Manager in project governance in driving sustainability by incorporating environmental, social, and governance considerations into project planning, execution, and monitoring processes.
To be able to perform high-level planning and programming skills.	This outcome could be achieved in the context of a complex project/multiple project scenario to include, planning, project scope and definition, assembly of data, use of method statements and use of appropriate digital technologies and information to produce effective project programmes.

4.3 Learning outcomes for a master's degree in design management, architectural technology or architectural engineering

Learning outcome	Indicative range of subjects
To be able to critically assess the technical aspects of design and management in construction.	Complex issues of design and management within the environment and the role of digital construction, information management and BIM. The management of design processes to include client brief analysis, evolution of design, the development of drawings and other production information to achieve buildability, building safety, inclusivity, client satisfaction, value, end user satisfaction and sustainability.
To be able to critically appraise contractual procedures and construction law within the context of design management, architectural technology or architectural engineering.	Critical appraisal of client contracts, procurement, assurance, contract set up/operation/completion/ determination, claims and disputes. Statutory and regulatory considerations in a design context including health, welfare, safety, inclusivity and sustainability.
To be able to perform high-level planning and programming skills.	For a complex project scenario, define the scope and the management aspects of models, drawings, production information and resources. The use of information technology techniques within the design process.
To be able to perform advanced design management skills.	This outcome could be achieved in the context of a real or simulated project, based on a complex design management scenario and address pre-contract and post contract design management issues. It could include a critical appraisal of the project, team selection, operational/production control, feedback, and analysis. Design management to inform client negotiation, quality, plan/programme, human and other resources, health, welfare, safety, inclusivity, design economics, cost planning and sustainability. Demonstrate the role of design management in incorporating sustainability principles into the design process, selecting sustainable materials, and ensuring that designs are sustainable across the whole life of the building.

4.4 Learning outcomes for a master's degree in building surveying

Learning outcome	Indicative range of subjects
To be able to critically evaluate technical aspects in the design, management and effective operation of built assets.	Complex issues of design, management and effective operation management considered from the organisation, building user and project perspectives. It is anticipated that reference is made to building condition surveys, building pathology, space planning and computer-aided facilities management systems to balance time, cost, carbon and value challenges. The management of facilities design and operational processes including briefing and design development, utilising models, drawings and production information to address buildability, affordability and maintenance issues. Whole life considerations: sustainability and carbon, building commissioning, handover, management, care and repair of the building during use, refurbishment and any potential future re-use/replacement of the asset/facility.
To be able to appraise and apply premises, construction and employment law to the safe and effective management of complex-built assets.	Critical appraisal of client and contract supplier relationships. Company law, joint ventures, partnering, and other appropriate special purpose vehicles i.e. Public Private Partnership (PPP), Private Finance Initiatives (PFI). Contract operation, completion, determination and settlement of accounts, claims, dispute resolution and case law applicable. Statutory and regulatory considerations of design and operational use of facilities; fully embracing health and safety management, and environmental sustainability considerations. Human resource management, including industrial relations, EDI/employment law and health, safety and environment legislation.
To be able to perform high-level planning and programming skills.	Use of information technology techniques to support effective asset management processes for achieving best value delivery of strategic and operational services.
To be able to perform advanced facilities management skills.	This outcome could be achieved in the context of a real or simulated project, based on a case study of a development or existing facility. It could include project/role definitions, feasibility studies and appraisals, market research and locational factors, strategic procurement decisions, team selection, target setting, operational/production control, decision-making, problem solving, feedback, analysis and action. Factors will include stakeholder negotiations, time/cost value, plan/programme, resource, production, health and safety, quality, human resources, accessibility, maintenance planning, and environmental sustainability. Demonstrate an understanding of the range of services surveyors contribute to a sustainable built environment.

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