**Creating Safe and Healthy Environments**

This module focuses on developing and managing appropriate strategies, processes, tools and systems as designers and employers to support your duties in relation to construction site and workplace safety and wellbeing.

**Design decisions and site safety**

* Dust Control: Choosing finishes and materials that minimise dust accumulation
* Safety critical elements: Ensuring structural integrity and safe construction practices
* Mental Health: Creating environments with ample natural light, ventilation, and connection to nature
* Applying the framework of CDM

**Safety critical elements**

* Safety-critical elements are those which if they fail, are omitted, or incorrectly installed, carry an unacceptable risk of causing serious injury or fatality
* What are safety critical elements?
* Identifying safety critical elements on drawings (or in project documentation) for tendering and the construction team
* Mapping recommended actions against the RIBA Plan of Work
* Case Study
* Resource to read - RIBA/CIOB Guide to Safety Critical Elements

**RIBA Health & Safety Mandatory Competency**

* Background: The Grenfell Tower tragedy, the Edinburgh Schools Inquiry and the review of the building safety regulatory regime led to RIBA’s introduction of a mandatory competency on health and safety
* RIBA Health & Life Safety Knowledge Schedule *(to be touched on lightly)*
* Understanding the (relaunched) RIBA Health & Safety Test Preparing for the mandatory test in 2025

**Design Risk Management**

* Legislation
* How do you assess hazards and risk?
* Exploring how hazards and risks may be identified, affect design and site strategies and methodologies (i.e., unexploded ordnance survey, contamination report, geotechnical survey, pre and post drainage condition surveys, condition surveys, pre-construction information, Party Wall Act)
* Design Risk Management: Designer’s Risk Assessments, Risk Register, Trackers (Planning, Building Control, Building Regulations’ compliance) – how are they used and what are their purpose within a project
* Temporary Works; who does what and when and how it may influence or affect the design risk management

**Fee Negotiation: Practical Skills for a Resilient Business**

This module equips architects with practical skills in fee negotiation and strategies to build business resilience. The focus is on showcasing value, working to your strengths and how to market them along with adopting processes that support and enhance competent, ethical, effective and efficient business.

**Fundamentals of Fee Negotiation**

* Fee Structures: Fixed fees, hourly rates, percentage of construction costs, value-based fees
* Preparation: Market research, project scope evaluation, detailed cost estimates, RIBA Fee Calculator
* Client Rapport: Active listening, understanding client priorities, clear communication

**Practical Skills for Effective Fee Negotiation**

* Strategies: Anchoring, concessions, BATNA, win-win approach
* Communication: Assertive techniques, non-verbal cues, building trust
* Challenges: Handling objections, dealing with difficult clients, managing outstanding payments and additional fee claims

**Creating and Maintaining a Resilient Business**

* Planning: Setting goals, identifying KPIs, strategic growth
* Financial Management: Budgeting, cash flow, diversifying income and why RIBA can’t set fees
* Risk Management: Identifying risks, developing contingency plans, mitigation strategies
* Marketing: Brand identity, digital marketing, networking
* Avoiding and handling disputes
* Client Relationships

**Showcasing Value to Clients**

* Expertise: Past projects, testimonials, unique skills
* Value Proposition: Benefits articulation, visual aids, value-added services
* Client Relationships: Long-term focus, exceptional service, feedback for improvement

**Climate Emergency: Achieving and Exceeding Standards**

This module underpins the knowledge and guidance to be applied across the current and emerging regulatory and policy frameworks to support the skills needed to respond to the climate emergency.

**Exploring current and emerging sustainability guidance**

* Future Homes Standard: Aiming for net-zero carbon homes by 2025, focusing on energy efficiency, low carbon heating, and high-performance building envelopes
* LETI (London Energy Transformation Initiative): Promoting zero carbon buildings through best practices and benchmarks
* RIBA Climate Challenge: Setting targets for operational energy, embodied carbon, and water use for buildings
* UK NZCBS (UK Net Zero Carbon Buildings Standard): Providing a consistent approach to achieving net-zero carbon buildings

**Integrating Sustainability Principles**

* Energy Efficiency: Implementing high-performance insulation, windows, and building fabrics
* Low Carbon Heating: Utilising heat pumps, solar thermal systems, and other renewable technologies
* Embodied Carbon: Selecting low-carbon materials and construction methods

**Building Contracts and Contract Administration for Architects**

This module supports architects’ understanding of how procurement routes can affect the choice of contract to ensure they have the right building or professional services contract or agreement in place for any project.

**Procurement Routes and the RIBA Plan of Work**

Exploring how different procurement routes may affect approaches to the RIBA work stages in respect of appointments, tenders (or preferred bidders) and employer’s requirements supporting contract administration

* **Public Sector Work** Public sector projects often involve complex regulations and stringent oversight. Architects must navigate frameworks like the Public Contracts Regulations 2015, ensuring compliance with procurement laws and standards
* **Traditional procurement under new legislation** – is it changing?
* **Domestic Clients**; working with a preferred contractor vs. tendering for a contractor
* **Design & Build**
* **Strategic Partnerships and procurement**
* **Contractor led procurement**

**Contracting as a designer and principal designer under the Building Regulations**

* Legislation
* Differentiating the ‘designer’ and ‘principal designer’ duties
* How the procurement route may affect the ‘designer’ and ‘principal designer’ appointment
* Using the RIBA Building Regulations Principal Designer Professional Services Contract 2024

**Choosing the right contract - opportunity and risk**

* **NEC4 Contracts and Roles**
* **JCT**
* **RIBA PSCs**
* **Domestic Homeowner Contracts**
* **Design & Build vs. Traditional Contracts**
* **Bespoke Contracts**

**Using Ecology and Biodiversity for Flood Resilience**

This module explores how the project team should collaborate to successfully harness the best outcomes for flood mitigation using ecology and biodiversity strategies.

Through integrating ecological principles, post-occupancy evaluation and design coordination, this topic explores the context of understanding flood zones and sustainable drainage. It covers how these align with landscaping, and the importance of holding pre- and post-drainage condition surveys, along with the risks of holding open water. Liaising with key stakeholders, including statutory bodies, is also covered, along with interdisciplinary collaboration and design coordination.

**Harnessing ecology and biodiversity as a sustainable approach to design**

* Ecological Principles: Incorporating green roofs, rain gardens, and permeable surfaces to enhance water absorption and reduce runoff
* Native Plantings: Using native species to stabilise soil, improve water retention, and support local ecosystems
* Natural Water Management: Designing wetlands and bioswales to manage stormwater naturally

**Collaboration between the project team**

* Integrated Design Process: Early and continuous collaboration
* Shared Tools and Models: Utilising shared digital models and tools for cohesive design and planning co-ordination
* Interdisciplinary Workshops: Regular workshops to foster communication and idea exchange and review the design against the brief

**Sustainable drainage solutions for flood resilience**

* Exploring flood zones; risk and opportunity
* Compliance with Policy and Regulations
* Understanding any survey requirements to support design strategy
* Working as part of a collaborative design team
* Exemplar approaches with case studies
* Post-Occupancy Evaluation (POE)

**Retrofitting for Inclusive Environments**

This module focuses on retrofitting to create inclusive environments while balancing conflicting priorities. It covers designing for the future, multi-generational housing, and inclusive design for Special Educational Needs (SEN), autistic spectrum disorder, and physical disabilities.

**Retrofitting for Inclusivity**

* Assessment: Evaluating existing buildings to identify barriers to accessibility
* Assembling the team; Identifying who will lead (and has the appropriate level of competence) to meet the inclusive design brief
* Universal Design Principles: Applying designs that cater to all users, regardless of ability
* Balancing Priorities: Managing project aspirations, budgets, historical preservation, and key stakeholder contributions

**Designing for the Future**

* Multi-Generational Housing: Creating adaptable spaces that cater to different age groups and abilities
* Flexibility: Designing homes that can be easily modified as occupants' needs change
* Sustainability: Integrating eco-friendly practices to ensure long-term viability

**Creating Inclusive Spaces**

* SEN: Providing quiet spaces, sensory rooms, and clear signage to support diverse learning needs
* Autistic Spectrum Disorder and neurodiversity: Designing with predictable layouts, low-stimulation environments, and sensory-friendly materials
* Physical Disabilities: Ensuring wheelchair accessibility, incorporating ramps, wide doorways, and accessible bathrooms
* Recognising and integrating diverse cultural needs and perspectives in design

**Balancing Conflicting Priorities**

* Design: can designing for inclusion ever inadvertently create exclusion and how should you approach this (i.e., one solution will not suit all)
* Stakeholder Engagement: Involving users, caregivers, and community members in the design process but being clear on any limitations
* Cost Management: Prioritising key inclusivity features within budget constraints
* Regulatory Compliance: When can meeting planning policy and building regulations risk enhancing accessibility and inclusivity

**Strengthening Communities and Addressing Planning Challenges**

This module addresses city-scale, countryside and urban challenges; from active high streets, community services impact of cars and EV parking, to public open spaces, urban green spaces, biodiversity and carbon sequestration.

**City-Scale Challenges**

* High Streets and Community Needs: Revitalising high streets to serve diverse community needs while promoting economic activity
* EV Parking and COU Car Parks: Integrating electric vehicle parking and change of use for car parks within urban planning
* Public Open Spaces: Creating accessible and multifunctional public spaces that balance recreational needs and urban density
* Infrastructure and Transport Systems: Designing efficient transport systems that connect high streets, suburbs, and reduce congestion

**Countryside Challenges**

* Biodiversity: Enhancing habitat connectivity and protecting native species
* Carbon Sequestration: Implementing strategies for carbon storage through reforestation and soil management
* Agriculture and Urban Green Spaces: Balancing agricultural productivity with the preservation of green spaces in urban planning
* Biodiversity Net Gain (BNG): Ensuring new developments contribute positively to biodiversity

**Supporting Community Projects**

* Understanding Community Pressures: Recognising the social, economic, and environmental pressures communities face
* Financial Mechanisms: Navigating funding sources, grants, and public-private partnerships to finance community projects
* Winning Work: Engaging with community stakeholders to identify needs, build trust, and secure project opportunities

**Designing Community Spaces**

* User-Centred Design: Creating spaces that cater to the diverse needs of the community
* Multifunctionality: Ensuring community spaces serve various functions and are adaptable to changing needs

Sustainability: Incorporating sustainable practices to ensure long-term viability and community well-being

**Retrofitting Historic Homes for Modern Performance**

This module focuses on helping clients retrofit their older homes and developing this as a service for architectural practices. It covers the retrofit of historic buildings to improve performance, in the context of current and emerging regulations.

**Retrofitting Historic Buildings**

* Importance: Enhancing energy efficiency, comfort, and sustainability while preserving historical integrity
* Assessment: Conducting detailed evaluations of existing conditions, materials, and structural issues and identifying constraints
* Building Regulations: Aligning retrofit projects with upcoming standards for energy efficiency and low-carbon technologies

**Developing Retrofitting as a Service for conservation and heritage buildings**

* Collaboration: Partnering with heritage consultants, engineers, and sustainability experts to offer comprehensive retrofit solutions
* Client Engagement: Educating clients on the benefits of retrofitting, including energy savings, improved comfort, and enhanced property value
* Service Offering: Creating tailored retrofit plans that respect the building's heritage while meeting modern performance standards
* Competence: what is competence and how to evidence competence

**Strategies for Retrofitting Historic Buildings**

* Energy Efficiency: Upgrading insulation, windows, and doors to reduce heat loss while maintaining historical aesthetics
* Renewable Technologies: Integrating solar panels, heat pumps, and other low-impact renewable energy systems
* Materials and Techniques: Using breathable, compatible materials to prevent damage to historic fabric and improve indoor air quality
* Passive Measures: Enhancing natural ventilation and daylighting through sensitive design interventions
* Fire safety: exploring retrofit opportunity for a safer buildings

**Enhancing Design with Smart Technology**

This module guides architects on leveraging technology to enhance the design process, even with a limited budget. It covers smart spending on technology, supporting the 'Golden Thread' with digital document sharing, and the benefits of smart buildings.

**Innovating approach to design**

* Software Tools: Utilise affordable or free software like SketchUp, Blender, and free versions of CAD tools for design and visualisation
* Hardware Investments: Spend wisely on essentials like a high-resolution monitor and a reliable mid-range laptop or tablet
* 3D Printing: Small 3D printers for creating models can provide a tangible feel of the design without heavy investment

**Supporting the 'Golden Thread'**

* Regulatory requirements and good practice
* Digital Document Sharing: Use platforms like Google Drive, Dropbox, or specialised tools like BIM 360 for efficient collaboration and document management
* Implement BIM for a seamless flow of information across the project lifecycle, ensuring transparency and traceability

**Smart Buildings**

* Definition: Smart buildings utilise IoT (Internet of Things) devices for better energy management, security, and comfort
* Benefits: Enhanced energy efficiency, improved occupant comfort, and proactive maintenance through data analytics
* Implementation: Starting with basics like smart thermostats, lighting controls, and security systems to incrementally improve building intelligence
* RIBA Smart Building Overlay

**Digital design and Intellectual Property Rights**

* Exploring impact of using AI for projects
* Asset data tagging in BIM