AS Unit 1: Our Built Environment

2.1.3: PROFESSIONS and TECHNICAL CAREERS



ARCHITECTURE

Role of the Architect. Designing buildings (layout and aesthetics), developing the technical aspects of their designs for construction – including residential, industrial and commercial developments – and working on restoration and renovation projects.

Routes to professional status

- 1. Degree recognised by the ARB, followed by,
- 2. One year practical experience, followed by,
- 3. Post graduate course (BArch/DipArch) followed by
- 4. Two years practical experience followed by,
- 5. A final qualifying examination.

Alternative vocational routes include the RIBA Studio practice based qualifications.

Professional Institution(s)

ARB Architects Registration Board. Registration is required to use the tile 'Architect'.

RIBA Royal Institute of British Architects.

TOWN PLANNING

Role of the Town Planner. To balance and advise politicians on the demands on land by housing, business, transport and leisure with the needs of people and society.

Routes to professional status

RTPI accredited degree or work placement with distance learning.

Professional Institution

RTPI Royal Town Planning Institute.

CIVIL ENGINEERING

Role of the Civil Engineer. The design and management of infrastructure projects, such as roads, bridges and sports stadiums.

Routes to professional status

- Degree, or Level 4 HNC in Civil Engineering
- Level 5 HND in Construction and the Built Environment
- Work placement / Degree apprenticeship.

Professional Institution

ICE Institute of Civil Engineers.

STRUCTURAL ENGINEERING

Role of the Structural Engineer. The design and detailing of the structural elements of buildings and civil engineering projects.

Routes to professional status

- MEng and BEng Degrees.
- · Work placement / Degree apprenticeship.

Professional Institution

IStructE The Institution of Structural Engineers.

BUILDING SERVICES ENGINEERING

Role of the Building Services Engineer. The design and specification of service installations.

Routes to professional status

Degree in building services, mechanical or electrical engineering, or work placement and apprenticeship.

Professional Institution.

CIBSE Chartered Institute of Building Services Engineers.

SURVEYING

Role of a Building/Land Surveyor. Measurement and assessment of the condition of a built asset/land intended for development.

Routes to professional status

RICS accredited Degree or higher education course.

Professional Institution

RICS Royal Institute of Chartered Surveyors.

QUANTITY SURVEYING

Role of the Quantity Surveyor. Management of the cost and budget of a building project from inception to completion.

Routes to professional status and Professional Institution. (See surveying)

SITE and PROJECT MANAGEMENT

Role of the Site Manager. To organise work on site, making sure that it is completed safely, to standard, on time and to budget.

Role of the Project Manager. To oversee all aspects of a building project, including work programmes and the procurement of labour and materials.

Routes to professional status

BSc or other level 6 qualification + 3 years relevant experience.

Professional Institution(s)

CIOB Chartered Institute of Building

and

APM Association of Project Management.

Key term: Professional Institute: An organisation that provides status, knowledge, resources, training, opportunities to network and influence thinking about future developments.