

# The Quantity Surveying Degree Apprenticeship High Level Skills and Knowledge include

### Skills

A Quantity Surveyor will be able to:

Provide data, information, and advice for stakeholders relevant to Quantity surveying.

Recommend solutions to ensure safe and secure working environments.

Provide advice relating to the construction technology of buildings or structures and their materials related to cost.

Provide advice and recommendations as to appropriate procurement routes and manage the tendering processes relevant to them.

Contribute to the management of contract instructions from engagement to completion with respect to time, cost and awareness of quality.

Implement administrative procedures for the running of a construction project in line with standard forms of building contracts.

Prepare instructions, deal with payment provisions, manage variation procedures and deal with completion and possession issues and the issuing of certificates.

Undertake the detailed quantification Including Bill of Quantity, costing and cost planning of construction works.

Carry out value engineering processes. Prepare data, reports, and forecasts.

Undertake feasibility studies or generic project appraisal.

Apply the appropriate guidance and use the appropriate basis to undertake measurements such as measurement of works.

Prepare and present standard units of measurements in line with new rules for measurement.

Analyse costs and benefits of sustainability initiatives on a project.

Be able to advise on the most suitable construction solutions that maximise value for stakeholders and enhance the cost effectiveness of the project within the budget constraints.

Advise on the appropriate methods of measurement of completed works and issue documentation required for payment to specialist contractors.

Monitor reports and advise construction team and/or stakeholder on project cashflow and profitability. Evaluate and advise on financial implications of decisions during the construction phase and/or post contract matters.

Demonstrate understanding of balance sheets, profit and loss accounts and business plans.

Be able to use Information Technology Effectively

Appreciate the role that other construction team members play.

#### Knowledge

A Quantity Surveyor will know:

Understand how carry out life cycle costing. Prepare data, reports, and forecasts.

Understanding of procurement routes both for internal and external stakeholders

Understand the role of the Quantity Surveyor considering the RIBA plan of works.

The methods and techniques for providing information, data and advice to clients or colleague or stakeholders.

How to ensure safe and secure working environments for self and others.

The importance and recognition of diversity. Legal, regulatory, and ethical requirements including inclusive environments e.g. The Future Generations act

How to embed sustainability into projects and how to influence client and stakeholder behaviour to mitigate climate change e.g. supply chain procurement.

The technology of buildings including materials.

How to manage client/customer, stakeholder relationships.

The various stages of the design process, legal requirements and regulations including planning, Building Regulations and health and safety requirements and the structural implication of design.

The Standard forms of building/construction contract and subcontract, contractual mechanisms and procedures applied at various stages of the contract.

The role and responsibilities of the contract administrator and the duties of the parties to the contract.

When different forms of procurement and tendering are appropriate and the clauses of building/infrastructure contracts.

The detailed quantification and costing of construction work and the methods of cost planning that can be applied.

Know how manage a construction project and the principles of contingencies and risk allowance, life cycle costing and value engineering.

Techniques to manage contractors, sub-contractors and/or suppliers. Reporting and forecasting.

How to undertake capital and rental valuations of land and property and the requirements for valuation reporting.

The basis on which measurement should be undertaken, data capture techniques and appropriate standards and guidance. Limitations and degrees of accuracy required for measurements

Understand the environmental impact of Construction activities and how to minimise negative impacts during all stages of Construction.

How to use Information Technology Effectively

#### **Behaviours**

Provide high standard of service - Always ensure your client, or others to whom you have a professional responsibility, receive the best possible advice, support or performance of the terms of engagement you have agreed to and ensure you always give attention to detail.

Act in a way that promotes trust in the surveying profession - Act in a manner, both in your professional life and private life, to promote you, your firm, or the organisation you work for in a professional and positive way.

Act with integrity and impartiality, always be trustworthy, open and transparent.

Respect confidential information of your clients or potential clients and do not allow bias, conflict of interest or the undue influence of others to override your professional or business judgments or obligations.

Always act consistently in the public interest when making decisions or providing advice.

Treat others with respect - Treat everyone with courtesy, politeness and respect and consider cultural sensitivities and business practices.

Promote sustainability, including energy efficient practices to minimise negative environmental impact and reduce climate change.

Take responsibility – Always act with skill, care and diligence and deal with any complaint in an appropriate professional manner.

Identify own development needs and take appropriate action to meet those needs

Understand and adhere to governance and regulatory frameworks of Industry Professional Bodies. Global and professional ethical standards and apply the Rules of Conduct and how to deal with ethical dilemmas.

## **Topics for Quantity Surveying**

- 1. Impact and benefits of Surveying on Society and the Environment
- 2.Sustainability
- 3. Construction Technology
- 4. Land, property, and planning law
- 5. Research methods
- 6. Compliance with current codes and specifications
- 7. Building or Structure Pathology
- 8. Administer contracts
- 9. Managing Budgets, resources, and risk
- 10. Health and Safety
- 11. Effective Communication
- 12. Diversity and Inclusion
- 13. Personal and Interpersonal
- 14. Managing People