Pathway No: FR0730 Issue No: Draft Issue Date: 27/05/24 Review by Date: Last Updated: Issuing Authority: Welsh Government



Llywodraeth Cymru Welsh Government

0730 Welsh Construction Degree Apprenticeship Pathway

PLEASE SUBMIT all queries to Welsh Government:

DfES-ApprenticeshipUnit@gov.wales



FEAD DfES • Ty Afon Bedwas Rd • Bedwas Cf838WT DfES-ApprenticeshipUnit@gov.wales Gwefan • website: <u>www.llyw.cymru</u> <u>www.gov.wales</u>

Learning Programme Content

Entry Requirements

Apprenticeship Pathway Learning Programme(s)

- Level 6: Construction Management
- Level 6: Civil Engineering
- Level 6: Quantity Surveying
- Level 6: Surveying

Other Additional Requirements

Job Roles

<u>Progression</u>

Equality & Diversity

Employment Responsibilities and Rights (ERR)

Responsibilities

Annex 1 - Level 6: Construction Management Annex 2 - Level 6: Civil Engineering Annex 3 - Level 6 Quantity Surveying Annex 4 - Level 6: Surveying Annex 5 - Competency Assessment

LEARNING PROGRAMME CONTENT

The Learning Programme provision shall comprise of three mandatory elements:

- Qualifications,
- On/off the job training

The total minimum credit value required for all Construction Degree Pathways is 360 credits.

ENTRY REQUIREMENTS

General Entry Requirements for all Construction Degree Pathways

The Construction Degree Apprenticeship pathway at Level 6 is primarily suitable for applicants who have either completed "A" levels appropriate for university entrance, or who may have already completed a related apprenticeship at Levels 3, 4 or 5.

Please note: Applicants for this apprenticeship pathway are likely to be 19+ years.

Processes exist to make sure that applicants with relevant prior knowledge, qualifications and/or experience are not disadvantaged by having to repeat learning. Individual universities will be able to advise on the current rules for accrediting prior learning and recognising prior experience.

APPRENTICESHIP PATHWAY LEARNING PROGRAMME(S)

Level 6: Construction Management

Qualifications

Participants must achieve one of the following combined qualifications below.

BSc (Hons) Construction Management							
Awarding Qualification	Credit	Total	Competence	Qualification			
Organisation		Value	Qualification	/ Knowledge	Assessment		
Organisation	INO,	value	value	value	Time	/ Combined	Language(s)
Wrexham	n/a	360	48 months	Combined	English and/or		
University	n/a	560	40111011115	Combined	Welsh		

BSc (Hons) Construction Management						
Awarding Organisation	Qualification No,	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)	
Trinity St Davids U University	n/a	360	48 months	Combined	English and/or Welsh	

BSc (Hons) Construction Project Management						
Awarding Organisation	Qualification No.	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)	
University of South Wales	n/a	360	48 months	Combined	English and/or Welsh	

Please see <u>Annex 1</u> for the relationship between the competence and knowledge units within the combined qualification.

On/Off the Job Training

Pathway	Minimum On the Job Training Hours	Minimum Off the Job Training Hours
Level 6: Construction Management	500	900

On/Off the Job Qualification details (Minimum Credit & Hours)

360 credits for competence and knowledge

The total amount of learning hours which includes both on and off-the-job training for the Construction Management is 1400.

Pathway duration approximately 48 months

Level 6: Civil Engineering

Qualifications

Participants must achieve one of the following combined qualifications below.

BEng (Hons) C	ivil Engineering				
Awarding	Qualification	Credit	Total	Competence	Qualification
Organisation	No,	Value	Qualification	/ Knowledge	Assessment
Organisation	NO,	value	Time	/ Combined	Language(s)
Wrexham	n/a	360	48 months	Combined	English and/or
University	Π/G	500	40 11011113	Combined	Welsh

BSc (Hons) Civil Engineering					
Awarding Organisation	Qualification No.	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)
University of South Wales	n/a	360	48 months	Combined	English and/or Welsh

BEng (Hons) Civil Engineering					
Awarding Organisation	Qualification No.	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)
University of South Wales	n/a	360	48 months	Combined	English and/or Welsh

Please see <u>Annex 2</u> for the relationship between the competence and knowledge units within the combined qualification.

On/Off the Job Training

Pathway	Minimum On the Job Training Hours	Minimum Off the Job Training Hours
Level 6: Civil Engineering	500	900

On/Off the Job Qualification details (Minimum Credit & Hours)

360 credits for competence and knowledge

The total amount of learning hours which includes both on and off-the-job training for the Civil Engineering is 1400.

Pathway duration approximately 48 months

Level 6: Quantity Surveying

Qualifications

Participants must achieve one of the following combined qualifications below.

BSc (Hons) Quantity Surveying and Commercial Management						
Awarding Organisation	Qualification No,	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)	
University of South Wales	n/a	360	48 months	Combined	English and/or Welsh	

BSc (Hons) Qu	antity Surveying				
Awarding Organisation	Qualification No,	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)
Trinity St Davids University	n/a	360	48 months	Combined	English and/or Welsh

BSc (Hons) Quantity Surveying					
Awarding Organisation	Qualification No,	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)
Wrexham University	n/a	360	48 months	Combined	English and/or Welsh

Please see <u>Annex 3</u> for the relationship between the competence and knowledge units within the combined qualification.

On/Off the Job Training

Pathway: Quantity	Minimum On the	Minimum Off the Job
Surveying	Job Training Hours	Training Hours
Level 6 Quantity Surveying	500	900

On/Off the Job Qualification details (Minimum Credit & Hours)

360 credits for competence and knowledge

The total amount of learning hours which includes both on and off-the-job training for the Quantity Surveying is 1400.

Pathway duration approximately 48 months

Level 6: Surveying

Qualifications

Participants must achieve one of the following combined qualifications below.

BSc (Hons) Building Surveying					
Awarding Qualification Organisation No,	Qualification	Credit	Total	Competence	Qualification
	Value	Qualification	/ Knowledge	Assessment	
	NO,	Value	Time	/ Combined	Language(s)
Wrexham	n/a	360	48months	Combined	English and/or
University	nya	560	4011011113	Combined	Welsh

BSc (Hons) Building Surveying					
Awarding Organisation	Qualification No.	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)
University of South Wales	n/a	360	48 months	Combined	English and/or Welsh

BSc (Hons) Real Estate					
Awarding Organisation	Qualification No.	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)
University of South Wales	n/a	360	48 months	Combined	English and/or Welsh

Please see <u>Annex 4</u> for the relationship between the competence and knowledge units within the combined qualification.

On/Off the Job Training

Pathway: Surveying	Minimum On the Job Training Hours	Minimum Off the Job Training Hours	
Level 6 Surveying	500	900	

On/Off the Job Qualification details (Minimum Credit & Hours)

360 credits for competence and knowledge

The total amount of learning hours which includes both on and off-the-job training for the Property Surveying is 1400.

Pathway duration approximately 48 months

OTHER ADDITIONAL REQUIREMENTS

Applicants for this apprenticeship pathway are likely to be 19+ years.

JOB ROLES

The latest version of the job roles and job descriptions for the Construction Degree Pathways can be found below.

Construction Manager

Construction managers are responsible for the practical management and planning of every stage of a construction project. They ensure building projects are completed safely, within budget and on time. As a construction manager, you'd oversee schedules of work and delegate tasks to your team to ensure that each phase of a build goes to plan.

Additional skills which may benefit anyone considering a job as a construction manager include:

- Knowledge of building and construction
- Leadership qualities
- Time management skills
- Excellent verbal communication skills
- Ability to problem-solve and use your initiative.

Civil Engineer

Civil engineers plan, design and manage large construction projects. This could include bridges, buildings, transport links and other major structures. They use computer modelling software and data from surveys, tests and maps to create project blueprints. These plans advise contractors on the best course of action and help minimise environmental impact and risk.

Additional skills which may benefit anyone considering a job as civil engineer include:

- Knowledge of building and construction
- Design skills and knowledge
- Be thorough and pay attention to detail.
- Excellent verbal communication skills
- Able to work well with others.
- Able to use your initiative.
- Able to use a computer and the main software packages confidently.

Quantity Surveyor

Quantity surveyors estimate and control costs for large construction projects. They make sure that structures meet legal and quality standards. Quantity surveyors are involved at every stage of a project. Whether they're working on residential, commercial, or industrial projects, clients rely on them to ensure that the final outcome is value for money.

Additional skills which may benefit anyone looking to become a quantity surveyor include:

- Strong maths knowledge
- Excellent attention to detail
- Analytical thinking skills
- Understanding of engineering science and technology
- Knowledge of building and construction
- Ability to use your initiative.

Surveyor

Surveyors provide professional advice on a range of construction-related matters. They could be ensuring that new-build properties are built to regulations and specifications, advising on maintenance and repair of existing structures or assessing damage for legal and insurance purposes. Many surveyors specialise in one area as the role carries many responsibilities.

Additional skills which may benefit anyone looking to become a surveyor include:

- Knowledge of building and construction
- Be thorough and pay attention to detail.
- Customer service skills
- Able to use your initiative.
- Analytical thinking skills
- Patience and the ability to remain calm in stressful situations.
- Thinking and reasoning skill.

PROGRESSION

Progression for those who have completed a Construction Degree Pathways:

- employment in job roles in the above link or similar job roles
- Master's Degrees in the relevant occupation.
- Professional body membership/Chartership

EQUALITY & DIVERSITY

It is important that Apprenticeship Pathways are inclusive and can demonstrate an active approach to identifying and removing barriers to entry and progression. Pathways should advance equality of opportunity between persons who share protected characteristics and those persons who do not, as identified in the Equality Act 2010.

Construction Degree Apprenticeship Framework offers no barriers to entry and is intended to accommodate all learners regardless of their gender, age, disability, religious beliefs, or ethnic origins. The learning content required for the off-the-job learning can be delivered in a number of different learning styles to accommodate learner requirements.

EMPLOYMENT RESPONSIBILITIES AND RIGHTS (ERR)

Employment Responsibilities and Rights (ERR) is no longer compulsory. But it is recommended. that all apprentices receive a company induction programme including thorough Health and Safety Training.

PROFESSIONAL BODY AND INDUSTRY RECOGNITION/ACCREDITATION

HEI's delivering Construction Degree Apprenticeship Programmes are required to have attained or be actively working towards attainment of accreditation by a Professional Body related to the Occupation being followed.

HEI's should actively encourage apprentices to engage with professional bodies during their apprenticeship and prepare for professional body recognition on completion of their apprenticeship.

Degree Apprentices should be encouraged to attain a relevant Industry accreditation card such as a CSCS Professionally qualified person card on completion of their Degree Apprenticeship.

RESPONSIBILITIES

It is the responsibility of the Training Provider and Employer to ensure that the requirements of this pathway are delivered in accordance with the Welsh Government Apprenticeships Guidance.

Further information may be obtained from:

Welsh Government DfES-ApprenticeshipUnit@gov.wales

Relationship between competence and knowledge qualifications

These are combined construction degree qualifications that deliver both the knowledge and competence requirements as set out in the individual learning and skills pathway outcomes Knowledge, Skills, and behaviours available in the learning outcomes documents contained in annex 1-4 below.

Annex 1 - Construction Management

Knowledge

A Construction Manager will:

Understand the short and longer-term environmental impact both positive and negative of Construction activities and how to maximise and minimise these impacts during all stages of the project and in the longer term.

Know how to review threats and opportunities for the construction industry and appraise and evaluate the influence of current legal, political, and social issues on the industry.

Understand the project management cycle including the planning, controlling, budgeting, project funding, procurement, and payment processes to lead to effective project delivery.

Understand Basic Understanding of Contract law and contract types.

Understand strategies and processes related to Change Management

Demonstrate knowledge and understanding of the construction process and of the materials and technology that comprise best practice.

Understand obligations for Health, Safety, wellbeing, and environmental issues on site, how to identify potential hazards and manage the risks

Understand how to apply knowledge of the construction process to the examination and selection of procurement processes.

Understand and evaluate different leadership styles in relation to projects appropriate to their role.

Have knowledge of common defects in buildings and understand quality measures including structural reports, dilapidation surveys and construction reports and how these can be utilised.

Understand current legislation and other UK/home nation safety standards and their impact on construction activities.

Know how to develop effective work relationships and cross team working with other construction Team professionals involved in the project.

Understand legal, contractual matters and contract management relating to the site and work within commercial and legal constraints to ensure effective project outcomes as/if required.

Understand methods to ensure collaboration and communicate effectively with duty holders including clients, consultants and/or stakeholders, colleagues, sub-contractors.

Understand the need for building safety as it relates to current and/or future occupants or users.

Understand how to develop effective interpersonal skills, how to motivate others and effective disciplinary practices.

Understand matters that affect construction logistics and constraints.

Understand how the effective use of technology and computer programmes can contribute to the management process.

Understand how to read and interpret construction drawings in paper or digital format.

Have and awareness and understanding of environmental accreditation schemes and UK/home nation policies.

Skills

A Construction Manager will be able to:

Set and review objectives, identify resources and their limitations and plan, monitor and control activities to ensure projects are delivered in line with project requirements for the stakeholders including occupants or users.

Demonstrate a good appreciation of good practice with regards to building and maintaining a good working relationship with clients and/or stakeholders.

Manage or manage under supervision risks of health, safety, wellbeing, and environment in line with legislation, hazards, environment, safe buildings and safe systems of work.

Identify the standards required by clients and/or other stakeholders and implement effective procedures for managing, recording, and improving quality.

Manage or manage under supervision construction activities in a way that contributes to sustainable development and implements best practice and reduce/negate negative environmental impact and improve environmental impact where possible/required.

Contribute to legal and contractual matters and contract management relating to the site and work within commercial and legal constraints to ensure effective project outcomes as/if required.

Liaise with the Principal Contractor on all matters relating to building safety for the benefits of all current and future occupiers or users.

Investigate problems, causes and effects and determine solutions.

Identify, obtain, process, and make available information required to manage projects.

Manage or manage under supervision risk and plan for its mitigation to minimise its impact.

Contribute to the management and appraisal of team members and specialist contractors, build teams, advise on development, and resolve conflicts to ensure effective teamwork.

Contribution to the implementation of innovative solutions.

Manage or manage under supervision effective client hand over and effective customer service.

Effectively manage or supervise operatives and/or specialist contractors during the construction phase.

Develop effective work relationships and cross team working with other construction team professionals involved in the project.

Identify and rectify common defects in construction activities.

Able to manage or manage under supervision construction activities in a way that contributes to sustainable development and implements best practice and improves, reduces, or negates environmental impact where required.

Able to read and interpret construction drawings in paper or digital format.

Behaviours

A Construction Manager will:

Be able to work within own level of competence and know when to seek advice from others and when to be able to advise clients and/or stakeholders.

Work within rules and regulations of professional competence and conduct and demonstrate integrity and professionalism in all activities as set by professional body requirements.

Be able to plan and manage effective meetings, present information to a variety of audiences and demonstrate effective interpersonal skills.

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

Demonstrate effective collaboration and communicate effectively with clients and/or stakeholders, colleagues, sub-contractors.

Demonstrate effective interpersonal skills, including how to motivate others and effective disciplinary practices.

Demonstrate ethical principles standard and conduct including leadership, teamwork and communication, personal responsibility and accountability and duty of care to others including building occupants and/or users.

Undertake CPD as required by the Professional Body.

Annex 2 - Civil Engineering

Knowledge

A Civil Engineering will:

Know how to apply knowledge of mathematics, statistics, natural science and engineering principles to broadly defined problems, and how to analyse those problems to reach substantiated conclusions.

Understand how to contribute to the design and development of engineering solutions and how to implement those solutions effectively including how to evaluate their effectiveness in the context of the whole project life cycle.

Know how to select apply and evaluate appropriate computational and analytical techniques to model broadly defined problems, recognising the limitations of the techniques employed to include, technical literature, practical laboratory and workshop skills and appropriate materials, engineering technologies.

Know how to plan the work and resources needed to enable effective implementation of engineering tasks and projects.

Understand how to manage the planning and organisation of tasks and resources.

Know how to apply an integrated or systems approach to the solution of broadly defined problems and how to design solutions that meet a combination of societal, user, business and customer needs as appropriate involving consideration of applicable health and safety, diversity, inclusion, cultural, societal, environmental, and commercial matters, codes of practice and industry standards.

Know how to manage teams or technical specialisms.

Understand how to assist others to meet changing technical and managerial needs.

Understand how to manage quality processes and contribute to quality improvements.

Know how to manage, prepare, and control costs/budgets of engineering tasks or projects.

Have a sound knowledge of statutory and commercial frameworks and contracts within own area of responsibility and have an appreciation of other commercial arrangements.

Demonstrate a sound knowledge of legislation, hazards, and safe systems of work.

Know how to manage risks and understand CDM requirements.

Know how to manage and implement improvements in health, safety, and welfare.

Understand the principles of sustainable development, environmental assessment and wellbeing in the context of and home nation/UK policies and legislation such as the Future Generations Act (Wales)

Understand the principles of Net Zero and Carbon Emission reduction and apply them in work.

Know how to manage engineering activities that contribute to sustainable development and the United Nations' Sustainable Development Goals (UNSDGs) and demonstrate an understanding of best practice.

Recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion.

Understand the range of technology and computational tools such as BIM for analysis and design.

Skills

A Civil Engineering Degree Apprentice will be able to:

Demonstrate how they are maintaining and extending their knowledge of engineering theory and practice, and how technology assists its application.

Demonstrate how they have solved engineering problems using a sound theoretical approach, based on evidence and how they have contributed to continuous improvement.

Identify, review, and select techniques, procedures and methods to undertake engineering tasks.

Contribute to the design and development of engineering solutions and how they have contributed to the implementation of those solutions, including the evaluation of their effectiveness in the context of the whole project life cycle.

Show how they have exercised sound engineering judgements.

Communicate well with others at all levels including effective use of English or Welsh, orally and in writing.

Discuss ideas and plans competently and with confidence.

Undertake the use of a risk management process to identify, evaluate and mitigate risks (the effects of uncertainty) associated with a particular project or activity, including security risks. Plan the work and resources needed to enable effective implementation of engineering tasks and projects.

Manage, assist, or support the preparation, and control costs/budgets of engineering tasks or projects.

Manage, assist, or support the planning and organisation of tasks and resources within their own area of responsibility.

Manage, assist, or support the management of teams or technical specialists within their own area of responsibility.

Assist others to meet changing technical and managerial needs.

Manage, assist or support quality processes and contribute to quality improvements within their own area of responsibility.

Manage risks within their own area of responsibility.

Manage health, safety and welfare within their own area of responsibility.

Manage or manage under supervision engineering activities, including risk management and health, safety & welfare.

Contribute to improvements in health, safety and welfare.

Apply the principles of sustainable development in work activities.

Manage or manage under supervision sustainable development and the United Nations' Sustainable Development Goals (UNSDGs).

Apply the principles of Net Zero and Carbon Emission reduction in or own work.

Demonstrate the application of statutory and commercial frameworks and contracts within their own area of responsibility and have an appreciation of other commercial arrangements such as NEC Contract management.

Behaviours

A Civil Engineering Degree Apprentice will:

Demonstrating effective personal and social skills including effective collaboration with colleagues' clients and other stakeholders.

Challenge negative behaviour.

Demonstrating awareness of diversity and inclusion

Understanding and complying with Professional Body Code of Conduct

Understanding the ethical issues that may arise in their role and carrying out their responsibilities in an ethical manner.

Planning, carrying out and recording Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice as required by the Professional body.

Identifying the limits of their personal knowledge and skills

Engaging with professional engineering institutions (PEIs) who form the Joint Board of Moderators (JBM)'.

Promoting diversity, inclusion, and equality

Annex 3 - Quantity Surveying

Knowledge

A Quantity Surveyor will:

Understand how carry out life cycle costing. Prepare, interpret and analyse 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; and 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 identification, risk allowance and mitigation, life cycle costing, value engineering and change control.

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 and benefits of construction activities and how to maximise positive impact and minimise negative impacts during all stages of Construction.

Understand environmental standards on a home nation and UK basis.

How to use Information Technology effectively including estimating software, measurement software and contract management software.

Understand how to use and interpret paper and digital plans and construction drawings.

Demonstrate and awareness of Building Pathology including how completing a property inspection and measurement is completed to identify defects, causes and remedies.

Skills

A Quantity Surveyor Degree Apprentice will be able to:

Provide data, information, and advice including tender returns, applications for payment and contributions to feasibility studies to stakeholders.

Recommend solutions to ensure safe and secure working environments.

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

Provide advice and recommendations as to appropriate procurement routes and manage the tendering processes to include evaluating tender returns and negotiating with subcontractors.

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, analysis, 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 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 e.g., estimating software, measurement software and contract management software.

Use and interpret paper and digital plans and construction drawings.

Appreciate the role that other construction team members play.

Behaviours

A Quantity Surveying will:

Provide high standard of service - Always ensure your client, stakeholders, 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, stakeholders 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.

Annex 4 – Surveying

Knowledge

A Surveyor will know:

The law and the role of legal advisers relating to either acquisition/disposal of property, standard forms of building contracts or other property related contracts.

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

Accounting procedures and methods for obtaining and managing finance.

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

The importance and recognition of diversity; and 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 complex buildings including materials.

How to manage client, customer or stakeholder relationships.

The detailed pathology of buildings and the related defects, causes and remedies including costing of repairs for retrofit and new build work.

The methodology for completing a property inspection and inspection techniques.

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.

Legal responsibilities related to relevant legislation and ethical considerations including anti bribery and corruption procedures.

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, contracts, surveys and tendering are appropriate and the clauses of building/infrastructure contracts.

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

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

How land law, the law of landlord and tenant and planning law affects the occupation, management and use of buildings and land.

The requirements and reasons for a property inspection. Safety issues when undertaking an inspection and identifying access arrangements.

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.

Understand current UK and home nation safety standards. e.g., Welsh Safety Standards.

Understand how to consider and promote sustainability, and energy efficient practices to minimise negative environmental and climate change impact.

Skills

A Surveyor will be able to:

Provide data, information, and advice for clients relevant to the surveying discipline.

Recommend solutions to ensure safe and secure working environments.

Understand the terms for acquisition/disposal of property or contract administration.

Manage terms of engagement in accordance with professional standards.

Undertake site inspections and surveys and reporting methods.

Undertake feasibility studies or appraisal relevant to the field of practice.

Impartially provide negotiation solutions to issues affecting both owners and occupiers of land and property.

Use standards methods of measurement and where appropriate instrumentation to take measurements of land and property.

Prepare and present measurements in an appropriate manner.

Analyse costs and benefits of sustainability initiatives on a project utilising analytical skills, Information Technology

Provide good customer services.

Apply UK and home nation safety standards within work.

Consider and promote sustainability, and energy efficient practices to minimise negative Environmental and Climate change impact.

Specific Skills for Building Surveyors

Provide advice relating to the construction technology of buildings and their materials.

Carry out the preparation of the design and specification of building projects from outline proposals to completion of the design and specification process.

Behaviours

A Quantity Surveying Degree Apprentice will:

Provide a high standard of service - Always ensure your client, stakeholders 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 - Always be trustworthy, open, and transparent. Respect confidential information of your clients, stakeholders 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.

Take responsibility – Always act with skill, care and diligence and deal with any complaint in an appropriate professional manner using own initiative where and when required.

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

Adhere to governance and regulatory frameworks of Industry including those set by Professional Bodies

Apply Global and professional ethical standards and apply the Rules of Conduct and how to deal with ethical dilemmas.

<u>Appendix 5</u> - Competency Assessment Process for Wales Construction Degree Apprenticeships

Competency Assessment Process for Wales Construction Degree Apprenticeships

Competency assessment will need to be assessed based on evidence from the workplace. All Skills and Behaviours for the occupation will need to be experienced practiced and attained.

The process below is based on the current elements of Construction Apprenticeships assessment in Wales.

Employer Confirmation (skills) that skills have been practiced and the apprentice can undertake these skills competently. (This assessment will have an element of subjectivity as some employers may be more stringent and require higher standards of competency than others). The employer and provider confirm and agree that all skill requirements have been met.

The assessment elements above can be evidenced through recorded discussion between the employer/mentor and HEI tutor/assessor, through a diary of work placed activity countersigned by the employer/mentor or a combination of both.

Employer Confirmation (behaviours) that the employer has witnessed the behaviours included in the Occupational KSB's and that the apprentice has effectively demonstrated these positive behaviours in the workplace (This assessment will have an element of subjectivity as some employers may be more stringent and require higher standards of behaviour than others). The employer and provider confirm and agree that all behavioural requirements have been met.

The assessment elements above can be evidenced through recorded discussions, or appraisal meetings between the employer/mentor, through a diary of work placed behaviour or a combination of all confirmed by the employer/mentor.

Assessment of competence by HEI's tutors/assessors must satisfy learning outcomes of the degree apprenticeship and can be evidenced through a range of assessment strategies, including for example work-based assignments as part of the degree, observation of apprentice behaviour.

Work placed project will be undertaken when both the employer and the HEI agree that the apprentice has achieved competence and is ready for assessment. The project should include an element of observation in the workplace by either the employer or the HEI Tutor/assessor, a substantial academic assignment related to the workplace and a professional discussion.

Final assessment should be undertaken prior to the final academic/degree assessment this will ensure that apprentices complete all elements of the apprenticeship and not attain a degree only. The stages for final assessment will be employer confirmation combined with HEI assessment and a Workplace Project.

Apprenticeship certification will require evidence from the employer that they agree that the apprentice has attained the skills and behaviours required in the KSB's (this can be in the form of a company letter headed confirmation letter signed and dated by the

employer) and a copy of the degree certificate. Knowledge will be assessed as part of the academic degree awarding process.

Recognition of prior learning (RPL) can be used as evidence of previous experience and learning where the Provider is able to verify that it has taken place. This evidence should be presented and assessed as outlined above and meet the Providers academic regulations. Accreditation of related experience and learning is at the discretion of the HEI.

